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#### Everybody Talks:

Social Structure and the Selective Disclosure of Discrediting Information in the Workplace

by

Eliot Lawrence Sherman

A dissertation submitted in partial satisfaction of the

Requirements for the degree of

Doctor of Philosophy

in

**Business Administration** 

in the

**Graduate Division** 

of the

University of California, Berkeley

Committee in charge:

Professor Jennifer Chatman, Chair

Professor Sameer Srivastava

Professor Sandra Smith

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# Everybody Talks: Social Structure and the Selective Disclosure of Discrediting Information in the Workplace © Copyright 2016 by Eliot Lawrence Sherman

#### **ABSTRACT**

Everybody Talks: Social Structure and the Selective Disclosure of Discrediting Information in the Workplace

by

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Doctor of Philosophy in Business Administration

University of California, Berkeley

Professor Jennifer Chatman, Chair

Andreas Lubitz, a 27-year-old German pilot employed by Germanwings, a subsidiary of the airline Lufthansa, struggled with severe depression—a condition that he felt he could not share with his co-workers (Eddy, Bilefsky, and Clark 2015). His depression was bad enough that he elected to take medical leave during his aviation training before returning to complete his pilot's license. Presumably he hoped his condition would improve, but it didn't. On March 24, 2015, he killed himself and 149 other people by intentionally crashing an Airbus A320 into the French Alps.

The consequences of withholding personal information in the workplace are rarely so dramatic. Yet the dilemma that Lubitz faced was familiar to many. We must often contend with difficult personal matters in the course of carrying out our work. This creates a dilemma. On one hand, keeping such information to ourselves is unpleasant and cognitively depleting (Lane and Wegner 1995; Critcher and Ferguson 2014) while disclosing it to another person can be emotionally cathartic (Pennebaker 1997). On the other hand, we are compelled by a psychological need to be liked by others (James 1890; Srivastava and Beer 2005) and cognizant of the fact that the negative evaluations of coworkers have a direct bearing on our employment prospects (Schneider 1986).

Accordingly, insofar as certain information marks one as substantially less desirable to others (Goffman 1963: 3), its disclosure in the workplace threatens both our self-esteem and our remunerative potential. Following Goffman's distinction between the *discredited* and the *discreditable*—people with undesirable traits that are visible versus those that are concealable—I refer to such information as *discrediting* (Goffman 1963: 4). The extent to which information can actually discredit a person exhibits numerous contingencies, varying substantially based on aspects of the focal individual and the social environment in which he or she is embedded (Quinn and Chaudoir 2009). The key point for the purposes of this research, however, is that the potential discloser considers the information discrediting and guards it carefully as a result.

The tension between the compulsion to disclose and the rationale for withholding discrediting information receives substantial attention from scholars (see Pachankis 2007 for an excellent review). However, at present our understanding of this tension remains circumscribed due to a heavy emphasis on the role of the individual—a consequence of the fact that the study of disclosure has been, in recent years, primarily the domain of psychologists. As a result, we know little about the way in which the social structure of relationships that surround the dyad of discloser and confidant influences the probability of disclosure, as well as the consequences therein. Yet this element is critical to building an accurate theory of disclosure, since a person's reputation—which he risks when revealing discrediting information—arises from the exchange of information between people in his social network who are themselves connected (Coleman 1988). Accordingly, to understand disclosure one must also understand the social structure in which a discloser operates.

I investigate the influence of workplace social networks on the disclosure of discrediting information with a multi-method empirical approach that includes the analysis of survey data, a laboratory experiment, and qualitative interviews. The use of multiple methods strengthens the empirical insights that I am able to derive (Fine and Elsbach 2000; Small 2011). In Chapter 1, I develop a theory of disclosure that addresses a conceptual puzzle. Disclosure occurs when a discloser trusts that a confidant will not share his discrediting information with any third parties. Trust tends to inhere in strong ties, or ties between two people who are emotionally close (Marsden and Campbell 1984). Yet strong ties are often transitive, in that two people who are close friends are likely to have other close friends in common (Simmel 1908; Heider 1958; Kossinets and Watts 2006). Thus, while trust at the *dyadic* level can be expected to promote disclosure, its structural concomitant—the density of relations around a strongly-connected dyad—should exert the opposite effect, insofar as a confidant who shares many third-party ties with a discloser is ideally positioned to circulate the discloser's discrediting information should he or she wish to (Davis 1973, Granovetter 1985: 492).

I test this idea in Chapter 2 with two empirical studies. In the first, an analysis of a social network survey that I administered to the employees of a consulting firm, I show that the presence of a dense social structure around a dyad discourages disclosure over and above the positive effect of tie strength. Because these data are cross-sectional, however, I also design and implement a laboratory experiment in order to test whether social network density itself, as opposed to an omitted variable that is associated with it, is responsible for inhibiting disclosure. By manipulating subjects' perceptions of the social structure surrounding them and a confederate I confirm experimentally that density itself reduces the probability of disclosure.

In Chapter 3 I summarize my findings and describe opportunities for future research. My findings contribute to social capital theory by showing that a dense social structure does not universally enhance knowledge sharing (e.g., Kadushin 2012). Instead, when the information in question renders its object vulnerable, network density serves as a source of interpersonal "friction" that can impede knowledge exchange (Ghosh and Rosenkopf 2014). Additionally, I advance scholars' theoretical understanding of disclosure by expressly incorporating the effect of social structure beyond the dyad. This approach, which stands in contrast to social psychological treatments that focus exclusively on discloser and confidant (e.g., Pennebaker 1990), increases

theoretical precision with respect to the probability of disclosure occurring. With that said, it represents the very beginnings of a comprehensive theory of disclosure that has yet to develop.

Toward that end, I describe three different research projects that, when pursued, will significantly advance scholarly understanding of disclosure's antecedents and consequences. I first discuss the fact that most investigations of disclosure are agnostic to the egregiousness of the discrediting information in question (e.g., Kelly 2002). This element is essential to specify, however, since information that is more egregiously discrediting is less likely to be disclosed at baseline, irrespective of individual or structural factors. Next, I explore the phenomenon of impression management in dense networks. I suggest that people have a stronger desire to manage impressions vis-à-vis contacts with whom they are densely connected, yet are simultaneously constrained from doing so because inconsistent behavior—the hallmark of impression management—is easily detected and effectively punished in dense networks. The disclosure of discrediting information, however, is an impression management tactic that may represent an exception if used strategically. Finally, I address the perspective of the confidant, and explore the antecedents of "betrayal," that is, of a confidant sharing a discloser's discrediting information with third parties. This approach has the potential to shed light on the way in which discrediting information travels through a social network in spite of incentives that should inhibit its transfer (e.g., Kurland and Pelled 2000). In each case, I derive testable hypotheses that constitute fruitful avenues for future research.

To Aneesha

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#### Acknowledgements

I got the call from Harvard Business School some time before noon. When my phone rang I was walking between the second and third locations of Penn's annual graduation bar crawl that, for whatever reason, had begun very early that morning. The recruiter wanted to talk about my application for a research associate position, so I peeled off from my group and headed to one of those small parks in Philadelphia's Old City to continue the conversation. I assured her that I was very interested in the study of business (which was true) and had a great deal of experience with case studies (which was not true in the slightest). By the end of the call I was pretty sure I had a good chance at the job.

That's where this whole thing began. But for the vicissitudes of fate—the presence of some liquid courage, as well as decent cell phone reception, which was even less of a given back in those days—my life might have turned out quite a bit differently. Because as soon as I got to HBS I knew that I wanted to spend the rest of my life at a business school. Everywhere I looked people seemed to be doing work that really mattered. Excellence in all things was expected as a matter of course. And as for the professors, I was simply in awe of them—at first anyway. Eventually, I had a naive but ultimately useful thought: I bet I could do what they do.

I say naïve because there are few experiences as universally humbling as completing a doctoral program. Perhaps surviving is a better way to put it. And I wish I could tell you why that is, but I honestly don't know. It's not the hard work, although this is the hardest I have ever worked. It's not the pressure to live up to expectations, although I have never expected more of myself. It's not the rejection, although that remains a constant companion. There is some other unspecified element that makes the doctoral program a uniquely strenuous undertaking. So perhaps it is not surprising that, here at the end of it, I have come full circle and find myself, once again, in awe of the professors who have taught me.

I want to begin by thanking the chair of my dissertation committee, Jennifer Chatman. I took Jenny's micro organizational behavior course during my first semester as a doctoral student, and I can't imagine a better introduction to the profession. Jenny is a world-class scholar who sets the standard for the development of theory that is precise, informative, novel, and testable. She is also tremendously supportive of her advisees' research. When I needed \$1,000 to run an experiment she offered it to me without thinking twice. When I applied for government data that came with numerous restrictions—including a prohibition against analyzing it in a shared office space—Jenny cleared off the table in her office to make room for my computer and gave me a key. Most importantly, however, she has been incredibly generous with her time. I've lost track of the number of times Jenny provided insightful feedback on my job market paper, but it was definitely more than 30.

I also want to thank the chair of my orals committee, Sameer Srivastava. I began working with Sameer during my third year in the program and it was one of the best decisions I ever made. Sameer combines an emphasis on methodological rigor with a keen eye for theoretical puzzles. He is also incredibly supportive of his students. When a company approached him with a consulting opportunity he immediately put them in touch with me, suggesting I collaborate with them in exchange for the opportunity to gather some data. That company went on to be the

primary research site for this dissertation. Sameer also patiently read, and provided incisive comments on, over 30 versions of my job market paper. Without him I simply would not be where I am today.

I am also indebted to several Berkeley faculty members whose positive influence on me will endure for a long time to come. Sandra Smith graciously agreed to serve as the outside member of my dissertation committee. As a great admirer or her work I was extremely grateful for her willingness to engage with the research of a wayward business student. I was also lucky enough to take a course on social networks with Toby Stuart. To this day, I don't believe I have sufficiently articulated the extent to which that course, and Toby in general, influenced my thinking. I would also like to thank Ming Leung for the incredible amount of work he put into the macro organizational behavior course that he taught as an assistant professor in his first year. It was noticeable, and it made a difference. Neil Fligstein's economic sociology course was an inspiration, and I am grateful to him for serving on my orals committee. He remains one of the most omnivorous academics I have ever met. Finally, I want to thank Barry Staw. I will always admire, and seek to emulate, the enthusiasm with which he disregards conventional academic wisdom.

I was fortunate to be surrounded with some incredible peers during my time at Haas. Brian Reschke was a constant companion from the start who never hesitated to lend a hand, no matter how busy he was. BYU is very lucky to have him. Angus Hildreth lives up to his scholarly interest in loyalty and then some. His secret is that he is actually a genuinely nice guy, no matter how much he tries to hide it. Sanaz Mobasseri could always make me laugh regardless of how stressed we both were. I will miss her greatly when I am gone. Weiyi Ng, Jenn Logg, Katherine Ullman, Alex Van Zant, Daron Sharps, and Bernadette Doerr provided me with incredible friendship and endless patience. My life is exponentially better for having all of you in it.

Lastly I'd like to thank Vivian Li, whose 11<sup>th</sup> hour intercession on my behalf quite literally saved this dissertation. It may take a while, but eventually I will figure out a way to adequately pay you back.

#### **CHAPTER 1:**

#### Social Structure and Discrediting Information Disclosure at Work

People actively keep important aspects of their lives and identities hidden from others (Simmel 1950). Every day at work, millions of Americans conceal a minority sexual orientation (Tilcsik, Anteby, and Knight 2015), a clinical mood disorder, (Martin, Pescosolido, and Tuch 2000), a progressive and incurable disease (Siegel and Krauss 1991), or ongoing marital infidelity (Berebitsky 2012), among other examples. For many people, these examples constitute discrediting information, that is, information that a focal person believes would mark them as less desirable to others should it be revealed (Goffman 1963: 3).

How people respond once a colleague reveals discrediting information is contingent on the nature of the information, its importance to the discloser's identity, and the social context in which the discloser and her confidant are embedded (Quinn and Chaudoir 2009). In general, however, revealing discrediting information invites a negative reaction that is best understood as social sanctioning (Miall 1987; Stiles and Kaplan 1996). When conferred in the workplace, such sanctions can have adverse career consequences, including—in extreme cases—the loss of a job (Schneider 1986).

As a result, people must regularly weigh whether to reveal their discrediting information in social interactions with co-workers (Goffman 1963; Pachankis 2007). Disclosure can be beneficial in two ways. First, it can elicit social support from trusted colleagues, which people may seek in response to certain discrediting events or conditions (Ragins, Singh, and Cornwell 2007). This is consistent with Goffman's (1963: 95) insight that a person will often manage a characteristic that makes him discreditable "by dividing the world into a large group to whom he tells nothing, and a small group to whom he tells all and upon whose help he then relies." Second, habitually monitoring one's social interactions to maintain concealment is cognitively depleting (Critcher and Ferguson 2014). As a result, revealing discrediting information, even in a selective and limited fashion, can reduce this psychological drain (Major and Gramzow 1999).

