THE COMPANY YOU KEEP: A TARGET-DRIVEN MODEL OF INVISIBLE IDENTITY DISCLOSURE AT WORK

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ABSTRACT

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Employees with invisible and potentially stigmatizing identities frequently make decisions as to whom and to what extent they discuss their identity at work. Two studies were conducted to examine the *specific* stigma disclosure decisions that employees with invisible stigmas make toward *specific* coworkers and how certain characteristics of the relationship with the target coworker (i.e. the potential recipient of disclosure) may explain those decisions. Constructs related to the broader coworker network of the individual, his/her individual traits, and the organization were also examined. Attempts were also made to generalize these proposed relationships across two very different invisible stigmas: lesbian, gay, and bisexual (LGB) identity and depression diagnosis identity. Results indicate that both LGB employees (Study 1) and employees diagnosed with depression (Study 2) tend to make different disclosure decisions to different coworkers in their network and that these decisions can be explained, in part, by the employee's perceptions of that coworker's supportiveness and their trust in that coworker. Further, results suggested that for LGB employees, disclosure to a specific coworker was also encouraged by having at least one very supportive/trustworthy coworker in their overall network, working for an organization with LGB-friendly policies, and by a high propensity to take risks. Differential findings between these two identities suggest potential limitations of applying general stigma disclosure models to depression identity. Overall, results suggest that the target

relationship is an important factor in disclosure decision-making and that studies examining disclosure without looking at specific disclosure decisions may be missing key factors in the process.

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Introduction

Individuals with invisible stigmatized identities, such as a non-heterosexual orientation, a mental illness, or a non-majority religion, frequently make decisions regarding the disclosure of their stigma each time they enter a new situation and/or interact with a new individual (Croteau, Anderson, & VanderWal, 2008). Although many individuals with stigmatized identities will choose to not disclose to others at work for fear of harassment, exclusion, or discrimination (Clair, Beatty, & MacLean, 2005; Corrigan & Mathews, 2003; Ragins, Singh, & Cornwell, 2007), research has suggested that concealing a stigmatized identity is associated with negative personal and organizational outcomes (Baretto, Ellemers, & Banal, 2006; Cole et al., 1996; Day & Schoenrade, 1997; Corrigan & Mathews, 2003; Ellis & Riggle, 1996).

The goal of this study is to examine the antecedents of invisible stigma disclosure at work from a target-centered perspective, as past models of stigma identity management have either downplayed or entirely omitted characteristics of the target (i.e. the potential recipient of disclosure) as predictors of disclosure. Further, quantitative and qualitative research that has explicitly tested variables related to the target (e.g. trust, Boon and Miller, 1999; support, Ragins, Singh, & Cornwell, 2007) have either only looked at target characteristics and disclosure to a specific target in isolation, ignoring the influence of other individuals in the potential discloser's network, or have viewed all individuals in the potential discloser's network as one monolithic entity, ignoring the differences individuals have in their perceptions of different relationships in their relationship network. Thus, this study will test a multi-level model of invisible stigma disclosure, examining *coworker relationship quality* as it relates to disclosure decision-making at both the target and network level.

In the following sections, I will introduce and describe the proposed *target-driven model* of invisible stigma disclosure tested in this study, citing theory and empirical work in the areas of self-disclosure (Altman & Taylor, 1973; Derlega, Metts, Petronio, & Marguiles, 1993; Jourard, 1964; Luft, 1969); stigma management (Clair, Beatty, & MacLean, 2005; Ragins, 2008) and private information communication (Petronio, 1991; 2002; 2007). I will also discuss different conceptualizations of network support and trust that could be relevant to stigma disclosure decisions, utilizing research on group processes (Steiner, 1972), support networks (Laursen & Mooney, 2008) and qualitative research on stigma disclosure (Brooks & Edwards, 2009; Fesko, 2001; McDermott, 2006) to frame these arguments. I will begin by discussing the purpose of disclosing self-relevant information broadly and of disclosing invisibly stigma identities specifically.

