WORKPLACE GOSSIP, PARANOIA, AND A DEVIANCE DILEMMA:

A WARNING FOR DEVIANCE/CWB RESEARCH

by

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A thesis
presented to the University of Waterloo
in fulfilment of the
thesis requirement for the degree of
Doctor of Philosophy
in
Psychology

Waterloo, Ontario, Canada, 2018

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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Abstract

Organizational research has long conceptualized workplace gossip as a form of deviance and included gossip in many measures of deviance and counterproductive work behaviors (CWB). However, empirical evidence regarding the nature of workplace gossip is extremely limited. In this paper, five studies are performed with the goal of addressing three fundamental research questions: (1) is workplace gossip a form of deviance, (2) why is there so much confusion surrounding workplace gossip, and (3) how does treating workplace gossip as a form of deviance affect organizational research? Together, the research advances our theoretical and conceptual understanding of workplace gossip and deviance/CWBs. Further, it advances our understanding of paranoia, a construct which has an important, but previously overlooked relationship with workplace gossip and deviance/CWBs. Evidence from this research indicates that workplace gossip is not a form of deviance/CWB, and that paranoia uniquely affects perceptions of workplace gossip, making workplace gossip appear more like a form of deviance/CWB than it otherwise would without the influence of paranoia. Importantly, the long-standing practice of treating workplace gossip as a form of deviance/CWB can have a significant, and potentially very misleading, effect on organizational research. Specifically, including workplace gossip in deviance/CWB measurement can result in false discoveries of deviance/CWBs and systematic measurement contamination which significantly biases relationship estimates between deviance/CWB and other commonly-studied variables. Overall, treating workplace gossip as a form of deviance/CWB clouds our understanding of deviance/CWBs and can dramatically increase the probability of Type I/II errors in deviance/CWB research. Implications, recommendations, and future research directions are discussed.

Keywords: workplace gossip, measurement, deviance, CWB, paranoia

Acknowledgments

This research was made possible through the support of many people. I am grateful for my time at the University of Waterloo. Its culture of support and research excellence has been vital to my research, and has given me the opportunity to develop my skills as a researcher and enabled my quest for knowledge of organizational psychology.

I would specifically like to thank my advisor, Doug Brown, for his feedback and mentorship throughout my time in graduate school. He has provided me with the rare balance of autonomy and support that I needed to pursue the research that I was passionate about. Graduate school is hard, and Doug was both a mentor and friend. I truly appreciate the time that I have spent as his student.

I would also like to thank the faculty in the I/O Psychology department for their advice and feedback on my research. In particular, I would like to thank Ramona Bobocel for pushing me to be a better researcher. Her passion for psychometrics and research methods invigorated my interest in measurement, and helped lay the groundwork for much of my subsequent research. I would also like to specifically thank James Beck, whose patience and training helped me to reach new heights as a researcher. When I teach, I find myself repeating his words to my students.

Finally, I would like to thank Laurie, Shaggy, and Charlie. It was Laurie's passion for learning which drew me to graduate school, and academia more broadly. Without her love, support, and patience, this research would not have been possible.

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INTRODUCTION

> *The fundamental conceptions of psychology are practically very clear to us, but theoretically they are very confused, and one easily makes the obscurest assumptions in this science without realizing, until challenged, what internal difficulties they involve.*
>
> – William James (1890, p. 145)

> *The history of science, like the history of all human ideas, is a history of irresponsible dreams, of obstinacy, and of error. But science is one of the very few human activities — perhaps the only one — in which errors are systematically criticized and fairly often, in time, corrected. This is why we can say that, in science, we often learn from our mistakes, and why we can speak clearly and sensibly about making progress there.*
>
> – Karl Popper (1965, p. 216)

Workplace gossip (WG) has traditionally been seen as an undesirable workplace behavior, with a century-long history of practitioner writings recommending the complete elimination of WG from organizations (Noon & Delbridge, 1993). In recent years, the trend of writing about the "evils" of WG has accelerated, with recommendations against WG becoming a very popular topic in online writings. At the same time, organizational research has taken a similar, negative view of WG, categorizing it as a form of interpersonal deviance (Robinson & Bennett, 1995). This has resulted in WG being included in the conceptualizations and operationalizations of a wide variety of deviance-related constructs/subconstructs (e.g., counterproductive work behaviors, Dalal, Lam, Weiss, Welch, & Hulin, 2009; aggression, Glomb & Liao, 2003; social undermining, Duffy, Ganster, & Pagon, 2002; incivility, Cortina, Magley, Williams, & Langhout, 2001; abusive supervision, Tepper, 2000; etc.).

Despite this, recent WG research has begun to argue that WG may have been misconceptualized as a form of deviance and called for more research into the relationship between WG and deviance (Brady, Brown, & Liang, 2017). This has created a debate within the organizational literature regarding the nature of WG, and whether WG is or is not a form of deviance. Importantly, answers to this debate have the potential to affect both our understanding

of WG and deviance. For example, if WG is typically not a form of deviance, then this could indicate that prior research which treated WG as a form of deviance in measurement could be systematically contaminated. In essence, WG could cloud the lens of deviance research, thereby interfering with our accurate understanding of workplace deviance and associated sub-constructs.

This research makes a variety of important theoretical, conceptual, and measurement contributions which enhance our understanding of organizational psychology. First, we test the question: is WG a form of deviance? This research question directly addresses the fundamental debate about the nature of WG and has important consequences for both WG and deviance research. For example, it affects our understanding of how deviance should be measured and also fundamentally affects how we should develop, test, and interpret WG and deviance theory moving forward. This research extends arguments that WG is not a form of deviance (Brady et al., 2017) and then performs, to our knowledge, the first systematic, empirical, test of the nature of WG. In so doing, this research enhances our understanding of how WG and deviance should be conceptualized and informs future research that studies WG and deviance.

If WG is not a form of deviance, as we argue, then this raises the question of why the organizational literature has traditionally treated it as a form of deviance. Prior gossip research has noted that individuals' views of gossip can be biased or confused (Baumeister et al., 2004; Ben-Ze'ev, 1994; Foster, 2004). However, the cause of this confusion or lack of clarity regarding WG is currently unclear. With that in mind, a second focus of this paper is to address the question: why is there so much confusion surrounding WG? Stated differently, why has the organizational literature treated WG as a form of deviance rather than as a behavior which is distinctly different from deviance? We will argue that paranoia acts as a cognitive bias that highly influences our WG perceptions. In essence, paranoia has a unique relationship with WG

in which paranoia clouds our WG perceptions and makes WG appear more like a form of deviance than it otherwise would without the influence of paranoia. Importantly, paranoia interferes with our ability to develop accurate WG and deviance theory and may provide one possible explanation why WG has traditionally been seen as a form of deviance in the organizational literature. To our knowledge, this is the first research which has examined paranoia as a cognitive bias for WG perceptions and deviance. In so doing, this research introduces novel insights into the nature of WG and advances our understanding of WG, paranoia, and deviance.

Finally, we address the question: how does treating WG as a form of deviance affect deviance measurement? If WG is not a form of workplace deviance, as we argue, then WG could represent a previously-unknown and widespread form of contamination for organizational research. This is a very important issue for organizational researchers to be aware of because workplace deviance is seen as a fundamental component of the job performance criterion (Rotundo & Sackett, 2002). As such, deviance is an important and well-researched topic in organizational research. Unfortunately, WG items appear to have been included in many deviance scales. This has resulted in hundreds, if not thousands, of studies in which WG has been assessed as a part of deviance. If WG is a common form of contamination for deviance measurement, then it is vital to examine the nature of this contamination as it could decrease the accuracy of research and cloud our theoretical understanding of both deviance and WG. To our knowledge, this is the first research which examines and attempts to quantify the effect that including WG in deviance measurement can have on research. Specifically, we assess whether WG contamination can bias observed relationships away from the deviance nomological network and toward the WG and/or paranoia nomological networks. This possibility represents an

important and previously-unknown threat to the validity of deviance research and could affect how we should interpret prior research which has examined deviance using measures that include WG. We begin by providing some background on the deviance and WG constructs.

Workplace Deviance/CWBs

Workplace deviance (deviance) is defined as a "voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both" (Robinson & Bennett, 1995, p. 556). There are two key definitional elements of deviance. First, deviance behaviors violate norms. As such, witnesses to deviance would generally see manifestations of deviance as being an unexpected, abnormal behavior in workplaces. Second, deviance behaviors harm organizations and/or their members. In this sense, deviance is seen as a form of negative job performance which detracts from the efficiency of organizations (Rotundo & Sackett, 2002). As such, organizations are generally advised to deter or reduce the frequency of workplace deviance, often through performance management or employee selection systems.

Deviance is conceptualized as a broad superset of negative, undesirable workplace behaviors.[1] Early deviance research created typologies of deviance behaviors and argued that deviance is a multidimensional construct with dimensions distinguishing between minor and serious forms of deviance, and deviance behaviors which target individuals or the organization (Robinson & Bennett, 1995). For example, theft of work goods is generally categorized as a form

[1] Research has also used the term counterproductive work behaviors (CWB) to refer to the superset of undesirable work behaviors. CWB has been defined as "voluntary employee behaviors that are viewed by the organization as contrary to its legitimate interests, violate significant organizational norms, and threaten the well-being of the organization or its members" (Berry, Carpenter, & Barratt, 2012, p. 613). There is a near-complete definitional overlap of the deviance and CWB constructs, and deviance/CWB research has been treated as being interchangeable in meta-analyses. We have elected to use the term deviance in this research (instead of CWB) as the deviance construct has a stronger historical association with the categorization of WG, and deviance also has a stronger association with the social control construct (Black, 1984), which is particularly relevant to this research. However, our use of the deviance term should generally be seen as being synonymous with the CWB term.

of serious organizational deviance, whereas workplace incivility toward coworkers is generally categorized as a form of minor interpersonal deviance. Over the last three decades, research into interpersonal deviance has been particularly prolific, with researchers investigating both the broad interpersonal deviance construct as well as other, more specific, behaviors which are seen as sub-constructs of deviance. For example, researchers have studied aggression (Neuman & Baron, 1997), incivility (Andersson & Pearson, 1999), social undermining (Duffy, Ganster, & Pagon, 2002), and abusive supervision (Tepper, 2000), amongst other forms of deviance.

Today, deviance and its related sub-constructs are some of the most commonly-studied outcome variables in organizational research. In large part, this is due to the negative impact that deviance can have on the effective functioning of organizations and their members. Meta-analyses have described meaningful relationships between deviance and a variety of important organizational variables, including neuroticism, agreeableness, conscientiousness, organizational justice, organizational commitment, job satisfaction, age, and gender (Berry, Ones, & Sackett, 2007; Dalal, 2005). Overall, the deviance literature has grown over the last three decades to become a very large and mature literature.

Workplace Gossip and the Deviance Categorization

WG is formally defined as informal positive or negative evaluative talk from one employee to one or more coworkers about a non-present work colleague (Brady et al., 2017). At its core, WG is evaluative or value-laden talk which communicates an implied judgment about a non-present individual's behavior or reputation. Although lay people often think of gossip as being solely a form of negative, malicious talk (Baumeister, Zhang, & Vohs, 2004; Ben-Ze'ev, 1994; Foster, 2004), gossip researchers have argued that WG can manifest in either negative or positive forms (Brady et al., 2017). For example, negative WG can manifest as a complaint or

negative judgment about someone's behavior, while positive WG can manifest as a compliment or positive judgment about someone's behavior.

In the organizational literature, *negative* WG was formally categorized as a form of interpersonal deviance based on evidence from Robinson and Bennett's (1995) seminal work on the typology of deviance. In that research, the authors asked employees to provide examples of behaviors which are deviant in their workplace. Twelve participants (professors) then judged whether the provided behaviors fit the definition of deviance. Afterwards, a sample of employees rated the similarity of the behaviors, and these ratings were used to categorize the behaviors according to deviance type. Three of the 45 assessed behaviors were gossip (i.e., "Employee gossiping about manager", "Employee gossiping about co-worker", and "Boss gossiping about employees"), and all were categorized as manifestations of minor interpersonal deviance.

Despite this, there are reasons to question the accuracy of the procedure in which WG was categorized as a form of deviance. Gossip researchers have long argued that some individuals have confused and/or negatively biased views of gossip (Ben-Ze'ev, 1994; Foster, 2004). This could have increased the likelihood that some participants would nominate WG as a form of deviance in Robinson and Bennett's (1995) deviance identification procedure. Although their study describes a second step in which the nominated behaviors were verified as being deviant, the only stated test of deviance (versus non-deviance) for the behaviors was performed by a very small sample of twelve participants and no agreement statistics were reported. Further, the authors stated that the participants "unanimously agreed that *most* [emphasis added] of the behaviors fit our definition of deviance" (p. 559). This wording suggests that some behaviors may not have fit the definition of deviance. However, no items were reported as being eliminated for not fitting the definition of deviance. This is potentially problematic, as it is not clear whether

or not WG actually fit the definition of deviance.

Based on Robinson and Bennett's evidence, WG was subsequently included as a component of deviance conceptualizations, and WG items were included in measures of interpersonal deviance and its sub-constructs. Subsequently-developed scales then copied items from earlier scales, often without reassessing the validity of items, thereby propagating WG items from scale to scale within the deviance literature. As it stands today, WG items appear to have been included in many, if not most, measures of interpersonal deviance. However, despite WG items having been commonly included in deviance scales, evidence concerning whether WG is or is not a form of deviance is actually very limited.[2]

Recently, Brady and colleagues (2017) argued that WG is an important organizational construct which may not fit a deviance conceptualization. In support of this, the authors developed a series of WG scales and demonstrated relationships between WG and important organizational variables. The authors' stated goal was not to test whether WG was a form of deviance, but rather to raise awareness of the importance of the WG construct and to facilitate future research into WG as its own field of study. As a part of the research, the authors demonstrated that their WG scales were statistically distinct from deviance scales. This was done as a part of demonstrating the discriminant validity of the WG scales, essentially demonstrating that there was unique predictive value for the WG scales. However, this has created confusion for both WG and deviance researchers because a test of statistical distinctness is not a strong test of deviance and has left open the possibility that WG is still a *subform* or *type* of deviance.

[2] Some may argue that the deviance scales themselves provide evidence that WG is a form of deviance. However, examinations of scale developments indicate that some WG items have been eliminated for not being a good fit (e.g., Aquino, Lewis, & Bradfield, 1999; Bennett & Robinson, 2000). Further, model fit for deviance scales have historically not met modern guidelines for model fit (e.g., interpersonal and organizational deviance together, CFI = .90; Bennett & Robinson, 2000; recommended CFI of at least .95, Hu & Bentler, 1999), providing little evidence for whether or not WG is actually a form of deviance.

Essentially, even though Brady and colleagues demonstrate that their WG scales do not assess 100% the same thing that a broad measure of deviance does, WG could still be a specific type of deviance. This would be similar to how measures of workplace incivility do not 100% statistically overlap with broader measures of deviance (Blau & Andersson, 2005), and yet incivility is still considered a subform/type of deviance (Andersson & Pearson, 1999). Understanding this limitation, Brady and colleagues (2017) called for more research into the relationship between WG and deviance.

Is Workplace Gossip a Form of Deviance?

From a theoretical perspective, there is reason to believe that WG is not a form of deviance but rather something altogether different. Specifically, WG may be a social control - a term which describes behaviors, processes, and structures which *define and discourage deviance* (Black, 1984). In short, social controls are the conceptual opposite of deviance – they exert a force which deters nonconformative behavior, and deviance occurs when individuals do not conform. Historically, social control research has been most active in the fields of sociology and criminology, with researchers examining a wide variety of social controls, including incarceration (Rose & Clear, 1998), surveillance (Welsh & Farrington, 2009), social exclusion (Beckett & Herbert, 2009), community structure (Sampson & Groves, 1989), shame (Makkai & Braithwaite, 1994), religion (Baier & Wright, 2001), and norms (Heckathorn, 1990), amongst others. Research has distinguished between informal social controls (e.g., norms), and formal social controls (e.g., policies and laws), and provided evidence that informal social controls can have a stronger deterrence effect on deviance than formal social controls (Hollinger & Clark, 1982). The social control construct was influential for very early workplace deviance research, however social controls have been relatively underappreciated in the organizational literature

over the last two decades, with more research attention being paid to the antecedents to deviance (e.g., personality, justice, job satisfaction, etc.; Berry et al., 2007; Dalal, 2005) rather than to social controls. This may have been an important oversight which has served to obscure our understanding of WG.

Although the organizational literature has traditionally considered WG to be a form of deviance, some research in other fields has argued that gossip is an *informal* social control. In large part, this is because gossip is thought to facilitate the communication, construction, and enforcement of group norms and can be used to warn individuals of bad behavior/group threats (Gluckman, 1963; Merry, 1984; Vaidyanathan, Khalsa, & Eckund, 2016). Gossip is seen to discourage harmful behaviors by facilitating norm-related processes (Feldman, 1984) and by managing reputations (Wu, Balliet, & Van Lange, 2016b; Zinko & Rubin, 2015). By communicating normative information amongst group members, gossip is thought to enable a shared understanding of norms (Cialdini & Trost, 1998) and helps to define what constitutes deviance in a particular group. In so doing, gossip is seen to help norms function more effectively in the regulation of behavior. Research has shown that gossip deters selfish behaviors (Feinberg, Willer, Stellar, & Keltner, 2012; Wu, Balliet, & Van Lange, 2015), promotes cooperation in groups (Feinberg et al., 2014; Wu, Balliet, & Van Lange, 2016a), and occurs in response to counter-normative behaviors (Kniffin & Wilson, 2005; Peters, Jetten, Radova, & Austin, 2017).

Some gossip researchers have argued that gossip can be a prosocial behavior (Feinberg et al., 2012). However, this is not to say that individuals always knowingly gossip with a prosocial motive. Indeed, evidence has shown that individuals gossip for a variety of reasons, including to sensemake about others' behavior, to build friendships, to alleviate boredom, to vent or cope

with their emotions, to warn others of threats, and to influence others, amongst other reasons (Beersma & Van Kleef, 2012; Brady et al., 2017). However, regardless of why individuals gossip, the gossip content always includes an evaluation of behavior or reputation against some standard. We see WG as being similar to an informal performance evaluation - negative WG describes behavior which has been evaluated as negatively deviating from desired standards, while positive WG is about behavior which is seen to meet or exceed standards. In both cases, WG transmits information about both the evaluation and the relevant standards used to make the evaluation (e.g., workplace norms). In so doing, WG is seen to help clarify reputation and norms.

There is an active interest among researchers to better understand how gossip is related to deviance. However, it is currently very difficult to study WG and deviance when (1) the organizational literature has traditionally considered WG as itself a form of deviance, and (2) most interpersonal deviance measures include WG items. Whether WG is or is not a form of deviance fundamentally affects how research should be modeled and interpreted. For example, if WG is primarily a form of deviance, then it may be best to frame the WG/deviance relationship using a tit-for-tat model of deviance (Andersson & Pearson, 1999). That is, one sees deviance and then retaliates using WG as a form of deviance. In that case, it would be valid to include WG in deviance measurement. However, if individuals do not typically engage in WG as a form of deviance, then it may be better to interpret the WG and deviance relationship in a more nuanced way. For example, one could see deviance and then use WG to sensemake about the observed behaviors (Mills, 2010; Paine, 1967; Weick, 1995). In that case, treating WG as a form of deviance in research could interfere with our understanding of deviance, and could result in the development of inaccurate WG and deviance theory.

With that in mind, we see a vital need to empirically answer the question: is WG a form

of deviance? However, answering this question directly is difficult. This is largely because deviance is defined in terms of social controls (i.e., deviance is a behavior that violates norms; Robinson & Bennett, 1995). This necessitates that to identify whether something is deviant we need to examine the social control influences related to the behavior. For example, to determine if a behavior is a crime requires that we examine the relevant laws which concern the behavior. If there is no law concerning the behavior, then it is not a crime to engage in the behavior. Similarly, if there are no meaningful social controls against engaging in WG, then it is not a form of deviance. That is, if WG does not violate norms, then it is not deviant.

We have argued that typical WG is not a form of deviance (i.e., a violation of social controls) but is rather a behavior which often operates as a social control or facilitates the effectiveness of social controls. We therefore expected that there would not be meaningful social control influences against engaging in WG behavior. This stems from the idea that social controls deter deviance behavior and not other social control behaviors. This is somewhat complicated, so we provide a few brief examples. For example, it is not against the law to inform individuals of relevant laws. Similarly, it is not against the law to report criminal behavior. In these cases, informing others of what the law is and reporting crime are both forms of social controls – they help define and discourage deviance (i.e., crime). Research has argued that two of the primary functions of WG are to inform individuals of norms and to warn others of norm violations (Brady et al., 2017). Just as it is not against the law to inform individuals of the law, it should not be a norm violation to engage in WG which informs others of what is or is not normative behavior. More broadly speaking, there should not be meaningful social control influences against engaging in WG (i.e., a social control behavior).[3]

[3] Although most WG is expected to not be deviant, there could be some extreme manifestations of WG which are deviant. For this research, we were primarily interested in whether WG behavior is, *on average*, seen as a form of

Researchers have proposed three social control-related tests which can be used to determine whether a behavior qualifies as a form of deviance: a test of reactions, norms, and frequency. First, whether a behavior is a form of deviance can be inferred by witness reactions to the behavior. A negative reaction from one's group exerts a social pressure not to engage in the behavior (Heckert & Heckert, 2002). The stronger the negative reaction is, the stronger the social control influence is against the behavior, and the more serious the deviance is likely to be. In essence, the reaction to a behavior is an indicator of whether a behavior is or is not deviant. For example, there is unlikely to be a meaningful negative reaction to witnessing a coworker blowing their nose in the office, consistent with it not being a form of deviance. In contrast, there is likely to be a strong negative reaction to witnessing workplace harassment, consistent with it being a form of deviance.

Second, deviance can be inferred by examining whether a behavior violates norms. By definition, deviance violates group norms (Robinson & Bennett, 1995). The higher the degree of consensus that a behavior violates norms, the more consistent the social control influence against the behavior will be, and the more likely the behavior is to be a form of deviance (Heckert & Heckert, 2002; Thio, 2001). For example, if only 20% of a group believe that wearing jeans to work is a norm violation, then wearing jeans is not deviant. That is, there is unlikely to be a consistent normative pressure against wearing jeans, suggesting that jean wearing is not a form of deviance. Instead, wearing jeans may actually be normative, because it is not seen as being unexpected by a majority of the group (i.e., 80% of the group do not see it as being counter-normative). In contrast, if 95% of a group believe that theft is a norm violation, then there is

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deviance by employees. This is an important distinction because if WG does not, on average, reflect deviance for participants, then WG is unlikely to be a valid indicator of deviance. If correct, then inaccurately treating WG as a form of deviance could negatively affect the accuracy of theoretical models which treat WG as a form of deviance and also decrease the accuracy of deviance measurement which has included WG in deviance scales.

likely to be consistent social controls against engaging in theft, indicating that theft is a form of deviance. In summary, the higher the level of consensus that a behavior violates norms, the more likely it is to be deviant.

Finally, deviance can be inferred by the frequency of the behavior (Spreitzer & Sonenshein, 2004). In general, the more common a behavior is, the less likely it is that social controls are acting to deter the behavior. This decreases the likelihood that the behavior is a form of deviance. For example, taking a bag lunch to work is very common, suggesting that there are not meaningful social controls acting against the behavior. This, in turn, implies that taking a bag lunch to work is unlikely to be deviant. In contrast, workplace violence is much less common, implying that there could be social controls deterring the behavior, consistent with it being deviant. Generally, deviance cannot be inferred only by frequency. However, frequency is seen as a social control-related test of deviance which can be used in conjunction with tests of reactions and norm violations to infer deviance.

As previously mentioned, WG can manifest as either positive or negative WG. However, it is *negative* WG behavior that has been categorized as a form of *minor* deviance in the organizational literature (Robinson & Bennett, 1995). If negative WG has been miscategorized as a form of minor deviance, then social controls should have less of a deterrence effect on negative WG than on minor deviance. We therefore predicted that social control influences would be weaker for negative WG than for minor deviance – the form of deviance which WG has been categorized as:

> *Hypothesis 1a. Reactions to negative WG behavior are less negative than to minor deviance; negative WG behavior is less likely to violate norms than minor deviance; and negative WG behavior occurs more frequently than minor deviance.*

Researchers have argued that at least 50% of a group must see a behavior as being

deviant for it to be a form of deviance (Heckert & Heckert, 2002). In the context of a social control-related test of deviance, this can be assessed by the level of consensus that a behavior violates norms. Deviance occurs when a behavior deviates from the norm (i.e., deviance is an *ab*normal or unexpected behavior). If there is not a majority consensus that a behavior violates norms, then the behavior does not qualify as a form of deviance. For example, serious forms of deviance (e.g., physical violence) are associated with high consensus opinions that the behavior violate norms (Thio, 2001). This suggests that serious deviance could mobilize a consistent group response/opinion against the behavior. In contrast, if there is no consensus that a behavior violates norms (e.g., wearing green socks), then the behavior is unlikely to generate a consistent group response against the behavior, suggesting that there are unlikely to be any meaningful social controls against the behavior. This would be consistent with the behavior not being deviant for the group.

To be clear, it is not enough that one person in a group sees a behavior as violating norms for the behavior to be deviant. Instead, deviance reflects a majority consensus. At a bare minimum, more than half the group must see a behavior as violating norms for it to qualify as a form of deviance. Consistent with our arguments that WG is not a form of deviance (i.e., neither minor nor serious deviance), we predicted that there would be no majority consensus that WG violates norms. For meaningful forms of deviance, the level of consensus that the behavior violates norms should be much higher than a simple majority. However, by predicting a simple majority consensus, this is the most conservative test of deviance possible.