Disclosures must be made carefully, however, because the information may become widely known among a person's contacts if a confidant leaks it to a mutual tie, who may then inform others in the network (Ragins 2008). Consequently, insofar as people seek to control who is aware of their discrediting information (e.g., Ward and Winstanley 2005), they must trust their confidants to keep their disclosure private (Burt and Knez 1995). This presents an interesting theoretical puzzle, however. Trust tends to inhere in strong ties, or ties between two people who are emotionally close (Marsden and Campbell 1984). Yet strong ties are often transitive in that two people who are close friends are likely to have other close friends in common (Simmel 1908; Heider 1958; Kossinets and Watts 2006). Thus, while trust at the *dyadic* level can be expected to promote disclosure, its structural concomitant—the density of relations around a strongly-connected dyad—should exert the opposite effect, insofar as a confidant who shares many third-

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<sup>&</sup>lt;sup>1</sup> I use the terms "reveal" and "disclose" interchangeably throughout the paper. I also refer to the person who has the potential to disclose discrediting information as the "discloser" and the co-worker who is at risk of receiving this information as the "confidant."

party ties with a discloser is ideally positioned to circulate the discloser's discrediting information should he or she wish to (Davis 1973, Granovetter 1985: 492).

Critically, people in dense networks are also more vulnerable to the social sanctioning that can result from discrediting information becoming widespread than are people in sparse networks (Coleman 1988; Willer, Kuwabara, and Macy 2009). This is especially important because the prospect of being negatively sanctioned strongly influences the decision in the first place (Ragins 2008). In comparison, this vulnerability is attenuated within a sparse network, as the lack of redundant ties limits the spread of information to relevant third parties and precludes their ability to effectively level sanctions in response (Coleman 1988; Burt 2005).

Accordingly, I argue that density will especially discourage disclosure in the workplace for two primary reasons. First, organizations are echo chambers in which colleagues, when discussing a co-worker, share opinions that they believe reflect the perspective of their conversation partner (Burt 2005). As a result, a salient and negative fact about a person can become amplified through repeated discussions, thereby egregiously damaging her reputation. Second, negative sanctioning in the workplace can have consequences that go beyond reputational damage. For example, social exclusion and the attendant withdrawal of key resources can result in a decline in performance that could ultimately threaten the discloser's job security (Lazega 2001).

I extend this logic in order to consider how the decision to disclose to a co-worker is influenced by the network position of that co-worker. I argue that central contacts—people who are well connected and tied to people who are themselves well connected—represent less appealing confidants for disclosers in dense networks as compared with disclosers in sparse networks. Network centrality has long been viewed as a source of power in terms of control over resources (Bonachich 1987). As a result, central contacts are well-positioned to marshal informal sanctions against a discloser should awareness of the discloser's discrediting information motivate them to do so. This is particularly dangerous for disclosers in dense networks, insofar as they are more vulnerable to sanctioning than are disclosers in sparse networks. Accordingly, I argue that people in dense networks are less likely to disclose to highly central contacts than are people in sparse networks.

I test these hypotheses with a multi-method empirical approach that combines a field study and a laboratory experiment. The field study allows me to examine disclosure in an externally-valid environment in which the professional consequences of being negatively sanctioned were substantial. At the same time, the laboratory experiment allows me to address the individual- and environmental-level confounds that are commonly associated with observational network data (e.g., Kossinets and Watts 2009).

My primary contribution is to illustrate the limits of trust based on network density (e.g., Burt, Kilduff, and Tasselli 2013). While scholars have embraced Coleman's (1988) argument that dense relations promote trust between contacts, less attention has been paid to the other side of Coleman's intuition—that this trust is largely attributable to the increased vulnerability to sanctioning that attends participation in dense networks. By applying this logic to the disclosure of discrediting information, I show that the very social structure which would be expected to

enable information exchange actually discourages it when the information in question renders its source vulnerable. As a result, it is theoretically imprecise to assert that network density uniformly enhances knowledge sharing. Rather, accurately specifying the relationship between network density and information exchange requires considering the interpersonal ramifications that would occur should the information become widely known. A second contribution is to show that a central network position does not provide equal-opportunity access to the information possessed by one's contacts. Instead, contacts in dense networks are more reluctant to share discrediting information with a central actor than are contacts in sparse networks—a somewhat counterintuitive finding, given the preponderance of evidence which links network centrality to uniformly superior information access (e.g., Burt 1992). This result similarly illustrates the need to consider the interpersonal implications of disclosure for a knowledge source when specifying the relationship between network position and information access.

#### **THEORY**

#### **Discrediting Information**

Since Goffman's (1963) seminal work on stigma, which remains a common frame of reference, a number of definitions and closely related constructs have proliferated (Lucas and Phelan 2012). For example, scholars have utilized the terms "concealable stigmatized identities" (Quinn and Chaudoir 2009: 635), "invisible stigmas" (Ragins 2008: 194), and "concealable stigmas" (Pachankis 2007: 328). These constructs, however, remain somewhat disparate from one another despite recent attempts to unite them toward a focused research agenda (e.g., Link and Phelan 2001; Major and O'Brien 2005). More importantly, they fail to account for the fact that Goffman reserved the label of stigma for particularly egregious cases: "The term stigma, then, will be used to refer to an attribute that is deeply discrediting ..." (Goffman 1963: 3). For example, research on stigma examines characteristics such as minority sexual orientation (Tilcsik, Anteby and Knight 2015); mental illness (Perry and Pescosolido, 2012); eating disorders (Smart and Wegner 1999); a criminal record (Pager 2003); sexual assault victimhood (Weidner and Griffitt 1983); substance abuse (Spell and Blum, 2005); sexually-transmitted disease (Johnsen et al. 1995); and marital infidelity (South and Lloyd 1995). In contrast, people may also carefully guard information about themselves that is much more benign—information that would, by any objective measure, fail to reduce them in the minds of others "from a whole and usual person to a tainted, discounted one" if disclosed (Goffman 1963: 3).

Accordingly, I follow Goffman (1963: 3) in utilizing the term discrediting information. I consider information to be discrediting insofar as the disclosing individual believes that its disclosure will mark him or her as less desirable to others. In this manner, I view discrediting information as similar to, but distinct from, two related constructs: gossip and secrets. Gossip is "evaluative talk about a person who is not present" (Eder and Enke 1991: 494) and, as such, is not necessarily discrediting to its source. Similarly, a secret is information that is not widely known (Cowan 2015); the information itself can be completely benign. Accordingly, discrediting information can be conceptualized as a specific type of secret that may or may not become gossip in the event that it is disclosed to a confidant.

A robust literature examines how individuals manage discrediting information in the course of their daily social interactions. As Goffman (1963: 42) described it, "This issue is ... To

display or not to display; to tell or not to tell; to let on or not to let on; to lie or not to lie; and in each case, to whom, how, when, and where." One substantial side effect of this process, however, is that it is cognitively depleting (Critcher and Ferguson 2014) particularly if it must be maintained throughout the course of a full work day. Furthermore, the disconnect between disclosing in some domains and withholding in others (Ragins 2008) creates, in the language of Sedlovskaya and colleagues (2013), a "divided self" that is emotionally distressing to maintain. Disclosure relieves this distress in a manner that is often described as "cathartic" (e.g., Bootzin 1997) and that has been found to induce psychological and even physiological benefits (Pennebaker and Beall 1986; Petrie et al 1995). For example, the social psychologist James Pennebaker showed a decline in the skin conductance levels—a physiological indicator of increased relaxation—among suspected criminals who admitted their crimes while being monitored by "lie detector" machines (Pennebaker 1985; 1990).

The emotional distress evinced by a divided self provides one reason why people would disclose discrediting information in the workplace at all, in lieu of more private outlets such as the home (e.g., Nippert-Eng 2010) or ostensibly objective third parties, such as clinical psychologists (Hill et al. 1993). Another reason can be found in research that illustrates the limits of these two outlets in particular. For example, Hill and colleagues (1993) reported that nearly 50% of patients withheld discrediting secrets from their clinical psychologists—specifically, secrets pertaining to sex, failure, and mental health issues. In a related study, Kelly (1998) surveyed a sample of psychotherapy outpatients and found that 40% of them were withholding information from their psychotherapists that was relevant to treatment. In both cases, withholding relevant information was unrelated to the number of therapy sessions the patients received. Furthermore, Bolger and colleagues (1996) showed that significant others cannot always be relied upon to relieve the emotional burden of a stressful life event. Specifically, they conducted interviews with 102 breast cancer patients and their partners four months and 10 months after the initial diagnosis. While the patients' partners offered support for the patients' physical impairments they withdrew support in response to the patients' emotional distress. thereby limiting their effectiveness as confidants. In accordance with this, the disclosure literature emphasizes that a non-judgmental outlook is one of the most important characteristics for a confidant to possess; thus, insofar as a significant other lacks this disposition generally or with respect to a particular kind of discrediting information, disclosers may be motivated to reveal to others in their social network (Pennebaker 1990; Kennedy et al. 1990; Kelly et al.  $2001).^{3}$ 

<sup>&</sup>lt;sup>2</sup> More recent treatments of the cathartic motivation (e.g. Kelly et al. 2001), however, also emphasize benefits gained from the meaning making that attends disclosure to another person (Park 2010).

<sup>&</sup>lt;sup>3</sup> My interviews, which I describe in detail in Chapter 3, provided illustrative support for this idea. One respondent, Zach, stated: "The person I would go to, and I have in the past, is [workplace confidant] ... My brother is a weirdo, and my dad's dead, anyway, so it's him. I think I need it to be someone older than me, and I don't need the judging shit. Which is why I hardly ever, even my wife—I'm not going to burden her with that." Another respondent, Henry, discussed his own limitations as a confidant vis-à-vis his wife: "She'll have a problem and about the fourth time she brings it up, now we understand each other, I'll say you gotta call somebody else. I hear you but I have nothing to give, you're not going to get that here. I'm still supporting you but I can't talk about it anymore."

Accordingly, extant research supports the idea that workplace disclosures do occur. Specific examples of this include Pescosolido's (1992) finding that working individuals relied on co-workers when responding to an adverse medical diagnosis, as well as Schneider's (1986) investigation of disclosures pertaining to minority sexual orientation in the workplace—specifically, the negative consequence therein. Yet while people seek to disclose discrediting information in the workplace in order to experience cathartic relief, they also seek to selectively choose who is aware of the information (Ward and Winstanley 2005). This suggests that disclosers must trust their confidants to keep from sharing the discrediting information with third parties, particularly those who are tied to both the discloser and the confidant (Ragins 2008). Trust exists when one person is willing to be vulnerable to the actions of another based on the expectation that this vulnerability will not be exploited in a potentially harmful way (Gargiulo and Ertug 2006: 167). As prior sociological research has established, the social structure in which a person is embedded strongly influences a person's trust in his contacts.

#### **Trust and Social Structure**

A core insight of social capital theory is that relationships among network participants who share many contacts are characterized by high levels of trust (Burt, Kilduff, and Tasselli 2013). Trust is elevated within this type of social structure because bad behavior toward any one network member is readily detectable by others, who are also well-positioned to negatively sanction offenders in response to this behavior (Burt 2005). This recognition allows people to interact without concerns about opportunistic behavior such as lying, breaking agreements, or being otherwise taken advantage of (Baker 1984). A classic example concerns mutual ties between wholesale diamond sellers, who often release valuable merchandise to one another for inspection without contractual guarantees of any sort (Ben-Porath 1980; Granovetter 1985; Coleman 1988). More recently, Biggart (2001) described how dense social relations mitigate the likelihood of default within rotating savings and credit associations, or "roscas," through which members take turns utilizing capital that is raised from all participants (also see Anthony 2005). In both examples, dense relationships between participants preclude opportunistic behavior because people know that such behavior will be detected and punished by other contacts (DiMaggio and Louch 1998).

Three features associated with density combine to produce this result. First, norms of cooperation are very strong in dense networks (Granovetter 1992). For example, Ingram and Roberts (2000) showed that participants in a dense network of competing hoteliers routinely cooperated by providing each other with information about new hotel openings and recommending each other's properties to overflow customers. A common explanation for this finding is that repeated interactions produce generalized expectations of reciprocity (Gouldner 1960; Adler and Kwon 2002). That is, behavior in a dense network is guided by the norm to accede to someone's request because they will probably be in a position to do the same for you in the near future, given the frequency of interactions between network members (Stack 1974; Uzzi 1997). In some cases, this norm can be powerful enough to overcome violent antagonism between opposing armies, such as the "live-and-let-live" system of trench warfare that emerged during World War I (Axelrod 1984). Specifically, in between large-scale offensives, opposing soldiers afforded each other the freedom to leave their trenches and walk above ground—behavior that emerged in this conflict specifically because the static nature of trench warfare resulted in repeated interactions between the same participants (Axelrod 1984).

Second, the frequent interactions and mutual ties of dense network participants ensure that opportunism enacted against any one network member by another—behavior that clearly violates the cooperative norm—will become known to all participants (Raub and Weesie 1990; Burt 2010). This is an important feature of a dense social structure because proactively monitoring the behavior of other people requires constant attention and effort (e.g., Hechter 1987). Instead, within a dense network, discussions that surface updated information on other members' behavior is a useful byproduct of repeated interactions, obtained without excess exertion (Burt 2005).

Third, once news of a person's opportunistic behavior becomes widely known within a dense structure, network members respond by collectively levelling negative sanctions against the offender (Coleman 1988; Granovetter 2005). People take this punitive step because it enforces the norm proscribing opportunistic behavior, which both publicly affirms members' support of the norm and discourages future offenses (Coleman 1990; Centola, Willer, and Macy 2005). The application of such sanctions represents a powerful means for influencing behavior in dense networks (Krackhardt 1999). There are several reasons for this, the first of which is that being publicly sanctioned by one's close associates is emotionally unpleasant (Cook and Hardin 2001). As Granovetter (1992: 44) described it, "My mortification at cheating a friend of long standing may be substantial even when undiscovered ... But it may become even more unbearable when our mutual friends uncover the deceit and tell one another." Furthermore, on a more instrumental level, sanctioned individuals may be temporarily unable to benefit from their network membership as contacts stop providing resources to the offender (Stack 1974). For example, Lazega (2001) describes the mechanisms for punishing a freeloading partner at a law firm, which include a cessation of both client referrals and the informal provision of case-related advice. Finally, in extreme cases, social sanctioning may result in an offender being "squeezed out" of the network entirely (Burt 2005: 105; Portes 1994). Each of these three elements, however, is attenuated in sparse networks due to the lack of mutual connections among people (Burt 1992).