Background

The Open/Hidden Self

The idea of the hidden self is discussed in the *Johari Awareness Model* (Luft & Ingham, 1950; Luft, 1969), which is an early representation of the individual in terms of how aware the individual is of him/herself as well as how aware others are of the individual. The model depicts four quadrants that differ in these two types of awareness and represent four distinct aspects of self: the *open self*, the *blind self*, the *unknown self*, and the *hidden self*. The *open self* represents the part of the self that is known to the individual and known to others, such as a hobby of which an individual and his/her friends are aware. The *blind self* represents the part of the self that is known to others, but not known to the actual individual. An example of this would be an individual who is perceived as egotistical by coworkers but does not view him/herself that way. The *unknown self* represents the part of the self of which neither the individual nor others are

aware. Aspects of the *unknown self* are by definition the most difficult to confirm, but can be shown in retrospect (e.g. an employee who develops an authoritative manner when promoted to manager that neither he/she nor others were aware existed within his/her personality; Luft, 1969). Lastly, the *hidden self* represents the part of the individual that is known to the individual, but not known to others. An example of this could be a family secret that one does not share with their friends.

Under the *Johari Awareness Model,* self-disclosure (defined as revealing aspects of the *hidden self*) is seen as an action that simultaneously decreases the area of the *hidden self* and increases the area of the *open self* (Luft, 1969). Early self-disclosure researchers viewed self-disclosure as a necessary precursor to connecting with others, reducing stress associated with secrecy, and learning more about oneself through honest interactions with others (Jourard, 1964; Luft, 1969; Pennebaker, 1989). Although it is stressed that the level of self-disclosure should be appropriate for the situation and the relationship in question in order to reap the benefits (Derlega et al., 1993; Jourard, 1964; Luft, 1969), the general assumption is that concealing important aspects of the self leads to negative outcomes for the individual.

The Open/Hidden Stigma

Much like the self-disclosure literature, more recent theories on invisible stigma identity management have focused on the importance of disclosure. A *stigmatizing identity* is an identity that is devalued in a particular context due to negative stereotypes associated with that particular identity (Crocker, Major, & Steele, 1998). When a stigmatizing identity is not readily visible to others (e.g. mental health status, sexual orientation, religion), an individual makes decisions as to how (or if) they discuss this identity in a particular situation (Ragins, 2008). Similar to self-disclosure, stigma identity disclosure is defined as *the extent to which one reveals a stigmatizing*

identity to others. Examples of a stigma identity disclosure would be an employee diagnosed with depression telling his coworker about his condition or a lesbian employee introducing her female partner to a coworker. The stigma identity management literature has proposed other identity management strategies beyond the "reveal or conceal" language typically used in self-disclosure literature (e.g. Anderson, Croteau, Chung, & DiStefano, 2001; Chaudoir & Fisher, 2010; Woods, 1994). For example, in Anderson and colleagues' work on sexual orientation disclosure, disclosure was viewed as a continuum with completely revealing one's sexual orientation (labeled being *explicitly out*) on one end of the spectrum, followed by not confirming or denying one's sexual orientation to others (labeled being *implicitly out*), then staying away from topics or situations that could reveal one's sexual orientation (labeled *avoiding*), and then at the other end of the continuum, explicitly lying about one's sexual orientation (labeled *hiding*).

Stigma disclosure is recognized as risky (Ragins, 2008), but stigma concealment is also emphasized as a potentially harmful choice, backed by empirical evidence. Maintaining the secrecy of a concealed identity can be an exhausting and anxiety-ridden experience (Goffman, 1963; Lane & Wegner, 1995; Smart & Wegner, 2000) and can prevent individuals from forming strong bonds and gaining support from others (Chaudoir & Fisher, 2010). Specifically, for individuals with invisible stigmas, identity concealment has been linked to lower self-efficacy (Baretto, Ellemers, & Banal, 2006), lower ratings of job satisfaction (Day & Schoenrade, 1997; Ellis & Riggle, 1996), a greater likelihood of stress-related physical symptoms (Cole et al., 1996) and lower affective commitment to the organization (Day & Schoenrade, 1997). Given these findings, understanding the antecedents of stigma identity disclosure could hold practical significance for organizations and career counselors aiming to maximize employee mental health and positive organization-related attitudes.