Hypothesis 1b. Negative WG will, on average, not be seen as a norm violation.

Why is There so Much Workplace Gossip Confusion?

We have predicted that WG is not a form of deviance. However, WG has traditionally

been categorized as a form of deviance in the organizational literature. This naturally raises the question of why WG may have been miscategorized. Prior research has argued that some individuals' views of gossip are often confused and/or biased (e.g., Baumeister et al., 2004; Ben-Ze'ev, 1994). This is important because gossip bias could make WG appear to be more deviant than it otherwise would without the bias. This could provide an explanation for why WG has been categorized as a form of deviance in the organizational literature. Unfortunately, very little is currently known about gossip bias.

We argue that gossip bias stems from fundamental construct differences between WG *behavior* and WG *perceptions* (i.e., perceptions that others are gossiping about oneself; Wu, Birtch, Chiang, & Zhang, 2016). Specifically, individuals understand their own WG *behavior* to be largely innocent but have biased *perceptions* of others' WG. By definition, WG is a covert behavior in which the gossip subject is not present to hear what is said about them. This leads to a knowledge asymmetry in which individuals have accurate knowledge of their own WG behavior but a knowledge deficiency about others' WG about them (i.e., WG perceptions). Even if others tell us that we are the subject of gossip, our estimates of the frequency of others' WG could still be very error-prone because the total extent of covert WG behavior is unknown. For example, we could have knowledge of WG between two coworkers. However, the WG may or may not have spread to others. It is therefore difficult to accurately estimate the frequency of WG about ourselves, resulting in WG perceptions being inaccurate, by their very nature.

We argue that the lack of knowledge of others' covert WG behavior creates a knowledge vacuum in which paranoia can greatly affect WG perceptions. Paranoia is a cognitive bias typified by delusions, heightened suspicion, mistrust, and an irrational belief that others intend to cause oneself harm (Combs & Penn, 2004; Freeman et al., 2005a). Individuals who experience

paranoia are more likely to see neutral or unrelated events as being related to themselves and have a heightened sensitivity to, and expectation of, threats (Freeman et al., 2013; Green and Phillips, 2004). Paranoia also influences how individuals process information and the types of attributions that are made (e.g., paranoia is related to sinister attributions and external attributions of negative events; Bentall, Kinderman, & Kaney, 1994). Although paranoia is often discussed in clinical terms (e.g., debilitating levels of paranoia), research has argued that paranoia exists along a spectrum of severity, with less severe forms of paranoia regularly manifesting in approximately one-third of the nonclinical population (Freeman et al., 2005b). With this in mind, researchers now regularly examine the effects of paranoia within the general population (e.g., Bebbington et al., 2013; Elahi, Algorta, Varese, McIntyre, & Bentall, 2017; Freeman, Evans, Lister, Antley, Dunn, & Slater, 2014; Waite & Freeman, 2017).

There is some preliminary evidence from the clinical psychology and psychiatry literatures that paranoia can affect gossip perceptions. Individuals clinically diagnosed with paranoia are more likely to believe that they are being gossiped about (Startup & Startup, 2005), and gossip perceptions are associated with paranoid delusions of reference, a form of paranoia typified by beliefs that one is the focus of attention (Freeman et al., 2005b). Consistent with this, gossip-like items have been included in validated measures of paranoia (e.g., “It was hard to stop thinking about people talking about me behind my back”, Green et al., 2008).

We see paranoia affecting WG perceptions in two ways. First, because paranoia is related to a heightened sensitivity to threats, we predicted that paranoia will increase the likelihood that an individual will see negative WG as posing a threat. Second, paranoia is associated with heightened beliefs that others are referring to oneself (i.e., delusions of reference). Because of this, we predicted that paranoia would be positively related to estimates of the frequency that

others are engaging in negative WG about them. In essence, paranoia creates a double-whammy in which perceptions of both the threat and the frequency of others' WG are heightened.

Hypothesis 2a. Paranoia is positively related to threat ratings of WG.

Hypothesis 2b. Paranoia is positively related to negative WG perceptions (i.e., estimates that others are engaging in WG about oneself).

We have argued that the bias which surrounds WG stems from fundamental construct differences between WG *behavior* and WG *perceptions*. Specifically, we expect the two constructs to be differentially related to paranoia. Individuals have complete knowledge of their own WG behavior. We therefore expect WG behavior to be related to paranoia for functional reasons. For example, paranoia is associated with feelings of anxiety/uncertainty (Freeman et al., 2011) and paranoid individuals could use WG to gather information to address the uncertainty (Beersma & Van Kleef, 2012). In contrast, gossip subjects (i.e., WG perceivers) have limited direct knowledge of gossip about themselves, and this knowledge vacuum enables paranoia to have a strong effect on WG perceptions. That is, individuals who experience paranoia are likely to have inflated WG perceptions because paranoia cognitively biases their perceptions. In essence, WG perceptions may be a reflection of paranoia. This suggests that the relationship between paranoia and WG perceptions should be especially strong. Consistent with our argument that paranoia is differentially related to WG behavior and WG perceptions, we predicted:

Hypothesis 2c. Paranoia is more strongly related to WG perceptions than to WG behavior.

If paranoia biases views of others' gossip, then this could explain the historical confusion which has surrounded gossip. It also raises the possibility that the traditional categorization of WG as a form of deviance may not be a reflection of the nature of WG behavior, but rather a reflection of inaccurate WG perceptions which have been biased by paranoia.

What is the Effect of Treating Workplace Gossip as Deviance?

Whether WG is or is not a form of deviance could have serious implications for both WG and deviance research. WG items have long been included in deviance measures, leading to a very large body of research in which WG has been treated as an indicator of deviance. It is currently unclear how WG researchers should interpret this research. On the one hand, if WG is a form of deviance, then prior deviance research could give us insights into WG which would be extremely valuable for building WG theory. On the other hand, if WG is not a form of deviance, then the prior research could interfere with our understanding of WG and impede the development of WG theory. Further, treating WG as a form of deviance could introduce unique WG variance into deviance research, potentially interfering with our knowledge of deviance. It is vital to understand the effect of treating WG as a form of deviance on research, as this will affect both the development of theory and how we assess deviance in future research.

If WG is not a form of deviance, as we argue, then WG and deviance should have a different pattern of relationships with other variables (i.e., different nomological networks; Cronbach & Meehl, 1955). In most cases, we expect that negative WG *behavior* will have a stronger relationship than deviance behavior with non-deviance constructs. For example, if an individual experienced an unfair event, they could use WG to sensemake about the event (Jones & Skarlicki, 2012) before choosing whether to engage in deviance (Brady et al., 2017). In this case, WG is more proximal to the event and should have a stronger relationship with the event than deviance would. Similarly, if other workers engaged in WG about the event as a form of social control (e.g., communicating norms), then WG would again be more strongly related to the event due to the larger number of WG instances versus deviance instances. That is, one individual could respond to an event with deviance, whereas multiple individuals could respond to the event with WG. In that case, we would expect a measure of WG (versus deviance) to

correlate more strongly with the event due to the higher prevalence of WG versus deviance.

With this in mind, we predicted a broad pattern of stronger relationships for WG behavior (versus deviance) with other commonly-studied variables. Prior research offers some initial support for this. Tepper and Henle (2011, pp. 493-494) reported relationships between 11 deviance behaviors (e.g., "disobeying supervisor instructions") and three other variables (job satisfaction, trust, and LMX). The authors called out several behaviors (i.e., "gossiping about my supervisor", "belittling my supervisor's opinions to others", and "giving supervisor the silent treatment") as having especially strong relationships with the other variables and argued that not all deviance behaviors are equally powerful predictors. However, if respondents interpreted these items as WG and social control behaviors and not deviance, then this would support our prediction of a pattern of stronger relationships for WG versus deviance.

Because we predicted a broad *pattern* of stronger relationships across multiple correlates, we chose not to hypothesize individual relationships. Instead, we selected a set of commonly-studied correlates from deviance meta-analyses (i.e., conscientiousness, neuroticism, organizational justice, see Berry et al., 2007; job satisfaction, organizational commitment, see Dalal, 2005) and predicted that WG will be more strongly related to these correlates than deviance is.

> *Hypothesis 3a. Negative WG behavior will have a stronger relationship with deviance common correlates (i.e., conscientiousness, neuroticism, organizational justice, job satisfaction, organizational commitment) than deviance does.*

We also predicted that the practice of including WG behavior items in deviance scales will shift observed deviance relationships away from the deviance nomological network and toward the WG behavior nomological network. In this case, because WG items (versus deviance items) should be more strongly related to other variables, we expected WG behavior items to systematically amplify observed relationships between deviance behavior and other variables,

consistent with WG being a meaningful form of contamination for deviance measurement.

Hypothesis 3b. Including negative WG behavior items in deviance scales will amplify the relationship between deviance and its common correlates.

Although we expect WG behavior to generally have a stronger relationship than deviance with non-deviance variables, there may also be cases when WG has a weaker relationship, consistent with WG and deviance having different nomological networks. Meta-analyses indicate that there are weak relationships between deviance and both age and gender (e.g., Berry et al., 2007), where females engage in less deviance than males, and deviance is negatively related to age. In contrast, gossip researchers have conceptualized gossip as a behavior which occurs in response to contextual needs rather than as a disposition, and research has shown that WG frequency is not related to either age or gender (Brady et al., 2017). We therefore predicted that negative WG behavior will have a weaker relationship (versus deviance) with both age and gender. If correct, then including WG behavior items in deviance measurement could systematically attenuate observed relationships between deviance and both age and gender.

Hypothesis 4a. Negative WG behavior will have a weaker relationship with age and gender than deviance does.

Hypothesis 4b. Including negative WG behavior items in deviance scales will attenuate the relationship between deviance and both age and gender.

Until now, we have focused primarily on predictions involving WG behavior and deviance behavior. However, we also predicted that WG *perceptions* and deviance *perceptions* would have different nomological networks. If paranoia cognitively biases WG perceptions, then WG perceptions should strongly relate to paranoia's nomological network. We therefore predicted that WG perceptions would have a stronger relationship than deviance perceptions with paranoia and its correlates such as self-esteem (Pickering, Simpson, & Bentall, 2008; Thewissen, Bentall, Lecomte, van Os, & Myin-Germeys, 2008) and neuroticism (Freeman, Evans, & Lister,

2012). Including WG perceptions items in deviance perceptions scales should therefore amplify the observed relationship between deviance perceptions and both paranoia and paranoia's correlates.

> *Hypothesis 5a. Negative WG perceptions will have a stronger relationship with paranoia and paranoia's correlates (i.e., self-esteem, neuroticism) than deviance perceptions do.*
>
> *Hypothesis 5b. Including negative WG perception items in deviance perception scales will amplify the relationship between deviance perceptions and both paranoia and its correlates.*

Phase/Study Preview

The following research describes five studies which examine WG, deviance, and paranoia. To enhance clarity, the manuscript is separated into three study phases, each of which corresponds to a single research question. For an overview of the phases and studies, see Table 1. In Phase 1, we test if WG is a form of deviance. In Phase 2, we test paranoia as an explanation for the confusion which has historically surrounded WG. Finally, in Phase 3, we test how inaccurately treating WG as a form of deviance can affect deviance measurement and organizational research, more broadly. Together, this research provides a variety of important insights which enhance our understanding of WG, deviance, and paranoia.

Table 1
Overview of Phases and Studies

Study	Study Description	*N*	Study Goal(s)
Phase 1: TESTING IF WG IS A FORM OF DEVIANCE			
Study 1	Compares the social control influences for WG and deviance.	204	GOAL: to empirically test whether WG qualifies as a form of deviance.
Phase 2: TESTING WHY THERE IS SO MUCH CONFUSION SURROUNDING WG			
Study 2	Examines (1) the relationship between WG perceptions and paranoia, and (2) the perceived threat of WG and deviance.	80	GOALS: (1) to examine paranoia as a cognitive bias which uniquely affects WG perceptions; and (2) to replicate Study 1 findings that WG is not a form of deviance using a sample of supervisors.
Phase 3: TESTING THE EFFECT OF INACCURATELY TREATING WG AS DEVIANCE			
Study 3	Identifies WG items which have been included in deviance measurement.	381	GOAL: To identify WG items which can be experimentally manipulated in Study 5.
Study 4	Verifies that the WG behavior items identified in Study 3 assess typical WG, and not extreme cases of WG.	235	GOAL: To confirm that the identified items are indicators of typical WG behavior and not deviance.
Study 5	Experiment in which the identified WG items either are or are not included in deviance scales. Examines how the WG items affect relationships between deviance and other variables commonly studied in deviance research.	704	GOALS: (1) to test whether the nomological networks of WG and deviance are different; (2) to test whether including WG items in deviance measurement can contaminate deviance research; and (3) to replicate Study 2 findings that WG perceptions are highly related to paranoia.

PHASE 1: TESTING IF WG IS A FORM OF DEVIANCE

Our goal for this study phase was to address our first research question: is WG a form of deviance? As previously mentioned, the organizational literature has traditionally categorized WG as a form of deviance and has included WG items in deviance measurement. However, there are theoretical reasons to expect that WG is actually not a form of deviance but rather something altogether different from deviance. As previously discussed, to determine if a behavior is a form of deviance, one must examine whether the behavior violates social controls (e.g., norms). This is similar to how determining if something is a crime requires that we examine whether there are laws concerning the behavior.

Study 1 – Examining Social Control Influences

For Study 1, we set out to examine the social control influences related to WG and deviance using three social control-related tests (i.e., tests of reactions, norm violations, and behavioral frequency). If WG is not a form of deviance, as we have predicted, then the social control influences related to WG should be weaker than those related to minor forms of deviance. To our knowledge, this study is the first to systematically assess whether WG is or is not a form of deviance. In so doing, it addresses a core question in the fundamental debate about the nature of WG. It also provides critical information regarding whether workers see WG as a valid indicator of deviance. In essence, if workers do not see WG as a valid indicator of deviance, then treating WG as a form of deviance in measurement could lead to measurement contamination in deviance research.

Participants and Procedure. Full-time working adults (U.S. and Canada) were recruited in MTurk for an online survey. We chose to use MTurk for this research so that we could maximize the workplace diversity in our sample, thereby enabling us to assess social control

influences in as broad a variety of workplace contexts as possible. This is important because deviance is context-dependent such that what is deviant in one organization may or may not be deviant in another organization. For this research, we were interested in whether WG is, on average, a form of deviance in North American organizations. By recruiting a heterogeneous sample, we reduced the likelihood that outlier contexts could introduce error into our analysis of the nature of WG. Instead, the nature of this sample allowed us to test whether specific behaviors are deviant, on average, across a variety of North American work contexts.

To begin, we conducted a prescreen survey intended to identify working adults. A total of 294 participants reported being full-time workers, accurately responded to attention checks, tests of English-language comprehension, and finished the survey. These participants were then invited to participate in a follow-up survey which assessed social control influences for specific workplace behaviors. In total, 204 participants responded to the invitation and finished the follow-up survey (69% response rate; 53% of the sample was male; mean age = 36.36, *SD* = 10.75; mean hours per week = 42.48, *SD* = 6.57; mean organizational tenure = 6.18 years, *SD* = 5.69; median income = $40,000 to $49,999). Participants reported working in a wide variety of industries, including architecture and engineering (4%), business and financial operations (12%), computer industries (10%), construction (3%), education (13%), food services (3%), government (3%), healthcare (9%), office administration (4%), production (5%), and sales (15%). This is consistent with this being a heterogeneous sample in terms of workplace context, as expected. Participant education was also varied (some high school = 1%; high school = 21%; technical college or trade certification = 14%; university = 44%; graduate degree = 20%).

As previously discussed, WG was initially categorized as a form of deviance in Robinson and Bennett's (1995) deviance typology. For this study, we re-assessed the 45 behaviors which

were categorized as manifestations of deviance in Robinson and Bennett's study, including three items that directly assess WG (e.g., "Employee gossiping about manager"). Using these 45 items enabled us to test the social control influences related to as broad a spectrum of deviance manifestations as possible. In addition to the 45 Robinson and Bennett items, we also assessed 20 validated WG items (negative/positive WG about a supervisor/coworkers; Brady et al., 2017). These items assessed both negative and positive WG using items which did not include the word "gossip" in the item text. This was important because bias related to the word "gossip" could interfere with the accuracy of this test. Assessing the extra 20 WG items enabled us to test as broad a spectrum of WG manifestations as possible, using many items, thereby increasing the theoretical sensitivity and accuracy of the test. Because Robinson and Bennett's (1995) items were worded to assess the deviance of others (e.g., "Employee lying about hours worked"), the added WG items from Brady et al. (2017) were reworded to also assess third-party behavior (e.g., "Employee venting to a work colleague about something that another co-worker has done").

We assessed social control influences for the 65 assessed behaviors using three social control-related tests (i.e., tests of reactions, norm violations, and behavioral frequency). For reactions, participants were asked how they would react to each behavior if they witnessed it in their organization (1 = *strong negative reaction*, 3 = *neutral, weak, or no reaction*, 5 = *strong positive reaction*). Participants then assessed whether each behavior violated the norms of their workplace (a dichotomous variable) using a dichotomous response format (0 = *does not violate norms*, 1 = *violates norms*). To increase clarity, norm violation ratings are discussed in terms of consensus levels (e.g., a consensus norm violation rating of .75 indicates that 75% of ratings were that the behavior or category of behavior violated norms). Finally, for frequency,

participants were asked how frequently each behavior occurs in their workplace (1 = *never* to 7 = *more than once a day*). To minimize potential participant fatigue which could occur if participants rated all 65 items for all three social control tests, participants instead rated a randomly-chosen subset of 25 items for each social control test. For a detailed summary of the scales used in this study, see Appendix A.

Analysis and Results. To begin, we examined the non-WG items (i.e., potential deviance items) to verify that they reflected deviance. Three items were identified as norm violation outliers (two-step iterative process, norm violation consensus ≥ 2.5 SDs from mean) and were eliminated.[4] We predicted that the remaining items would fall into four item clusters: positive WG, negative WG, minor deviance, and serious deviance. This reflected Brady and colleagues' (2017) distinction between positive and negative WG, and Robinson and Bennett's (1995) distinction between minor and serious deviance.[5] A hierarchical cluster analysis of the items was performed (Ward's method, standardized ratings, squared Euclidean distance; see Hair & Black, 2000) and a visual inspection of the fusion coefficients confirmed that a four-cluster solution best fit the data. Similar to a scree test, this procedure determines the ideal number of clusters by identifying the point where explanatory information is not meaningfully increased by the addition of another cluster (see Aldenderfer & Blashfield, 1984; Sinclair, Tucker, Cullen, & Wright, 2005).

[4] Eliminated items: "Boss following rules to the letter of the law", norm violation consensus = .11, 95% CI [.05, .18]; "Boss asking employee to work beyond job description", norm violation consensus = .33, 95% CI [.23, .44]; "Employee talking with co-worker instead of working", norm violation consensus = .26, 95% CI [.16, .36]. For all three items, there was a clear consensus that they did *not* violate norms, consistent with them not fitting the definition of workplace deviance. Although the third item assessed talk, it did not clearly assess WG (i.e., evaluative talk), so we did not consider it to be a WG item.

[5] Although Robinson and Bennett (1995) differentiated between constructs according to two deviance dimensions in their research (i.e., deviance severity and target), we only expected to identify item clusters which varied along the severity dimension. Our reasoning was that the three social-control-related tests only differentiate items along a single dimension corresponding to the extent to which the behaviors are deviant, and that this would map to Robinson and Bennett's severity dimension.

Cluster membership for individual items was determined using a second-stage clustering strategy based on a combination of deductive item sorting and nonhierarchical clustering (see Ketchen & Shook, 1996).[6] The positive WG items from Brady et al. (2017) were assigned to the positive WG category (10 items), while three Robinson and Bennett WG items (i.e., "Employee gossiping about co-worker [manager]", "Boss gossiping about employees") were combined with the negative WG items from Brady et al. to form a negative WG cluster (13 items). Finally, a k-means cluster analysis (2 clusters, standardized ratings, Euclidean test of distance) was performed to sort the non-WG items into minor and serious deviance clusters (minor deviance: 16 items, e.g., "Employee calling in sick when not"; serious deviance: 23 items, e.g., "Employee sabotaging merchandise"). Cluster centers were calculated using the mean ratings of the items within each cluster, and subsequent tests were performed at the item level of analysis. Item ratings and clustering are shown in Figure 1.

[6] Our goal was to compare the cluster centers for minor deviance versus negative and positive WG. Although the hierarchical clustering procedure identified a four-factor solution, the procedure inductively assigned items to the minor deviance and WG clusters to purposefully maximize the distance between clusters. Subsequent comparisons of those clusters could capitalize on the maximized distance between clusters, thereby resulting in biased comparisons. To address this issue, we performed a *second*-stage item sort. The WG item clustering was based on theory and not based on an inductive sorting procedure. Further, the choice of which items were included in the minor deviance cluster was unaffected by the WG items. This ensured that comparisons between the WG and deviance clusters would not capitalize on a biased item sorting procedure. Stated differently, the distance between the clusters being compared was not artificially maximized by an inductive item-sorting procedure.

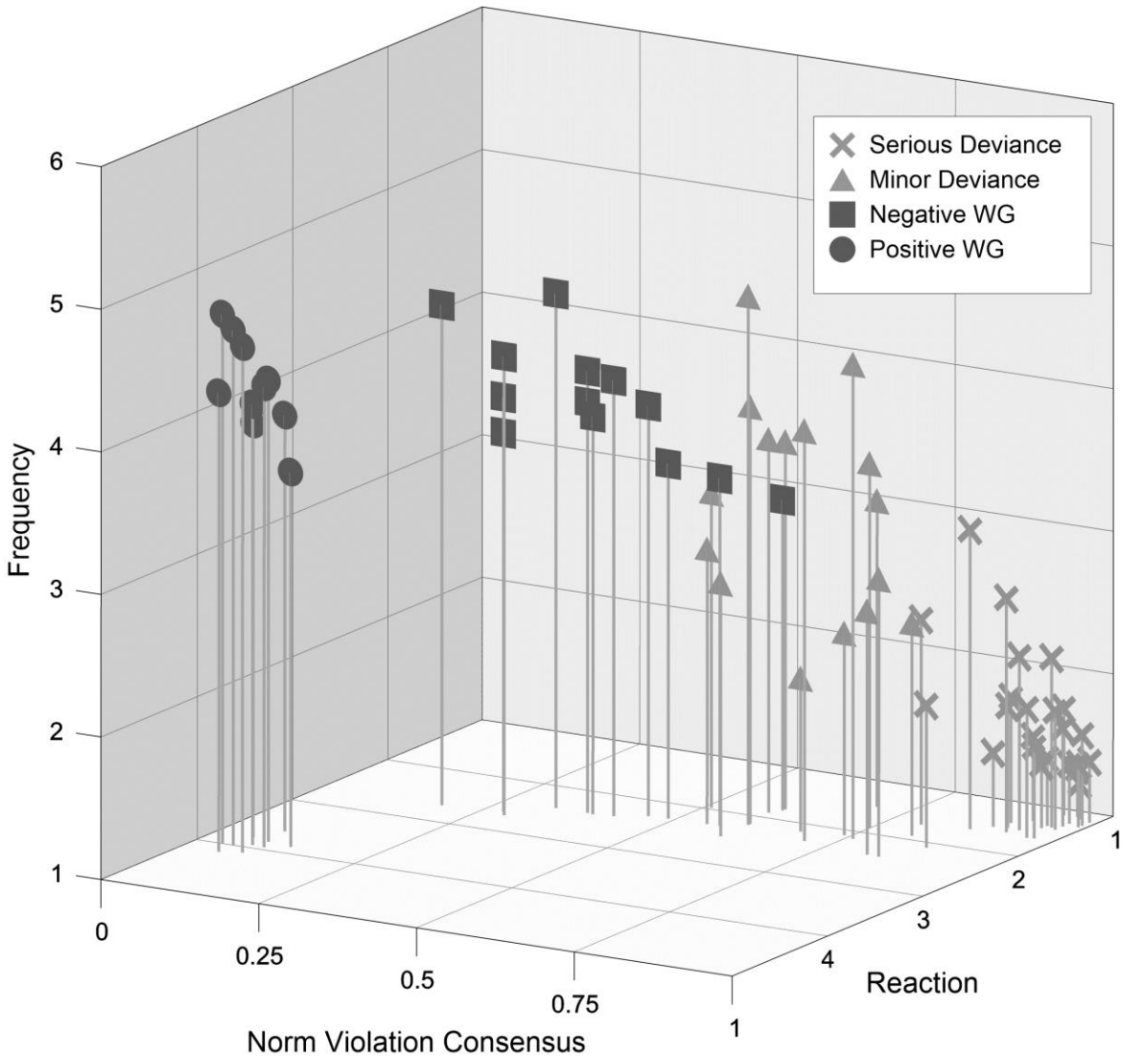


Figure 1. Ratings and clustering for assessed behaviors in Study 1. Each point represents an item-described behavior which was assessed for three social control-related criteria (i.e., reaction, norm violation, and behavioral frequency). On average, there were 78.46 participant ratings for every criterion, for every item. Reactions to witnessing the behavior ranged from 1 = *strong negative reaction* to 5 = *strong positive reaction*; norm violation consensus reflects the proportion of ratings which indicated that the behavior violated norms; frequency of the behavior occurring in their organization ranged from 1 = *never* to 7 = *more than once a day*. Item categorizations reflect the final item categorizations. WG = workplace gossip.