In sum, density produces trust through the anticipation of—and strong desire to avoid—being negatively sanctioned on the basis of opportunistic behavior, paired with the knowledge that other network members are similarly disposed. According to this account, density should enable the transfer of information that makes its source vulnerable (Reagans and Zuckerman 2008: 937). That is, people should feel comfortable disclosing discrediting information to contacts in a dense network because opportunistic behavior—in this case, violating the discloser's trust by illicitly discussing the mark with another contact—would be detected and punished by other network participants. This account represents a compelling theoretical baseline, but it fails to address what Burt and Knez (1995: 261) refer to as the "dark side" of network density.

#### **Density and Sanctioning**

The dark side of density is that people are monitored more closely and punished more severely for deviating from normative expectations than they are in a sparse network (Coleman 1988; Krackhardt 1999). Increased monitoring—that is, frequent interactions during which people talk about one another—is pertinent to disclosure because it suggests that a single leak, wherein a confidant illicitly discusses one person's discrediting information with another contact, can easily result in total awareness of the information throughout the network. That is, the

tendency of information within a dense network to become known to all, or redundant (Burt 1992; Reagans and Zuckerman 2008), can preemptively limit disclosure insofar as people anticipate a lack of control over who in their network will become aware of the discrediting information once it is revealed to a single contact (Goffman 1963; Schneider and Conrad 1980).

It is particularly detrimental for discrediting information to become widely known in this manner because the sanctioning capability that people in dense networks possess may be applied to the discloser instead of the trust-betraying confidant. The concern is that people in the network will view the confidant's betrayal as a lesser or irrelevant offense compared to the discloser's discrediting information that has now become known to all. This can occur because discrediting information generally involves deviance of some kind (Goffman 1963), which people in dense networks are motivated to sanction (Coleman 1990). There are two reasons that people in dense networks sanction behavior that is generally construed as deviant. The first is simply that they are what Centola and colleagues refer to as "true believers" who genuinely think the deviant behavior in question warrants punishment once it is revealed (Centola, Willer, and Macy 2005). Given the value homophily that characterizes most social networks (McPherson, Smith-Lovin, and Cook 2001), it is not difficult to imagine a network composed entirely of true believers with respect to numerous examples of discrediting information.

A network need not be comprised entirely of true believers for people to collectively apply strong sanctions on the basis of discrediting information, however. Sociological examples in which people express public disapproval for behavior that they privately condone are numerous (Willer, Kuwabara, and Macy 2009). The mechanism is common knowledge, whereby many contacts know of discrediting information themselves and are *also* aware that others in the network know of it (Chwe 2013), a circumstance that strongly influences peoples' propensity to sanction (Adut 2005).

A person's discrediting information is more likely to become common knowledge in a dense network because frequent interactions between people with mutual ties surface both the information and identify the people in the network who are also aware of it (Zuckerman 2010). The presence of this common knowledge forces people to either follow the minority of true believers in publicly registering their disapproval or, by their conspicuous silence, effectively endorse the deviant behavior. For instance, Adut (2005) describes how Oscar Wilde's homosexuality was known to many in Victorian London prior to his prosecution for it—however, once events transpired to push his sexual behavior into the realm of public discourse, whereby it became common knowledge, even those who had privately condoned his sexuality were compelled to join the chorus of denigrators, lest they be perceived as deviant themselves (e.g., Willer et al. 2013). A similar point is made by Erikson (1966) regarding the Puritan witch trials, during which skeptical members of the community publicly endorsed the execution of accused women in order to deflect suspicion from themselves.

Finally, people who are not true believers may also sanction contacts whose discrediting information becomes common knowledge purely in order to uphold the best interests of their group. The literature on stigma by association, or what Goffman referred to as "courtesy stigma," provides substantial evidence in support of this point (Goffman 1963). That is, people may be compelled to sanction a contact because failing to do so would provoke a negative reaction against all who recognizably associate with that contact. This is especially concerning because

the strong and redundant ties that characterize dense networks are powerful conduits of stigma by association (Phelan 2005; Mobasseri, Srivastava, and Tilcsik 2015).

Thus, in spite of the elevated levels of trust that are expected to operate between people in a dense network, and contrary to what has become received wisdom among scholars of social capital, this type of social structure is also associated with substantial vulnerability related to information disclosure when the information in question is discrediting. It can take only a single betrayal of trust for discrediting information to become both widely and commonly known, which is of particular concern to people in dense networks, who are vulnerable to the social sanctioning that their contacts are particularly motivate to apply. In the next section, I discuss how this pertains to disclosure in the workplace specifically.

#### Disclosure in the Workplace

There are two reasons why density will especially discourage disclosure in the workplace. The first is due to what Burt (2005) refers to as the echo hypothesis. Within organizations, people often gossip about their colleagues; however, etiquette compels that they do so in an agreeable manner. In other words, people divulge opinions about colleagues that they think their conversation partners will share. As Burt (2005: 172) describes it, "If people in a conversation seem to feel good about you, the third party relays a story in which you were a good colleague. It would be rude to bring up that embezzlement charge a couple years ago. If people seem to feel uncomfortable about you, the third party relays a story in which you were less than a good colleague. It would be rude to bring up that award for excellence you received a couple years ago."

When a person's discrediting information becomes common knowledge, it often endures as one of the most salient features of his identity—that is, a master status (Goffman 1963). As a result, colleagues are more likely to focus on it when discussing the focal person. This has the effect of amplifying the perception of the individual as deviant and crowding out positive features that may have otherwise warranted discussion, thereby exacting a greater reputational toll. Employees are generally aware of this aspect of organizational life; it is one reason why people routinely manage impressions in the workplace (Rosenfeld, Giacalone, and Riordan 1995).

Being negatively sanctioned in the workplace, however, can have ramifications that go beyond reputational damage. This is due to the fact a certain kind of discrediting information can send a negative signal about a person's professional competence, which can thereby affect their capacity for attainment (Rosenfield 1997). It is largely for this reason that two-thirds of workers with schizophrenia in the U.K. preferred to keep their condition hidden from colleagues (Thornicroft et al. 2009). A key concern is that the social exclusion and isolation from coworkers that attends negative sanctioning on the basis of discrediting information can result in the loss of job-related resources upon which a person previously relied (Lazega 2001). This can diminish the discloser's productivity, thereby inducing genuine declines in job performance.

Furthermore, disclosers can experience negative ramifications in the workplace even if their job performance remains objectively unchanged. This is because attainment in organizations—such as the provision of bonuses and promotions—is often based on relatively subjective criteria (Castilla 2008). Accordingly, once an employee's discrediting information

becomes common knowledge in the workplace, these more subjective indicators of performance may be used as justification to hinder her advancement. Anticipation of such an outcome is one reason why homosexual workers disproportionately select jobs, such as flight attendants and clinical psychologists, that are low in interdependence vis-à-vis coworkers (Tilcsik, Anteby and Knight 2015).

In extreme cases, revealing discrediting information can cause a person to lose their job. This can occur because co-workers deem the discloser a poor cultural fit in light of the potentially revealed information (Rivera 2012), which makes it difficult for a person to remain with an organization for very long (Chatman 1991). Alternatively, the intensity of the reaction to the discrediting information may be such that the discloser may simply be immediately fired on its basis (Schneider 1986). Notably, there is rarely federal litigation that precludes firing someone due to certain characteristics, such as homosexuality, that are widely perceived as discrediting (Barnard 2013). In either case, discrediting information that leads to termination can also preclude, or at least constrain, a person from obtaining a subsequent job. Organizations often rely on current employees' prior affiliations when making personnel decisions (Rider 2012). Accordingly, a person who is fired from one job may find it difficult to obtain another one insofar as there are ties between his previous organization and his prospective one.

Taken together, these arguments suggest the following hypothesis:

**Hypothesis 1:** The density of a discloser's workplace social network is negatively associated with his or her propensity to reveal discrediting information to a confidant.

When people do reveal discrediting information in the workplace, however, it is necessary to minimize the negative consequences that can occur if the confidant illicitly discusses the information with mutual ties. This suggests that a contact whose network position is central makes a less appealing confidant for disclosers in dense networks—insofar as the central contact is optimized, by virtue of his network position, for using the information to the detriment of its source. A central contact's network position allows her to exploit the discloser's vulnerability in two primary ways. First, centrality enables the contact to widely circulate the discrediting information she chose to do so: The central contact knows more people who are themselves more central (Borgatti and Everett 2000). Second, and perhaps more importantly, network centrality confers power (Bonacich 1987, suggesting that central contacts can effectively mobilize ties in order to strongly sanction the person with the discrediting information (e.g., Wang and Soule 2012). This is of particular concern to people in dense networks due to the higher sanctioning costs that they face as compared with people in sparse networks (Coleman 1988).

The opposite, meanwhile, is true of peripheral contacts, whose network position makes it difficult for them to spread news of the discrediting information widely and to encourage mutual ties to collectively sanction the discloser on its basis. The latter point is due to the fact that a person is often peripheral because he has been classified as having an identity that separates him from the rest of the group in a salient manner (Reagans and Zuckerman 2008). In the context of the workplace, for example, a peripheral contact may be a recent hire with limited experience. As such, he may lack the credibility to motivate the few mutual ties that he may have with the discloser to collectively sanction the discloser on the basis of discrediting information. Consistent with this view, in his essay on the stranger, Simmel (1950: 404) notes that people who

are peripheral with respect to a particular collectivity often receive "the most surprising openness—confidences which sometimes have the character of a confessional and which would be carefully withheld from a more closely related person."

Overall, because people in dense networks are more vulnerable to sanctioning than are people in sparse networks, they are more apprehensive about revealing discrediting information to a confidant who is central—by virtue of either structural position or organizational tenure—than are people in sparse networks. Taken together, this suggests the following hypotheses:

**Hypothesis 2a:** Disclosers with dense workplace social networks will be less likely than disclosers with sparse networks to reveal discrediting information to a central confidant. By comparison, discloser network structure will not influence the probability of discrediting information to a peripheral confidant.

**Hypothesis 2b:** Disclosers with dense workplace social networks will be less likely than disclosers with sparse networks to reveal discrediting information to a longer-tenured confidant. By comparison, discloser network structure will not influence the probability of revealing discrediting information to a confidant with less tenure.

I test my hypotheses with two studies. In the first study I examine how the density of a discloser's workplace social network influences the probability that he or she reveals discrediting information to a confidant. This study, for which I gathered data from employees at a consulting firm, tests both of my hypotheses. The cross-sectional nature of these data, however, prevents me from establishing a causal relationship between density and disclosure. Thus, in order to confirm that density itself is the mechanism that constrains disclosure, as opposed to an omitted variable that is associated with density, I conducted a second study in the form of a laboratory experiment involving a discussion between a subject and a confederate posing as another subject. This second study attempts to replicate my first hypothesis but not the latter two.

## CHAPTER 2: Two Empirical Studies of Discrediting Information Disclosure

#### Study 1:

A mid-sized consulting firm with two main offices in the United States served as the research site for study 1. At the time I surveyed the firm it employed 149 people, 82 of whom worked out of one of these two offices. The remaining employees were based in various locations across the U.S. and internationally, including Thailand, Australia, and the United Kingdom. This geographical distribution of work sites ensured that the people at this firm were not fully connected; rather, there was substantial variance in network density within the sample. In addition, the firm's size made it possible for participants to select from a full roster of contacts when constructing key network variables. This is advantageous because this technique optimizes informant accuracy compared with the free recall of network contacts (Marsden 2011).

Importantly, the somewhat unusual structure of this firm ensured that its offices were not populated by fully-connected cliques. This was due the firm's business model, under which experienced consultants worked under the brand of the firm while also offering their services independently of it. As a result, each of the firm's offices were relatively small, comprising space that the consultants could use for meetings and presentations, as opposed to a space in which consultants spent a full workday. Consultants who became connected with one another tended to do so through shared projects and the firm's annual offsite meetings, as opposed to routine office interactions.

I gathered the data described below as part of an internal network analysis conducted by the firm. I therefore selected the name-generating questions used to construct subjects' networks, which I describe below, in conjunction with the firm for this analysis. I gathered the data used in both the firm's network analysis and in the analysis reported here via an online survey. Participants opted into the research-related portion of the survey after completing the first section. In exchange for their participation, I entered each participant into a lottery for one of the following three prizes: a new iPad mini with retina display and two \$100 Amazon gift cards. Out of the 149 employees of the firm, 106 elected to participate in the research-related portion of the survey, constituting a response rate of 71%. This response rate is consistent with prior intraorganizational network studies (e.g., Srivastava and Banaji 2011). T-Tests indicated no significant differences with respect to gender, race, or company tenure between survey respondents and non-respondents.