Risky Decision-Making

Due to the potential risk involved in disclosing a stigmatizing identity, one might apply a risky decision-making model, such as prospect theory (PT; Kahneman & Tversky, 1979) or the updated cumulative prospect theory (CPT; Tversky & Kahneman, 1992) to predict disclosure decisions. Under these influential theories, individual decision-making is a function of the valence of the potential outcomes tied to different options, with each outcome valence influenced in varying degrees by the probability of that outcome occurring. That is, individuals perceive the outcomes associated with the available options and attach a valence to them, compared to some neutral reference point (i.e. gaining $1000/ losing $1000 compared to 0 gain/ loss). Each potential outcome has a probability of occurring and that probability will influence the decision maker to a certain extent, creating a *decision weight.* As one example, under these theories individuals will be more likely to choose a certain optino when the probability of a negative outcome occurring influences the individual less than the probability of a positive outcome occurring. CPT improves upon PT in its recognition of situations in which more than two options are available and the recognition that the probability of a loss may have a different effect on the weighting of an outcome than the probability of a gain.

The application of CPT and PT to the area of stigma disclosure, while appealing in its parsimony and incorporation of the riskiness of the disclosure decision, is problematic for several reasons. For one, these models assume that all associated outcomes and probabilities are known to the individual. This view of risky decisions is compatible with contexts where the outcomes of interest are monetary, as is typical in studies using prospect theory (see Holmes et al., 2011), but may not serve this particular context well. With stigmatizing identities, the outcomes associated with a particular risky choice can be anticipated (e.g. if you disclose an identity, you

predict your coworkers will most likely be supportive but they could exclude you), but cannot be truly known in the same way that the outcomes and probabilities of typical *gambles* discussed in prospect theory can be known to an individual decision-maker (e.g. if you choose option A, you have a 2 % chance of losing $10 and a 98% chance of gaining $5).

Second, these theories contend that the assignment of valence to available outcomes relies on comparing those outcomes to a referent that is typically the current status quo. For example, compared to one's current state, gaining $500 has a positive valence. In stigma disclosure decisions; however, the status quo *is* a disclosure decision of interest as well. When confronted with a new relationship, individuals with stigmatizing invisible identities are typically assumed to be nonstigmatized (e.g. heterosexual, without invisible disabilities, of the majority religion), meaning there is no real referent state on which to compare other available disclosure options. In a sense, individuals with stigmatizing identities are always making a disclosure decision.

Third, if applied to stigma management, these models would assume that individuals acknowledge representations of *all* possible options (e.g. *hiding, avoidance, indirect acknowledging, direct acknowledging*) when making a disclosure decision concerning a specific individual. This may not be the case, however; as aspects of personality, environment, and specific relationships may make certain options less salient in certain interactions. As one example, an individual who has a very close relationship with a specific individual may not even register *hiding* as a plausible option with that particular person, instead choosing between *avoidance, indirect acknowledgement,* and *direct acknowledgement* options. Given these limitations, the current study examines stigma disclosure using a proposed model that specifically incorporates variables associated with *stigma* disclosure, focusing on aspects related

to the target relationship (and other relationships within the work context) that may influence disclosure decisions.

A Target-Driven Model of Invisible Identity Disclosure

Figure 1 displays a model of hypotheses. In the model, the quality of the relationship between the individual with the invisible stigmatizing identity and his/her target is seen as the key influence of disclosure decision-making, defined as the *extent to which the individual discloses a concealable identity to another individual.* It is hypothesized that this relationship will be moderated by characteristics related to the individual, his/her environment, and his/her broader network of coworkers. As other models exist that specifically examine stigma disclosure, the following section will distinguish the current model from past stigma disclosure theories.