WG has traditionally been categorized as a manifestation of *minor deviance*. Hypothesis 1a predicted that negative WG is different from minor deviance in terms of social control influences. In essence, we predicted that WG has been miscategorized as a form of minor deviance. As shown in Table 2, results showed that reactions to negative WG were significantly less negative than to minor deviance, $t(27) = 3.41$, $p = .002$, $d = 1.27$. Similarly, the norm violation consensus was significantly lower for negative WG than for minor deviance, $t(27) = 7.07$, $p < .001$, $d = 2.64$. Finally, the frequency of negative WG was significantly higher than the frequency of minor deviance (Levene's test, $F(1, 27) = 4.98$, $p = .034$), $t(24.46) = 2.96$, $p = .007$, $d = 1.05$. In summary, negative WG was found to be significantly different from minor deviance for all three social-control-related tests of deviance. Hypothesis 1a was supported.

Table 2
Mean Ratings for Behavior Categories in Study 1

	Reactions			Norm Violation Consensus			Frequency		
Category	*M*	SD	95% CI	*M*	SD	95% CI	*M*	SD	95% CI
Serious Deviance	1.43	.23	[1.33, 1.53]	.94	.05	[1.92, 1.96]	1.81	.46	[1.61, 2.01]
Minor Deviance	2.10	.26	[1.96, 2.24]	.68	.10	[1.63, 1.73]	3.27	.72	[2.89, 3.66]
Negative WG	2.41	.23	[2.27, 2.55]	.39	.12	[1.32, 1.46]	3.90	.41	[3.66, 4.15]
Positive WG	3.93	.16	[3.81, 4.04]	.08	.03	[1.06, 1.10]	4.21	.34	[3.97, 4.46]

Note. Means are based on the average of the individual item means within each respective category of behavior. Reactions are from 1 = *strong negative reaction* to 5 = *strong positive reaction*. Norm violation consensus represents the proportion of ratings in which the behavior was rated as being a norm violation. Frequency ranges from 1 = *never* to 7 = *more than once a day*. WG = workplace gossip.

Hypothesis 1b predicted that, on average, negative WG is not seen as a norm violation. This is important, because for a behavior to qualify as a form of deviance, a majority of a group must see it as being deviant (Heckert & Heckert, 2002). In this case, a majority would have to see negative WG as a norm violation for it to be deviant. Results showed that the mean norm violation consensus ratings for negative WG (M = .39, SD = .12) were significantly less than .50, indicating that significantly less than half the ratings were that WG violates norms, $t(12) = 3.36$, $p = .006$, $d = .93$. This indicates that there is a significant majority consensus across a variety of WG manifestations that negative WG does *not* violate norms. Hypothesis 1b was supported.

Discussion. Evidence indicates that workers see positive WG, negative WG, minor deviance, and serious deviance as different categories of behavior. Further, the social control influences related to negative WG and deviance are significantly different. This directly contradicts prior categorizations of negative WG as a form of minor deviance. By definition, to be a form of deviance, a behavior must violate norms. However, results show that there is a majority consensus that negative WG does *not* violate norms. This indicates that negative WG does not qualify as a form of deviance. Further, as shown in Table 2, positive WG was also significantly different from minor deviance, and there was also a majority consensus that positive WG also does *not* violate norms. This provides further evidence that WG (overall) is not seen as a form of deviance. Instead, North American workers see WG as being something altogether different from deviance.

With that being said, two negative WG items were rated by more than half the raters as being a norm violation, although this was not a statistically significant majority consensus in either case ("Employee telling an unflattering story about a co-worker while talking to another work colleague", norm violation consensus = .57, 95% CI [.45, .69]; "Boss gossiping about

employees", norm violation consensus = .60, 95% CI [.49, .71]).[7] In contrast, the remaining 21 WG items were all rated by a majority as not violating workplace norms, including two direct assessments of WG ("Employee gossiping about manager", norm violation consensus = .38, 95% CI [.27, .49]; "Employee gossiping about co-worker", norm violation consensus = .33, 95% CI [.22, .44]). Interestingly, no item was rated as 100% not a norm violation. For example, 13% of raters said that an "Employee telling a work colleague that they respect his/her supervisor" was a norm violation, despite this clearly not fitting a traditional deviance conceptualization. This finding stresses the importance of assessing deviance across a broad sample of individuals and contexts, and the need to look at majority consensus views when assessing deviance.

As a part of this study, we also asked participants if their organization has a policy against employee gossip. This is potentially important because practitioners have long recommended that gossip be eliminated from organizations, and their recommendations could have led to formal social controls against WG (i.e., policies). Only 7% of participants said that their company has a policy against WG (no policy against WG = 73%; unsure = 21%). This indicates that a small number of contexts may have formal social controls against WG, but this is unlikely to be generalizable across workplaces.

Overall, evidence indicates that North American employees, on average, do not see WG as being deviant. This implies that WG should *not* be conceptualized as a subform/type of deviance. Further, by logical extension, WG should not be conceptualized as a part of any other construct which is itself a subset of deviance (e.g., incivility, aggression, etc.). For example, if workplace aggression is a subset/form of deviance, but WG is *not* a form of deviance, then it would *not* be logically consistent to categorize WG as a form of aggression. This is important

[7] Although employees rated their boss' WG as potentially being a norm violation, it is unclear whether they would have enough knowledge of their boss' covert WG behavior to judge this. See Study 2 for a further discussion of this issue, and for evidence that boss'/supervisors' WG behavior is unlikely to be a norm violation.

because WG has been included in conceptualizations and operationalizations for both the broader deviance construct as well as constructs which are subsets/types of deviance.

Inaccurately treating WG as a form of deviance in measurement could negatively affect research because participants are unlikely to see WG as being a valid indicator of deviance. For example, if WG items are included in deviance measurement, then those WG items are unlikely to elicit memories of deviance behavior for most respondents. This would be consistent with WG potentially representing a form of contamination for deviance research.

PHASE 2: TESTING WHY THERE IS SO MUCH CONFUSION SURROUNDING WG

Evidence from Study 1 indicates that WG does not qualify as a form of deviance. However, this directly contradicts with how WG has traditionally been seen in the organizational literature. Prior research has suggested that individuals' views of gossip are sometimes confused and/or negatively biased (Foster, 2004). Indeed, although the previous study indicates that most do not see WG as a form of deviance, some minority of individuals appear to rate WG as being deviant. With this in mind, we asked the next research question: why is there so much confusion surrounding WG? To answer this, we examined whether paranoia biases WG perceptions in a way that increases the likelihood that some individuals will see WG as a threat (i.e., as deviance). If paranoia does bias WG perceptions, then this could provide one explanation why WG has been historically miscategorized as a form of deviance.

Study 2 – Examining Threat and Paranoia

For this study, we assessed perceptions of the threat that negative WG and deviance pose to organizations or their members and examined whether paranoia biases perceptions of the threat of WG. To test this, we chose to recruit a sample of supervisors. This choice was made for two primary reasons. First, this study concerned perceptions of behavioral threat, and as front-line managers of employee performance, supervisors would be qualified to assess the threat of specific behaviors to their organization and/or its employees. In essence, as representatives of their organization, supervisors could provide an organizational perspective on WG and deviance. Second, by using a sample of supervisors, we set out to conceptually replicate the Study 1 finding that WG is not a form of deviance using a different population.

Participants and Procedure. Prescreens were conducted using MTurk to identify employed adults who held any position within their organization (U.S. and Canada). An

independent group of 211 individuals who freely identified as supervisors were invited for participation. In total, 80 supervisors responded, completed the survey, correctly responded to attention checks, and re-indicated that they were supervisors in their organization (response rate = 38%; 50% male; mean age = 38.84, *SD* = 10.42; mean number of subordinates = 8.36, *SD* = 7.94; mean hours per week = 43.14, SD = 8.62, mean organizational tenure = 7.01 years, *SD* = 6.12; mean time in current position = 3.74 years, SD = 3.84; modal income = $50,000 - $59,999 per year). Participant industry and education was varied, suggesting that this was a heterogeneous sample (e.g., the supervisors reported working in 22 different industries).

To assess threat, a subset of the final items used in Study 1 were administered as a single item block with randomized item presentation. Items which assessed positive WG were eliminated because evidence from Study 1 indicated that positive WG is clearly not a form of deviance (i.e., individuals have positive reactions to it). Items which assessed supervisor behavior or behavior directed toward the supervisor (i.e., the rater) were also eliminated to minimize the effects of impression management and paranoia in item threat ratings. Instead, paranoia was measured separately. All remaining items from Study 1 were administered.

Participants rated the threat of employee negative WG behavior toward coworkers (6 items; 5 from Brady et al., 2017; 1 from Robinson and Bennett, 1995), employee minor deviance (13 items), and employee serious deviance (19 items). We wanted to see if supervisors see the behaviors as threats. We therefore chose to employ a dichotomous response scale that created a forced choice for raters (0 = *no, it does not meaningfully threaten the well-being of the organization and/or its members*, 1 = *yes, it does meaningfully threaten...*). This had the benefit of getting participants off the fence to make a clear decision on how they perceive the tested behaviors. It also allowed us to report consensus levels of threat. This was important because

only behaviors which are viewed by a majority as deviant qualify as a form of deviance. Internal consistency reliability was very good for the scales, suggesting that the chosen scale format was acceptable (negative WG threat, $\alpha = .90$; minor deviance threat, $\alpha = .88$; serious deviance threat, $\alpha = .95$).

Participants reported their generalized paranoia over the last month (paranoid delusions of reference, 16 items; $\alpha = .96$; 1 = *not at all* to 5 = *totally*; e.g., "I was certain that people have followed me", "I believed that certain people were not what they seemed"; Green et al., 2008). Participants also assessed their WG perceptions of the frequency of follower negative WG about them (5 items; $\alpha = .95$; e.g., "criticized you while talking to a work colleague"; 1 = *none* to 7 = *more than once a day*; modification of Brady et al., 2017), and their own WG behavior (i.e., negative and positive WG about coworkers; 2 scales, 5 items each; negative WG, $\alpha = .88$; positive WG, $\alpha = .94$; 1 = *never* to 7 = *more than once per day*; Brady et al., 2017), both assessed over the last month. For a detailed summary of the scales used in this study, see Appendix B.

Results and Discussion. Hypothesis 2a predicted that paranoia would be positively related to threat ratings of negative WG. In essence, it was predicted that individuals higher in paranoia are more likely to see negative WG as being threatening. Evidence confirmed this, as paranoia was significantly positively related to threat ratings of negative WG ($r = .27$, $p = .014$). To better understand this relationship, we performed a follow-up investigation of the relationship between paranoia and threat for all types of behavior that were tested. As shown in Figure 2, there was a significant behavior category by paranoia interaction on threat rating (Mauchly's test of sphericity was significant, so a Greenhouse-Geisser correction was applied), $F(1.48, 115.73) = 11.07$, $MSE = .06$, $p < .001$, $\eta_p^2 = .12$. Whereas paranoia was significantly positively related to ratings of negative WG, as predicted in Hypothesis 2a, paranoia was not significantly related to

threat ratings of minor deviance (r = .02, p = .845) or serious deviance (r = -. 19, p = .092). Comparison of the simple effects revealed that paranoia had a significantly stronger relationship with threat ratings for negative WG versus threat ratings for minor deviance (z = 2.61, p = .009). This indicates that paranoia affects threat perceptions of negative WG differently than threat perceptions of minor deviance. Hypothesis 2a was supported.

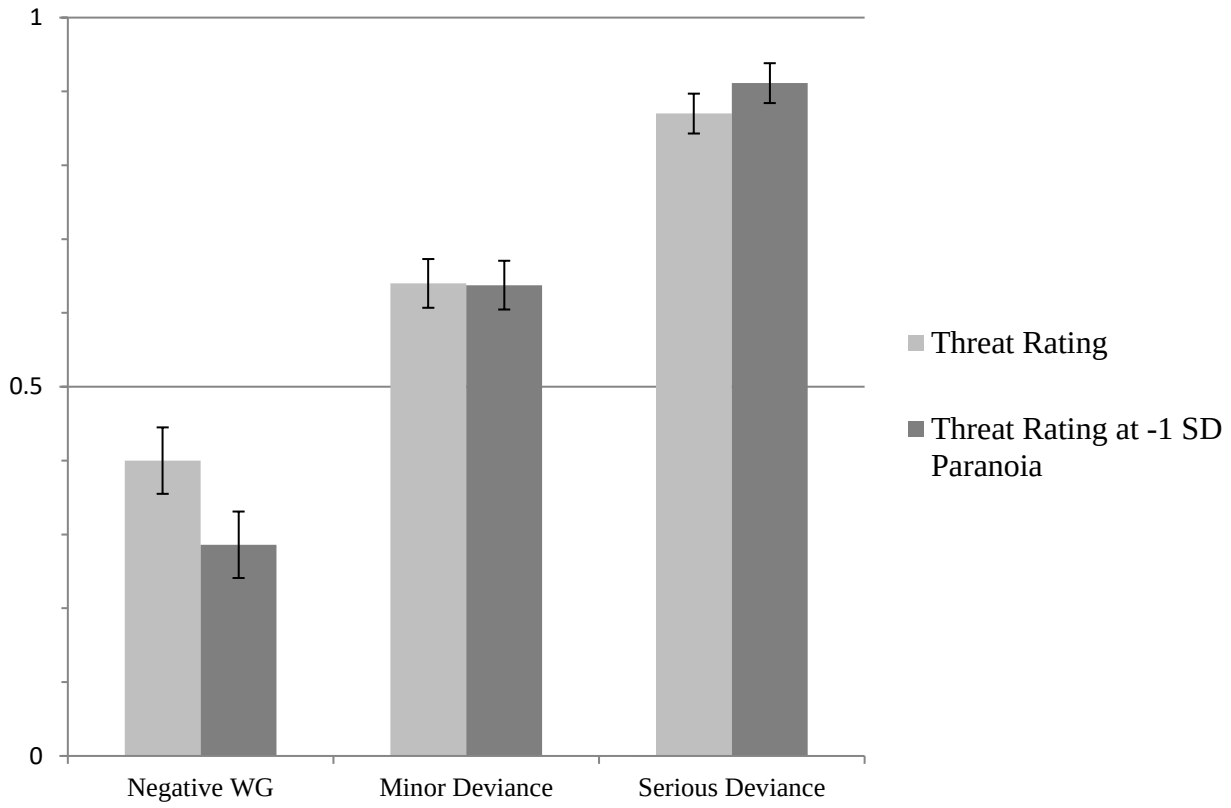


Figure 2. Behavior category by paranoia interaction in Study 2. Threat ratings are reported as a consensus (i.e., as a proportion of ratings that the behavior is a threat). To help clarify the nature of the interaction, threat ratings are also plotted at minus 1 SD of supervisor paranoia. WG = workplace gossip. Error bars represent the mean ± 1 SE.

Hypothesis 2b predicted that paranoia would be highly positively related to perceptions of the frequency of others' WG about oneself. Results confirmed this, with WG perceptions being highly related to generalized paranoia, $r = .72$, $p < .001$. The strength of this relationship suggests that WG perceptions may be a reflection of paranoia. Essentially, if WG perceptions are highly affected by cognitive biases related to paranoia, as we have argued, then WG perceptions could be an indicator of paranoia. Hypotheses 2b was supported.

Hypothesis 2c predicted that paranoia would have a stronger relationship with WG *perceptions* than with WG *behavior*. In essence, this predicted that paranoia affects WG perceptions in a unique way. Results indicated that WG *behavior* was related to paranoia, $r = .52$, $p < .001$, but the relationship was significantly weaker than the relationship between paranoia and WG *perceptions*, $z = 2.54$, $p = .011$, as expected. Hypothesis 2c was supported.

Follow-up analyses were then performed. Deviance is defined as a behavior which violates norms and is a threat to the well-being of an organization or its people (Robinson & Bennett, 1995). Whereas Study 1 tested whether WG violates norms, this study assessed the second component of the deviance definition – whether WG is a threat. Evidence showed that negative WG ($M = .40$, $SD = .40$) was rated as being significantly less of a threat than minor deviance ($M = .64$, $SD = .30$), $t(79) = 7.00$, $p < .001$, $d = .78$. Evidence also showed that significantly less than half of negative WG ratings judged negative WG to be a threat, $t(79) = 2.32$, $p = .023$, $d = .26$. This indicates that supervisors see negative WG as being different from minor deviance, and that there is a majority consensus among supervisors (i.e., organizational representatives) that employee negative WG is *not* a threat. Both findings are consistent with evidence presented in Study 1 and provide further evidence that WG does not qualify as a form of deviance.

Prior research has argued that gossip is a ubiquitous behavior (Dunbar, Marriott, & Duncan, 1997). Consistent with that, 96% of supervisors assessed in this study reported engaging in some form of WG behavior in the last month (71% reported engaging in negative WG). This suggests that there are unlikely to be any meaningful social controls which deter WG. Indeed, if a strong majority of individuals engage in the behavior, then that implies that the behavior is more likely to be expected or normative than it is to be a norm violation. That most supervisors engage in WG is consistent with the idea that WG is not deviant. Instead, engaging in WG appears to be the norm for supervisors.[8]

The fundamental debate about the nature of gossip stems, in large part, from the contradiction in how some individuals believe gossip is a form of malicious talk, and yet nearly everyone still gossips (Foster, 2004). Researchers have argued that this contradiction implies that views of gossip are often confused and/or biased. In this study, supervisors reported engaging in WG regardless of whether or not they perceive WG to be a threat. That is, supervisors' own negative WG behavior was not related to their threat ratings of negative WG, $r = .06$, $p = .613$. If ratings of the threat that WG poses were entirely non-biased, then we would expect there to be a negative relationship between WG behavior and ratings of the threat that it poses. Essentially, the more harmful an employee sees a behavior to be, the less likely they should be to engage in the behavior. However, supervisors appear to engage in WG regardless of their perceptions of the threat that WG poses. This is what we would expect to see if supervisors see their own WG as

[8] In the previous study (i.e., Study 1), employees rated their boss' WG as potentially being a norm violation, although not at a significant level ("Boss gossiping about employees", norm violation consensus = .60, 95% CI [.49, .71]). However, this study indicates that most supervisors report engaging in negative WG in the last month, consistent with their WG behavior not being a norm violation. The discrepancy between the Study 1 and 2 results stresses the idea that WG is, by definition, a covert behavior. Employees are unlikely to have accurate knowledge of their boss' WG because they are not always present to hear it. We have argued that this lack of information about others' WG is what enables paranoia to bias views of others' WG. In this case, paranoia could bias employees' views of their boss' WG behavior to make the boss' WG behavior appear more deviant than it otherwise would be without the influence of paranoia.

being innocent (i.e., non-deviant) but have biased perceptions of the threat that others' WG poses.

Overall, evidence demonstrates that paranoia biases how individuals perceive WG. Paranoia essentially creates a double-whammy where individuals higher in paranoia are more likely to see WG as a threat and also believe that WG about themselves occurs at a higher-than-normal frequency. Interestingly, paranoia biases views of WG in a way that it does not bias views of deviance. This serves to make WG appear more like deviance (i.e., more threatening) than it otherwise would without the influence of paranoia.

Further, paranoia is more strongly associated with WG *perceptions* than it is with WG *behavior*. This indicates that there is a fundamental difference between the two constructs. This difference provides one possible explanation why individuals have confused views about gossip and why WG has been treated as a form of deviance in the organizational literature. Essentially, WG may have been categorized as a form of deviance not based on an accurate assessment of WG behavior, but rather based on WG perceptions which can be highly biased by paranoia. In essence, individuals who experience paranoia would be likely to nominate WG as a form of deviance in deviance typologies, and gossip bias could impair both participants' and researchers' ability to recognize that WG does not qualify as a form of deviance.

PHASE 3: TESTING THE EFFECT OF TREATING WG AS DEVIANCE

Evidence from Studies 1 and 2 indicate that most employees and supervisors do not see WG as a being a form of deviance. This is important because WG is often treated like a form of deviance in deviance measurement. With that in mind, we asked our third research question: how does inaccurately treating WG as a form of deviance affect organizational research? As summarized in Table 1, we tested this question using three related studies (i.e., Studies 3, 4, and 5). In Study 3, we identify cases in which WG items have been treated as indicators of deviance in research. In Study 4, we verify that when the identified WG items are included in deviance scales, they elicit responses which correspond with typical WG and not extreme cases of WG (e.g., malicious WG). Finally, in Study 5, we conduct an experiment in which we manipulate whether the identified WG items either are or are not present in deviance scales and measure the effect that the WG items have on relationships between deviance and other variables. This essentially tests whether treating WG as a form of deviance in deviance measurement can meaningfully contaminate deviance research.

Study 3 – Identifying WG Items in Deviance Measurement

For this study, our goal was to identify deviance scales and items for subsequent experimentation. To begin, we visually inspected the items in a sample of commonly-used interpersonal deviance scales to identify items which are likely to assess WG. Our goal was not to exhaustively identify every WG item which has been used in deviance scales. Instead, we were primarily interested in identifying items and scales which we could examine in follow-up studies. As shown in Table 3, potential WG items were identified in 15 interpersonal deviance scales/subscales. In some cases, items directly assess gossip by using the word "gossip" in the item text (e.g., "Gossiped about my supervisor", Aquino, Lewis, & Bradfield, 1999). In other

cases, items appear to have been written to assess evaluative talk, a core element of the definition of WG (e.g., “Criticized a coworker’s opinion or suggestion”, Dalal et al., 2009). Although the evaluative talk items oftentimes do not specify that the behavior occurs outside someone’s awareness, it is logical to expect that this is how these behaviors will typically manifest. This largely stems from the idea that WG occurs more frequently than deviance (see Study 1). This is simply due to the influence of social controls which deter the manifestation of deviance but not WG. With that in mind, we expected that evaluative talk behaviors will more commonly manifest as WG rather than as deviance.

Table 3
Example WG Items in Interpersonal Deviance Scales

Scale	Item
Interpersonal deviance (Aquino et al., 1999)	"Gossiped about my supervisor"
Interpersonal deviance (Bennett & Robinson, 2000)	"Made fun of someone at work"[a]
Incivility (Cortina et al., 2001; Instigated incivility, Blau & Andersson, 2005)	"Made demeaning or derogatory remarks about you?" "Doubted your judgment on a matter over which you have responsibility?"
Counterproductive work behaviors (3 scales; Dalal et al., 2009)	"Criticized my supervisor's [a coworker's] opinion or suggestion"[a] "Spoke poorly about my supervisor [a coworker] to others"[a] "Gossiped about people at (organization name)" "Talked badly about people behind their backs"
Social undermining (2 scales; Duffy et al., 2002)	"Spread rumors about you?"[a,b] "Talked bad about you behind your back?"[a] "Criticized the way you handled things on the job in a way that was not helpful?"[a] "Did not defend you when people spoke poorly of you?"[a,c]
Harassment and bullying (Einarsen & Raknes, 1997)	"Ridicule or insulting teasing" "Gossip or rumors about you"
Aggression **(**2 scales; Glomb, 1998; Glomb & Liao, 2003)	"Talking behind someone's back" "Insulting, criticizing another (including sarcasm)" "Failing to correct false information about another"[c] "Spreading rumors"[b] "Belittling the opinions of another in front of other people"
Supervisor-directed deviance (Mitchell & Ambrose, 2007)	"Made fun of my supervisor at work"[a] "Gossiped about my supervisor"[a]
Abusive supervision (Tepper, 2000; short version, Mitchell & Ambrose, 2007)	"Ridicules me" "Puts me down in front of others" "Makes negative comments about me to others"

[a]Items assessed in Study 3
[b]Although rumor and gossip are conceptualized as being different, lay people often confuse the two behaviors.
[c]This item appears to assess an absence of positive gossip.

Having gathered a set of potential WG items, we next set out to test some of the items to determine if they are indicators of WG rather than deviance. If the items assess WG variance, then the items could negatively impact deviance measurement. Specifically, they could contaminate measurement, biasing observed relationships away from the deviance nomological network and toward the WG nomological network. For this study, we tested 11 items which are in five different scales: supervisor-directed deviance (SDD), interpersonal deviance (IDEV), counterproductive work behaviors (CWB) toward supervisor, CWBs toward coworkers, and social undermining by coworkers (for a list of predicted WG items in these scales, see Table 3). The first four scales were chosen because they are commonly-used scales which assess deviance behavior and could include WG behavior items. The social undermining scale was chosen because it assesses deviance perceptions and could include WG perception items.[9]

Participants and Procedure. Two independent employed samples were recruited from MTurk (U.S. and Canada). This enabled us to test the deviance scales across two samples, thereby decreasing the likelihood of method effects that could arise from administering all of the deviance scales in a single survey. This also had the benefit of conceptually replicating the procedure. We describe the procedure and results for both samples as a single study.

For Sample 3a (N = 186; 54% male; mean age = 33.57, SD = 9.87; hours per week = 40.76, SD = 7.66; industry and education were varied), participants assessed their own supervisor-directed deviance (SDD; 10 items; Mitchell & Ambrose, 2007), interpersonal deviance (IDEV; 7 items; Bennett & Robinson, 2000), and negative WG (i.e., about supervisor/co-workers; 2 scales, 5 items each; Brady et al., 2017). All scales assessed behavior

[9] As a part of their discriminant validity test between WG and deviance, Brady et al. (2017) noted that the SDD and IDEV scales may include gossip items. However, the prior research was limited in nature as it did not exclude the WG items from scale administration, limiting inferences that can be drawn from the earlier research. This research examines those two scales along with three other deviance scales, and then extensively analyses the scales without the WG items to examine the effect that the WG items have on deviance measurement.

over the last year (1 = *never* to 7 = *daily*), matching the timeframe used in the deviance scale developments.