#### Variables and Estimation

Due to the relational nature of disclosure, I estimated models at the level of the dyad—that is, models which accounted for characteristics of the discloser, characteristics of the confidant, and common characteristics between the two (Mizruchi and Marquis 2006). The dependent variable *Disclosure* was an indicator set to 1 when focal actor *i* (the discloser) reported revealing discrediting information to colleague *j* (the confidant) and to 0 otherwise. I assessed disclosure in the following manner. First, subjects read the following text: "From time to time, most people disclose sensitive personal matters about themselves to another person. The person who receives this information is expected to keep it to themselves. Please consider an

example of something that is not widely known about yourself—such as health concerns, relationship troubles, or financial difficulty—that you disclosed to at least one person in your life." Next, I asked subjects "Did you share this information with at least one person at [company]?" One quarter of the sample indicated that they did not disclose the information in question to anyone at the firm. Subjects who did disclose to someone in the firm indicated to whom they disclosed by selecting names from a full roster of employees. By constructing my dependent variable in this manner, I accounted for subjects who did not have a meaningful example of discrediting information to disclose, or who alternatively were too discreet to disclose in this particular setting. Due to privacy concerns, however, I was not permitted to assess any details of what each subject disclosed. The average of *Disclosure* was 0.02 (SD = 0.14) per every possible dyad. Considered differently, disclosers revealed discrediting information, on average, to 2.5 (SD = 3.42) confidants.

I calculated the independent variable *Network Density* using UCINET VI (Borgatti, Everett, and Freeman 2002). This variable measures the extent to which the sender's contacts are themselves interconnected, that is, the ratio of actual ties to possible ties between the sender's contacts. I determined the contacts that comprise each subjects' workplace network using the following five items: (1) "Whom do you rely on to help you find prospective clients, propose new work or expand the existing scope of work for your clients?" (2) "From whom do you solicit help or advice when staffing a new consultant?" (3) "From whom do you seek advice about change implementation tools, methodologies and techniques?" (4) "With whom do you share new ideas, learnings, innovations, or improvements for better delivery of client solutions?" (5) "From whom do you seek help or advice when faced with a challenging person or situation on a project?" Any contact named by a respondent in response to one of these questions was considered part of his or her network. Consistent with a more conservative assessment of social structure, I did not include a confidant in a discloser's network if the confidant named the discloser in response to one of these questions but the discloser did not name the confidant.

The mean *Network Density* was 0.54 (SD = 0.19). Prior research indicates that this is fairly typical: For example, Marsden (1987) reported an average density of 0.61 in the core discussion networks of Americans, while Fischer (1982) reported an average figure of 0.44. In order to test hypotheses 2a and 2b, I interacted the discloser's *Network Density* with variables measuring the confidant's centrality and organizational tenure. I describe these variables, which I mean-centered in all interaction terms, in the section below.

Control variables. I included two types of control variables in my analysis. The first were discloser and confidant attributes that may influence the propensity for discrediting information to be revealed. Network Size was a count of the number of contacts in each discloser's network ( $\bar{x} = 12.5$ , SD = 10.1). I calculated Network Centrality ( $\bar{x} = 0.08$ , SD = 0.05) in UCINET VI (Borgatti, Everett, and Freeman 2002) using Bonacich's eigenvector centrality measure (Bonacich 1987). This measure, which is the most widely-used means for assessing centrality in social networks (Burris 2004), is a weighted sum of each discloser's direct and indirect connections (Bonacich 2007). In other words, a person is high in eigenvector centrality when they are connected to many people who are themselves connected to many people. Lastly, I

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<sup>&</sup>lt;sup>4</sup> Network Size and Network Centrality were strongly correlated with one another. However, I obtained the same results when estimating my models without including Network Size.

included two non-network controls pertaining to disclosure. These are *Generalized Trust*, measured using Yamagishi's five-point scale (e.g. Yamagishi, Cook, and Watabe 1998), and organizational *Tenure*, measured in months. The means for these two variables were 3.5 (SD = 0.57) and 57 (SD = 53), respectively.

I also included dyadic control variables in order to account for the presence of homophily in disclosure. *Same Gender* was set to 1 when both members of the dyad were male or female and 0 for each dyad where gender was mixed.<sup>5</sup> The mean of this variable was 0.5. I constructed the variable *Same Race* in a similar manner—I set this variable to 1 in dyads where both members were either white or non-white and to 0 otherwise. The mean of *Same Race* was 0.69. I also included a variable to capture the presence of strong ties between discloser and confidant. This variable, *Strong Tie*, was assessed using a measure of emotional closeness (Marsden and Campbell 1984). I set *Strong Tie* to 1 for each dyad in which both members rated each other as "close" or "extremely close" on a four-point scale and as 0 otherwise.

Estimation. The error term in any regression of dyadic data violates the assumption of independence, presenting an estimation challenge (e.g., Kleinbaum, Stuart, and Tushman 2013). For example, the propensity of employee *i* to reveal discrediting information to employee *j* is highly contingent on employee *j*'s propensity to reveal discrediting information to employee *i* (Quintane and Kleinbuam 2011). Scholars have recently developed an approach that accounts for the problem of nonindependence by estimating robust standard errors clustered on both dyad members *i* and *j* (Cameron, Gelbach, and Miller 2011). A single matrix is created by adding the two robust covariance matrices, clustered on person *i* and person *j*, respectively, and subtracting a covariance matrix that is clustered according to their intersection (Kleinbaum, Stuart, and Tushman 2013). To implement this procedure, which has become widely used in organizational network research (Dahlander and McFarland 2013; Kleinbaum, Jordan, and Audia 2015; Srivastava 2015a) I used the clus\_nway.ado package in STATA (Kleinbaum, Stuart, and Tushman 2013). I estimate linear probability models because they allow for a more straightforward interpretation of interaction effects than do nonlinear models; however, I obtained comparable results using logistic regression.

#### **Study 1 Results**

Model 1 in Table 2 shows the effect of my control variables. No discloser control variables were significantly associated with revealing discrediting information. With respect to confidant attributes, however, *Network Centrality* was strongly and significantly associated with the probability of disclosure. This is consistent with prior social capital research which indicates that, all else being equal, central actors have superior access to information (e.g., Burt 2004). In addition, confidant *Network Size* was negatively associated with the probability of disclosure. One interpretation of this result is that, for the discloser, a confidant's network size serves as a cognitive proxy for how well-connected that person is. Insofar as this is the case, this negative effect is consistent—albeit indirectly—with hypotheses 2a and 2b. Lastly, in terms of dyadic control variables, both *Strong Tie* and *Same Gender* were significantly and positively associated with disclosure, the latter of which confirmed the enabling effect gender homophily on disclosure. *Same Race*, however, was not significant. This may indicate that gender homophily is

5 As a robustness check I also estimated separate models that controlled for whether dyads were both female or both male as opposed to mixed gender and obtained the same pattern of results as I report below.

more predictive of disclosure than is racial homophily; alternatively, it may be due to the limited amount of racial variation within these data.

Model 2 tests hypothesis 1 by adding the sender attribute *Network Density*. This coefficient is negative and significant ( $\beta$  = -0.03, p < 0.05) indicating that as the density of a discloser's network increased the probability of them disclosing discrediting information decreased. In terms of the size of this effect, a one standard deviation in network density was associated with a 0.5% reduction in the probability of disclosure. This is considerable given that the base rate of disclosure in these data was 2%. Stated differently, a one standard deviation increase in network density reduced the base rate of disclosure by 25%. Accordingly, hypothesis 1 was supported. Importantly, this effect attains significance net of *Strong Tie*'s positive influence on the probability of disclosure. This suggests that, while people undoubtedly target strong ties as confidants, network density nevertheless exerts a detectable and substantial negative effect on disclosure.

Models 3 and 4 test hypotheses 2a and 2b, that people in denser networks are less likely to disclose to central and longer-tenured confidants than are people in sparse networks. Model 3 adds the interaction term *Discloser Network Density* × *Confidant Network Centrality* which was negative and significant ( $\beta$  = -0.64, p < 0.05). **Figure 1** shows the form of this interaction, which indicates that people in dense networks are significantly less likely to disclose to central confidants than are people in sparse networks (p < 0.001). Model 4 adds variables measuring tenure for both discloser and confidant as well as the interaction term *Discloser Network Density* × *Confidant Tenure*, which was negative and significant ( $\beta$  = -0.05, p < 0.05). **Figure 2** shows the form of this interaction, which indicates that people in dense networks are significantly less likely to disclose to longer-tenured contacts that are people in sparse networks (p < 0.001). Thus, hypotheses 2a and 2b are supported. I jointly estimate both interactions in model 5, which also includes all relevant main effects. In these models, both *Discloser Network Density* × *Confidant Network Centrality* ( $\beta$  = -0.54, p < 0.10) and *Discloser Network Density* × *Confidant Tenure* ( $\beta$  = -0.03, p < 0.10), respectively, remain marginally significant and in the predicted direction.

**Discussion**. Study 1 provided support for hypothesis 1, that network density constrains the disclosure of discrediting information, and hypotheses 2a and 2b: That people in dense networks are less likely to disclose to central and longer-tenured confidants, respectively, than are people in sparse networks. In confirming the first hypothesis, I show that the trust-enhancing effects of network density for information exchange do not extend to the exchange of information that potentially renders its source vulnerable. To the contrary, at least with respect to discrediting information, network density made people less likely to disclose. In confirming the latter two hypotheses, I demonstrate a previously unidentified aspect of network centrality: Namely, that centrality does not provide uniform access to the information possessed by one's contacts. Instead, it is more difficult for central individuals to acquire information that renders its source vulnerable from contacts in dense networks than in sparse ones.

One concern with the results of Study 1, however, is possibility that people disclosed for the express purposes of increasing intimacy. That is, insofar as self-disclosure has been found to promote liking (e.g., Collins and Miller 1994), it is possible that people in sparse networks disclosed more not because they believed that their confidants were structurally precluded from

exploiting them, but instead because they felt more distant from them and were motivated to form a connection—which they believed they could accomplish by revealing discrediting information. There is reason to believe that this is not the case, however. In terms of theory, prior research suggests that revealing discrediting information too early in relationships can be highly detrimental. This "too much too soon" effect, which was first suggested by Cozby (1972), was supported in a meta-analysis by Collins and Miller (1994), who showed that the association between disclosure and liking was much weaker in experimental studies—which usually involved disclosure among strangers—than in correlational studies, which evaluated disclosure among established intimates. Empirically, the large and positive association between strong ties and disclosure that I found in supports this assertion. That is, it suggests that in a naturalistic setting, people tended to disclose to those with whom they already felt a substantial amount of emotional closeness.

I obtained these results based on data gathered in a field setting in which there were real and substantial consequences for revealing discrediting information. However, as is commonly the case when analyzing observational data, there are alternative explanations that could account for my results. For example, with respect to hypothesis 1, it is possible that people who are predisposed to disclose less may disproportionately participate in dense workplace networks. This possibility raises serious concerns about the direction of causality between density and disclosure. Due to the cross-sectional nature of the data examined in study 1, it is impossible to rule out potential confounds. Accordingly, study 2 involves a controlled laboratory experiment in order to address this concern and replicate support for hypothesis 1.

#### **Study 2: The Disclosure Experiment**

Experimentally testing the relationship between network density and disclosure requires credibly manipulating network structure. This represents a significant methodological challenge that researchers have approached in several different ways: By priming subjects with density or sparsity (Shea 2013), by connecting subjects in different patterns via an online portal (Centola 2010; Suri and Watts 2011), and by manipulating the structure through which subjects in a lab can communicate telephonically while remaining physically separated from each other (Friedkin 1999). While each of these approaches has substantial merit, the nature of my research question required me to employ a different methodology. Specifically, effectively simulating the costs and benefits of disclosure in a randomized controlled setting required me to focus on dyadic interactions and to induce a meaningful connection between discloser and confidant prior to the exchange of discrediting information, while ostensibly varying the network structure surrounding that dyad.

Accordingly, I designed an experiment in which subjects participated in a structured discussion with a confederate posing as another subject whom the actual subjects perceived as being either densely or sparsely connected to them. This discussion culminated in the opportunity for the subject to disclose something potentially discrediting about themselves to the confederate, which the confederate subsequently reciprocated with a standardized disclosure of their own. After the discussion, subjects filled out a questionnaire in which they indicated how discrediting they considered the information that they disclosed to be. Hypothesis 1 would be supported if subjects disclosed information that they rated as significantly more discrediting

when conversing with a confederate in the sparse condition as compared with the dense condition.

**Procedure**. Subjects were 102 students enrolled at a public university in the U.S. (54% female) who participated in exchange for course credit or \$20. Upon signing their consent forms, subjects filled out an online survey that asked them to list the names of the students in their social network at this university. After completing the survey subjects arrived at the lab, which consisted of a small room with a closed door. At this point they were paired with a partner, sat opposite one another at a table, and received their instructions. These instructions suggested that the purpose of the experiment was to study how people form first impressions based only on whether or not they have friends in common. As part of the cover story, the instructions forbade subjects from discussing people that they and their partner might both know, student groups that they belong to, or any other information that could potentially be used to identify mutual ties (see **Appendix A**).

I randomly paired each subject with a confederate of the same sex who served as their partner for the discussion. I recruited two male and two female confederates from Berkeley's most advanced undergraduate acting seminar. Recruiting students trained in the dramatic arts as confederates was beneficial because their training enables them to maintain the same self-presentation style and responses to questions across experimental conditions (e.g., Barsade 2002). I trained confederates to present themselves as open, friendly, and agreeable irrespective of experimental condition. This enhanced the experiment's control by ensuring that there was as little variation in stimuli for subjects between conditions as possible, with the exception of the variation in perceived network structure.