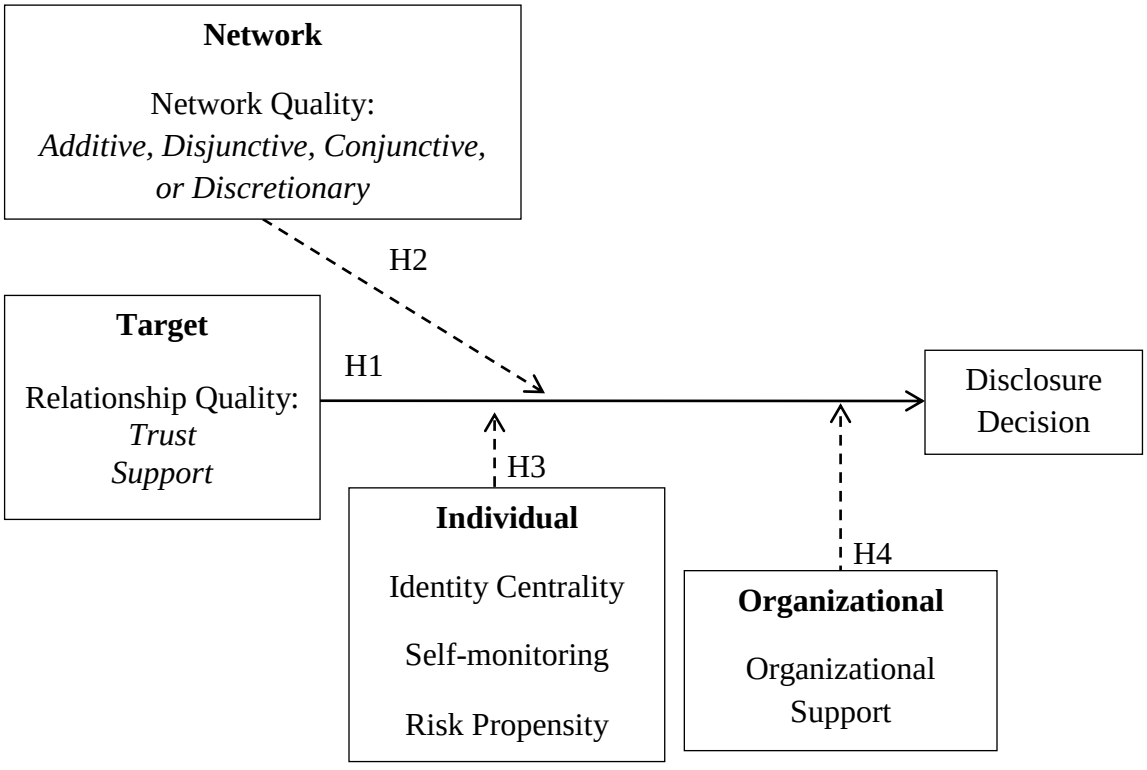

Figure 1. *A Target-Driven Model of Disclosure*

Beyond Current Antecedent Models of Stigma Disclosure

There are other several models in the literature specifically concerning invisible stigma identity management (Chaudoir & Fisher, 2012; Clair et al., 2005; Ragins, 2008), all acknowledging the complexity of disclosure decision-making and the high stakes involved in deciding to what extent one reveals a stigmatizing identity to others. Similar to the current model, these models do not view disclosure as a positive or negative action, but rather seek to understand how individuals arrive at their disclosure decisions. All three models draw from prominent and relevant literatures, including stigma theory (e.g. Goffman, 1963) and self-disclosure (e.g. Altman & Taylor, 1973). They cite many factors that could influence invisible disclosure decisions, including the proposal of individual difference variables (Clair et al., 2005; Ragins, 2008), personal goals (Chaudoir & Fisher, 2010; Clair et al., 2005), contextual variables (Clair et al., 2005; Ragins, 2008), stigma-related characteristics (Ragins, 2008), and the outcomes associated with past disclosure decisions (Chaudoir & Fisher, 2010; Clair et al., 2005) as predictive of disclosure decisions.

These models have improved our understanding of invisible stigma management; however, the current *target-driven* model differs from these models in key ways that attempt to specify disclosure as a nuanced and discrete decision regarding a particular individual that is influenced by characteristics associated with one's relationship with that individual and other individuals in the context. Table 1 compares these models to one another and to the proposed model.