For Sample 3b (*N* = 195; 50% male; mean age = 34.86, *SD* = 10.28; hours per week = 41.49, *SD* = 6.52; industry and education were varied), participants assessed their CWB behavior (toward supervisor/co-workers; 2 scales, 6-items each; Dalal et al., 2009), their negative WG behavior (as described in Sample 3a), their perceptions of co-workers' social undermining (13 items; Duffy et al., 2002), and their WG perceptions (i.e., coworker negative WG about oneself; see Study 2). All scales in Sample 3b used a 7-point one-month response format (1 = *never* to 7 = *more than once per day*), matching the timeframe used in the social undermining scale development. Although the CWB scales were developed to assess daily behavior, the one-month response format used here enabled us to more accurately examine CWB item covariance. For a detailed description of the scales used in this Study, refer to Appendices C and D.

We tested 11 predicted WG items from five deviance scales. The predicted WG items were each presented individually, separate from the deviance scale in which they are normally included. This was done to minimize item-context effects which could negatively affect results (Harrison & McLaughlin, 1993). For example, the presence of WG items in a deviance scale could change the interpretation of deviance items, thereby contaminating deviance variance. By testing the predicted items apart from the deviance scale, this was a sensitive test of the items against non-contaminated deviance variance. To minimize anchoring effects (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) which could also negatively affect this analysis, the tested items and scales were interspersed amongst non-related scales and demographics questions. Presentation order for the items and scales was randomly counterbalanced.

Results and Discussion. Five exploratory factor analyses (EFA; maximum likelihood,

promax rotation, number of factors fixed to two) were performed to test if the predicted items assessed WG variance. Each EFA included items from one deviance scale and items from one WG scale that matched the context of the deviance scale (e.g., an EFA with the supervisor-directed deviance scale items and the negative WG about a supervisor scale items). The goal was to determine if the predicted items covaried with a WG factor or with a deviance factor. Scale development best-practices recommend that if an item does not load cleanly onto the intended factor, then the item can introduce variance from outside the construct of interest (Hinkin, 1998). In this case, if the predicted items did not load cleanly onto the deviance factor, then they could introduce WG variance into deviance measurement. For this analysis, we chose to use EFAs rather than confirmatory factor analyses (CFAs) so that we could identify cross-loaded items (i.e., items which do not load cleanly onto a single factor). This was important because cross-loaded WG items could also introduce a meaningful degree of WG variance into deviance measurement.

As shown in Table 4, all 25 items from the WG scales loaded onto one factor (loadings from .72 to .95). In contrast, 30 of 31 deviance scale items which were not expected to assess WG loaded more onto a second factor (loadings from .60 to .91). This was consistent with what we would expect to see if the WG and deviance scales assessed different constructs (i.e., they each assessed unique variance). We then examined the 11 items that we predicted were indicators of WG but which have been included in deviance scales. Ten of the items loaded more onto the WG factor than onto the deviance factor, while the remaining item was cross-loaded between factors (factor loading: .62 on the WG factor versus .73 on the deviance factor). This confirmed that all 11 items can introduce meaningful WG variance into deviance measurement, thereby confirming our predictions that these are WG items which have been included in

deviance scales.

Table 4
Factor Loadings for Exploratory Factor Analyses in Study 3

Scale/Item	Factor 1	Factor 2
EFA #1 (Sample 3a)		
Supervisor-Directed Deviance (Mitchell & Ambrose, 2007)		
Made fun of my supervisor at work	**.706**	.419
Played a mean prank on my supervisor	.356	**.803**
Made an obscene comment or gesture toward my supervisor	.412	**.809**
Acted rudely toward my supervisor	.469	**.812**
Gossiped about my supervisor	**.724**	.348
Made an ethnic, religious, or racial remark against my supervisor	.347	**.648**
Publicly embarrassed my supervisor	.379	**.714**
Swore at my supervisor	.311	**.703**
Refused to talk to my supervisor	.384	**.815**
Said something hurtful to my supervisor at work	.396	**.914**
Negative WG about Supervisor (Brady et al., 2017)		
asked a work colleague if they have a negative impression of something that your supervisor has done	**.921**	.406
questioned your supervisor's abilities while talking to a work colleague	**.858**	.442
criticized your supervisor while talking to a work colleague	**.930**	.399
vented to a work colleague about something that your supervisor has done	**.899**	.388
told an unflattering story about your supervisor while talking to a work colleague	**.816**	.487
EFA #2 (Sample 3a)		
Interpersonal Deviance (Bennett & Robinson, 2000)		
Made fun of someone at work	**.716**	.388
Said something hurtful to someone at work	.462	**.865**
Made an ethnic, religious, or racial remark at work	.238	**.674**
Cursed at someone at work	.284	**.597**
Played a mean prank on someone at work	.283	**.828**
Acted rudely toward someone at work	.492	**.719**
Publicly embarrassed someone at work	.350	**.895**
Negative WG about Coworkers (Brady et al., 2017)		
asked a work colleague if they have a negative impression of something that another co-worker has done	**.901**	.353
questioned a co-worker's abilities while talking to another work colleague	**.919**	.342
criticized a co-worker while talking to another work colleague	**.919**	.426
vented to a work colleague about something that another co-worker has done	**.903**	.340
told an unflattering story about a co-worker while talking to another work colleague	**.821**	.443
EFA #3 (Sample 3b)		
Counterproductive Work Behaviors toward Supervisor (Dalal et al., 2009)		
Behaved in an unpleasant manner toward your supervisor	.515	**.819**
Tried to harm your supervisor	.379	**.786**
Criticized your supervisor's opinion or suggestion	**.687**	.445
Excluded your supervisor from a conversation	.555	**.733**
Tried to avoid interacting with your supervisor	**.596**	.530
Spoke poorly about your supervisor to others	**.558**	.394
Negative WG about Supervisor (Brady et al., 2017)		
asked a work colleague if they have a negative impression of something that your supervisor has done	**.858**	.535
questioned your supervisor's abilities while talking to a work colleague	**.918**	.479
criticized your supervisor while talking to a work colleague	**.947**	.543

vented to a work colleague about something that your supervisor has done	**.781**	.468
told an unflattering story about your supervisor while talking to a work colleague	**.723**	.702
EFA #4 (Sample 3b)		
Counterproductive Work Behaviors toward Coworkers (Dalal et al., 2009)		
Behaved in an unpleasant manner toward a coworker	.502	**.686**
Tried to harm a coworker[a]	.203	.256
Criticized a coworker's opinion or suggestion	**.523**	.506
Excluded a coworker from a conversation	.540	**.900**
Tried to avoid interacting with a coworker	.460	**.748**
Spoke poorly about a coworker to others	**.691**	.523
Negative WG about Coworkers (Brady et al., 2017)		
asked a work colleague if they have a negative impression of something that another co-worker has done	**.857**	.606
questioned a co-worker's abilities while talking to another work colleague	**.895**	.538
criticized a co-worker while talking to another work colleague	**.933**	.569
vented to a work colleague about something that another co-worker has done	**.904**	.593
told an unflattering story about a co-worker while talking to another work colleague	**.783**	.468
EFA #5 (Sample 3b)		
Social Undermining from Coworkers (Duffy et al., 2002)		
Insulted you?	.582	**.814**
Gave you the silent treatment?	.549	**.692**
Spread rumors about you?	**.612**	.525
Delayed work to make you look bad or slow you down?	.591	**.794**
Belittled you or your ideas?	.615	**.804**
Hurt your feelings?	.595	**.655**
Talked bad about you behind your back?	**.657**	.643
Criticized the way you handled things on the job in a way that was not helpful?	.619	**.726**
Did not give as much help as they promised?	.539	**.722**
Gave you incorrect or misleading information about the job?	.395	**.646**
Competed with you for status and recognition?	.465	**.637**
Let you know they did not like you or something about you?	.532	**.811**
Did not defend you when people spoke poorly of you?	**.716**	.683
Coworker Negative WG about Oneself (modification of Brady et al., 2017)		
asked a work colleague if they have a negative impression of something that you have done	**.884**	.627
questioned your abilities while talking to a work colleague	**.889**	.657
criticized you while talking to a work colleague	**.917**	.609
vented to a work colleague about something that you have done	**.838**	.544
told an unflattering story about you while talking to a work colleague	**.819**	.596

Note. Italicized items indicate items which were hypothesized to assess workplace gossip. Bold factor loadings indicate the dominant loading. Underlined factor loading indicates a difference in loading greater than .20. WG = workplace gossip.

[a] This item appeared to have too little variance to load meaningfully onto either factor

The primary objective of this study was to identify deviance scales and items for follow-up experimentation (i.e., in Study 5). Across two independent samples, evidence indicated that all five tested scales are likely to include WG variance. However, although the two CWB scales do appear to include WG variance, post-hoc analysis of the non-WG items in these scales indicated that there could be other validity issues with the CWB scales which are unrelated to the WG items. Specifically, the CWB scales include items which assess an intent to harm ("Tried to harm a coworker [your supervisor]"; Dalal et al., 2009). These items had a very low frequency (coworker harm item M = 1.05, CWB toward coworker full-scale M = 1.65; supervisor harm item M = 1.12, CWB toward supervisor full-scale M = 1.49). Further, one of these items did not covary meaningfully with either factor in the EFA (i.e., WG factor: .203; CWB toward coworker factor: .256). This is potentially problematic because the CWB construct which corresponded to these scales was defined by the scale authors as "behavior that harms, or *at least is intended to harm* [emphasis added], the legitimate interests of an organization" (p. 1052). That an item which directly assesses an intent to harm did not covary with the WG factor is consistent with our argument that WG is typically not deviant. However, that it did not meaningfully covary with the other CWB items could be indicative of issues with the other items. Specifically, the other, non-WG items may not be valid indicators of the intended CWB construct. One possible explanation is that participants may interpret some other items in the CWB scales as assessing social exclusion (a form of social control) or some other non-CWB construct (e.g., "Excluded your supervisor [a coworker] from a conversation", "Tried to avoid interacting with your supervisor [a coworker]").

With this potential issue in mind, we chose not to study the CWB scales further. The remaining scales (i.e., SDD, IDEV, and social undermining) were retained for follow-up study.

Study 4 – Verifying that the Identified Items Assess Typical WG

This study was part two in our three-part assessment of the effect of inaccurately treating WG as deviance in deviance measurement (for an overview, see Table 1). The goal of this study was to verify that the items identified in Study 3 assess typical WG behavior. Researchers have argued that the context in which items are presented can change how participants interpret the items (i.e., item-context effects; Harrison & McLaughlin, 1993; Podsakoff et al., 2003). This is important because it is technically possible that treating WG as a form of deviance could elicit deviance responses if participants saw the WG items alongside deviance items and then inferred that they should respond to the WG items with extreme cases of WG which actually are deviant (e.g., malicious WG). In essence, the deviance items could introduce item-context effects which change how participants interpret the WG items.

To rule out this possibility, we performed an in-context validity test on the previously-identified WG behavior items that appear to have been included in deviance scales (see Study 3). Although prior research has described procedures to assess the substantive validity of individual items, prior procedures are limited in that they generally perform rational assessments of items independent of the item-context effects stemming from other items. To address this potential limitation, we utilized a novel procedure which assessed the substantive validity of the predicted WG items in the context in which participants encounter the items. In so doing, this procedure provides a more accurate assessment of the substantive validity of the items.

As a part of this validity test, participants were asked to categorize behaviors according to behavioral type (i.e., to assess whether a behavior is WG or deviance). We focused on assessing the validity of the previously-identified WG *behavior* items, and not the WG *perception* items. We made this choice because categorizations of one's own WG behavior can be accurate, whereas categorizations of others' WG about oneself (i.e., WG perceptions) could be highly

inaccurate due to the biasing influence of paranoia (see Study 2).

Participants and Procedure. An independent employed sample was recruited using MTurk (U.S. or Canada; *N* = 235; 54% male; mean age = 35.34, *SD* = 11.29; mean hours per week = 41.65; *SD* = 7.86; mean organizational tenure = 5.30 years, *SD* = 5.87; median income = $40,000 - $49,999). As before, employment industry and education were varied (industry: arts and media = 4%, business and financial operations = 7%, computer industries = 11%, construction = 3%, education = 11%, food services = 4%, government = 5%, healthcare = 11%, social sciences = 6%, office administration = 6%, production = 4%, and sales = 12%; education: some high school = 1%, high school = 18%, technical college or trade certification = 17%, university = 49%, graduate degree = 15%). All evidence was consistent with this sample being a heterogeneous sample of working adults.

For this study, participants were randomly presented with either the full SDD or the full IDEV scale (as described in Study 3). If participants clicked on an item-response bubble signaling that they had engaged in some behavior (versus none) for one of the three predicted WG behavior items (see Table 3), the survey immediately proceeded to a new survey page where participants were asked to think about and describe the specific behavior they had in mind when they responded to the item. This was intended to activate a detailed memory of the behavior which was assessed by the item. On a separate page, participants were then provided with lay-worded definitions of four behavioral constructs. These constructs included WG and three deviance-related constructs (i.e., deviance, social undermining, and incivility). Participants were asked to select the construct which best fit the behavior that they had in mind when they responded to the item (for a description of this categorization task, see Anderson & Gerbing, 1991). Construct names were not provided to minimize bias in ratings. Finally, participants were

provided with a variety of motives, and were asked to select the motive which best reflected why they engaged in the behavior. The provided motivations were drawn from previously identified motivations for engaging in WG (e.g., to gather information, to undermine or harm someone, etc.). For detailed information about the scales used in this survey, see Appendix E.

Results. We predicted that participants would interpret the three tested items in the SDD and IDEV scales (see Study 3) as assessing WG behavior and not deviance, even when those items were presented alongside deviance items. To begin, we examined the descriptions of behaviors that participants recalled when they responded to the tested items (for example behavior descriptions, see Table 5). Descriptions of behaviors categorized as WG were consistent with what we would expect to see from typical WG – specifically evaluative talk that is often in response to others' norm violations (Brady et al., 2017). For example, participants frequently described engaging in evaluative/judgmental talk about others' counter-normative behavior (i.e., others' deviance). Although most of the recalled behaviors were rated as being WG, some behaviors were rated as being deviant. For example, one participant recalled a time in which they made "general fun at someone's [e]thnic [sic] background" and categorized this as a form of workplace incivility (i.e., as a form of deviance). Participant descriptions of their behavior appeared consistent with their behavior categorizations, suggesting that participants understood the difference between the WG and deviance constructs. That is, we had no reason to question participant ratings of their own behavior.

Table 5
Example Behaviors Assessed when WG is Treated as a Form of Deviance (Study 4)

	Behavior Description	Categorization
1.	"I was speaking with some coworkers; I made mention of the fact that our supervisor does not really pay attention to or is aware of what we are doing on a day to day basis."	WG
2.	"My supervisor reprimanded several co-workers unfairly, and we discussed how upset they were about it and how he had no right to do that."	WG
3.	"She was pushing our team way too hard with unreasonable expectations for what could be accomplished within one day and we were sarcastic about it. We complied, but we talked sarcastically about what a great day it was."	WG
4.	"I was talking to another member of the staff about why people, on the whole, view my manager as tough to work for. I gave my perspective on his strengths & weaknesses in those areas (both the good and the bad)."	WG
5.	"There is one person who is always 'sick' we joked about what could be wrong with her this time. We all now she just hates work and doesnt want o come."	WG
6.	"I often gossip with my small group of co-workers about our boss. He tends to tell each of us different versions of events so we often compare stories to see what the truth really is. He also tells us a lot about his personal life, which we talk about to ech other."	WG
7.	"Talked to co workers about how another is always making excuses for being late."	WG
8.	"We all gossip about him and his lack of telecommunications knowledge."	WG
9.	"There was a particular action that my supervisor let an employee do that I felt was not moral. I was talking about this with another coworker over the phone."	WG
10.	"Complained about how bad an worker smelled."	WG
11.	"general fun at someone's [e]thnic [sic] background"	Incivility
12.	"backbiting against someone for poor choices/incompetence…"	Deviance

Note. These are example descriptions of behaviors that participants had in mind when they responded to a WG item that was included in a deviance scale. The behavior categorization reflects how participants rated their own behavior according to the type of behavior that it was. WG = workplace gossip.

To analyze how participants rated their behavior, we dichotomized the behavior categorizations into whether participants thought the behavior that they recalled was a manifestation of WG or rather some form of deviance (i.e., a behavior categorized as deviance, social undermining, or incivility). We then compared the ratings of WG versus deviance. As expected, results indicated that participants typically categorized the behaviors that they had in mind as being WG. Specifically, the behaviors were categorized as being WG significantly more often than all forms of deviance combined (SDD item 1, $p = .012$; item 2, $p < .001$; IDEV item, $p = .040$, one-tailed distribution; for a description of this statistical test, see Anderson & Gerbing, 1991; see Appendix E for item text).

We then examined participants' motivations for their behavior. Individuals reported engaging in the recalled behaviors for a variety of reasons, including to alleviate boredom (49%), to vent or cope with emotions (24%), to build friendships (8%), to inform others of something important (6%), and to gather information (5%). Only 2% reported that they engaged in the behavior to undermine or harm someone. The relative infrequency of the intentional harm motivation provided further evidence that the behaviors reflected typical WG and not extreme, malicious cases of WG (i.e., deviance).

Discussion. Overall, evidence indicated that responses to the three tested items reflect typical WG behavior and not deviance behavior, even when the items are presented within a deviance scale. This suggests that item-context effects stemming from the deviance items do not appear to change respondents' interpretation of the WG items. That is, mixing WG and deviance items does not appear to result in participants interpreting the WG items as assessing deviance instead. This confirms that treating WG as a form of deviance in measurement could introduce typical WG variance into deviance measurement. Given that WG items appear to have been

included in a wide variety of deviance measures, evidence from this study stresses the importance of assessing the effect of WG items on deviance measurement. Specifically, it is important to determine whether items which appear to assess WG can meaningfully contaminate deviance measurement.

Study 5 – Experimental Study of the Effect of Treating WG as Deviance

Finally, we conducted the third study in our three-part examination of how the traditional practice of treating WG as a form of deviance in measurement affects research (see Table 1 for a study overview). For this study, we conducted an experiment in which WG items were or were not present in deviance scales and examined the effect that these items have on relationships between deviance and other variables. We predicted that WG and deviance have different nomological networks (i.e., a differing pattern of relationships with other variables), and that including WG items in deviance scales could bias observed relationships away from the deviance nomological network, essentially resulting in measurement contamination.

To our knowledge, this is the first time that the tested deviance scales have been administered without their WG items with the intent of examining relationships between deviance and other variables. Evidence from Study 4 indicated that mixing WG and deviance items does not appear to change the interpretation of WG items. However, it is possible that mixing WG and deviance items in a single scale could change the interpretation of the deviance items. By removing the WG items before scale administration (Condition 2), this is the first "clean" test of these deviance scales without item-context effects resulting from the mixing of WG and deviance items (Harrison & McLaughlin, 1993). This makes this a more accurate assessment of the relationships between these deviance scales and other variables than what would be possible if the WG items were simply removed after scale administration.

Participants and Procedure. An independent employed sample (U.S. and Canada) was recruited from MTurk for a multiwave online experiment. In total, 704 participants accurately responded to attention checks, tests of English-language comprehension, and completed the first survey wave (54% female; mean age = 35.27 years, *SD* = 9.70; hours per week = 41.26, SD = 6.87; organizational tenure = 4.68 years, *SD* = 4.76; median income = $40,000 - $49,999 per year). Participants were employed in a variety of industries, including arts and design (7%), business and financial operations (8%), computer industries (9%), education (13%), food services (4%), government (3%), healthcare (12%), office administration (5%), production (4%), sales (13%), and the social sciences (3%). Participant education was varied (some high school = 1%; high school = 19%; technical college = 16%; university = 44%; graduate degree = 20%). All demographics information was consistent with this being a broad-based heterogenous sample of North American working adults.

In Wave 1, participants were randomly assigned to one of two conditions. In Condition 1 (*n* = 348), participants assessed three deviance scales identified as including WG items (i.e., SDD, IDEV, and social undermining; see Study 3). In Condition 2 (*n* = 356), participants assessed the same scales, but with the WG items removed. In an effort to minimize anchoring effects that could result if the deviance scales were presented back-to-back, the deviance scales were interspersed amongst non-deviance scales (e.g., three organizational commitment scales) and demographics questions (see Podsakoff et al., 2003). The only difference between conditions was the presence or non-presence of WG items.

Six days later, participants were invited back for a second survey wave in which they assessed a set of scales which tested the nomological networks of deviance and WG. Participants also reported their own negative WG behavior and WG perceptions of coworkers' negative WG

about themselves. In total, 535 participants were retained from Wave 1 to Wave 2 (76% retention; Condition 1: n = 270; Condition 2: n = 265), with no significant demographic differences between the retained and non-retained participants.

Measures. To determine how WG behavior items affect the measurement of deviance behavior, we assessed six scales. Supervisor-directed deviance (SDD) was assessed using Mitchell and Ambrose's (2007) 10-item scale (α = .83) and a shorter 8-item version of the scale without WG items (α = .89; see Table 1). Interpersonal deviance (IDEV) was assessed using Bennett and Robinson's (2000) 7-item scale (α = .84) and a shorter 6-item version of the scale (α = .87; see Table 1). Negative WG behavior was assessed using the Brady et al. (2017) negative WG about supervisor (NWGS, 5 items, α = .94) and negative WG about coworkers (NWGC, 5 items, α = .95) scales. All behavior was assessed over the last year, reflecting the low base rate of deviance behavior and the timeframe used in the deviance scale developments (1 = *never* to 7 = *daily*).

We predicted that including WG perception items in deviance scales can introduce variance related to paranoia. To test this, we assessed five scales. Perceptions of social undermining by coworkers was assessed using Duffy and colleagues' (2002) 13-item scale (α = .95) as well as a shorter 9-item version of the scale without WG items (α = .92; see Table 1). Both scales used a 6-point response format (1 = *never* to 6 = *every day*). WG perceptions was assessed using a scale which assessed coworkers' negative WG about oneself (CNWG; α = .94; as described in Study 3). Paranoia was assessed using Green and colleagues' (2008) paranoid delusions of reference scale (α = .97; as described in Study 2) and also Fenigstein and Vanable's (1992) general paranoia scale (20 items, α = .94; "I have often felt that strangers were looking at me critically"; 1 = *not at all applicable to me* to 5 = *extremely applicable to me*). Perceptions

were assessed over the last month, consistent with the timeframes used in the social undermining and paranoid delusions scale developments.

To assess nomological differences between WG and deviance, we examined relationships with a variety of other constructs which are commonly studied in deviance research (see Hypotheses 3 and 5). Organizational justice was assessed using Colquitt's (2001) four-factor measure of justice (i.e., procedural justice: 7 items, α = .90; interpersonal justice: 4 items, α = .93; informational justice: 5 items, α = .89; distributive justice: 4 items, α = .97; e.g., "Have those procedures been free of bias?"; 1 = *to a small extent* to 5 = *to a larger extent*). Job satisfaction was assessed using the Barnes, Miller, and Bostock (2017) version of Brayfield and Rothe's (1951) job satisfaction scale (5 items; e.g., "I felt fairly well satisfied with my job"; 1 = *strongly disagree* to 7 = *strongly agree*; α = .93). Organizational commitment was assessed using Meyer, Allen, and Smith's (1993) three-factor measure (affective commitment: 6 items, α = .92; normative commitment: 6 items, α = .92; continuance commitment: 6 items, α = .83; e.g., "I would be very happy to spend the rest of my career with this organization"; 1 = *strongly disagree* to 7 = *strongly agree*). Conscientiousness (10 items, α = .90; e.g., "Pay attention to details") and neuroticism (10 items, α = .93; e.g., "Have frequent mood swings") were assessed using Goldberg's (1992) measures (1 = *strongly disagree* to 7 = *strongly agree*). Self-esteem was assessed using Rosenberg's (1965) measure (10 items, α = .94; e.g., "On the whole, I am satisfied with myself"; 1 = *strongly disagree* to 6 = *strongly agree*). For a detailed description of the scales used in this study, see Appendices F and G.

Analysis and Results. To begin, we tested our predictions that there are nomological network differences between WG and deviance. As shown in Table 6, there was a pattern of differences in relationship significance for WG versus deviance (Condition 2 - without WG

items) for the H3, H4, and H5 correlates. For example, there were 19 significant relationships between the commonly-studied deviance correlates (i.e., H3 correlates) and WG behavior (i.e., NWGS and NWGC) versus only 2 significant relationships between the correlates and deviance (i.e., SDD and IDEV, Condition 2 - presented without WG items). In contrast, there were no significant relationships between the H4 correlates (age and gender) and WG behavior versus four significant relationships between the H4 correlates and deviance (Condition 2). This indicates that WG and deviance have a different pattern of significant/non-significant relationships with other variables, consistent with the constructs having different nomological networks.

To statistically test the patterns of relationship differences, we performed a series of multiple regressions. In each case, regressions were performed between the predicted correlates and (1) a WG scale versus (2) a deviance scale presented without WG items (Condition 2). The multiple correlations were then compared to determine whether there was a significant difference in shared variance (Olkin & Finn, 1995). This was seen as being a very conservative test of stronger/weaker relationship patterns, as relationships were tested across multiple correlates. Further, the patterns of relationship differences were tested using multiple deviance scales (e.g., SDD and IDEV), thereby replicating the findings across scales.