I randomly assigned subjects to a dense or sparse condition (see **Appendix B**). I told subjects that based on their social network survey results, as well as those of their friends and their friends' friends, they either 1) had many friends in common with their partner, or 2) had no friends in common with their partner. Regardless of condition, subjects next completed a structured discussion that consisted of 10 questions that I provided and lasted for approximately 40 minutes. Subjects and confederates took turns asking each other questions such that each asked five questions of the other. Confederates always went first and were also responsible for timekeeping, although this choice was ostensibly random.

I selected the questions primarily to induce a meaningful connection between the subject and the confederate, who were initially strangers to one another. In order to do so, I adapted the format of the "fast friends" procedure (Aron et al. 1997). Social psychologists use the fast friends procedure to promote friendship and emotional closeness between subjects in a laboratory setting (e.g., Page-Gould, Mendoza-Denton, and Tropp 2008). This is accomplished by having subjects ask each other questions that begin fairly innocuously (e.g., "Do your close friends tend to be older or younger than you?") and rapidly escalate in terms of gravity (e.g., "Do you believe in any sort of God? If not, do you think you might still pray if you were in a life-threatening situation?").

In my adapted version of the paradigm, I focused the initial questions on basic background information. I emphasized questions that might reveal common interests—such as favorite television shows—in order to better simulate tie formation. However, in accordance with

the fast friends paradigm, the questions became progressively more serious, culminating in the ninth question (see **Appendix C** for a full list of these questions). In the ninth question, the confederate asked the subject to reveal something discrediting about themselves by reading the following: "Sensitive information is something about yourself that you try to keep hidden from many of your friends because you don't want them to think less of you. However, research indicates that sharing such information with another person can be very beneficial for you. Please share a piece of sensitive information about yourself with your partner." The tenth question mirrored the ninth question with the subject asking instead of the confederate. In each case, the confederate disclosed that they had recently begun feeling depressed and had sought support from the university's student health services.

Dependent variable. The dependent variable Discrediting Information was subjects' averaged responses to the following three items on a post-discussion survey, scaled on a 7-point Likert scale, regarding the stigmatizing information that they shared with the confederate in their response to the ninth question: 1) "How personal was the information you shared?" 2) "How sensitive was this information? Think of sensitivity here in terms of how uncomfortable it would make you if the information became common knowledge among your friends" 3) "How serious was this information? Think of serious here in terms of the long-term consequences for your life, such as health-related matters, family conflict, or financial difficulties." Aggregating these three items helps to account for the somewhat multidimensional nature of discrediting information (Quinn and Chaudoir 2009). The responses to these three items showed substantial internal consistency, with a Cronbach's alpha of 0.82.

**Results and Discussion**. I determined whether subjects in the sparse condition disclosed information that they considered to be more discrediting than in the dense condition by using a one way analysis of variance (ANOVA). As shown in **Figure 3**, network condition had a significant effect (F = 6.68, p = 0.01) indicating that subjects considered the information they disclosed in response to the ninth question to be significantly more discrediting in the sparse condition ( $\bar{x} = 5.43$ ) than in the dense condition ( $\bar{x} = 4.77$ ). Thus, this study provided causal evidence in support of hypothesis 1.

Replicating the results of my field study with respect to hypothesis 1 in a randomized controlled setting offers additional support for my theory that social network structure itself, and not an omitted variable with which it is associated, is responsible for limiting people's propensity to disclose discrediting information to another person. Once a basic level of familiarity has been established, engaging in a discussion with a person who is entirely lacking in mutual ties provides a level of anonymity that enables the disclosure discrediting information. Knowledge that the confidant is structurally prevented from repeating the details of a discussion with one's close associates frees the discloser to provide information about himself that is potentially incriminating or, at the very least, inconsistent with his regular patterns of behavior. By comparison, such information would invite sanctioning if disclosed to a contact within a dense network (e.g., Gargiulo, Ertug, and Galunic 2009).

One potential concern is that my social structural manipulation precluded a fair test of my hypothesis because the experiment's instructions informed subjects that information they shared in the "dense" condition was "more likely" to be circulated in their network versus "highly

unlikely" in the sparse condition. The concern, in other words, is that this wording of the manipulation could restrict the range of responses because no subject would disclose truly discrediting information in the dense condition. This concern, however, fails to account for the fact that there are clear social norms around what Christophe and Rime (1997) refer to as "secondary sharing," or situations in which confidants betray the trust of a discloser by relating the discloser's discrediting information to at least one third party. Namely, there are reputational costs to being viewed as a "gossip" (Kurland and Pelled 2000) which, according to social capital theory, are particularly elevated in dense networks, where people are more likely to observe and sanction bad behavior such as betraying the trust of another network member (Coleman 1988). Accordingly, the manipulation constitutes a fair and credible test of my hypothesis since, if this aspect of social capital theory is to be believed, disclosers are aware that confidants with whom they are densely connected risk severe sanctioning as a result of engaging in "secondary sharing" of discrediting information and, as a result, should trust in their discretion.

A second concern pertains to the fact that I constructed the dependent variable based on subjects' own evaluations of the discrediting information that they disclosed. While this operationalization is congruent with my theory, in that it emphasizes how information is discrediting insofar as disclosers think it will make them less desirable to others, it raises the possibility of a confound. Specifically, it is possible that subjects retrospectively perceived their disclosures as more or less discrediting based on the manipulation. For example, according to self-perception theory (Bem 1972), people develop attitudes through the post hoc interpretation of their own behavior. Thus, subjects may have decided that the information they shared was less discrediting *because* they disclosed it to a person with whom they believed they shared numerous friends. Given the research design that I have employed, it is not possible to conclusively rule out this possibility; doing so will require additional research.

#### **General Discussion**

According to social capital theory, dense social networks provide a safe environment for all types of exchanges between members (Coleman 1990). In particular, the strong ties and elevated levels of trust associated with network density should enable people to disclose things that make them vulnerable, such as discrediting information, without fear of negative reprisal. This perspective, however, fails to account for the concurrent aspect of dense networks articulated by Coleman (1988): Close monitoring and strong norm enforcement, such that people are more vulnerable to being punished on the basis of anything that makes them appear deviant. That is, in dense networks discrediting information is more likely to "leak" to co-workers who are, in turn, more likely to apply negative sanctions in response, to which the discloser is more vulnerable than are people in sparse networks. This has particularly serious ramifications in the workplace, where such sanctioning can have egregious and enduring professional consequences. As a result, I hypothesized, and my analysis confirmed, that the density of a person's workplace network negatively influences the probability of revealing discrediting information. Furthermore, because central confidants can more effectively circulate information and catalyze the application of sanctions, people in dense networks are less likely to disclose to central confidants than are people in sparse networks.

Interviews that I subsequently conducted with the survey respondents illustrated the manner in which people may view network density as constraining.<sup>6</sup> As Vicky summarized:

Sometimes you don't want to talk to your friends or family about it. You want to talk to the stranger. You want to talk to the guy on the plane that you're never going to see again. You won't believe the kind of stuff I tell people on airplanes, just so you know. I've told people stuff on airplanes I've never told anyone in my whole life. Because I'm just sure I'm never going to see that person again. That's super. I would never tell a friend, I would never tell a family member, I would never tell a coworker, but the person you see in the hotel bar, when you know you're not going to ever go to Minnesota again? That's when I am most revealing, to people I will not see again.

Mark shared a similar perspective: "Actually one of the first people I told some random Joe Blow who I had never met before and there was no risk of him sharing it with anybody that I knew ... He wouldn't even know how to leverage that information anyway." Importantly, Martine pointed out that such disconnection need not be restricted to strangers. Instead, insofar as a friend is unknown to—or only infrequently interacts with—members of one's core social network, that friend provides a kind of anonymity in which one can share discrediting information without fear of the information becoming widespread. As she described it:

I would say for the majority of the people from a professional relationship perspective that I consider close enough that I would tell sensitive information to ... they know each other, and they probably interact with each other on various occasions, but they definitely don't have the kind of relationship, at least that I'm aware of, where they're sharing that kind of information and talking about things that are extremely personal with each other. It's human nature, right, you're going to be a little more hesitant like if you know that these two people are really great friends too and you feel like they share a lot of information with each other, you're probably going to be hesitant to share information that, you know, you don't really want everybody knowing ... If they're sharing that same kind of relationship with somebody else, I almost feel like that would create a little bit of hesitancy for me to share information about myself. I'd be worried that they would potentially take that into the other relationship that they have.

#### **Study Limitations and Future Directions**

This study included several limitations that both warrant attention and provide opportunities for future research. First, my theory presumes that the negative association between a confidant's centrality and disclosure is attributable to an awareness among disclosers in dense networks that central contacts are more capable of spreading news about discrediting information and catalyzing a negative response from mutual ties, to which the disclosers are more vulnerable based on their network structure. While the results of my qualitative interviews and field study offered support for this interpretation, I was unable to directly test this mechanism in my experiment. Future research could do so experimentally within an organizational context (e.g. Srivastava 2015b) by manipulating the role of confidant centrality and examining its impact on disclosure. In particular, this research could help illuminate whether peripheral contacts are at an

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<sup>&</sup>lt;sup>6</sup> I provide a detailed description of these interviews in Chapter 3.

advantage for obtaining discrediting information from people in dense networks, or whether—as was the case for my analysis—it is merely central contacts who are at a disadvantage as compared with contacts in sparse networks.

Second, because I conducted my field study at a single firm, it is not clear that my results will generalize to organizations with different characteristics. For example, many workplaces vary both in the content of prevalent norms and the strength with which employees adhere to those norms (Chatman et al. 2014). Accordingly, it is not clear that my results would extend to workplaces where it is especially counter-normative to discuss personal information, discrediting or otherwise. Alternatively, larger firms might create a greater sense of anonymity among employees at baseline, reducing the echo effect described by Burt (2005) and, as a result, employees' apprehension regarding disclosure. In either case, the results of my field study invite replication and extension.

Finally, while I developed my theory with respect to discrediting information specifically, future research could fruitfully investigate whether density constrains the exchange of other forms of information that renders its source vulnerable upon disclosure. Trade secrets, that is, organizational knowledge that provides an ongoing source of competitive advantage, may represent a promising example (Hannah 2005; Fauchart and Von Hippel 2008; Haas and Park 2010). Within organizations, people in dense networks often compete for a fixed amount of resources (e.g., Burt 1982). Accordingly, discussing trade secrets with a contact in a dense network can make a person vulnerable by providing the contact with the opportunity to capitalize on the information at the direct expense of the person who shared it with them. To the extent that this is widely recognized by network participants, network density may constrain information exchange in a manner that limits collaboration and discourages innovation. This could expand the scope of my theoretical contribution by showing that confidential information in general, as opposed to discrediting information specifically, disseminates through social networks in a counterintuitive manner. It would also represent a first step towards cataloguing the categories of information that people in dense networks tend to systematically withhold from one another to a greater degree than those in sparse networks.

#### **Contributions**

This research makes several contributions to both theory and practice. The first contribution lies in integrating the social capital and disclosure literatures. By doing so, I am able to empirically demonstrate the limits of trust based solely on network density. I show that density does not uniformly enable information sharing (e.g., Kadushin 2012). Rather, when the information in question renders its source vulnerable, density has the opposite effect. Accordingly, to adjudicate between density's enabling and constraining effects with respect to information exchange, future research must consider the interpersonal ramifications of the information being exchanged. The type of information in question is a significant source of potential "friction" that can impede exchange in dense networks in light of reputational consequences (Ghosh and Rosenkopf 2014). Research that fails to account for this can potentially generate inaccurate predictions (Burt 2008).

This research also contributes to social capital research by showing that a central network position does not afford a person equal-opportunity access to the full range of knowledge that their contacts possess. Specifically, my results demonstrate that contacts in dense networks are

less likely to reveal information that potentially renders them vulnerable to central contracts than are contacts in sparse networks. This is a novel finding in light of the large body of social capital research which presumes that central actors benefit from their contacts' knowledge more or less equivalently (e.g., Burt 2004). One practical implication of this finding is that managers who are centrally located in the organizational social structure—and who, as a result, expect to have access to a great deal of information—may actually find it difficult to obtain discrediting information regarding co-workers or subordinates whose workplace networks are particularly dense. This can hinder the effectiveness of the managers' decision-making and limit their capacity to accurately assess the political landscape of their firm (e.g. Krackhardt 1990), thereby negatively influencing their own attainment—particularly insofar as information that is confidential also tends to be more valuable (Reagans and Zuckerman 2008).

In his seminal article on the role of embeddedness, Granovetter (1985: 491) noted that "The trust engendered by personal relations presents, by its very existence, enhanced opportunity for malfeasance." This study provides a structural account of Granovetter's insight and, in so doing, challenges received wisdom in the social capital literature. As a result, this study opens the door to future research that can enhance our understanding of social structure and individual behavior by further exploring the circumstances under which density impedes, rather than enhances, the exchange of information.

#### **CHAPTER 3**:

#### Toward a General Theory of Disclosure in the Workplace: A Research Agenda

The purpose of this dissertation has been to investigate the phenomenon of discrediting information disclosure in the workplace. Drawing from research on the cognitive costs of concealment (e.g., Smart and Wegner 1999) and the emotional relief provided by disclosure (e.g., Pennebaker 1990), I suggest in Chapter 1 that people are motivated to reveal discrediting information to co-workers, albeit in a selective and limited fashion (e.g., Ward and Winstanley 2005). The key component in the decision to disclose to a co-worker is trust (Ragins 2008), that is, the willingness to be vulnerable to the actions of another based on the expectation that this vulnerability will not be exploited in a potentially harmful way (Gargiulo and Ertug 2006: 167). Here, trust specifically applies to the discloser's belief that the confidant will not share the discrediting information with others. As Kelly (2002: 182) notes with respect to stigmatizing secrets: "Trusting the confidant not to repeat the secret to others may be the most important factor in determining whether someone should reveal to that person ... In contrast, in situations in which confidentiality is not guaranteed, the person loses this sense of control and may be victimized by others who are privy to the secrets."