Table 1

Comparisons of Stigma Disclosure Models to Current Model

Model	Disclosure Options	Target Specification	Antecedents of Interest				
			Target	Network	Individual	Organizational	Other
Clair et al. (2005)	pass vs. reveal	one *target* in a specific interaction	relationship; target characteristics	none	risk propensity; self-monitoring; developmental stage; motives	diversity climate; professional norms; legal protections	consequences of past disclosure decisions (feedback loop)
Ragins (2008)	identity denial → identity integration across work and home domains	*few*, *some*, or *all* in a given domain	none	supportive relationships (in general); presence of similar others	self-verification processes; identity centrality	institutional support	stigma characteristics; anticipated costs
Chaudoir & Fisher (2010)	disclosure varies in *depth*, *breadth*, *duration*, and *emotional content*	one *confidant*	none	none	approach and avoidance goals	none	consequences of past disclosure decisions (feedback loop)
Current Study	concealment → avoidance → indirect acknowledgement → direct acknowledgement	one *coworker*	coworker support; coworker trust	support networks; trust networks	identity centrality; self-monitoring; risk propensity	supportive organizational policies	none

Past models define disclosure as an action that makes a previously concealable identity known to another (Chaudoir and Fisher, 2010; Clair et al., 2005) or others (Ragins, 2008). Right away, Ragins' model is distinguished from the other models due to its focus on disclosure as a varying across *domains* as opposed to *people / targets.* Definitions diverge in other ways across these three models, with Ragins (2008) and Chaudoir and Fisher (2010) focusing on verbal disclosure, whereas Clair and colleagues (2005) also include non-verbal disclosure, such as wearing a certain symbol associated with an identity. Further, disclosure options are viewed differently in these models. Clair and colleagues mention several different options for managing an invisible identity, but contend that they fall under two main categories, *passing* and *revealing* (i.e. disclosure). Chaudoir and Fisher propose several different dimensions upon which those who choose to disclose can differ, including the type of information they give about their identity (*breadth*), the intimacy of the disclosure (*depth*), the *duration* of the disclosure, and the *emotional content* involved in the disclosure event. Non-disclosure, on the other hand, is discussed only as *concealment,* with the focus of that part of their model being on ways in which individuals disclose. Ragins' model views disclosure as continuum from *identity denial,* in which very few or no individuals know about one's identity in both home and work domains to *identity integration,* in which most or all of individuals in one's home and work domains are aware of one's identity.

In terms of antecedents of interest, there is little overlap among these models. Clair and colleagues focus primarily on a proposed feedback effect in which past consequences of disclosure are thought to affect future disclosure decisions. They also discuss individual, target, and organizational influences on decisions to pass versus reveal. Chaudoir and Fisher focus primarily on how one's goals lead to different disclosure events, viewing individual-, target-, and

organizational-level variables as distal outcomes of disclosure events that indirectly affect future disclosure via a feedback loop. Ragins proposes the greatest number of antecedent variables, compared to the other two models, hypothesizing direct and indirect effects of stigma-related characteristics, environmental characteristics, network characteristics, and individual characteristics on stigma disclosure across home and work domains. This model is the most closely related to risky decision-making theories, as anticipated consequences (i.e. risk versus reward) is thought to be a proximal link that connects all predictors to disclosure.

The model proposed here improves upon past models of stigma disclosure in two main areas. Taking the perspective that focusing on disclosure to specific targets allows for a closer look at actual disclosure decisions, the proposed target-driven model aligns with Chaudoir and Fisher's and Clair and colleagues' models in its specification of the *target* (specifically, the *coworker*) as the recipient of disclosure, rather than a group of people or a domain (e.g. "the workplace"). This model takes the idea of person-to-person variation a step further by focusing on target-related characteristics that influence target-directed disclosure. The two aforementioned models discuss the role of the target (i.e. recipient of disclosed information) in the disclosure process, but it is important to note that Chaudoir and Fisher's model focuses on the dyadic *outcomes* of disclosure (rather than the antecedents) and Clair and colleagues' model only briefly discusses target-related characteristics as moderators of individual difference effects (i.e. target relationship variables are *not* the key driver of disclosure). The current model includes target-related relationship quality variables as antecedents to disclosure, based on self-disclosure theories. Further, neither model discusses the role of the broader network of individuals that might influence target-based decisions, as is proposed in the current model. Ragins includes a network-related variable (supportive relationships) in her model, but does not include target-