Table 6

Relationships Between Deviance (with and without WG) and Common Correlates (Study 5)

		Supervisor-directed deviance (SDD)			Interpersonal deviance (IDEV)			Social undermining		
Correlates	Hypothesis	With gossip (Cond. 1)	Without gossip (Cond. 2)	Only gossip (NWGS)	With gossip (Cond. 1)	Without gossip (Cond. 2)	Only gossip (NWGC)	With gossip (Cond. 1)	Without gossip (Cond. 2)	Only gossip (CNWG)
Procedural justice	H3	-.15*	-.05	-.33***	-.13*	-.05	-.13**	-.29***	-.22***	-.26***
Interpersonal justice	H3	-.27***	-.15*	-.43***	-.16*	-.10	-.11***	-.39***	-.40***	-.35***
Informational justice	H3	-.27***	-.11	-.45***	-.11	-.09	-.16***	-.34***	-.30***	-.28***
Distributive justice	H3	-.12	-.03	-.36***	-.09	-.08	-.14**	-.27***	-.26***	-.23***
Job satisfaction	H3	-.20***	-.10	-.34***	-.17**	-.11	-.19***	-.28***	-.25***	-.32***
Affective Commitment	H3	-.13*	-.06	-.24***	-.10	-.10	-.12**	-.18***	-.24***	-.17***
Normative Commitment	H3	-.13*	-.01	-.22***	-.09	-.02	-.07	-.16**	-.22***	-.13**
Continuance Commitment	H3	.05	-.02	.10*	-.02	.02	.09*	.17**	-.03	.04
Conscientiousness	H3	-.14*	-.11	-.21***	-.26***	-.12*	-.20***	-.10	.01	-.19***
Neuroticism	H3 & H5	.00	.12	.18***	.05	.08	.13**	.19**	.09	.28***
H3a/H3b: Multiple *R*		**.36**	**.25**	**.50**	**.33**	**.21**	**.27**	.42	.43	.43
Age	H4	-.08	-.18***	-.06	-.06	-.16**	-.06	-.04	-.07	-.08
Gender	H4	-.02	-.19***	-.02	-.12*	-.18***	-.05	.05	-.08	.02
H4a/H4b: Multiple *R*		**.09**	**.25**	**.07**	**.14**	**.23**	**.08**	.07	.10	.09
Paranoid delusions[a]	H5	.25***	.28***	.27***	.29***	.23***	.26***	.53***	.34***	.60***
General paranoia[b]	H5	.24***	.29***	.27***	.27***	.31***	.26***	.46***	.39***	.59***
Self-esteem	H5	-.02	-.14*	-.17***	-.08	-.13*	-.16***	-.15*	-.10	-.31***
H5a/H5b: Multiple *R*		.31	.32	.30	.32	.33	.29	**.56**	**.43**	**.64**

Note. n ranges from 265 (Condition 2 with Wave 2 correlates) to 534 (gossip with age and gender). For gender, 1 = male, 2 = female. NWGS = negative workplace gossip about a supervisor; NWGC = negative workplace gossip about co-workers; CNWG = perceptions of co-workers' negative workplace gossip about oneself; Multiple regression comparisons are outlined.

[a] Green and colleagues' (2008) paranoid delusions of reference scale. [b] Fenigstein and Vanable's (1992) paranoia scale. * $p < .05$. ** $p < .01$. *** $p < .001$.

Hypothesis 3a predicted that a variety of commonly-studied deviance correlates will have stronger relationships with WG behavior than with deviance. As shown in Table 6, the H3 deviance correlates shared significantly more variance with WG than with SDD (NWGS R = .50, SDD Condition 2 R = .25, z = 3.98, p < .001). The same pattern occurred for IDEV, although not at a significant level (NWGC R = .27, IDEV Condition 2 R = .21, p = .349). As predicted in Hypothesis 4a, age and gender shared significantly less variance with WG than with deviance (NWGS R = .07, SDD Condition 2 R = .25, z = 2.76, p = .006; NWGC R = .08, IDEV Condition 2 R = .23, z = 2.24, p = .025). Finally, also as predicted, the H5 paranoia-related correlates shared significantly more variance with WG perceptions than with social undermining (WG perceptions R = .64, social undermining Condition 2 R = .43, z = 3.96, p < .001). In summary, evidence demonstrated that WG behavior and deviance behavior have different nomological networks, as predicted in Hypotheses 3a, 4a, and 5a.

We then tested our predictions that inaccurately treating WG as a form of deviance can bias deviance measurement. Multiple regressions were again performed, but this time between commonly-studied deviance correlates and a deviance scale (1) *with* WG items (Condition 1) versus (2) *without* WG items (Condition 2). The multiple correlations were examined to verify that they matched the hypothesized bias direction. We then divided the quantity of shared variance (i.e., R^2 for Condition 1 / R^2 for Condition 2) to provided an estimate of the relationship bias that can be expected when WG is treated as a form of deviance in deviance measurement.

Results revealed that the H3 deviance correlates shared 2.12 times more variance with SDD when presented with WG behavior items versus without (Condition 1 R = .36 vs. Condition 2 R = .25). Similarly, the correlates shared 2.52 times more variance with IDEV when presented with WG versus without (Condition 1 R = .33 vs. Condition 2 R = .21). We next examined the

H4 correlates and relationship attenuation. As expected, age and gender only shared .12 times as much variance with SDD when presented with WG items versus without (Condition 1 R = .09 vs. Condition 2 R = .25). For IDEV, age and gender shared .35 times as much variance with IDEV presented with WG versus without (Condition 1 R = .14 vs. Condition 2 R = .23). Finally, we examined relationship amplification related to including WG perceptions items in a deviance scale. As expected, the H5 correlates shared 1.69 times more variance with social undermining when presented with WG items versus without (Condition 1 R = .56 vs. Condition 2 R = .43). In summary, evidence indicated that including WG items in deviance scales can meaningfully bias observed deviance variance away from the deviance nomological network and toward the WG/paranoia nomological networks. Hypotheses 3b, 4b, and 5b were supported.

Finally, we attempted to replicate the Study 2 findings regarding the relationship between WG perceptions and paranoia. Hypothesis 2b predicted that WG perceptions would be positively related to paranoia. As shown in Table 6, WG perceptions (i.e., CNWG) was highly related to both paranoid delusions (r = .60, p < .001) and general paranoia (r = .59, p < .001), as expected. Hypothesis 2c predicted that paranoia would be more strongly related to WG perceptions than to WG behavior. Evidence indicates that WG behavior was moderately related to paranoid delusions (NWGS: r = .27, p < .001; NWGC: r = .26, p < .001) and general paranoia (NWGS: r = .27, p < .001; NWGC: r = .26, p < .001). However, in all cases, paranoia was more strongly related to WG *perceptions* than to WG *behavior* (all p's < .001), as expected. This replicated Study 2 results using an employee sample, providing further support for Hypotheses 2b and 2c.

Discussion. Evidence from Studies 1 and 2 indicated that most individuals do not see WG behavior as a form of deviance, and that WG perceptions are highly related to paranoia. This raises the possibility that treating WG as a form of deviance in deviance measurement could

result in measurement contamination. Evidence from this study confirmed that WG and deviance have different nomological networks. When WG is treated as a form of deviance in measurement, it appears to meaningfully bias observed deviance relationships away from the deviance nomological network and toward a different nomological network. For WG behavior items, the bias is toward the WG behavior nomological network. In contrast, when WG perception items are included in deviance measurement, observed deviance perception relationships are biased toward the paranoia nomological network.

This is important because it demonstrates that inaccurately treating WG as a form of deviance in measurement could lead to an increase in Type I/II errors and interfere with our knowledge of deviance. For example, treating WG behavior as a form of deviance in measurement can amplify deviance relationships with other constructs, making non-significant relationships appear significant when they otherwise would not be if WG had not been inaccurately treated as a form of deviance. For example, in this study, WG items increased the shared variance between deviance behavior and its commonly-studied correlates by a factor of 2.12 to 2.52 times. If a researcher adopted a Type I error rate of $\alpha = .05$, that level of observed relationship amplification would approximately *quadruple* the probability of Type I errors, with non-significant relationships, $p \approx .20$ being made to appear significant at $p < .05$.[10] This is highly problematic and is something that researchers need to be aware of in their research.

Some may find it surprising that adding a few WG items to a deviance scale can have such a profound impact on measurement. For deviance/WG behavior, we see this as a natural outcome of entangling constructs with different base rates. In this study, 81% of participants reported engaging in any negative WG behavior (i.e., NWGS or NWGC) versus 49% engaging

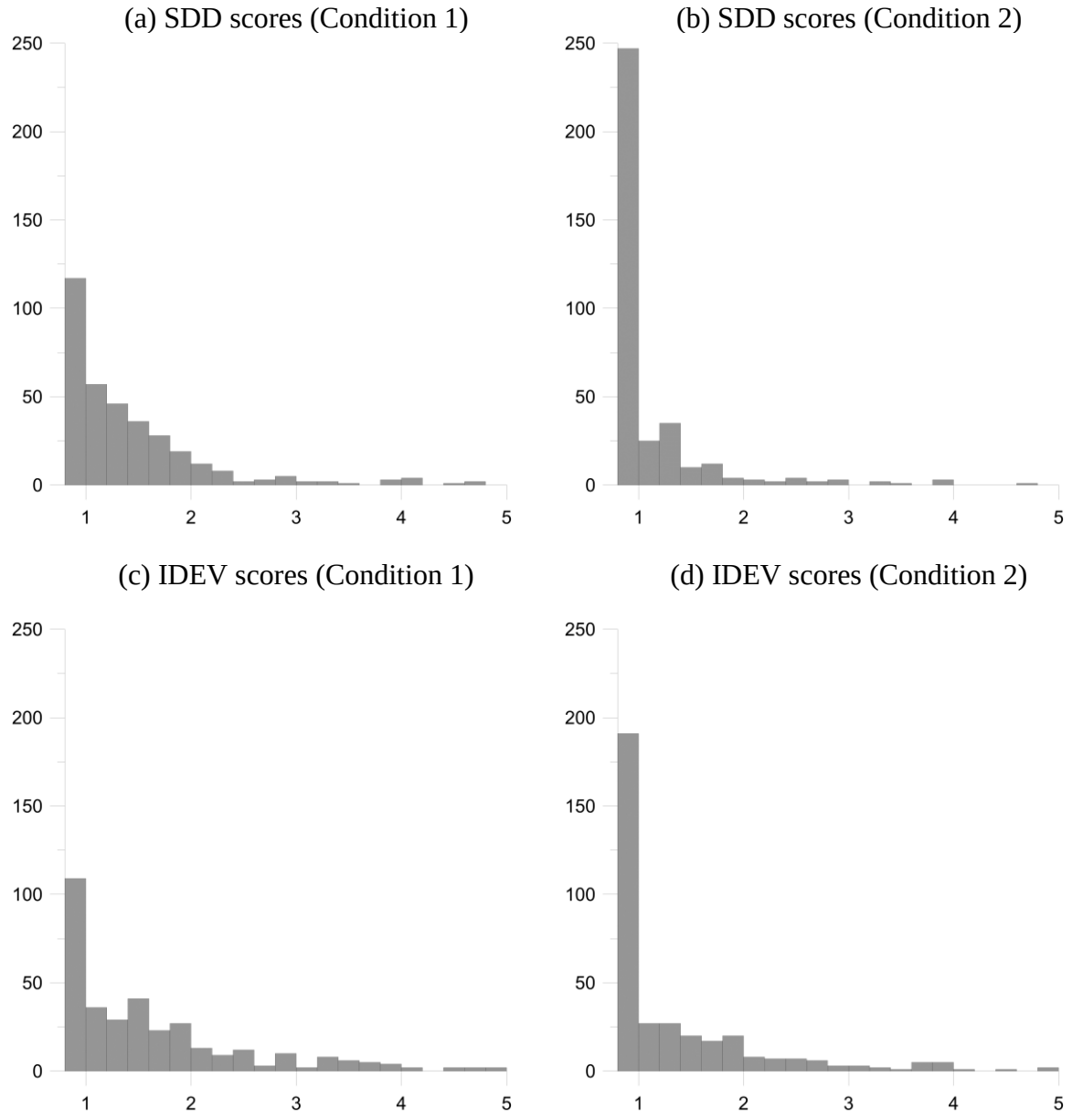
[10] Assuming an expected Type I error rate of $\alpha = .05$, critical $z = 1.96$. Observed SDD critical $z = \sqrt{1.96^2 \div 2.12 \text{ times amplification}} = 1.34$, observed Type I error rate $\alpha = .18$. Using the same calculation, IDEV observed Type I error rate was $\alpha = .22$.

in any deviance behavior (i.e., SDD or IDEV, Condition 2 – without WG items). This is important because mixing higher-frequency WG and lower-frequency deviance items in a deviance scale could lead to false discoveries of deviance in which only WG behavior is reported. This could result in the WG items explaining a disproportionately large quantity of meaningful (non-zero) scale variance.

In a follow-up, we tested this possibility, comparing deviance scale scores across conditions to determine if WG items inflated reports of deviance (i.e., non-zero scale scores). As shown in Figures 3a to 3d, the presence of WG items in deviance measurement appears to change the distribution in scores for the scales, inflating the number of non-zero responses (i.e., cases in which any deviance behavior is reported). For SDD, there was a significant difference in reports of deviance between conditions (Condition 1 – with WG items: 117 zero reports vs. 231 non-zero; Condition 2 – without WG items: 247 zero reports vs. 109 non-zero; $\chi^2(1) = 90.13$, $p < .001$). This indicates that non-zero SDD behavior was reported at 2.17 times the frequency when WG items were included in the scale. Stated differently, when WG items are included in the SDD scale, *54% of non-zero reports of SDD behavior appear to be solely due to WG behavior*. For IDEV, there was a similar difference (Condition 1 – with WG items: 109 zero reports vs. 239 non-zero; Condition 2 – without WG items: 191 zero reports vs. 165 non-zero; $\chi^2(1) = 35.88$, $p < .001$), with non-zero IDEV scores occurring 1.48 times more often with versus without WG items. That is, when a WG item is included in the IDEV scale, *33% of non-zero reports appear to be solely due to WG*. In summary, mixing WG and deviance behavior items in a single deviance scale can significantly change score distributions, inflating non-zero deviance scores. This is problematic, because evidence from Study 4 demonstrated that the behaviors recalled in response to the WG items are not deviance behaviors but rather typical WG behaviors. Overall,

the frequency difference between WG behavior and deviance behavior appears to enable a few WG items to have an oversized impact on deviance measurement.

For measures of deviance perceptions, including WG perceptions items in deviance measurement appears to result in a significant increase in the relationship between deviance perceptions and paranoia. For example, including WG items in the social undermining scale significantly increased the relationship between social undermining and paranoid delusions from $r = .34$ to $r = .53$ ($z = 2.65$, $p = .008$). This is important because it indicates that even a few WG perceptions items can significantly increase the variance related to a known cognitive bias (i.e., paranoia), thereby decreasing the accuracy of reports. Overall, all evidence indicates that including either WG behavior or WG perception items into deviance measurement can have a significant, and potentially very misleading, effect on organizational research.



Figures 3a-d. Frequency of scores on the SDD and IDEV scales in Study 5. Panel a: SDD scores when WG items are included in the scale. Panel b: SDD scores when WG items are not included in the scale. Panel c: IDEV scores with WG. Panel d: IDEV scores without WG. A score of 1 represents a report of no deviance behavior (i.e., a zero/negative response), while a score greater than 1 represents reported deviance (i.e., a non-zero/positive response). SDD = supervisor-directed deviance. IDEV = interpersonal deviance. WG = workplace gossip.

Follow-up Analysis of Item-Context Effects

Evidence indicates that treating WG as a form of deviance can introduce contamination into deviance measurement. In a follow-up, we further examined the Study 5 data to determine whether WG contamination can be successfully removed from deviance scales after data collection by manually removing the WG items. This would seem to be the simplest option to eliminate the contamination if researchers have access to the source data. However, WG items could create item-context effects in which the mere presence of WG items could change the interpretation of non-WG items, resulting in cross-item contamination which cannot be easily removed (see Harrison & McLaughlin, 1993; Podsakoff et al., 2003). In essence, participants could see a non-deviance item (i.e., WG item) and then interpret deviance items as assessing something other than just deviance. We performed three analyses to test for this possibility.

To begin, we manually removed the WG items from the deviance scales in Condition 1 and re-assessed the degree of observed relationship bias using multiple regressions. Specifically, multiple regressions were performed using the hypothesized correlates and a deviance scale (1) *where the WG items were manually removed* (Condition 1) versus (2) *when the WG items had never been administered* (Condition 2). Relationship bias was again determined by dividing the quantity of shared variance for the multiple regressions (i.e., Condition 1 R^2 / Condition 2 R^2). Evidence indicated that relationship bias was somewhat reduced but still meaningful, even after manual removal of the WG items (SDD and H3 correlates: 1.47 times shared variance; SDD and H4 attenuation correlates: .09 times explained variance; IDEV and H3 correlates: 2.52 times shared variance; IDEV and H4 attenuation correlates: .34 times shared variance; social undermining and H5 correlates, 1.54 times the explained variance). Overall, manual removal of the WG items after scale administration does not appear to eliminate relationship bias. This is what we would expect to see if the WG items introduced item-context effects which introduced

cross-item contamination.

As previously discussed, the presence of WG items in a deviance scale appears to change the scale score distribution, inflating the number of non-zero reports of deviance. In a second test of potential item-context effects, we examined if non-zero reports of deviance behavior are still higher even after the manual removal of the WG items. In essence, does the mere presence of WG items result in more non-zero scores for the deviance items?[11] For the SDD scale, after manually removing the WG items in Condition 1, non-zero reports were still higher than if the WG items were never presented at all (Condition 1 – WG items manually removed: zero reports 213 vs. 135 non-zero; Condition 2: 247 zero reports vs. 109 non-zero; $\chi^2(1) = 5.19$, $p = .023$). For the IDEV scale, the non-zero reports were still inflated, but not at a significant level (Condition 1 – WG item manually removed: 170 zero reports vs. 178 non-zero; Condition 2: 191 zero reports vs. 165 non-zero; $\chi^2(1) = 1.62$, $p = .203$). Evidence indicates that even after manually removing WG items from deviance scales, reports of non-zero deviance behavior could still be inflated. Again, this is consistent with the possible presence of item-context effects.

Finally, we examined whether the presence of WG items could result in participants having a different conceptual interpretation of deviance items. To test this, we performed measurement invariance tests on just the deviance items (i.e., non-WG items) in Condition 1 versus 2 to determine if the deviance items are configurally invariant (for a summary of measurement invariance, see Vandenberg & Lance, 2000). If models are not configurally invariant across conditions, then this could indicate that participants in different conditions did not have the same deviance construct conceptualization in mind when they responded to the deviance items. In a measurement invariance test, models are seen to not be invariant if there are

[11] One way in which the presence of WG items could lead to an increase in non-zero deviance reports would be if responding to WG items resulted in participants interpreting ambiguously-worded deviance items as assessing manifestations of non-deviance rather than deviance.

meaningful differences in model fit (i.e., if the difference in CFI values for models is greater than .01; Cheung & Rensvold, 1999, 2002). For our tests, model fit was assessed using LISREL (version 9.2).

For the SDD scale, there was a difference in model fit for the 8 deviance items between conditions (Condition 1 – manual removal of WG items: $\chi^2(20) = 186.38$, CFI = .86, SRMR = .07; Condition 2 – no WG items presented: $\chi^2(20) = 415.67$, CFI = .82, SRMR = .10), ΔCFI = .04. There was a similar difference for the IDEV deviance items (Condition 1: $\chi^2(9) = 122.17$, CFI = .88, SRMR = .07; Condition 2: $\chi^2(9) = 121.41$, CFI = .90, SRMR = .06), ΔCFI = .02, and also the social undermining deviance items (Condition 1: $\chi^2(27) = 111.86$, CFI = .96, SRMR = .03; Condition 2: $\chi^2(27) = 174.86$, CFI = .93, SRMR = .05), ΔCFI = .03. In each case, evidence was consistent with the idea that the deviance items were not configurally invariant across conditions. That is, participants may have interpreted the deviance items differently across conditions. This is important, because the only difference between conditions was whether or not the deviance items were administered with or without WG items.[12]

Overall, there was converging evidence across three different tests that WG items may create item-context effects which change the interpretation of non-WG items in deviance scales. Removing WG items post-data collection is therefore unlikely to remove all WG variance from deviance measurement. That is, simply eliminating items does not fix the contamination issue.

[12] In these measurement invariance tests, the baseline models for the SDD and IDEV scales did not fit guidelines for acceptable model fit (CFI $\geq$ .95, SRMR $\leq$ .08; see Hu and Bentler, 1999). This complicates the invariance tests because unacceptable model fit could indicate that these scales have other measurement issues unrelated to the WG items. Alternatively, it could indicate that these scales should be treated as formative rather than reflective scales (Tepper & Henle, 2011; for a discussion of formative measurement, see Edwards, 2011). However, both deviance behavior scales appear to have been modeled as reflective scales in the papers in which they were first described (i.e., reports of model fit were for reflective indicator models; see Bennett & Robinson, 2000; Mitchell & Ambrose, 2007). This suggests that the scale developers intended for these scales to be modeled as reflective scales, supporting the appropriateness of using a measurement invariance test on these scales. It should be noted that the IDEV and SDD scales are both very commonly-used deviance scales. Issues of model fit in this study, coupled with potential issues with the CWB scales observed in Study 3 highlight the need for further research into deviance measurement.

Instead, to fully remove WG-related contamination, WG items should be removed before deviance scales are administered to participants.

GENERAL DISCUSSION

Historically, the organizational literature has taken a very negative view of WG, treating it as a form of deviance in research. However, evidence indicates that WG and deviance are different things: the social controls which surround WG and deviance are different; WG is seen to pose less of a threat to organizations than deviance; and WG and deviance have different nomological networks. Further, there is a majority consensus that WG is *not* deviant in terms of norm violations and the threat that the behaviors pose to organizations. This confirms that WG does not fit a traditional deviance categorization and indicates that WG is *not* a subform of deviance, but rather something altogether different from deviance.

This raises the question of why WG has historically been treated as a form of deviance in the organizational literature. Evidence indicates that paranoia cognitively biases WG perceptions, making WG appear more deviance-like than it otherwise would without the influence of paranoia. Specifically, individuals higher in paranoia are more likely to see WG as a threat and also believe that others are engaging in WG about them. In essence, paranoia can interfere with some individuals' ability to have an accurate view of WG. However, evidence indicates that paranoia does not affect perceptions of WG and deviance in the same way, suggesting that paranoia uniquely affects perceptions of WG. This indicates that WG and deviance are distinctly different constructs which are sometimes perceived as being confusingly similar for individuals who experience paranoia. Overall, cognitive biases related to paranoia provide an explanation for why there has been historical confusion in our literature about the nature of WG, and why WG has been historically miscategorized as a form of deviance.

Unfortunately, there is a longstanding practice of including WG in deviance measurement. This is extremely problematic because a majority of survey respondents

(employees and supervisors) do not see WG as a form of deviance, and WG and deviance have differing patterns of relationships with other variables (i.e., they have different nomological networks). Evidence indicates that including WG items in deviance measurement can have a significant impact on organizational research. Even adding only one or two WG items to a deviance scale can meaningfully bias observed deviance relationships away from the deviance nomological network and toward the WG behavior or paranoia nomological networks. Indeed, WG items were found to more than double the relationship strength between measures of deviance behavior and other commonly-studied variables. Treating WG as a form of deviance can also lead to false discoveries of deviance and significantly increase the probability of Type I/II errors in research. Overall, evidence indicates that WG is an important form of contamination for deviance research. This has serious implications for organizational research as widespread WG contamination of deviance measurement could pose a fundamental threat to the foundations of our knowledge about deviance.

Recommendations and Research Agenda

With evidence that WG does not qualify as a form of deviance, we recommend that WG be disentangled from deviance, both at the conceptual and operational levels. We see this as an exciting opportunity to increase the accuracy of deviance measurement and facilitate the development of new theory involving both WG and deviance. Ideally, WG items should be removed from deviance scales before data collection to avoid item-context effects which could result in cross-item contamination. Indeed, evidence indicates that including WG items in a deviance scale may change how participants conceptually interpret the deviance items (see Study 5). We recommend against attempts to reword WG items to make them more severe because this does not address the WG/deviance problem at the conceptual level and could interfere with

future research that studies WG. Further, evidence from this research suggests that more harshly worded WG items can still elicit recall of behaviors which correspond with typical WG behavior rather than deviance (see Study 4). We see this as being a natural outcome of the frequency difference between deviance and typical WG. Individuals responding to WG behavior items should have more examples of typical WG to recall from memory versus extreme cases of WG (e.g., malicious WG).

Wording WG items more severely in deviance measurement also does not address the issue of paranoia's relationship with WG. First, the more extremely a WG perceptions item is worded, the less likely it is to be an indicator of reality but rather an indicator of paranoid delusions. That is, harshly worded WG perceptions items are likely to introduce even more paranoia variance into measurement. This is especially likely for items which are written to assess harmful intentions, such as perceptions of malicious WG (e.g., "talked behind my back to intentionally hurt me"). This is because paranoia is closely associated with sinister attributional biases which impair individuals' ability to accurately assess others' intentions (Freeman et al., 2005a; Green & Philips, 2004). Another problem is that wording a WG behavioral item more harshly with the goal of assessing extreme (deviant) manifestations of WG does not take into account the practical reality that behavioral scales are often repurposed to also assess perceptions (e.g., enacted social undermining versus perceived social undermining; Duffy, Scott, Shaw, Tepper, & Aquino, 2012). If a behavioral deviance scale has included any WG items, then as soon as the scale is repurposed to assess perceptions, it is likely to introduce contamination related to paranoia.