Trust tends to inhere in strong ties, or ties between two people who are emotionally close (Marsden and Campbell 1984). Yet strong ties are often transitive, in that two people who are close friends are likely to have other close friends in common (Simmel 1908; Heider 1958; Kossinets and Watts 2006). Thus, while trust at the *dyadic* level can be expected to promote disclosure, its structural concomitant—the density of relations around a strongly-connected dyad—should exert the opposite effect, insofar as a confidant who shares many third-party ties with a discloser is ideally positioned to circulate the discloser's discrediting information should he or she wish to do so (Davis 1973; Granovetter 1985: 492). Additionally, because the widespread revelation of discrediting information should be more harmful to people who are embedded in dense networks due to the increased vulnerability to social sanctioning that density engenders (e.g., Coleman 1988), and because confidants who are centrally-located are more powerful (e.g., Bonacich 1987) and therefore more capable of effectively mobilizing such sanctioning, I proposed that people in dense networks would be less likely to disclose to a centrally-located confidant than would people in sparse networks.

I tested my theory in Chapter 2 with two empirical studies. The first, a social network survey of a small consulting firm, provided support for my theory: Independent of the positive association between tie strength and disclosure, people with denser social networks were less likely to reveal discrediting information to a workplace confidant. The results of this survey also supported my prediction regarding the effect of confidant centrality on disclosure for people in dense versus sparse networks. However, because the survey was cross-sectional in nature, I conducted an experiment to verify that social network density itself, as opposed to an unobserved covariate, was responsible for inhibiting disclosure. In this experiment, I manipulated subjects' perceptions of the social structure surrounding them and a confederate who posed as another subject. At the conclusion of a discussion task, I prompted subjects to disclose something discrediting about themselves to the confederate and then subsequently evaluate how discrediting the information was. Subjects who believed that they had many friends in common with their

conversation partner rated the information that they disclosed as less discrediting overall, as compared with subjects who were informed that they had no friends in common with their partner. This suggests that the presence of a denser social structure around the dyad—the only thing which was manipulated in the experiment—inhibited subjects from disclosing as openly as did those subjects who perceived a sparser social structure.

These findings constitute an initial step toward the development of a comprehensive theory of discrediting information disclosure in the workplace. Several theoretically relevant findings are worth highlighting. First, while trust has long been considered a critical antecedent of disclosure, my models indicate that generalized trust—a general view that others have benign intentions and will not behave exploitatively (e.g., Nannestad 2008)—does not influence the disclosure of discrediting information. Instead, the trust that catalyzes disclosure is situational: It inheres in the relationship between a particular discloser and confidant. Second, the presence of trust between discloser and confidant is necessary but insufficient for predicting whether disclosure will occur; one must also account for the larger social structure in which the dyad is embedded. Specifically, as this social structure becomes denser, the probability of disclosure declines, presumably because of a concern on the part of the discloser that their information is more likely to become widely known within a dense cluster of association. Third, people who occupy central network positions are less likely to be chosen as confidants by disclosers with dense networks as compared with sparse networks. I suggest that this is due to the fact that people who occupy central network positions tend to be more powerful (e.g., Bonacich 1987) and, as a result, better able to leverage formal and informal sanctions against a discloser in response to learning their discrediting information. Accordingly, because people in dense networks are more vulnerable to social sanctioning than are people in sparse networks (Coleman 1988), they are more apprehensive about disclosing to centrally-located network contacts. This finding is highly relevant to organizations, as people are often centrally-located by virtue of occupying a key position in the formal organizational hierarchy. Thus, it suggests that managers may find it difficult to obtain important information regarding their subordinates when those subordinates occupy workplace networks that are dense.

Yet much remains to be learned about the phenomenon of disclosure in the workplace. For example, my theory does not make any predictions about the manner in which the details of discrediting information affect disclosure propensity, the way in which discrediting information can alter a confidant's view of a discloser—for better and worse—or the conditions under which a confidant will keep or break the trust of a discloser. Achieving clarity with respect to these key elements of discrediting information exchange is critical to the development of a comprehensive theory of disclosure in the workplace. Accordingly, I describe the projects that will contribute to this next step of theory development below.

In doing so, I utilize quotations in order to better illustrate the themes that my research addresses. I gathered these quotations during the course of 30 semi-structured interviews which I conducted, in the spring of 2016, with employees of the consulting firm that served as the research site for the survey data presented in Chapter 2. I do not view these interviews as a means for developing grounded theory (Glaser and Strauss 1967) or as qualitative data to be analyzed in their own right (e.g., Rivera 2015). Rather, I rely on selected quotations in order to

show, in their own words, how research subjects thought about both the promise and peril of disclosing discrediting information to co-workers.

#### Interview Procedure

I conducted 27 interviews (16 with female and 14 with male interview subjects) in person at the firm's offices in Houston and the Bay Area. Each interview lasted between 45 minutes and one hour. Due to subjects' last-minute scheduling changes, it was necessary to conduct the remaining three interviews via phone. I secured a private room for the entirety of each interview, each of which I tape recorded. My approach to the interviews was semi-structured, in that I proceeded in a similar manner with each subject but allowed for conversational diversions based on their responses. Specifically, my procedure consisted of the following steps.

First, after turning on the tape recorder and taking the subject's signed consent form I briefly and broadly explained that my research interest was in understanding the exchange of discrediting information in the workplace, which I defined as personal or sensitive information about the subject that the subject did not want to become widely known among co-workers. I used these terms in lieu of "discrediting" because they sounded less pejorative. The interview then began in earnest. My initial goal in each case was to establish a positive rapport with the subject (Weiss 1994: 61). To do so, I started by asking each subject to describe their career before they joined the company that served as my research site. I often also asked them to describe their current work with the company. Describing such familiar subject matter at length allowed subjects to get comfortable with the interview process (Weiss 1994). Next, I raised the general topic of trust in the workplace: how one can tell who is trustworthy, and how far—that is, with what sorts of things—can such a person be trusted. From here I segued into a conversation about whether there is, under certain circumstances, a place for sharing personal information in the workplace, or whether such sharing is simply not appropriate. The culmination of each interview, however, occurred toward the end—at which point, ideally, subjects were sufficiently disposed toward me to disclose discrediting information of their own. At this point, I explained to each subject that it would be helpful for me to understand the thought process that they had personally engaged in which deciding whether, and to whom, to disclose such information in the context of the workplace. I remained focused on this aspect of the interview for as long as subjects felt comfortable discussing it.

Finally, in all of the quotes derived from these interviews, I have employed the use of pseudonyms to protect the privacy of my research participants. I have also refrained from providing any additional information about my interviewees as it is possible that such information could inadvertently identify them given the firm's small size.

#### The Burdens That We Bear: Developing a Taxonomy of Discrediting Information

To this point, my theoretical conception of disclosure has been purposefully agnostic toward variation in the egregiousness of discrediting information. This approach is concordant with extant literature related to discrediting information. For example, Quinn and Chaudoir (2009) show that one of the biggest predictors of psychological distress as a function of maintaining a "concealable stigmatized identity," or an identity that are is both socially

devaluing and concealable from others, is the extent to which the discloser anticipates being stigmatized as a result of disclosure. This allows, essentially, for stigmatization to exist entirely in the eye of the discloser; a baseline level of expected stigmatization due to the nature of the concealable stigmatized identity is not a part of their theoretical model. This represents a key theoretical weakness, however, because information can be more or less discrediting—overall and in the specific context of the workplace—and information that is more discrediting is less likely to be disclosed. In order to increase theoretical precision regarding the probability of disclosure, it is therefore necessary to account for the degree to which information is, at baseline, discrediting.

Very little extant literature has investigated this question. The closest attempt is provided by Quinn and Chaudoir (2009), who elicited from undergraduates 13 categories of concealable stigmatized identities. These were mental illness (e.g., depression); weight / appearance issues (e.g., eating disorder); sexually related activity (e.g., affairs); medical conditions (e.g., epilepsy); sexual assault victimhood; history of childhood sexual abuse; sexual orientation; family member with psychological or medical condition (e.g., cancer); family member with addiction (e.g., alcoholism); abusive family (e.g., domestic violence); drug use; criminal activity; abortion; lies about personal information; death of a family member; and being adopted. The authors next had 114 undergraduates rate how negatively people with each identity were generally viewed by others on a scale from 1 to 7, with 7 being most negative. Unfortunately, while the authors used these ratings to construct a measure of "cultural stigma" that they included in their regression predicting psychological distress, their paper does not include a table with the ratings for each category. The authors do note, however, that the measure ranges from 4.1 for people with a hidden medical condition to 6.4 for people who have engaged in criminal activity.

That criminal activity received the highest rating from the authors' undergraduate sample is somewhat surprising, considering the extent to which many college students endorse moderate use of alcohol and narcotics (e.g., O'Malley and Johnston 2002) and petty crime, such as shoplifting (e.g., Arnett 1994). Accordingly, it is possible that violent crime specifically accounted for this effect. An extremely negative response to the threat of violence echoes studies of violence in the workplace, where it is commonly viewed as an egregious and unforgiveable violation of social norms (e.g., Neuman and Baron 1998). More broadly, however, scholars have noted the extent to which social norms proscribing violence are now stronger and more ubiquitous than they have been at any previous point in human history (Pinker 2011). As a result, violence—particular within the institutional context of the workplace—is presently viewed as an unacceptable violation of the social order and immediate grounds for both formal and informal sanctioning (Wood 2004). Accordingly, I propose the following:

**Hypothesis 1**: Discrediting information that involves the use of physical violence by the discloser against another person will be perceived as more negative than will discrediting information that does not involve the use of physical violence against another person.

Beyond Quinn and Chaudoir (2009) the most relevant work regarding the classification of discrediting information can be found in research examining personal secrets, or those involving negative and stigmatizing information (Kelly and McKillop 1996). Norton and colleagues (1974) examined the anonymous secrets of 359 undergraduates and found that they

reported topics related to sex most frequently. The authors then had a separate group of undergraduates rate a random sample of the secrets from most to least risky in terms of reputational damage; the raters considered secrets related to sex, mental health, and violence as most risky and those related to drug use to be least non-risky. In a similar study, Kelly and colleagues (2001) asked 85 undergraduates to anonymously write about a secret about themselves that was known to at most a very few other people. A third of these secrets were sexual in nature, constituting the largest single category.

Accordingly, one of the strongest conclusions that can be drawn from this research is that people guard discrediting information that is related to sex very closely. Furthermore, while these studies' exclusive reliance on undergraduates is suboptimal—insofar as they are not broadly representative of the population at large—the idea that people perceive information related to sex as particularly discrediting has been replicated among adult samples (Hill et al. 1993; Kelly 1998). This is perhaps due, at least in part, to the fact that within Western societies sexual impulse is strongly linked to feelings of shame, or the fear that "one runs the risk of another's contempt, indignation, disapproval or other negative assessment" (Scruton 1986: 141). This has a direct bearing on disclosure. For example, Finkenauer and Rime (1998) reported that disclosers' perceptions of how negative a secret was did not inhibit sharing; rather, the emotions that they felt were associated with the information—specifically, shame and guilt—were associated with a lower probability of disclosure. Therefore, I propose the following:

**Hypothesis 2**: Non-violent discrediting information that is sexual in nature will be perceived as more negative than will non-violent discrediting information that is not sexual in nature.

Another important, though more general, distinction emerged during my interviews. Subjects described two different types of discrediting information, which I refer to as "directly discrediting" and "indirectly discrediting." Information is directly discrediting when the behavior or events that constitute it are entirely within the control of the discloser. Information that is indirectly discrediting, however, involves at least some encroachment by another person—for example, an unfaithful spouse—or pertains to another person entirely, such as substance abuse by, or mental illness of, a close relative. Lisa provided an example of information that is directly discrediting in the workplace:

If I give feedback on somebody's performance, that's sensitive shit. Right? Now you're messing with somebody's career potentially, and that's really difficult to ever give feedback that's negative. So [management will always ask me] what do you think about this person, how is it working with this person, you know, because they're looking for should we staff this person again. And that's really tough, because you don't ever want to be in that position of like, I got someone let go—not even let go, right, because nothing's ever that bad, but not put up for the position because of xyz. ... Now you're really messing with somebody in a way that could get misinterpreted.

Lisa viewed this as discrediting for two primary reasons. The first was that the co-worker of whom she was critical could find out about the negative feedback, thus making Lisa much less desirable and potentially generating animosity between the two. The second concern was that

third parties would hear about the negative feedback and, lacking an understanding of the circumstances which led to it, believe the worst about Lisa: That she was the "type of person" who unjustifiably criticized colleagues in order to advance her own standing within the firm by comparison. In both cases, however, it was clear to all parties that the feedback was directly under Lisa's control. Henry, by comparison, provided an example of information that was indirectly discrediting:

This was many years ago. I have two kids from a first marriage and they um, and at one point in time the oldest one—I was doing every other week with my ex-wife—and at one point the oldest one said I want to go live with mom. You know, full time. And that was obviously a killer. You know, it happened. And at the time that it happened it was devastating. And I do remember I worked at [company] and I was flying out of [city] when she gave us this news. Actually she gave me the news. She didn't give it to my wife, she just gave it to me so I had to tell my wife about this. And my wife was the problem, the stated problem: Step mothers, you know. But I flew all night to [state] and I do remember that was a case when I took a friend aside, a co-worker aside, and I did share and talk about it.