With this in mind, we recommend that items which assess WG be excluded altogether from deviance measurement. However, this recommendation affects more than just items which

use the word “gossip” in the item text. We would recommend that researchers eliminate any items which assess negative talk about another person. In general, negative, evaluative talk is more likely to manifest as gossip (i.e., outside the gossip subject’s awareness) than as another form of talk (e.g., a direct verbal confrontation). It is safer, in terms of minimizing contamination, to simply eliminate all evaluative/judgmental talk items from deviance scales (see Table 3 for examples). If researchers are interested in studying negative talk specifically, then we would recommend that they study it as its own construct (e.g., WG) rather than as a part of deviance.

WG research is currently in a relatively nascent state, with only small number of published studies having directly assessed WG. However, WG has been studied thousands of times as a part of deviance. This creates a dilemma for WG researchers, as it has been unclear how this large body of literature which has (technically) studied WG should be interpreted. Evidence from this research indicates that deviance scales which include WG items may not be cleanly studying either WG or deviance, but rather some hybrid of constructs. With this in mind, we recommend that researchers interested in WG not use prior research which has treated WG as a form of deviance as a proxy for WG research, because this research is unlikely to be a valid reflection of WG. Unfortunately, even if researchers have access to source data, it is likely impossible to separate WG and deviance variance due to item-context effects which can be introduced by including WG items in the scales (see Study 5).

We found it very interesting just how much treating WG as a form of deviance can affect research. Indeed, including only one or two WG items in deviance scale can more than double the shared variance between deviance and other constructs. Stated differently - treating WG as a form of deviance can lead to situations where more than 50% of shared variance between

deviance and other constructs could be a result of WG items and not deviance items. This seems very problematic and is unlikely to reflect researcher intentions. Entangling WG and deviance could negatively affect Type I and/or Type II error rates and decrease the accuracy of point-estimates of relationship strength. For example, meta-analyses have reported meaningful negative relationships between fairness perceptions and deviance (e.g., $\bar{r}$ = -.24, justice with CWB toward supervisor, averaged across justice dimensions; Rupp, Shao, Jones, & Liao, 2014; also see Berry et al., 2007). Consistent with this, evidence from Study 5 showed that the relationship between fairness perceptions (i.e., justice) and the full supervisor-directed deviance scale was $\bar{r}$ = -.20 (averaged across the four justice scales). However, without WG items present, the relationship between fairness perceptions and SDD is a much weaker $\bar{r}$ = -.09. This is very concerning, and future research should examine how WG may have affected our understanding of the relationships between deviance and other variables.

Our research also indicates that WG perceptions are highly related to paranoia. We see this as being both a problem and an opportunity. First, it is a problem if WG perceptions items are entangled with deviance items, as this can introduce high levels of paranoia into measurement. Some researchers may argue that paranoia is a part of perception and is acceptable for measurement. We therefore pose the question: how much deviance variance should be due to paranoia? 10%? 30%? 50%? Is it acceptable to measure deviance using *only* a measure of paranoid delusions? If the answer is no, as we expect, then that indicates that deviance and paranoid delusions are distinctly different constructs which should be separated in measurement. We see paranoia as a cognitive bias which can contaminate perceptions of others' behavior. This is important to recognize because contamination decreases construct validity and interferes with our ability to accurately speak to construct-level relationships (Schwab, 1980).

Evidence from this paper shows that we can easily alter how much paranoia is a part of deviance measurement through our choice of items (e.g., WG perceptions items). Although we may never be able to completely eliminate paranoia from deviance measurement, we do have a choice regarding how much we entangle paranoia with deviance. The case of affect may be informative for contamination related to paranoia. Research indicates that affect can contaminate surveys (Burke, Brief, & George, 1993), and scale developers routinely eliminate items which are excessively related to affect, including in scales which assess perceptions of behavior (e.g., Ferris, Brown, Berry, & Lian, 2008). Paranoia contamination is similar to the problem of affect contamination. Indeed, paranoia has been linked to affect-related variables, including emotional instability, depression, and anxiety (Freeman et al., 2013). Just like affect, paranoia interferes with our ability to test theory.

Importantly, variance related to paranoia could change theoretical models and the interpretation of some research. For example, research has linked perceptions of others' deviance behavior to negative outcomes such as depression, and the argument is that others' deviance causes depression (e.g., Tepper, 2000). In contrast, paranoia research indicates that depression and other negative affective states can result in paranoia (Moritz, Göritz, McLean, Westermann, 2017). This is problematic because it suggests that paranoia and deviance may have different causal relationships with other variables. Instead of deviance perceptions leading to depression, depression could instead lead to paranoia and then heightened (i.e., cognitively biased) deviance perceptions. Overall, if enough paranoia variance is included in deviance measurement, then this could lead to alternative causal explanations for some research.

With that in mind, we recommend that paranoia should be minimized as much as possible in deviance measurement, and paranoia should be specified separately in theoretical models as

necessary (e.g., control for paranoia or test paranoia as a moderator). We also call for more dialog and research regarding the relationship between WG perceptions and paranoia. Future research should examine just how accurate WG perceptions are as an assessment of others' behavior and investigate the incremental validity of WG perceptions beyond paranoia. There has been a recent trend to study WG perceptions rather than WG behavior, but this could lead to an obscured understanding of WG if the unique relationship between WG and paranoia is not addressed. To minimize potential bias related to paranoia, it may be preferable for some WG research to assess group WG behavior rather than individual WG perceptions, although this will depend on the research question. In some cases, it may even be preferable to directly study paranoia instead of WG perceptions when paranoia is the real construct of research interest. Future research should also examine whether gossip perception experimental manipulations may also inadvertently introduce state paranoia into gossip research.

Although paranoia can create a problem for some research, recognizing paranoia's relationship with WG and deviance perceptions also creates opportunities. Paranoia has been underemphasized in our literature, and this may have been an important oversight (cf. Chan & McAllister, 2014; Marr, Thau, Aquino, & Barclay, 2012). Reducing paranoia variance in deviance measurement by removing WG perceptions items could lead to a richer understanding of deviance. For example, prior research has used meta-analyses to demonstrate that many of the deviance perceptions constructs have very similar relationships to other variables (e.g., aggression, undermining, incivility, abusive supervision, etc.; Hershcovis, 2011). In essence, there is limited unique explanatory value for any one deviance perceptions construct over other deviance perceptions constructs. However, if paranoia is a source of shared contamination across deviance measures, then minimizing variance related to paranoia could increase the unique

predictive value of individual deviance constructs, potentially enabling researchers to better examine differences between specific types of deviance. Examining paranoia in WG and deviance models could also advance our understanding of the manifestation of WG and deviance behavior, such as how paranoia could affect the manifestation of WG or deviance. Further, research into paranoia as an individual difference could enhance our understanding of deviance perceptions, and lead to more effective deviance perception interventions.

We also call for more research into the relationship between WG behavior, WG perceptions, and deviance. We do not want to leave readers with the impression that WG is just a form of contamination. Instead, we see WG behavior and WG perceptions as being very important constructs which have simply been misunderstood within the organizational literature. We see an increased focus on these constructs as opening up important future lines of research. For example, too little is known about WG as a social control. Future research should examine WG as a mechanism for employees to deter coworker deviance, and how leader behaviors can strengthen or weaken the informal social control functions of WG. Together, this could develop insights into how organizations can develop cultures in which deviance is naturally discouraged.

Practical Implications

Historically, organizational practitioners have made recommendations that WG be completely eliminated from organizations (Noon & Delbridge, 1993). If anything, these sorts of recommendations have accelerated over the last two decades as practitioner blogs and online writings have increased in popularity. We would argue that blanket recommendations to eliminate WG are not supported by evidence and are therefore inappropriate. Our research indicates that paranoia biases opinions of the threat that WG poses to organizations. As such, practitioner recommendations regarding WG may not be accurate, but rather based on faulty

assumptions. It is important to recognize that WG can be either positive or negative, good or bad, and that most WG is not done with a malicious intent.

Consistent with this, evidence indicates that WG is typically not a form of deviance. This is practically important because deviance is an important component of individual job performance (Rotundo & Sackett, 2002). As such, organizations attempt to minimize deviance in employee selection, and also attempt to deter deviance as a part of performance management. However, inaccurately treating WG as a form of deviance risks introducing contamination into the assessment of job performance. This could occur either in an assessment of deviance, or in an assessment of overall job performance, of which deviance is seen as a component. For example, treating WG as a form of deviance could lead to inflated ratings of deviance. Alternatively, ratings of overall job performance could be negatively biased by paranoia and beliefs that others are engaging in threatening WG.

If performance assessments are contaminated by WG, then this could lead to the misidentification of deviance, decrease the effectiveness of performance interventions, and decrease the validity of selection instruments which are intended to reduce deviance. With this in mind, we recommend that care be taken to separate WG from assessments of job performance. Ultimately, our goal should always be to reduce bias in performance assessments, and WG and WG-related-paranoia are possible sources of bias which managers need to be aware of. However, although eliminating WG from performance assessments sounds easy, it may be more challenging than it sounds. Evidence indicates that supervisor WG perceptions are highly related to paranoia. Managers will need to be careful to not let employee performance assessments be affected by perceptions that employees are gossiping about them, as this could lead to cases in which performance assessments are biased by paranoid cognitions.

In some cases, it may be advisable to re-validate selection systems if their validations were negatively affected by WG contamination. Technically, contamination could occur either in the measurement of the predictor (i.e., the selection instrument) or the measurement of the criterion (e.g., measure of deviance or overall performance). If selection instruments have been affected by contamination, then this could lead to unintended consequences for organizations. At a minimum, contamination could decrease the effectiveness of the selection instruments. Further, WG contamination could result in selection outcomes in which the frequency of deviance is actually increased in organizations. This counterintuitive result stems from the idea that WG may be a form of social control. If correct, then if WG is artificially decreased through selection, then this could erode the effectiveness of social controls, potentially leading to an overall increase in deviance – the opposite of what was intended. For example, attempts to decrease WG with the goal of decreasing deviance is analogous to reducing police activity with the goal of reducing crime. It is simply unlikely to work as intended. Instead, if companies erode their informal social control mechanisms, such as through an artificial reduction in WG, then this could have the opposite effect from what is desired – an increase rather than a decrease in deviance. Organizations should ensure that their selection systems do not decrease the effectiveness of informal social control processes, as this could negatively impact organizational performance.

Overall, we recommend that managers take a more nuanced, individual-based perspective on WG. In so doing, it is vital that managers recognize the relationship between WG and paranoia because employee WG/deviance perceptions could oftentimes be an issue of paranoia and not actual behavior. This would affect the choice of intervention strategies, with recommendations to eliminate WG/deviance behavior potentially failing to address underlying issues of employee paranoia. In some cases, it may be advisable to diagnose and address

paranoia directly through interventions for the individual who is experiencing paranoid symptoms. For example, cognitive behavioral therapies and/or individualized meta-cognitive therapies have been shown to be effective in the management of paranoia and related conditions (Andreou et al., 2017; Hutton & Taylor, 2014).

Strengths and Limitations

As with all research, there are strengths and limitations that should be considered. First, all data was collected using independent, broad-based, samples of employed adults. The heterogeneous nature of our samples was vital for assessing the nature of WG. This is because deviance is highly dependent upon the workplace context – that is, what is deviant in one context may not be deviant in another. By using heterogeneous samples, we have sought to maximize the generalizability of our research. Instead of speaking to the nature of WG in any one context, our research should be interpreted as providing evidence regarding whether or not WG is deviant, on average, across the North American working population (i.e., in the U.S. and Canada). Although sample data was collected online, multiple steps were taken to ensure the quality of samples, including the use of attention checks, prescreens, tests of English-language comprehension, and steps were taken to prevent participants from participating in multiple samples. This both increased the quality of the samples and maximized the likelihood that automated "bots" were excluded from the samples. Overall, all samples were heterogenous, independent, and high quality, thereby increasing the generalizability of this research.

One potential limitation of this research is that it has assumed a specific causal ordering in which paranoia precedes assessments of deviance – specifically that paranoia acts as a cognitive bias which alters assessments of deviance. Alternative causal explanations could be argued, such as assessments of deviance perceptions priming state paranoia. However, steps

were taken to minimize the possibility of this explanation in the design of our research (for a brief description of priming state paranoia and self-consciousness, see Fenigstein & Vanable, 1992). First, paranoia was always assessed over a one-month period, thereby minimizing the chance that state paranoia was assessed in this research. Second, when assessing the relationship between paranoia and behavioral threat (Study 2), participants only assessed the threat of behaviors which targeted generic "employees", and not the threat of behaviors targeted toward the participant. This minimized the risk of inadvertently priming paranoid cognitions within participants. Third, in Study 5, we utilized an experimental design in which the only difference between conditions was whether WG items were or were not present in deviance scales. Assessments of deviance perceptions were held constant across conditions, ruling out the possibility that assessing deviance perceptions explains our findings (i.e., by priming state paranoia). Further, paranoia was assessed in a separate survey wave from the experimental manipulation, thereby minimizing the risk that state paranoia could explain our results. Overall, all evidence was consistent with the idea that paranoia acts as a cognitive bias – that it changes the way that we perceive and rate others' behavior.

In another potential limitation, it could be argued that norms surrounding WG have recently changed in the last two decades, and that this could explain the discrepancy between our findings and the findings in earlier research which categorized WG as a form of deviance. However, we see it as being unlikely that norms surrounding WG have ever meaningfully changed. Instead, we would argue that gossip has always been *necessary* for maintaining large social networks and encouraging conformity to group expectations. Prior research has taken an evolutionary perspective on gossip, arguing that gossip is a fundamental human behavior which is required for groups to function as they do (Dunbar, 2004). Without gossip, it is not clear how

individuals within groups would communicate examples of what is and is not acceptable behavior within their group (Baumeister et al., 2004). Further, without gossip, it is not clear how individuals would be able to effectively warn others of behaviors which threaten the group (Feinberg et al., 2012) or manage reputations (Zinko & Rubin, 2015). People have likely engaged in gossip for as long as they have had the ability to speak. Indeed, researchers have argued that speech is a beneficial evolutionary adaptation because it enabled gossip and the ability to learn of individuals' reputations without the need for direct observation (Dunbar, 2004). With that in mind, it is not clear to us what would differentiate gossip behavior over the last 20 years versus the many thousands of years that individuals have engaged in the behavior. However, regardless of whether or not WG was ever deviant, evidence indicates that WG is currently not a valid indicator of deviance. Treating WG as a form of deviance is therefore unlikely to be generalizable for today's workplaces and could fundamentally impair our understanding of both WG and deviance.

Another potential limitation of this research is that it could be argued that some of our observed relationships may have been affected by method bias (Podsakoff et al., 2003). However, steps were taken to minimize method bias, including separating scales across survey time, survey waves, and even survey samples (Study 3 – Samples 3a versus 3b). Further, studies were designed to reduce participant fatigue and to minimize item-context effects. Evidence that treating WG as a form of deviance can lead to relationship bias was observed both within and across survey waves. Further, the findings were consistent for multiple deviance, WG, and paranoia scales across a broad variety of other organizational variables. Overall, the hypothesized patterns of relationship bias were consistently observed across many variables/scales. As such, method bias does not appear to be a likely explanation for our results.

CONCLUSION

Our goal for this research has been to empirically resolve the debate regarding whether or not WG is a form of deviance and illustrate some of the problems than can arise when WG is inaccurately treated as a form of deviance. Overall, evidence indicates that most employees and supervisors do not see WG as being a form of deviance/CWB. This confirms that WG does not qualify as a form of deviance/CWB. However, with that being said, it is not our intention to suggest that WG is always good. Instead, we see WG as being a richer, more complicated, behavior than other behaviors which have been categorized as manifestations of deviance.

We see it as being vital that researchers take a more nuanced view of WG if we are to accurately advance organizational theory. Instead of assuming that WG is always bad, research needs to examine when WG is bad, when it is good, when supervisors should look the other way, and even when WG should be encouraged. A new, more nuanced, perspective on the relationship between WG and deviance opens up a variety of new lines of research that could lead to novel and important insights which enhance our understanding of organizational psychology.

It is our hope that this research can serve as a useful warning for deviance researchers. The practice of including WG items in deviance/CWB measurement, can seriously contaminate research results, thereby limiting the validity of inferences that can be drawn from deviance/CWB research. Unfortunately, this is not a problem which can simply be resolved by eliminating measurement items which have the word “gossip” in them. Instead, WG contamination can be introduced by almost any item which assesses evaluative/judgmental talk. This suggests that WG contamination is likely present in most of the commonly-used deviance/CWB measurement devices. WG could therefore be a common, widespread, contaminant for deviance research.

With that in mind, we call for a systematic effort to improve deviance/CWB measurement. It is not enough to simply remove WG items after scale administration. Instead, to fully remove the contamination that we have observed, it is important that bad items not be presented to participants at all because those items could interfere with responses to other items. We therefore see the need for new deviance/CWB scales which have more demonstrated validity than those that are currently being used in research. We would argue that to fully understand organizational effectiveness, it is necessary to study deviance and deviance-related constructs. However, it is vital that we study these constructs using measures which are as valid and accurate as possible. Improved deviance/CWB measurement will enable us to better advance organizational theory.

REFERENCES

Aldenderfer, M. S., & Blashfield, R. K. (1984). *Cluster analysis: Quantitative applications in the social sciences* (Vol. 44). Beverly Hills, CA: Sage.

Anderson, J. C., & Gerbing, D. W. (1991). Predicting the performance of measures in a confirmatory factor analysis with a pretest assessment of their substantive validities. *Journal of Applied Psychology, 76*(5), 732-740.

Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review, 24*(3), 452-471.

Andreou, C., Wittekind, C. E., Fieker, M., Heitz, U., Veckenstedt, R., Bohn, F., & Moritz, S. (2017). Individualized metacognitive therapy for delusions: a randomized controlled rater-blind study. *Journal of Behavior Therapy and Experimental Psychiatry, 56,* 144-151.

Aquino, K., Lewis, M. U., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organizational Behavior, 20,* 1073–1091.

Barnes, C. M., Miller, J. A., & Bostock, S. (2017). Helping employees sleep well: Effects of cognitive behavioral therapy for insomnia on work outcomes. *Journal of Applied Psychology, 102*(1), 104-113.

Baumeister, R. F., Zhang, L., & Vohs, K. D. (2004). Gossip as cultural learning. *Review of General Psychology, 8*(2), 111-121.

Bebbington, P. E., McBride, O., Steel, C., Kuipers, E., Radovanoviĉ, M., Brugha, T., ... & Freeman, D. (2013). The structure of paranoia in the general population. *The British Journal of Psychiatry, 202*(6), 419-427.

Beersma, B., & Van Kleef, G. A. (2011). How the grapevine keeps you in line: Gossip increases contributions to the group. *Social Psychological and Personality Science, 2*(6), 642-649.

Beersma, B., & Van Kleef, G. A. (2012). Why people gossip: An empirical analysis of social motives, antecedents, and consequences. *Journal of Applied Social Psychology, 42*(11), 2640-2670.

Ben-Ze'ev, A. (1994). The vindication of gossip. In R. F. Goodman & A. Ben-Ze'ev (Eds.), *Good gossip* (pp. 11-24). Lawrence, KS: University Press of Kansas.

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*(3), 349-360.

Bentall, R. P., Kinderman, P., & Kaney, S. (1994). The self, attributional processes and abnormal beliefs: towards a model of persecutory delusions. *Behaviour Research and Therapy, 32*(3), 331-341.

Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: a review and meta-analysis, *Journal of Applied Psychology, 92*(2), 410-424.

Berry, C. M., Carpenter, N. C., & Barratt, C. L. (2012). Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta-analytic comparison. *Journal of Applied Psychology, 97*(3), 613-636.

Black, D. (1984). Social control as a dependent variable. In D. Black (Ed.), *Toward a general theory of social control* (pp. 1-36). New York, NY: Academic Press.

Blau, G., & Andersson, L. (2005). Testing a measure of instigated workplace incivility. *Journal of Occupational and Organizational Psychology, 78*(4), 595-614.

Brady, D. L., Brown, D. J., & Liang, L. H. (2017). Moving beyond assumptions of deviance: The reconceptualization and measurement of workplace gossip. *Journal of Applied Psychology, 102*(1), 1-25.

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*(5), 307-311.

Burke, M. J., Brief, A. P., & George, J. M. (1993). The role of negative affectivity in understanding relations between self-reports of stressors and strains: a comment on the applied psychology literature. *Journal of Applied Psychology, 78*(3), 402-412.

Chan, M. E., & McAllister, D. J. (2014). Abusive supervision through the lens of employee state paranoia. *Academy of Management Review, 39*(1), 44-66.

Cheung, G. W., & Rensvold, R. B. (1999). Testing factorial invariance across groups: A reconceptualization and proposed new method. *Journal of Management*, *25*(1), 1-27.

Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural equation modeling*, *9*(2), 233-255.

Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity and compliance. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The Handbook of Social Psychology* (4th ed., Vol. 2, pp. 151-192). Boston: McGraw-Hill.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*(3), 386-400.

Combs, D. R., & Penn, D. L. (2004). The role of subclinical paranoia on social perception and behavior. *Schizophrenia Research, 69*(1), 93-104.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: incidence and impact. *Journal of Occupational Health Psychology*, *6*(1), 64-80.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*(4), 281-302.

Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship

behavior and counterproductive work behavior. *Journal of Applied Psychology, 90*(6), 1241-1255.

Dalal, R. S., Lam, H., Weiss, H. M., Welch, E. R., & Hulin, C. L. (2009). A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counterproductivity associations, and dynamic relationships with affect and overall job performance. *Academy of Management Journal, 52*(5), 1051-1066.

Duffy, M. K., Ganster, D. C., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal, 45*(2), 331-351.

Duffy, M. K., Scott, K. L., Shaw, J. D., Tepper, B. J., & Aquino, K. (2012). A social context model of envy and social undermining. Academy of Management Journal, 55, 643–666.

Dunbar, R. I. M. (2004). Gossip in evolutionary perspective. *Review of General Psychology, 8*(2), 100-110.

Dunbar, R. I. M., Marriott, A., & Duncan, N. D. C. (1997). Human conversational behavior. *Human Nature, 8*(3), 231-246.

Elahi, A., Algorta, G. P., Varese, F., McIntyre, J. C., & Bentall, R. P. (2017). Do paranoid delusions exist on a continuum with subclinical paranoia? A multi-method taxometric study. *Schizophrenia Research, 190*, 77-81.

Einarsen, S., & Raknes, B. I. (1997). Harassment in the workplace and the victimization of men. *Violence and Victims, 12*(3), 247-263.

Erdogan, B., Bauer, T. N., & Walter, J. (2014). Deeds that Help and Words that Hurt: Helping and Gossip as Moderators of the Relationship Between Leader–Member Exchange and Advice Network Centrality. *Personnel Psychology, 68*(1), 185-214.

Feinberg, M., Willer, R., & Schultz, M. (2014). Gossip and ostracism promote cooperation in

groups. *Psychological Science, 25*(3), 656-664.

Feinberg, M., Willer, R., Stellar, J., & Keltner, D. (2012). The virtues of gossip: reputational information sharing as prosocial behavior. *Journal of Personality and Social Psychology, 102*(5), 1015-1030.

Feldman, D. C. (1984). The development and enforcement of group norms. *Academy of Management Review, 9*(1), 47-53.

Fenigstein, A., & Vanable, P. A. (1992). Paranoia and self-consciousness. *Journal of Personality and Social Psychology, 62*(1), 129.

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *Journal of Applied Psychology, 93*(6), 1348-1366.

Foster, E. K. (2004). Research on gossip: Taxonomy, methods, and future directions. *Review of General Psychology, 8*(2), 78-99.

Freeman, D., Dunn, G., Fowler, D., Bebbington, P., Kuipers, E., Emsley, R., Jolley, S., & Garety, P. (2013). Current paranoid thinking in patients with delusions: The presence of cognitive-affective biases. *Schizophrenia Bulletin, 39*(6), 1281-1287.

Freeman, D., Dunn, G., Garety, P. A., Bebbington, P., Slater, M., Kuipers, E., Fowler, D., Green, C., Jordan, J., & Ray, K. (2005a). The psychology of persecutory ideation I: A questionnaire survey. *The Journal of Nervous and Mental Disease, 193*(5), 302-308.

Freeman, D., Evans, N., & Lister, R. (2012). Gut feelings, deliberative thought, and paranoid ideation: a study of experiential and rational reasoning. *Psychiatry Research, 197*(1), 119-122.

Freeman, D., Evans, N., Lister, R., Antley, A., Dunn, G., & Slater, M. (2014). Height, social comparison, and paranoia: an immersive virtual reality experimental study. *Psychiatry*

Research, 218(3), 348-352.

Freeman, D., Garety, P. A., Bebbington, P. E., Smith, B., Rollinson, R., Fowler, D., Kuipers, E., Ray, K., & Dunn, G. (2005b). Psychological investigation of the structure of paranoia in a non-clinical population. *The British Journal of Psychiatry, 186*(5), 427-435.

Glomb, T. M. (1998). Workplace aggression: Antecedents, behavioral components, and consequences. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.

Glomb, T. M., & Liao, H. (2003). Interpersonal aggression in work groups: Social influence, reciprocal, and individual effects. *Academy of Management Journal, 46*(4), 486-496.

Gluckman, M. (1963). Gossip and scandal. *Current Anthropology, 4*(3), 307-316.

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment, 4*, 26-42.

Green, C. E. L., Freeman, D., Kuipers, E., Bebbington, D., Fowler, D., Dunn, G., & Garety, P. A. (2008). Measuring ideas of persecution and social reference: The Green et al. Paranoid Thought Scales (GPTS). *Psychological Medicine, 38*, 101-111.

Green, M. J., & Phillips, M. L. (2004). Social threat perception and the evolution of paranoia. *Neuroscience & Biobehavioral Reviews, 28*(3), 333-342.

Hair, J. F., & Black, W. C. (2000). Cluster analysis. In L. G. Grimm, P. R. Yarnold (Eds.), *Reading and understanding more multivariate statistics* (pp. 147-205). Washington, DC: American Psychological Association.

Harrison, D. A., & McLaughlin, M. E. (1993). Cognitive processes in self-report responses: Tests of item context effects in work attitude measures. *Journal of Applied Psychology, 78*(1), 129-140.

Heckert, A., & Heckert, D. M. (2002). A new typology of deviance: Integrating normative and reactivist definitions of deviance. *Deviant Behavior, 23*(5), 449-479.

Hershcovis, M. S. (2011). "Incivility, social undermining, bullying… oh my!": A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior, 32*(3), 499-519.

Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods, 1*(1), 104-121.

Hollinger, R. C., & Clark, J. P. (1982). Formal and informal social controls of employee deviance. *The Sociological Quarterly, 23*(3), 333-343.

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.

Hutton, P., & Taylor, P. J. (2014). Cognitive behavioural therapy for psychosis prevention: a systematic review and meta-analysis. *Psychological Medicine, 44*(3), 449-468.

James, W. (1890). The principles of psychology (Vol. 1). New York, NY: Henry Holt and Co.

Jeuken, E., Beersma, B., ten Velden, F. S., & Dijkstra, M. (2015). Aggression as a Motive for Gossip During Conflict: The Role of Power, Social Value Orientation, and Counterpart's Behavior. *Negotiation and Conflict Management Research, 8*(3), 137-152.

Jones, D. A., & Skarlicki, D. P. (2013). How perceptions of fairness can change: A dynamic model of organizational justice. *Organizational Psychology Review, 3*(2), 138-160.

Ketchen Jr, D. J., & Shook, C. L. (1996). The application of cluster analysis in strategic management research: an analysis and critique. *Strategic Management Journal, 17*, 441-458.

Kniffin, K. M., & Wilson, D. S. (2005). Utilities of gossip across organizational levels. *Human Nature, 16*(3), 278-292.

Marr, J. C., Thau, S., Aquino, K., & Barclay, L. J. (2012). Do I want to know? How the motivation to acquire relationship-threatening information in groups contributes to paranoid thought, suspicion behavior, and social rejection. *Organizational Behavior and Human Decision Processes, 117*(2), 285-297.

Merry, S. E. (1984). Toward a general theory of gossip and scandal. In D. Black (Ed.), *Toward a general theory of social control* (pp. 271-302). New York, NY: Academic Press.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*(4), 538-551.

Milfont, T. L., & Fischer, R. (2010). Testing measurement invariance across groups: Applications in cross-cultural research. *International Journal of Psychological Research, 3*(1), 111-130.

Mills, C. (2010). Experiencing gossip: The foundations for a theory of embedded organizational gossip. *Group & Organization Management, 35*(2), 213-240.

Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology, 92*(4), 1159-1168.

Moritz, S., Göritz, A. S., McLean, B., Westermann, S. (2017). Do depressive symptoms predict paranoia or vice versa? *Journal of Behavior Therapy and Experimental Psychiatry, 56*, 113-121.

Noon, M., & Delbridge, R. (1993). News from behind my hand: Gossip in

organizations. *Organization Studies, 14*(1), 23-36.

Olkin, I., & Finn, J. D. (1995). Correlations redux. *Psychological Bulletin, 118*(1), 155-164.

Paine, R. (1967). What is gossip about? An alternative hypothesis. *Man, 2*(2), 278-285.

Peters, K., Jetten, J., Radova, D., & Austin, K. (2017). Gossiping about deviance: Evidence that deviance spurs the gossip that builds bonds. *Psychological Science, 28*(11), 1610-1619.

Pickering, L., Simpson, J., & Bentall, R. P. (2008). Insecure attachment predicts proneness to paranoia but not hallucinations. *Personality and Individual Differences, 44*(5), 1212-1224.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.

Popper, K. R. (1965). Conjectures and refutations: The growth of scientific knowledge (2nd ed.). New York: Basic Books.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal, 38*(2), 555-572.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: a policy-capturing approach. *Journal of Applied Psychology, 87*(1), 66-80.

Rupp, D. E., Shao, R., Jones, K. S., & Liao, H. (2014). The utility of a multifoci approach to the study of organizational justice: A meta-analytic investigation into the consideration of normative rules, moral accountability, bandwidth-fidelity, and social exchange. *Organizational Behavior and Human Decision Processes, 123*(2), 159-185.

Schwab, D. P. (1980). Construct validity in organizational behavior. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 2, pp. 3-43). Greenwich, CT: JAI.

Sinclair, R. R., Tucker, J. S., Cullen, J. C., & Wright, C. (2005). Performance differences among four organizational commitment profiles. *Journal of Applied Psychology, 90*(6), 1280-1287.

Spreitzer, G. M., & Sonenshein, S. (2004). Toward the construct definition of positive deviance. *American Behavioral Scientist, 47*(6), 828-847.

Startup, H., & Startup, S. (2005). On two kinds of delusions of reference. *Psychiatry Research, 137*, 87-92.

Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*(2), 178-190.

Tepper, B. J., & Henle, C. A. (2011). A case for recognizing distinctions among constructs that capture interpersonal mistreatment in work organizations. *Journal of Organizational Behavior, 32*(3), 487-498.

Thewissen, V., Bentall, R. P., Lecomte, T., van Os, J., & Myin-Germeys, I. (2008). Fluctuations in self-esteem and paranoia in the context of daily life. *Journal of Abnormal Psychology*, *117*(1), 143-153.

Thio, A. (2001). *Deviant Behavior* (6th ed.). Boston: Allyn and Bacon.

Vaidyanathan, B., Khalsa, S., Eckund, E. H. (2016). Gossip as social control: Informal sanctions on ethical violations in scientific workplaces. *Social Problems*, *082016*, 1-19.

Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 3*(1), 4-70.

Waite, F., & Freeman, D. (2017). Body image and paranoia. *Psychiatry Research, 258*, 136-140.

Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage Publications.

Wu, J., Balliet, D., & Van Lange, P. A. M. (2015). When does gossip promote generosity? Indirect reciprocity under the shadow of the future. *Social Psychological and Personality Science, 6*(8), 923-930.

Wu, J., Balliet, D., & Van Lange, P. A. M. (2016a). Gossip versus punishment: The efficiency of reputation to promote and maintain cooperation. *Scientific Reports, 6*, 1-8.

Wu, J., Balliet, D., & Van Lange, P. A. M. (2016b). Reputation, gossip, and human cooperation. *Social and Personality Psychology Compass, 10*(6), 350-364.

Wu, L. Z., Birtch, T. A., Chiang, F. F., & Zhang, H. (2016). Perceptions of negative workplace gossip: A self-consistency theory framework. *Journal of Management*.

Zinko, R., & Rubin, M. (2015). Personal reputation and the organization. *Journal of Management & Organization, 21*(2), 217-236.

Appendix A

Scales used in Study 1

Test of Reactions

INSTRUCTIONS: Sometimes we see co-workers behave in ways which cause us to react.

These reactions can range from strong negative reactions (e.g., when you condemn someone's behavior) to strong positive reactions (e.g., when you praise someone's behavior). Other times, we might see someone's behavior and not react at all.

If you witnessed the following behaviors in your organization, how would you react?

RESPONSE SCALE: 1 = *Strong negative reaction*, 3 = *Neutral, weak, or no reaction*, 5 – *Strong positive reaction*.

Test of Norm Violations (see Spreitzer & Sonenshein, 2004, p. 842)

INSTRUCTIONS: Workplace norms are informal guides to acceptable workplace behavior.

Usually, workers behave according to workplace norms, but sometimes behaviors violate norms.

A behavior which violates norms is a behavior which the individuals in your workplace would see as being unexpected or not "business as usual".

Please specify whether or not the following behaviors violate the norms of your workplace.

RESPONSE SCALE: 1 = *Does not violate norms*, 2 = *Violates norms*.

Test of Behavioral Frequency

INSTRUCTIONS: In general, how frequently do the following behaviors occur in your workplace?

RESPONSE SCALE: 1 = *Never*, 2 = *Less than once a year*, 3 = *Once a year*, 4 = *Monthly*, 5 = *Weekly*, 6 = *Daily*, 7 = *More than once a day*.

Items for Social-Control Related Tests (i.e., test of reaction, norm violation, and frequency):

	Item	Behavior Category
1.	Employee stealing customer's possessions	Serious Deviance
2.	Boss verbally abusing employee	Serious Deviance
3.	Employee sabotaging equipment	Serious Deviance
4.	Employee coming to work late or leaving early	Minor Deviance
5.	Employee lying about hours worked	Serious Deviance
6.	***Employee gossiping about manager***	Negative WG
7.	Employee starting negative rumors about company	Minor Deviance
8.	Boss sexually harassing employee	Serious Deviance
9.	Employee physically abusing customer	Serious Deviance
10.	Employee taking excessive breaks	Minor Deviance
11.	Employee sabotaging merchandise	Serious Deviance
12.	Employee overcharging on services to profit him- or herself	Serious Deviance
13.	Employee intentionally making errors	Serious Deviance
14.	Employee covering up mistakes	Minor Deviance
15.	Employee leaving job in progress with no directions so the job is done wrong	Serious Deviance
16.	Boss following rules to the letter of the law	---[a]
17.	***Employee gossiping about co-worker***	Negative WG
18.	Employee intentionally working slowly	Minor Deviance
19.	Boss unjustifiably firing employee	Serious Deviance
20.	Employee sexually harassing co-worker	Serious Deviance
21.	Employee accepting kickbacks	Serious Deviance
22.	Employee endangering him- or herself by not following safety procedures	Serious Deviance
23.	Boss leaving early and leaving his/her work for employees to do	Minor Deviance
24.	Employee hiding in back room to read the newspaper	Minor Deviance
25.	Employee stealing company equipment/merchandise	Serious Deviance
26.	Employee acting foolish in front of customers	Serious Deviance
27.	Employee verbally abusing customers	Serious Deviance
28.	Employee working unnecessary overtime	Minor Deviance
29.	Employee calling in sick when not	Minor Deviance
30.	Boss showing favoritism to certain employees	Minor Deviance
31.	***Boss gossiping about employees***	Negative WG
32.	Employee talking with co-worker instead of working	---[a]
33.	Employee stealing money from cash drawer	Serious Deviance
34.	Employee misusing discount privilege	Serious Deviance
35.	Employee wasting company resources by turning up the heat and opening the window	Minor Deviance
36.	Employee blaming co-worker for mistakes	Minor Deviance
37.	Employee misusing expense account	Serious Deviance
38.	Employee going against boss's decision	Minor Deviance
39.	Employees competing with co-workers in a nonbeneficial way	Minor Deviance

40.	Boss blaming employees for his/her mistakes	Minor Deviance
41.	Boss refusing to give employee his/her earned benefits or pay	Serious Deviance
42.	Employee making personal long distance calls or mailing personal packages from work	Minor Deviance
43.	Employee endangering co-workers by reckless behavior	Serious Deviance
44.	Employee stealing co-worker's possessions	Serious Deviance
45.	Boss asking employee to work beyond job description	---[a]
46.	Employee asking a work colleague if they have a negative impression of something that their supervisor has done	Negative WG
47.	Employee questioning his/her supervisor's abilities while talking to a work colleague	Negative WG
48.	Employee criticizing his/her supervisor while talking to a work colleague	Negative WG
49.	Employee venting to a work colleague about something that his/her supervisor has done	Negative WG
50.	Employee telling an unflattering story about his/her supervisor while talking to a work colleague	Negative WG
51.	Employee complimenting his/her supervisor's actions while talking to a work colleague	Positive WG
52.	Employee telling a work colleague good things about his/her supervisor	Positive WG
53.	Employee defending his/her supervisor's actions while talking to a work colleague	Positive WG
54.	Employee saying something nice about his/her supervisor while talking to a work colleague	Positive WG
55.	Employee telling a work colleague that they respect his/her supervisor	Positive WG
56.	Employee asking a work colleague if they have a negative impression of something that another co-worker has done	Negative WG
57.	Employee questioning a co-worker's abilities while talking to another work colleague	Negative WG
58.	Employee criticizing a co-worker while talking to another work colleague	Negative WG
59.	Employee venting to a work colleague about something that another co-worker has done	Negative WG
60.	Employee telling an unflattering story about a co-worker while talking to another work colleague	Negative WG
61.	Employee complimenting a co-worker's actions while talking to another work colleague	Positive WG
62.	Employee telling a work colleague good things about another co-worker	Positive WG
63.	Employee defending a co-worker's actions while talking to another work colleague	Positive WG
64.	Employee saying something nice about a co-worker while talking to another work colleague	Positive WG
65.	Employee telling a work colleague that they respect another co-worker	Positive WG

Note. Items 1 to 45 are items from Robinson and Bennett's (1995) deviance typology. Items 46 to 65 are validated WG items from Brady et al., (2017). Italicized items reflect the three WG items which were included in Robinson and Bennett (1995). Behavior categorization reflects the final cluster assignment in Study 1 (not provided to participants).

Participants received 25 randomly chosen items for each social-control related test. All 25 items were presented together, with randomized item order. WG = workplace gossip.

[a] This item was rated as a norm violation outlier and was removed from analysis (see Study 1).

Appendix B

Scales used in Study 2

Threat Assessment

INSTRUCTIONS: Below is a list of behaviors which your subordinates could engage in. Please read each behavior and imagine a subordinate doing it.

If one of your subordinates engaged in this behavior, would it meaningfully threaten the well-being of your organization and/or its members?

	Item	Behavior Category
1.	Employee stealing customer's possessions	Serious Deviance
2.	Employee sabotaging equipment	Serious Deviance
3.	Employee coming to work late or leaving early	Minor Deviance
4.	Employee lying about hours worked	Serious Deviance
5.	Employee starting negative rumors about company	Minor Deviance
6.	Employee physically abusing customer	Serious Deviance
7.	Employee taking excessive breaks	Minor Deviance
8.	Employee sabotaging merchandise	Serious Deviance
9.	Employee overcharging on services to profit him- or herself	Serious Deviance
10.	Employee intentionally making errors	Serious Deviance
11.	Employee covering up mistakes	Minor Deviance
12.	Employee leaving job in progress with no directions so the job is done wrong	Serious Deviance
13.	***Employee gossiping about co-worker***	Negative WG
14.	Employee intentionally working slowly	Minor Deviance
15.	Employee sexually harassing co-worker	Serious Deviance
16.	Employee accepting kickbacks	Serious Deviance
17.	Employee endangering him- or herself by not following safety procedures	Serious Deviance
18.	Employee hiding in back room to read the newspaper	Minor Deviance
19.	Employee stealing company equipment/merchandise	Serious Deviance
20.	Employee acting foolish in front of customers	Serious Deviance
21.	Employee verbally abusing customers	Serious Deviance
22.	Employee working unnecessary overtime	Minor Deviance
23.	Employee calling in sick when not	Minor Deviance
24.	Employee stealing money from cash drawer	Serious Deviance
25.	Employee misusing discount privilege	Serious Deviance
26.	Employee wasting company resources by turning up the heat and opening the window	Minor Deviance
27.	Employee blaming co-worker for mistakes	Minor Deviance
28.	Employee misusing expense account	Serious Deviance
29.	Employee going against boss's decision	Minor Deviance
30.	Employees competing with co-workers in a nonbeneficial way	Minor Deviance

31.	Employee making personal long distance calls or mailing personal packages from work	Minor Deviance
32.	Employee endangering co-workers by reckless behavior	Serious Deviance
33.	Employee stealing co-worker's possessions	Serious Deviance
34.	Employee asking a work colleague if they have a negative impression of something that another co-worker has done	Negative WG
35.	Employee questioning a co-worker's abilities while talking to another work colleague	Negative WG
36.	Employee criticizing a co-worker while talking to another work colleague	Negative WG
37.	Employee venting to a work colleague about something that another co-worker has done	Negative WG
38.	Employee telling an unflattering story about a co-worker while talking to another work colleague	Negative WG

Note. Items 1-32 are from Robinson and Bennett (1995), while items 33-37 are from Brady et al., (2017). All items were presented together, with randomized item order. The italicized item reflects the WG item which was included in Robinson and Bennett (1995). Behavior categorization reflects the final cluster assignment in Study 1 (not provided to participants).

RESPONSE SCALE: 0 = *no, it does not meaningfully threaten the well-being of the organization and/or its members*, 1 = *yes, it meaningfully threatens the well-being of the organization and/or its members*.

Paranoid Delusions of Reference (Green et al., 2008)

INSTRUCTIONS: Please indicate the extent that you have had each of the following thoughts and feelings over the last month...

1. I spent time thinking about friends gossiping about me
2. I often heard people referring to me
3. I have been upset by friends and colleagues judging me critically
4. People definitely laughed at me behind my back
5. I have been thinking a lot about people avoiding me
6. People have been dropping hints for me
7. I believed that certain people were not what they seemed
8. People talking about me behind my back upset me
9. I was convinced that people were singling me out
10. I was certain that people have followed me
11. Certain people were hostile towards me personally
12. People have been checking up on me
13. I was stressed out by people watching me
14. I was frustrated by people laughing at me
15. I was worried by people's undue interest in me

16. It was hard to stop thinking about people talking about me behind my back

RESPONSE SCALE: 1 = *not at all*, 3 = *somewhat*, 5 = *a lot*.

Follower Negative Workplace Gossip about Oneself (modification of Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which your subordinates talked about you when you were not present to hear what was said.

In the last month, how often do you think any of your subordinates have...

1. asked a work colleague if they have a negative impression of something that you have done
2. questioned your abilities while talking to a work colleague
3. criticized you while talking to a work colleague
4. vented to a work colleague about something that you have done
5. told an unflattering story about you while talking to a work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – times a week*, 6 = *once a day*, 7 = *more than once a day*.

Negative Workplace Gossip about Coworkers (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about a co-worker when he/she was not present to hear what was said. The co-worker could be any co-worker who is not your supervisor.

In the last month, how often have you...

1. asked a work colleague if they have a negative impression of something that another co-worker has done
2. questioned a co-worker's abilities while talking to another work colleague
3. criticized a co-worker while talking to another work colleague
4. vented to a work colleague about something that another co-worker has done
5. told an unflattering story about a co-worker while talking to another work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – times a week*, 6 = *once a day*, 7 = *more than once a day*.

Positive Workplace Gossip about Coworkers (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about a co-worker when he/she was not present to hear what was said. The co-worker could be any co-worker who is not your supervisor.

In the last month, how often have you...

1. complimented a co-worker's actions while talking to another work colleague
2. told a work colleague good things about another co-worker
3. defended a co-worker's actions while talking to another work colleague
4. said something nice about a co-worker while talking to another work colleague
5. told a work colleague that you respect another co-worker

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – times a week*, 6 = *once a day*, 7 = *more than once a day*.

Appendix C

Scales used in Study 3 (Sample 3a)

NOTE: individual tested items were interspersed amongst demographics and unrelated scales to minimize item-context effects (e.g., anchoring effects).

Supervisor-Directed Deviance WG Items (Mitchell & Ambrose, 2007)

NOTE: The two assessed items were presented individually as two difference scales (each with a single item).

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year

1. Made fun of my supervisor at work
2. Gossiped about my supervisor

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Interpersonal Deviance WG Item (Bennett & Robinson, 2000)

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year.

1. Made fun of someone at work

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Supervisor-Directed Deviance (shortened scale – without WG items; Mitchell & Ambrose, 2007)

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year

1. Played a mean prank on my supervisor
2. Made an obscene comment or gesture toward my supervisor
3. Acted rudely toward my supervisor
4. Made an ethnic, religious, or racial remark against my supervisor

5. Publicly embarrassed my supervisor
6. Swore at my supervisor
7. Refused to talk to my supervisor
8. Said something hurtful to my supervisor at work

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Interpersonal Deviance (shortened scale – without WG item; Bennett & Robinson, 2000)

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year.

1. Said something hurtful to someone at work
2. Made an ethnic, religious, or racial remark at work
3. Cursed at someone at work
4. Played a mean prank on someone at work
5. Acted rudely toward someone at work
6. Publicly embarrassed someone at work

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Negative Workplace Gossip about Supervisor (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about your supervisor when he/she was not present to hear what was said.

In the last year, how often have you...

1. asked a work colleague if they have a negative impression of something that your supervisor has done
2. questioned your supervisor's abilities while talking to a work colleague
3. criticized your supervisor while talking to a work colleague
4. vented to a work colleague about something that your supervisor has done
5. told an unflattering story about your supervisor while talking to a work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Negative Workplace Gossip about Coworkers (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about a co-worker when he/she was not present to hear what was said. The co-worker could be any co-worker who is not your supervisor.

In the last month, how often have you...

1. asked a work colleague if they have a negative impression of something that another co-worker has done
2. questioned a co-worker's abilities while talking to another work colleague
3. criticized a co-worker while talking to another work colleague
4. vented to a work colleague about something that another co-worker has done
5. told an unflattering story about a co-worker while talking to another work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Appendix D

Scales used in Study 3 (Sample 3b)

Social Undermining by Coworkers Items (Duffy et al., 2002)

NOTE: The four assessed items were presented individually as four difference scales (each with a single item).

INSTRUCTIONS: In the last month, how often has a co-worker intentionally...

1. Spread rumors about you?
2. Talked bad about you behind your back?
3. Criticized the way you handled things on the job in a way that was not helpful?
4. Did not defend you when people spoke poorly of you?

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – times a week*, 6 = *once a day*, 7 = *more than once a day*.

Social Undermining by Coworkers (shortened scale – without WG items; Duffy et al., 2002)

INSTRUCTIONS: In the last month, how often has a co-worker intentionally...

1. Insulted you?
2. Gave you the silent treatment?
3. Delayed work to make you look bad or slow you down?
4. Belittled you or your ideas?
5. Hurt your feelings?
6. Did not give as much help as they promised?
7. Gave you incorrect or misleading information about the job?
8. Competed with you for status and recognition?
9. Let you know they did not like you or something about you?

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – times a week*, 6 = *once a day*, 7 = *more than once a day*.

Counterproductive Work Behaviors toward Supervisor WG Items (Dalal et al., 2009)

NOTE: The two assessed items were presented individually as two difference scales (each with a single item).

INSTRUCTIONS: In the last month, how often have you…

1. Criticized your supervisor's opinion or suggestion
2. Spoke poorly about your supervisor to others

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – 3 times a week*, 6 = *once a day*, 7 = *more than once a day*.

Counterproductive Work Behaviors toward Supervisor (shortened scale – without WG items; Dalal et al., 2009)

INSTRUCTIONS: In the last month, how often have you…

1. Behaved in an unpleasant manner toward your supervisor
2. Tried to harm your supervisor
3. Excluded your supervisor from a conversation
4. Tried to avoid interacting with your supervisor

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – 3 times a week*, 6 = *once a day*, 7 = *more than once a day*.

Counterproductive Work Behaviors toward Coworkers WG Items (Dalal et al., 2009)

NOTE: The two assessed items were presented individually as two difference scales (each with a single item).

INSTRUCTIONS: In the last month, how often have you…

1. Criticized a coworker's opinion or suggestion
2. Spoke poorly about a coworker to others

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – 3 times a week*, 6 = *once a day*, 7 = *more than once a day*.

Counterproductive Work Behaviors toward Coworkers (shortened scale – without WG items; Dalal et al., 2009)

INSTRUCTIONS: In the last month, how often have you…

1. Behaved in an unpleasant manner toward a coworker
2. Tried to harm a coworkera
3. Excluded a coworker from a conversation

4. Tried to avoid interacting with a coworker

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – 3 times a week*, 6 = *once a day*, 7 = *more than once a day*.

Negative Workplace Gossip about Supervisor (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about your supervisor when he/she was not present to hear what was said.

In the last year, how often have you...

1. asked a work colleague if they have a negative impression of something that your supervisor has done
2. questioned your supervisor's abilities while talking to a work colleague
3. criticized your supervisor while talking to a work colleague
4. vented to a work colleague about something that your supervisor has done
5. told an unflattering story about your supervisor while talking to a work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – 3 times a week*, 6 = *once a day*, 7 = *more than once a day*.

Negative Workplace Gossip about Coworkers (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about a co-worker when he/she was not present to hear what was said. The co-worker could be any co-worker who is not your supervisor.

In the last month, how often have you...

1. asked a work colleague if they have a negative impression of something that another co-worker has done
2. questioned a co-worker's abilities while talking to another work colleague
3. criticized a co-worker while talking to another work colleague
4. vented to a work colleague about something that another co-worker has done
5. told an unflattering story about a co-worker while talking to another work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – 3 times a week*, 6 = *once a day*, 7 = *more than once a day*.

Coworker Negative Workplace Gossip about Oneself (WG perceptions; modification of Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which a co-worker talked about you when you were not present to hear what was said. The co-worker could be any co-worker who is not your supervisor.

In the last month, how often do you think any co-worker has...

1. asked a work colleague if they have a negative impression of something that you have done
2. questioned your abilities while talking to a work colleague
3. criticized you while talking to a work colleague
4. vented to a work colleague about something that you have done
5. told an unflattering story about you while talking to a work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – times a week*, 6 = *once a day*, 7 = *more than once a day*.