For Henry, this information was discrediting because it challenged his self-perception as a father who could provide a welcoming home for his daughter. He was not, however, directly responsible for his daughter's desire to move out, which had instead been trigged by conflict with his wife.

In contrasting information that is directly versus indirectly discrediting, I draw on social psychological theories of causal attribution (e.g., Heider 1958; Kelley 1973). According to this research, when evaluating events people respond differently based on whether they perceive the event to be attributable to a person or to situational factors beyond a person's control. For example, people often err by interpreting others' missteps as dispositional and their own missteps as situational: One may attribute their own tardiness to bad traffic and a co-worker's tardiness to his fundamental irresponsibility. Accordingly, I suggest that indirectly discrediting information will be viewed by both disclosers and confidants as more situational and—insofar as this suggests that the discloser bears less responsibility—as less discrediting. Phrased more formally:

**Hypothesis 3**: *Information that is directly discrediting will be perceived as more negative than will information that is indirectly discrediting.* 

Ultimately, developing a general typology of discrediting information is essential because it is predictive of how a confidant will respond to a discloser after the discloser makes his revelation: Specifically, the extent to which the confidant's opinion of the discloser will change for the better or worse upon learning the discrediting information. I address this in the study described below.

## **Identity, Impression Management, and Social Networks**

My research shows that network density inhibits the disclosure of discrediting information. I suggest that the mechanism underlying this effect is the concern, on the part of

disclosers, that their discrediting information is more likely to be illicitly shared—and subsequently learned by all—within a dense network. There is, however, an alternative mechanism which my prior research design precluded me from explicitly testing. Specifically, it is possible that disclosers are less likely to reveal discrediting information to a confidant in a dense network because they are concerned that the confidant will think less of them as a result—an apprehension that is muted with respect to confidants with whom disclosers are less densely connected. In other words, the potential diffusion of discrediting information may be a secondary concern as compared with the more proximal concern of maintaining a positive self-presentation vis-à-vis a particular confidant.

Sociologists have long emphasized the importance of self-presentation, particularly with respect to the types of contacts that can be expected to populate a focal person's dense network. An early example of this idea can be found in Cooley's (1909: 23) work on primary groups, or "those characterized by intimate face-to-face association and cooperation ... [involving] the sort of sympathy and mutual identification for which 'we' is the only natural expression." Within such groups, as Cooley (1909: 25) notes, the chief object of each individual's ambition is a "desired place in the thought of the others." This desire for acceptance and approval is a powerful determinant of behavior. For example, Shils and Janowitz (1948) drew on Cooley's theory of primary groups to help explain the surprisingly low rates of desertion within the German army at the end of World War II once it became clear that an Allied victory was inexorable. The desire to be liked and accepted by primary group members, they argued, was so strong that German soldiers pursued it at the risk of physical peril. More recently, Walker and Lynn (2013) show that an increase in the density of alters that are associated with a particular role—such as work—increased the salience of that role with respect to a person's overall identity. This suggests the following baseline hypothesis:

**Hypothesis 4**: People have a stronger desire to be liked by co-workers with whom they are densely connected than co-workers with whom they are sparsely connected.

One of the primary means by which people in the workplace secure the approval of their co-workers is through the use of impression management (Goffman 1959; Jones and Pittman 1982). Impression management describes the manner in which people strategically self-present to others in order to leave a favorable impression. For example, as Baumeister (1989: 59) describes it, "Shrewd impression managers will seek to learn what kind of person the boss likes and then try to act accordingly, in order to get the boss to think of them as that kind of person." Accordingly, impression management does not describe a specific behavior or set of behaviors. Instead, the term encompasses any behavior that a person purposefully deploys in order to gain the approval of an external audience (Bolino 1999). Thus, flexibility is the hallmark of impression management, insofar as different people tend to expect and value different behavior (e.g., Zaccaro, Foti, and Kenny 1991). Padgett and Ansell's (1993) case study of Cosimo di Medici, for example, attributed his astonishing political success to multivocality, or the ability to self-present in a different—and even contradictory—manner depending on the circumstances.

The use of impression management tactics is complicated in dense networks, however, by informal mechanisms of social control which expose and punish inconsistent behavior (Coleman 1988; Gargiulo, Ertug, and Galunic 2009). The mechanism is increased monitoring due to

repeated interactions in which a person's contacts discuss that person's behavior. This has the effect of surfacing any information regarding conflicting or inconsistent behavior exhibited by a network participant (Burt 2001). In other words, the presence of mutual acquaintances makes a focal person's behavior public (e.g., Merton 1957: 114; Goode 1960; Burt 2001). This limits the flexibility that is integral to successful impression management because revealed inconsistencies convey inauthenticity, which is almost always viewed negatively (Baron 1989). Consequently, people in dense networks face a dilemma: As their motivation to secure the approval of their peers increases, their ability to do so via impression management decreases.

One exception to this contradiction, however, may be found in the disclosure of discrediting information. In the five-part typology provided by Jones and Pittman (1982) the disclosure of discrediting information can be viewed as a form of supplication, wherein individuals articulate their shortcomings. In general, as with other impression management tactics, the use of supplication can backfire if used in tandem with contradictory behaviors such as self-promotion (Turnley and Bolino 2001). That is, the contact towards whom the focal individual supplicated would discuss this behavior with the contact towards whom the focal person had self-promoted, creating a consensus between them that the focal individual behaved inconsistently and therefore hypocritically.

The disclosure of discrediting information may represent an exception to this bind, however, because it is inconsistent in a manner that privileges the confidant. That is, the disclosure of discrediting information and the concomitant imperative "not to tell" offers the confidant—symbolically or substantively—a more authentic picture of the discloser than the discloser grants to other network participants. Accordingly, insofar as confidants believe that the disclosure was authentic, they will refrain from punishing the discloser for behaving in a manner that is discordant vis-à-vis other network participants because they believe and value the fact that the discloser was more honest with them than with others (e.g., Jourard 1971).

Confidants value such disclosure since, as Aristotle observed, "We feel friendly towards those ... who will tell us of our own weak points" (Roberts 2004). Chatman (2010: 464) elucidates the mechanism underlying this effect, viewing "the process of surfacing personalized self-revealing information" as a form of decategorization, which "dislodges intergroup bias among identity groups" and thereby promotes closeness between individuals (see also Gaertner and Dovidio, 2000; Pettigrew, 1998). In addition, the vulnerability displayed by the discloser in revealing discrediting information often triggers a reciprocal disclosure on the part of the confidant. This can increase liking in two ways. First, people like others more simply as a result of having shared discrediting information with them (Collins and Miller 1994). Second, the mutual exchange of discrediting information binds two people closer together because they share knowledge of which few others are aware (Davis 1973; Richardson 1988). Such mutual confiding is associated with, if not predictive of, emotional closeness (e.g., Granovetter 1973: 1361).

The idea that disclosure can be used strategically as a form of impression is illustrated by Martine, who noted:

If you want to have long-term relationships—even with a client, right?—you have to be able to bring some of that personal element into it, not only sharing things about your life but also allowing them to share things about their life, and when things aren't going quite well it's a good thing for them to want to feel like they can come and talk to you about stuff that maybe doesn't have anything to do with [your] role. I've worked with [client] for quite some time, and it's because I have those kinds of relationships with them, and they're not just professional but they're somewhat personal too.

Extant literature suggests, however, that there is an important inflection point with regard to the egregiousness of the discrediting information in question. Specifically, the disclosure of information that is too discrediting can have the opposite effect, leading the confidant to increase their dislike of the discloser as a result (Cozby 1972; Collins and Miller 1994). This is especially likely to be the case in dense networks in which social norms are clearly articulated and strongly enforced (e.g., Granovetter 1992). Insofar as discrediting information entails behavior that is to some degree counter-normative, behavior that too egregiously violates social norms compels the confidant to marshal collective sanctions against the discloser and, under extreme circumstances, expel them from the collective (Lazega 2001; Burt 2005). The social ritual of ostracism is in actuality fundamental to the preservation of the group because it serves to re-inforce members' acceptance of, and adherence to, the collective norms that differentiate the group from other collectivities. As Erickson (1962: 310) described it—with respect to "visible deviants"—"As a trespasser against the norm, he represents those forces excluded by the group's boundaries: he informs us, as it were, what evil looks like, what shapes the devil can assume. In doing so, he shows us the difference between kinds of experience which belong within the group and kinds of experience which belong outside it."

In sum, I argue that a confidant's response to disclosure will be contingent on the egregiousness of the discrediting information that they learn. Discrediting information that is mildly counter-normative will be well-received because its disclosure privileges the confidant over other network participants without leading the confidant to question the validity of the discloser's membership in the group. Discrediting information that is egregiously counternormative, however, will have the opposite effect, given the role of norm enforcement in articulating and maintain the boundaries of a group. More formally I suggest, with respect to disclosure in dense networks:

**Hypothesis 5**: The relationship between the disclosure of discrediting information and a confidant's view of a discloser is curvilinear. Specifically, confidants will view disclosers more positively after they reveal mildly discrediting information and more negatively after they reveal severely discrediting information.

## Steel Traps, Sieves, and Discrediting Information: Exploring the Antecedents of Betrayal

In any social system, discrediting information about third parties will always be in demand (Gluckman 1968). As Simmel (1906: 455-456) has noted, people "credit themselves with the right to know everything which, without application of external illegal means ... it is possible to ascertain" even though the acquisition of such information can sometimes be thought of as the moral equivalent of "listening at keyholes and prying into the letters of strangers." For

example, Christophe and Rime (1997) studied "secondary social sharing," or instances in which individuals were told about an intense emotional experience. In their study, the information receivers, who were intimates of the disclosers 85% of the time, shared the emotional story with others over two-thirds of the time. Furthermore, when the disclosure involved an emotionally intense event, which is a reasonable proxy for information that can be highly discrediting, confidants were more likely to betray the discloser and told, on average, a greater number of people (overall confidants shared the information with a mean of two other people). Finally, the authors reported that in 78% of the instances where a confidant engaged in secondary social sharing the confidant specifically named the discloser. Additionally, consistent with Christophe and Rime's research, Petronio and Bantz (1991) demonstrated that when information was moderately or highly discrediting confidants shared it significantly more often than disclosers reported expecting.

This level of secondary sharing is surprising, however, in light of the strong social norms that proscribe the betrayal of a friend's trust, which secondary social sharing with respect to discrediting information clearly constitutes. Specifically, social penalties are commonly exacted upon individuals who are unable to retain the discrediting information that is placed in their charge (Bergmann, 1993; Yerkovich, 1977). If disclosers discover that a confidant has betrayed their trust, they re-evaluate the confidant "as a person who cannot be trusted to keep a secret or to be discreet with 'privileged information'" (Levin and Arluke, 1985: 16). Accordingly, the present research asks: What are the factors that encourage the secondary sharing of discrediting information despite strong social norms proscribing such behavior?

The first factor to consider is variance in the opportunity to engage in secondary sharing. Specifically, based on their dispositions, some people will select into social settings more frequently than will others—and, when in social settings, be more likely to participate in conversations in which discrediting information about others could be revealed. For example, in one study (McCroskey and Richmond 1995), subjects who were high in extroversion were found to be "compulsive communicators," that is, "to over-communicate in a consistent and compulsive manner" (McCroskey and Richmond 1993: 104). Many compulsive communicators, the authors suggest, are further unaware of the extent to which they are communicating more than is socially appropriate (McCroskey and Richmond 1995). This suggests that in addition to having more opportunities to share others' discrediting information extroverts might also be less attuned to the potential negative consequences of doing so. Accordingly, I propose:

**Hypothesis 6**: There is a positive association between extroversion and secondary social sharing.

This hypothesis raises the possibility of a corollary with respect to people who are high in neuroticism. Such individuals are often subject to negative emotional states—such as depression, pessimism, and low self-esteem—that reduce their desire to engage in social affiliation and, as a result, limit their opportunities for secondary sharing (e.g., Costa and McCrae 1980). Furthermore, people high in neuroticism are often not subject to a broad range of biases that protect self-esteem (Taylor and Brown 1988) such as the illusion of control (Langer 1975) or excessive optimism (Matlin and Stang 1978). Accordingly, insofar as neurotics are more accurate in their perceptions of the social environment (Alloy and Abramson 1979), they should

be more attuned to the negative ramifications of secondary sharing and, as a result, less likely to engage in it. Therefore, I propose:

**Hypothesis 7**: There is a negative association between neuroticism and secondary social sharing.

It is also necessary to consider people's motivation for engaging in secondary social sharing. The literature on gossip suggests that one of the primary motivations for secondary sharing is self-enhancement (Kurland and Pelled 2000). This is realized in two ways. First, articulating the discrediting information to a third party can trigger a downward social comparison with the object of the discrediting information. This can generate positive affect for the sharer (Wills, 1981) particularly if he is able to attribute his perceived superior position relative to the person who disclosed to him to his own superior competence and character (Major, Testa, and Blysma, 1991). The third party with whom the sharer is conversing is integral to this process, as the existence of an audience has been shown to amplify feelings of pride (Smith, 2000).