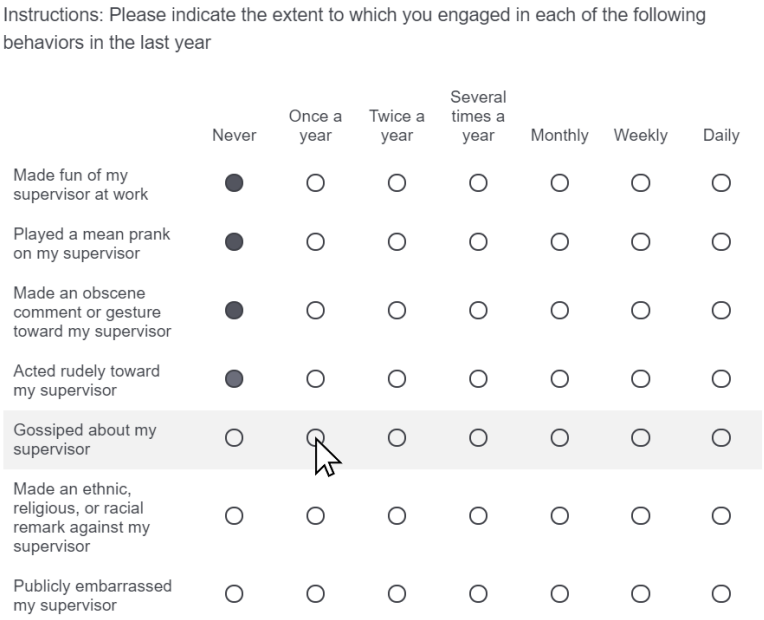
Appendix E

Scales used in Study 4

In-Context Substantive Validity Task

NOTE: If a participant clicked on a non-zero item-response bubble for the WG item that was being tested, then the survey *immediately* proceeded to a separate page which asked more information about the behavior that participants had in mind when responding to the WG item.

To help clarify this, an illustration is provided below. As soon as the participant clicks on the bubble indicating that they have engaged in the target behavior "Once a year", the survey will immediately proceed to a new page which asks follow-up questions. If the participant does not report engaging in any behavior for the evaluated items, then the participant will not see the follow-up questions.



Supervisor-Directed Deviance (Full Scale; Mitchell & Ambrose, 2007)

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year

1. ***Made fun of my supervisor at work***
2. Played a mean prank on my supervisor
3. Made an obscene comment or gesture toward my supervisor

4. Acted rudely toward my supervisor
5. ***Gossiped about my supervisor***
6. Made an ethnic, religious, or racial remark against my supervisor
7. Publicly embarrassed my supervisor
8. Swore at my supervisor
9. Refused to talk to my supervisor
10. Said something hurtful to my supervisor at work

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

NOTE: items in **bold** were evaluated using the in-context substantive validity task.

Interpersonal Deviance (Full scale; Bennett & Robinson, 2000)

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year.

1. ***Made fun of someone at work***
2. Said something hurtful to someone at work
3. Made an ethnic, religious, or racial remark at work
4. Cursed at someone at work
5. Played a mean prank on someone at work
6. Acted rudely toward someone at work
7. Publicly embarrassed someone at work

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

NOTE: the item in **bold** was evaluated using the in-context substantive validity task.

Follow-up questions (after the substantive validity task):

Event Description

INSTRUCTIONS: We want to ask you a bit more information about the response that you just made.

On the previous page, you reported that you:

"[insert item text here]" [insert scale response]

EXAMPLE: "Gossiped about my supervisor" Once a year

When you responded, you may have had a specific event in mind. If so, then please answer the questions below with that event in mind

If you did not have a specific event in mind, then please think about the last time that you engaged in this behavior, and then answer the questions below with that event in mind.

Please describe what happened during this event.

Please keep your response brief (i.e., no more than a few sentences), but include enough detail that someone could read your description and clearly understand your behavior.

_____

_____

_____

_____

_____

[Page Break]

Substantive Validity Assessment

Below are definitions of different types of behavior.

Please select the definition which best describes **<u>your</u>** behavior in the event that you were thinking about.

1. Definition: A behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both. *(1 - Deviance)*
2. Definition: An informal conversation about another person who is not present. The conversation is evaluative in nature (i.e., something positive or negative about the non-present person is discussed). *(2 – Workplace Gossip)*
3. Definition: A behavior intended to hinder, over time, the ability to establish or maintain positive interpersonal relationships, work-related success, and favorable reputation. It is not a one-time behavior – instead, it is part of a consistent pattern of behavior meant to intentionally hinder another person. *(3 – Social Undermining)*
4. Definition: A behavior that is characteristically rude or discourteous toward the person being interacted with (i.e., if person A is interacting with person B, then person A is

showing a lack of regard or rudeness toward person B – the direct recipient of the behavior). *(4 - Incivility)*

[Page Break]

Behavioral Motivation

Please choose the reason below which **best describes** why you engaged in this behavior during the event you are thinking about.

You engaged in this behavior...

1. To gather information
2. To vent or cope with your emotions
3. To build friendships
4. To have fun or alleviate boredom
5. To seek or give social support
6. To seek help from co-workers
7. To inform others of something important
8. To defend someone's reputation
9. To warn co-workers about something
10. To manage what others think of you
11. To undermine or harm someone
12. Other (please specify) _____

Note: motivation items 1 to 11 were randomly presented

Appendix F

Scales used in Study 5 – Wave 1

Note: There were two conditions in Wave 1. In Condition 1, the full scales were administered. In Condition 2, shorter versions of the scales were administered. That is, WG items which had been identified as being included in deviance measurement were omitted from the deviance scales. To increase clarity, the removed items are ***italicized*** in the below scale descriptions.

Supervisor-Directed Deviance (Full Scale; Mitchell & Ambrose, 2007)

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year

1. ***Made fun of my supervisor at work***
2. Played a mean prank on my supervisor
3. Made an obscene comment or gesture toward my supervisor
4. Acted rudely toward my supervisor
5. ***Gossiped about my supervisor***
6. Made an ethnic, religious, or racial remark against my supervisor
7. Publicly embarrassed my supervisor
8. Swore at my supervisor
9. Refused to talk to my supervisor
10. Said something hurtful to my supervisor at work

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Interpersonal Deviance (Full scale; Bennett & Robinson, 2000)

INSTRUCTIONS: Please indicate the extent to which you engaged in each of the following behaviors in the last year.

1. ***Made fun of someone at work***
2. Said something hurtful to someone at work
3. Made an ethnic, religious, or racial remark at work
4. Cursed at someone at work
5. Played a mean prank on someone at work
6. Acted rudely toward someone at work
7. Publicly embarrassed someone at work

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Social Undermining by Coworkers (Full Scale; Duffy et al., 2002)

INSTRUCTIONS: In the last month, how often has a co-worker intentionally...

1. Insulted you?
2. Gave you the silent treatment?
3. ***Spread rumors about you?***
4. Delayed work to make you look bad or slow you down?
5. Belittled you or your ideas?
6. Hurt your feelings?
7. ***Talked bad about you behind your back?***
8. ***Criticized the way you handled things on the job in a way that was not helpful?***
9. Did not give as much help as they promised?
10. Gave you incorrect or misleading information about the job?
11. Competed with you for status and recognition?
12. Let you know they did not like you or something about you?
13. ***Did not defend you when people spoke poorly of you?***

RESPONSE SCALE: 1 = *never*, 2 = *once or twice*, 3 = *about once a week*, 4 = *several times a week*, 5 = *almost every day*, 6 = *every day*

Affective Commitment (Meyer et al., 1993)

INSTRUCTIONS: How much do you agree with the following statements about your job?

1. I would be very happy to spend the rest of my career with this organization
2. I really feel as if this organization's problems are my own
3. I do not feel a strong sense of "belonging" to my organization
4. I do not feel "emotionally attached" to this organization
5. I do not feel like "part of the family" at my organization
6. This organization has a great deal of personal meaning for me

RESPONSE SCALE: 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, 7 = *strongly agree*

Normative Commitment (Meyer et al., 1993)

INSTRUCTIONS: How much do you agree with the following statements about your job?

1. I do not feel any obligation to remain with my current employer
2. Even if it were to my advantage, I do not feel it would be right to leave my organization now
3. I would feel guilty if I left my organization now
4. This organization deserves my loyalty
5. I would not leave my organization right now because I have a sense of obligation to the people in it
6. I owe a great deal to my organization

RESPONSE SCALE: 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, 7 = *strongly agree*

Continuance Commitment (Meyer et al., 1993)

INSTRUCTIONS: How much do you agree with the following statements about your job?

1. Right now, staying with my organization is a matter of necessity as much as desire
2. It would be very hard for me to leave my organization right now, even if I wanted to
3. Too much of my life would be disrupted if I decided I wanted to leave my organization now
4. I feel that I have too few options to consider leaving this organization
5. If I had not already put so much of myself into this organization, I might consider working elsewhere
6. One of the few negative consequences of leaving this organization would be the scarcity of available alternatives

RESPONSE SCALE: 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, 7 = *strongly agree*

Appendix G

Scales used in Study 5 – Wave 2

Negative Workplace Gossip about Supervisor (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about your supervisor when he/she was not present to hear what was said.

In the last year, how often have you...

1. asked a work colleague if they have a negative impression of something that your supervisor has done
2. questioned your supervisor's abilities while talking to a work colleague
3. criticized your supervisor while talking to a work colleague
4. vented to a work colleague about something that your supervisor has done
5. told an unflattering story about your supervisor while talking to a work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Negative Workplace Gossip about Coworkers (Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which you talked about a co-worker when he/she was not present to hear what was said. The co-worker could be any co-worker who is not your supervisor.

In the last month, how often have you...

1. asked a work colleague if they have a negative impression of something that another co-worker has done
2. questioned a co-worker's abilities while talking to another work colleague
3. criticized a co-worker while talking to another work colleague
4. vented to a work colleague about something that another co-worker has done
5. told an unflattering story about a co-worker while talking to another work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a year*, 3 = *twice a year*, 4 = *several times a year*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*.

Coworker Negative Workplace Gossip about Oneself (WG perceptions; modification of Brady et al., 2017)

INSTRUCTIONS: The following questions are about workplace conversations in which a co-worker talked about you when you were not present to hear what was said. The co-worker could be any co-worker who is not your supervisor.

In the last month, how often do you think any co-worker has...

1. asked a work colleague if they have a negative impression of something that you have done
2. questioned your abilities while talking to a work colleague
3. criticized you while talking to a work colleague
4. vented to a work colleague about something that you have done
5. told an unflattering story about you while talking to a work colleague

RESPONSE SCALE: 1 = *never*, 2 = *once a month*, 3 = *2 – 3 times a month*, 4 = *once a week*, 5 = *2 – times a week*, 6 = *once a day*, 7 = *more than once a day*.

Paranoid Delusions of Reference (Green et al., 2008)

INSTRUCTIONS: Please indicate the extent that you have had each of the following thoughts and feelings over the last month...

1. I spent time thinking about friends gossiping about me
2. I often heard people referring to me
3. I have been upset by friends and colleagues judging me critically
4. People definitely laughed at me behind my back
5. I have been thinking a lot about people avoiding me
6. People have been dropping hints for me
7. I believed that certain people were not what they seemed
8. People talking about me behind my back upset me
9. I was convinced that people were singling me out
10. I was certain that people have followed me
11. Certain people were hostile towards me personally
12. People have been checking up on me
13. I was stressed out by people watching me
14. I was frustrated by people laughing at me
15. I was worried by people's undue interest in me
16. It was hard to stop thinking about people talking about me behind my back

RESPONSE SCALE: 1 = *not at all*, 3 = *somewhat*, 5 = *a lot*.

Paranoia (Fenigstein & Vanable, 1992)

INSTRUCTIONS: Please indicate how much each of the following statements have applied to you over the last month...

1. Someone has it in for me
2. I sometimes feel as if I'm being followed
3. I believe that I have often been punished without cause
4. Some people have tried to steal my ideas and take credit for them
5. My parents and family find more fault with me than they should
6. No one really cares much what happens to you
7. I am sure I get a raw deal from life
8. Most people will use somewhat unfair means to gain profit or an advantage, rather than lose it
9. I often wonder what hidden reason another person may have for doing something nice for you
10. It is safer to trust no one
11. I have often felt that strangers were looking at me critically
12. Most people make friends because friends are likely to be useful to them
13. Someone has been trying to influence my mind
14. I am sure I have been talked about behind my back
15. Most people inwardly dislike putting themselves out to help other people
16. I tend to be on my guard with people who are somewhat more friendly than I expected
17. People have said insulting and unkind things about me
18. People often disappoint me
19. I am bothered by people outside, in cars, in stores, etc. watching me
20. I have often found people jealous of my good ideas just because they had not thought of them first

RESPONSE SCALE: 1 = *not at all applicable to me*, 5 = *extremely applicable to me*.

Procedural Justice (Colquitt, 2001)

INSTRUCTIONS: The following items refer to the procedures used to arrive at **outcomes** you receive from your job (e.g., pay, promotions, performance reviews, etc.).

To what extent...

1. Have you been able to express your views and feelings during those procedures?
2. Have you had influence over the outcome arrived at by those procedures?
3. Have those procedures been applied consistently?

4. Have those procedures been free of bias?
5. Have those procedures been based on accurate information?
6. Have you been able to appeal the outcome arrived at by those procedures?
7. Have those procedures upheld ethical and moral standards?

RESPONSE SCALE: 1 = *to a small extent*, 3 = *neutral*, 5 = *to a larger extent*.

Interpersonal Justice (Colquitt, 2001)

INSTRUCTIONS: The following items refer to the **individual** (e.g., perhaps your supervisor) who makes decisions regarding the outcomes you receive from your job (e.g., pay, promotions, performance reviews, etc.).

To what extent...

1. Has he/she treated you in a polite manner?
2. Has he/she treated you with dignity?
3. Has he/she treated you with respect?
4. Has he/she refrained from improper remarks or comments?

RESPONSE SCALE: 1 = *to a small extent*, 3 = *neutral*, 5 = *to a larger extent*.

Informational Justice (Colquitt, 2001)

INSTRUCTIONS: The following items refer to the **individual** (e.g., perhaps your supervisor) who makes decisions regarding the outcomes you receive from your job (e.g., pay, promotions, performance reviews, etc.).

To what extent...

1. Has he/she been candid in his/her communications with you?
2. Has he/she explained the procedures thoroughly?
3. Were his/her explanations regarding the procedures reasonable?
4. Has he/she communicated details in a timely manner?
5. Has he/she seemed to tailor his/her communications to individuals' specific needs?

RESPONSE SCALE: 1 = *to a small extent*, 3 = *neutral*, 5 = *to a larger extent*.

Distributive Justice (Colquitt, 2001)

INSTRUCTIONS: The following items refer to **outcomes** you receive from your job (e.g., promotions, performance reviews, etc.).

To what extent...

1. Does your outcome reflect the effort you have put into your work?
2. Is your outcome appropriate for the work you have completed?
3. Does your outcome reflect what you have contributed to the organization?
4. Is your outcome justified, given your performance?

RESPONSE SCALE: 1 = *to a small extent*, 3 = *neutral*, 5 = *to a larger extent*.

Job Satisfaction (Barnes et al., 2017; modification of Brayfield & Rothe, 1951)

INSTRUCTIONS: How much do you agree with the following statements about your job over the last month?

1. I felt fairly well satisfied with my job
2. Most days I was enthusiastic about my work
3. I found real enjoyment in my work
4. I considered my job to be rather unpleasant
5. Each day at work seemed like it would never end

RESPONSE SCALE: 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, 7 = *strongly agree*

Conscientiousness (Goldberg, 1992)

INSTRUCTIONS: Please indicate your agreement with each of the following statements based on your typical thoughts and feelings.

I...

1. Am always prepared
2. Pay attention to details
3. Get chores done right away
4. Like order
5. Follow a schedule
6. Am exacting in my work
7. Leave my belongings around
8. Make a mess of things

9. Often forget to put things back in their proper place
10. Shirk my duties

RESPONSE SCALE: 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, 7 = *strongly agree*

Neuroticism (Goldberg, 1992)

INSTRUCTIONS: Please indicate your agreement with the following statements.

I...

1. Often feel blue
2. Dislike myself
3. Am often down in the dumps
4. Have frequent mood swings
5. Panic easily
6. Rarely get irritated
7. Seldom feel blue
8. Feel comfortable with myself
9. Am not easily bothered by things
10. Am very pleased with myself

RESPONSE SCALE: 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, 7 = *strongly agree*

Self-esteem (Rosenberg, 1965)

INSTRUCTIONS: Please indicate your agreement with each of the following statements based on your typical thoughts.

1. On the whole, I am satisfied with myself
2. At times I think I am no good at all
3. I feel that I have a number of good qualities
4. I am able to do things as well as most people
5. I feel I do not have much to be proud of
6. I certainly feel useless at times
7. I feel that I'm a person of worth, at least on an equal basis with others
8. I wish I could have more respect for myself
9. All in all, I am inclined to feel that I am a failure

10. I take a positive attitude toward myself

RESPONSE SCALE: 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *somewhat agree*, 5 = *agree*, 6 = *strongly agree*.

Appendix H

Descriptive Statistics, Correlations, and Alpha Reliabilities for Study 2

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Age	38.84	10.42									
2. Gender	1.50	.50	.06								
3. Threat of Negative WG	.40	.40	-.03	-.06	**.90**						
4. Threat of Minor Deviance	.64	.30	-.04	-.20	.62***	**.88**					
5. Threat of Serious Deviance	.87	.24	.00	-.03	.32**	.71***	**.95**				
6. Paranoid Delusions	1.61	.80	-.28*	-.11	.27*	.02	-.19	**.96**			
7. Follower WG about oneself	2.24	1.22	-.25*	-.03	.36**	.15	.02	.72***	**.95**		
8. NWGC	1.83	.94	-.21	-.12	.06	-.10	-.05	.52***	.49***	**.88**	
9. PWGC	3.34	1.33	-.04	-.11	.14	.17	.18	.30**	.28**	.30**	**.94**

Note. $N = 80$; Cronbach's alpha reliabilities are on the diagonal in bold. For gender, 1 = male, 2 = female. WG = workplace gossip; NWGC = negative WG about coworkers; PWGC = positive WG about coworkers.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Appendix I

Descriptive Statistics, Correlations, and Alpha Reliabilities for Study 3 (Sample 3a)

Variable	*M*	*SD*	1	2	3	4	5	6
1. Age	33.57	9.87						
2. Gender	1.46	.50	.13					
3. SDD (without gossip)	1.26	.75	.05	-.10	**.92**			
4. IDEV (without gossip)	1.53	1.02	-.01	-.15*	.73***	**.88**		
5. NWGS	2.49	1.68	.02	-.09	.46***	.51***	**.95**	
6. NWGC	2.97	1.77	.01	.02	.27***	.43***	.69***	**.95**

Note. N = 186; Cronbach's alpha reliabilities are on the diagonal in bold. For gender, 1 = male, 2 = female. WG = workplace gossip; SDD = supervisor directed deviance; IDEV = interpersonal deviance. NWGS = negative WG about supervisor; NWGC = negative WG about coworkers.

* p < .05. ** p < .01. *** p < .001.

Appendix J

Descriptive Statistics, Correlations, and Alpha Reliabilities for Study 3 (Sample 3b)

Variable	*M*	*SD*	1	2	3	4	5	6	7	8
1. Age	34.86	10.28								
2. Gender	1.50	.50	.10							
3. SU from coworkers (without gossip)	1.65	.87	-.14*	-.00	**.91**					
4. CWB toward supervisor (without gossip)	1.45	.73	-.10	.06	.57***	**.70**				
5. CWB toward coworkers (without gossip)	1.48	.76	-.07	.05	.56***	.95***	**.74**			
6. Coworkers negative WG about oneself	1.87	1.00	-.12	.03	.67***	.61***	.60***	**.94**		
7. NWGS	1.66	1.04	-.19**	.02	.47***	.58***	.53***	.59***	**.93**	
8. NWGC	1.86	1.09	-.11	-.02	.52***	.57***	.57***	.67***	.56***	**.94**

Note. N = 195; Cronbach's alpha reliabilities are on the diagonal in bold. For gender, 1 = male, 2 = female. WG = workplace gossip; SU = social undermining; CWB = counterproductive work behaviors; NWGS = negative WG about supervisor; NWGC = negative WG about coworkers.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Appendix K

Descriptive Statistics, Correlations, and Alpha Reliabilities for Study 5

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Age	35.27	9.70																
2. Gender	1.54	.50	.06															
3. SDD (with gossip)	1.48	.69	-.08	-.02	**.83**													
4. SDD (without gossip)	1.23	.59	-.18***	-.19***	---	**.89**												
5. NWGS	2.31	1.45	-.06	-.02	.55***	.41***	**.94**											
6. IDEV (with gossip)	1.72	.94	-.06	-.12*	.71***	---	.41***	**.84**										
7. IDEV (without gossip)	1.48	.85	-.16**	-.18***	---	.71***	.49***	---	**.87**									
8. NWGC	2.64	1.55	-.06	-.05	.38***	.29***	.64***	.52***	.52***	**.95**								
9. SU (with gossip)	1.61	.82	-.04	.05	.56***	---	.41***	.51***	---	.35***	**.95**							
10. SU (without gossip)	1.57	.78	-.07	-.08	---	.47***	.40***	---	.47***	.31***	---	**.92**						
11. CNWG	1.83	1.04	-.08	.02	.30***	.22***	.40***	.36***	.25***	.40***	.59***	.45***	**.94**					
12. Procedural justice	3.30	.93	.02	-.06	-.15*	-.05	-.33***	-.13*	-.05	-.13**	-.29***	-.22***	-.26***	**.90**				
13. Interpersonal justice	4.09	1.00	.01	-.01	-.27***	-.15*	-.43***	-.16*	-.10	-.11**	-.39***	-.40***	-.35***	.58***	**.93**			
14. Informational justice	3.65	1.02	.01	.01	-.27***	-.11	-.45***	-.11	-.09	-.16***	-.34***	-.30***	-.28***	.65***	.72***	**.89**		
15. Distributive justice	3.51	1.24	-.02	.05	-.12	-.03	-.36***	-.09	-.08	-.14**	-.27***	-.26***	-.23***	.67***	.54***	.62***	**.97**	
16. Job satisfaction	4.77	1.52	.12**	.03	-.20***	-.10	-.34***	-.17**	-.11	-.19***	-.28***	-.25***	-.32***	.55***	.52***	.58***	.54***	**.93**
17. Affective commitment	4.41	1.56	.09*	.01	-.13*	-.06	-.24***	-.10	-.10	-.12**	-.18***	-.24***	-.17***	.52***	.41***	.46***	.45***	.69***
18. Normative commitment	3.95	1.61	.03	.02	-.13*	-.01	-.22***	-.09	-.02	-.07	-.16**	-.22***	-.13**	.45***	.39***	.44***	.44***	.60***
19. Continuance commitment	4.34	1.30	.07*	.11**	.05	-.02	.10*	-.02	.02	.09*	.17**	-.03	.04	-.13**	-.01	-.07	-.06	-.06
20. Conscientiousness	5.36	.98	.09*	.04	-.14*	-.11	-.21***	-.26***	-.12*	-.20***	-.10	.01	-.19***	.20***	.15***	.21***	.18***	.29***
21. Neuroticism	3.11	1.35	-.12**	.08	.00	.12	.18***	.05	.08	.13**	.19**	.09	.28***	-.35***	-.27***	-.32***	-.28***	-.43***
22. Paranoid delusions	1.77	.75	-.18***	.02	.25***	.28***	.27***	.29***	.23***	.26***	.53***	.34***	.60***	-.25***	-.30***	-.27***	-.22***	-.35***
23. General paranoia	1.78	.74	-.08	-.06	.24***	.29***	.27***	.27***	.31***	.26***	.46***	.39***	.59***	-.30***	-.36***	-.32***	-.26***	-.43***
24. Self-esteem	5.05	1.04	.19***	.01	-.02	-.14*	-.17***	-.08	-.13*	-.16***	-.15*	-.10	-.31***	.34***	.25***	.33***	.30***	.48***

Variable	17	18	19	20	21	22	23	24
1. Age								
2. Gender								
3. SDD (with gossip)								
4. SDD (without gossip)								
5. NWGS								
6. IDEV (with gossip)								
7. IDEV (without gossip)								
8. NWGC								
9. SU (with gossip)								
10. SU (without gossip)								
11. CNWG								
12. Procedural justice								
13. Interpersonal justice								
14. Informational justice								
15. Distributive justice								
16. Job satisfaction								
17. Affective commitment	**.92**							
18. Normative commitment	.79***	**.92**						
19. Continuance commitment	.01	.10*	**.83**					
20. Conscientiousness	.21***	.12**	-.03	**.90**				
21. Neuroticism	-.30***	-.22***	.16***	-.43***	**.93**			
22. Paranoid delusions	-.17***	-.11*	.11*	-.27***	.47***	**.97**		
23. General paranoia	-.25***	-.21***	.08	-.20***	.49***	.70***	**.94**	
24. Self-esteem	.34***	.23***	-.13**	.47***	-.81***	-.49***	-.53***	**.94**

Note. n ranges from 265 to 534; Cronbach's alpha reliabilities are on the diagonal in bold. For gender, 1 = male, 2 = female. SDD = supervisor-directed deviance; IDEV = interpersonal deviance; NWGS = negative WG about supervisor; NWGC = negative WG about coworkers; SU = social undermining; CNWG = perceptions of coworkers' negative workplace gossip about oneself.

--- = missing correlations due to variables being in different conditions. * p < .05. ** p < .01. *** p < .001.