More instrumentally, however, secondary sharing is self-enhancing because people can accrue social status as the result of the perception that they are "in the know" (Kurland and Pelled 2000). Such individuals may become frequently sought after by co-workers; as a result, secondary sharing can be a strategy through which a person builds status of their own (Kurland and Pelled 2000). Status is an inherently relational construct, however, in that it is high, low, or equivalent only in comparison with another person (Magee and Galinsky 2008). As a result, secondary sharing for the purposes of status accrual is only truly useful vis-à-vis a person who is higher status than the information sharer.

This selective approach to secondary sharing is concordant with the idea that, while there are negative repercussions to indiscriminate secondary sharing—being labeled a "gossip" for example (Kurland and Pelled 2000)—selective secondary sharing can be an effective form of status accrual if one shares aspirationally, that is, with people who are higher status. Doing so indicates to the higher-status individual that the secondary sharer values the relationship over others, a sentiment which the higher-status individual may feel compelled to reciprocate. As Davis (1973: 126) writes: "If A tells B's secrets to C, then A indicates that his relationship with C is more intense than his relationship with B. On this dimension, a person's most important relationship is with the intimate whose secrets he will absolutely not reveal to any of his other intimates and to whom he will tell the secrets of all his other intimates." This view was confirmed by Yovetich and Drigotas (1999) who showed that undergraduates were more likely to reveal a confidant's discrediting information to a "higher-level intimate," that is, a person whose relationship they valued to a greater degree; furthermore, observers rated the transmission of a higher-level intimate's discrediting information to a lower-level intimate more negatively than the reverse. Therefore, I predict:

**Hypothesis 8**: People are more likely to engage in secondary social sharing with a higher-status person than a person of equivalent or lower status.

Finally, I consider the propensity of a third party to divulge discrediting information. In this case, the third party is two steps removed from the object of the discrediting information, having been informed of it by the initial discloser's confidant. As Bellman (1981) points out, this situation presents the third party with a contradiction, insofar as the confidant is asking the third party to maintain secrecy when the confidant himself did not. Accordingly, I suggest that third parties view any confidant's request for discretion as largely symbolic. In effect, by revealing information that he was implored to keep secret, the confidant himself morally licenses the third party to discuss the discrediting information with as many other people as he wishes (e.g., Kouchaki 2011). Therefore, I propose:

**Hypothesis 9**: Third parties will share discrediting information that is revealed to them at a higher rate than will confidants.

The primary implication of this hypothesis is to demonstrate how once a piece of discrediting information has been related by a confidant to a third party, it will soon become known to all with whom that third party is socially tied.

#### **Conclusion**

This dissertation has utilized a particular phenomenon—the disclosure of discrediting information in the workplace—as a lens through which to examine one of the central tenets of social capital theory. I argue that, contrary to received wisdom, dense social networks are not always safe environments reinforced by mutual trust among participants. Instead, in the context of the workplace, they are often perceived by their members as social minefields wherein disclosure to the wrong confidant can result in embarrassing and stigmatizing information becoming known to all. I tested this theory with a multi-method empirical approach that demonstrated my results in the context of both a consulting firm and a laboratory experiment, thereby ensuring high levels of both external and internal validity. My results highlight an important contingency inherent in social capital theory: The same structural mechanisms which enhance trust between people simultaneously elevate the negative ramifications that will occur if that trust is betrayed. This insight, however, represents only a first step toward the development of a comprehensive theory of disclosure in the workplace. Such a theory must also unpack the characteristics that make information more or less discrediting; how the egregiousness of the information influences the reaction of the confidant; and the conditions under which confidants betray disclosers' trust by sharing discrediting information with others. Achieving clarity with respect to these aspects of disclosure theory will enhance its predictive and explanatory power.

I would like to offer one final takeaway. I began this dissertation by invoking a particularly shocking example of workplace violence. The actions taken by the employee in this example were morally unjustifiable and, fortunately, highly unusual. Yet the broader circumstance, in which a co-worker withholds discrediting information for fear of social retribution, remains ubiquitous. This is the tragedy inherent in the inhibition of discrediting information: Each person from whom we fear judgement on its basis is, simultaneously, withholding discrediting information of their own due to the very same fear. May I, composed like them of Eros and of dust, beleaguered by the same negation and despair, show an affirming flame (Auden 1940).

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Table 1. Means, Standard Deviations, and Correlations Among Study 1 Variables Variable SD 1 2 3 4 5 6 7 8 9 Mean 1. Network Size 12.5 10.1 1.00 2. Network Density 0.19 1.00 0.55 -0.65 3. Network Centrality 0.08 0.05 0.86 -0.59 1.00 4. Generalized Trust 0.57 0.03 0.07 -0.02 1.00 3.51 5. Tenure (in months) 56.7 52.9 0.23 -0.34 0.37 -0.05 1.00 6. Strong Tie 0.03 0.18 0.15 -0.09 0.14 0.02 0.04 1.00 7. Same Gender 0.50 0.50 -0.00 -0.01 -0.00 -0.00 0.00 0.04 1.00 8. Same Race 0.06 -0.06 0.10 0.03 0.02 0.69 0.46 -0.02 0.01 1.00 0.02 -0.08 0.08 9. Disclose 0.14 0.09 0.03 0.02 0.43 0.04 0.02 1.00

 $\overline{N}$  = 11,130 observations.

	(1) Disclosure	(2) Disclosure	(3) Disclosure	(4) Disclosure	(5) Disclosure
iscloser Attributes					
Network Size	0.000515	0.000222	0.000237	0.000147	0.000158
	(0.000645)	(0.000651)	(0.000650)	(0.000682)	(0.000681)
Network Density		-0.0258* (0.0131)	-0.0255* (0.0128)	-0.0280 <sup>+</sup> (0.0148)	-0.0277 <sup>+</sup> (0.0144)
Network Centrality	-0.0228	-0.0294	-0.0285	-0.0112	-0.0107
	(0.122)	(0.120)	(0.120)	(0.134)	(0.134)
Generalized Trust	0.00600	0.00672	0.00674	0.00673	0.00675
	(0.00462)	(0.00455)	(0.00455)	(0.00454)	(0.00454)
Tenure (in months)				-0.00266 (0.00470)	-0.00266 (0.00470)
onfidant Attributes					
Network Size	-0.00193**	-0.00193**	-0.00192**	-0.00185**	-0.00184**
	(0.000638)	(0.000640)	(0.000636)	(0.000653)	(0.000650)
Network Density	-0.00748	-0.00779	-0.00749	-0.00531	-0.00509
	(0.00894)	(0.00894)	(0.00896)	(0.00907)	(0.00910)
Network Centrality	0.464**	0.465**	0.466**	0.446**	0.446**
	(0.146)	(0.146)	(0.145)	(0.152)	(0.151)
Generalized Trust	-0.00106	-0.00108	-0.00107	-0.00110	-0.00108
	(0.00280)	(0.00280)	(0.00281)	(0.00278)	(0.00279)
Tenure (in months)				0.00293 (0.00288)	0.00292 (0.00280)
iscloser and Confidant Attributes					
Strong Tie	0.316**	0.316**	0.313**	0.315**	0.313**
	(.0377)	(0.0377)	(0.0373)	(0.0375)	(0.0372)
Same Gender	0.00654*	0.00647*	0.00660*	0.00637*	0.00652*
	(0.00281)	(0.00278)	(0.00279)	(0.00277)	(0.00278)
Same Race	0.00356	0.00395	0.00393	0.00401	0.00395
	(0.00335)	(0.00334)	(0.00335)	(0.00343)	(0.00343)
Discloser Network Density × Confidant Network Centrality			-0.637* (0.303)		-0.540 <sup>+</sup> (0.300)
Discloser Network Density × Confidant Tenure (in months)				-0.0462* (0.0184)	-0.0260 <sup>+</sup> (0.0157)
Constant	-0.0282	-0.0124	0.0106	-0.0264	0.00931
	(0.0206)	(0.0221)	(0.0184)	(0.0202)	(0.0187)

Robust standard errors, clustered on both the sender and the receiver, are in parentheses.  $^+p < 0.10, ^*p < 0.05, ^{**}p < 0.01$ 

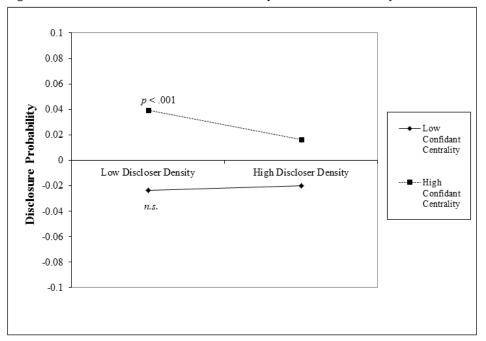


Figure 1. Interaction Effect Between Discloser Density and Confidant Centrality

*Note*: High and low levels set at one standard deviation above and below the mean, respectively. All control variables in these models, which include robust standard errors, were set at their mean.

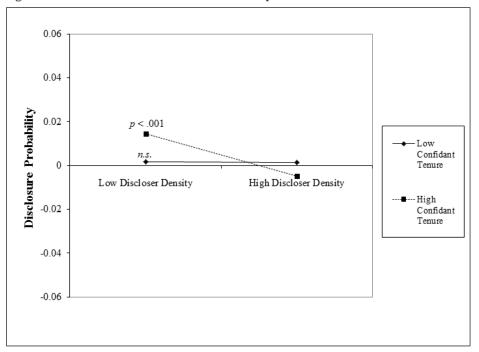
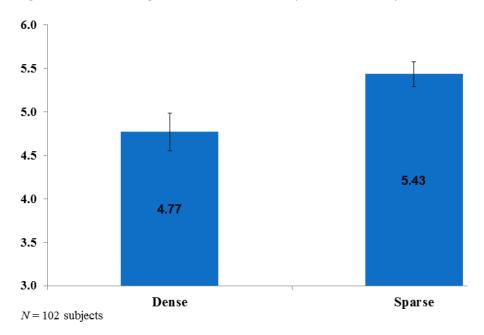


Figure 2. Interaction Effect Between Discloser Density and Confidant Tenure

*Note*: High and low levels set at one standard deviation above and below the mean, respectively. All control variables in these models, which include robust standard errors, were set at their mean.





## **APPENDIX A: Experiment Instructions**

<u>Please do not converse with your partner until you have officially begun the study</u>. Read these instructions thoroughly before turning over the page.

## **Study Background:**

- The purpose of this study is to investigate how people form first impressions.
- The study brings together two students who have not yet met for a discussion. We will
  examine differences in first impressions based on whether or not the students have
  friends in common.
- We recruited a large number of students for this study. Using the survey responses provided by you, your friends, and your friends' friends, we were able to construct nearly complete social networks for all study participants.

### **Discussion Exercise:**

- You will take turns asking each other questions. The questions that you will ask your partner are listed on the other side of this paper.
- Do not discuss people that you might both know or student groups that you belong to. Identifying information such as this could bias the results of the study, since we are interested in first impressions based **only** on the discussion itself.
- The person who receives the odd-numbered questions will go first. This person will also be the timekeeper and is responsible for ensuring that you conclude your discussion within **40 minutes**.
- Once the discussion is over, you will complete a short survey on a laptop in this room. To access the survey, <u>click on the link that reads "First Impressions Survey</u>." This link is saved to the desktop. Please make sure to hit the "submit" button at the end of the survey to upload your answers. This will ensure that you receive credit for your participation. Please leave the room promptly after you have finished the survey since we schedule sessions back to back.
- The other side of the paper indicates whether or not you have many friends in common based on all subjects' pre-survey results. If you have any questions please ask the experimenter. Otherwise, you may turn the page and begin the discussion.

## **APPENDIX B: Experiment Conditions**

# **Sparse Condition:**

You and your partner do not have any friends in common, and your social circles on campus are very distant from one another. According to psychological research, this means you are somewhat less likely to share similar interests. However, it is also highly unlikely that something you tell your partner will become known to other members of your social network. Please keep this in mind as you complete the discussion.

## **Dense Condition:**

You and your partner have many friends in common, and your social circles on campus are very intertwined with one another. According to psychological research, this means you are very likely to share similar interests. However, it is also **more likely** that something you tell your partner will become known to other members of your social network. Please keep this in mind as you complete the discussion.

## **APPENDIX C: Experiment Discussion Questions**

- 1. (Confederate): Ask your partner the following: "Take four minutes and tell me the story of your life **before you came to college** in as much detail as possible."
- 2. (Subject): Ask your partner the following: "Take four minutes and tell me the story of your life **before you came to college** in as much detail as possible."
- 3. (Confederate): Find out what TV shows you and your partner are fans of and discuss them briefly.
- 4. (Subject): Find out what kinds of food you and your partner both like and discuss this briefly.
- 5. (Confederate): Ask your partner to share an embarrassing moment in their life.
- 6. (Subject): Ask your partner to share an embarrassing moment in their life.
- 7. (Confederate): Ask your partner the following: "If you could change anything about the way you were raised, what would it be?"
- 8. (Subject): Ask your partner the following: "What is one thing you regret about your life so far? Do you think it would be possible to change it?"
- 9. (Confederate): Sensitive information is something about yourself that you try to keep hidden from many of your friends because you don't want them to think less of you. However, research indicates that sharing such information with another person can be very beneficial for you. Please share a piece of sensitive information about yourself with your partner.
- 10. (Subject): Sensitive information is something about yourself that you try to keep hidden from many of your friends because you don't want them to think less of you. However, research indicates that sharing such information with another person can be very beneficial for you. Please share a piece of sensitive information about yourself with your partner.