related characteristics as antecedents, as the outcome of interest is not disclosure to a specific individual. Thus, although these models have advanced our understanding of the invisible stigma disclosure process, the model proposed here moves the literature forward by examining the role of both *target*- and *network*-related influences on disclosure.

Similar to two of the models (Chaudoir & Fisher, 2010; Ragins, 2008), the proposed model focuses on *verbal* disclosure. Unlike any of the previous models mentioned; however, disclosure is viewed as an individual decision made on continuum: from active concealment (*hiding*), to non-active concealment (*avoidance*), to non-active revealing (*indirect acknowledgement*) to active revealing (*direct acknowledgement*). This conceptualization was developed by Anderson and colleagues (2001) as a way of representing sexual orientation disclosure decisions. Its inclusion in this model benefits the literature by going beyond disclose vs. non-disclose conceptualizations of disclosure that do not account for other decisions available to individuals with invisible stigmatizing identities.

In the following section, I will discuss each aspect of the proposed target-driven model (Figure 1) in greater detail, drawing from the self-disclosure, stigma management, privacy communication, and group processes literatures.

Target Characteristics and Disclosure

The trajectory of the modern workplace toward longer hours and fuzzier boundaries between the personal and the professional (Hochschild, 1997) have made the workplace an important resource for fulfilling socio-emotional needs (McGuire, 2007) and developing friendships (Fehr, 2008). As such, the quality of relationships with one's *coworkers* (defined here as *individuals with whom one works and who are neither subordinate nor superordinate in organizational rank*), can have a profound effect on work-related attitudes and outcomes (see

Chiaburu & Harrison, 2008, for a meta-analysis). Employees arguably have the greatest frequency of contact and social interactions with coworkers within the workplace context (Ferris & Mitchell, 1987), making them the ideal targets of interest for this first model examining the effects of relationship quality on stigma disclosure, as opposed to subordinate employees or superordinate supervisors. That is, status hierarchy differences can result in more restrictive interaction norms (Chiaburu & Harrison, 2008) and may decrease the likelihood of discussing *any* personal information at all, whereas coworkers are on a level field in which differences in stigma disclosure should result primarily from relationship differences, not status differences.

High quality coworker relationships have been conceptualized in the coworker/team member exchange literature (Sherony & Green, 2002; Tse & Dasborough, 2008) and the domain of workplace friendship (Berman, West, & Richter, 2002). In these literatures, it is emphasized that a high quality coworker relationship is a relationship that goes beyond a positive (i.e. friendly or civil) relationship and involves a reciprocal exchange of trust, and emotional and instrumental resources. A high quality relationship is thus defined here as *the extent to which the relationship is perceived as involving support (both emotional and instrumental) and trust. Supportiveness* is a relationship-level construct defined by the perception that another individual provides one with instrumental assistance and emotional support (Pierce, Sarason, & Sarason, 1991), such as listening, sharing, counseling, encouraging, and caring (Mcguire, 2007). *Trust* is defined as the "willingness to be vulnerable to the actions of another party" (Mayer & Davis, 1999, p. 124). That is, an individual who would be willing to let another individual have control over his/her outcomes, due to an expectation that that other individual would treat him/her favorably in said situation, can be said to *trust* that person. Although there are many different words one could use to describe a "high quality relationship" (e.g. respect, trust, and obligation;

Graen & Uhl-Bien, 1995; appreciation, encouragement, mutual respect, and trust; Tse & Danborough, 2008), many of these terms overlap and seem to be sufficiently subsumed by the chosen terms of this study: *supportiveness* and *trust.*

Coworker relationship quality is examined in terms of *perceptions* of coworker relationships, not actual objective measures of the relationships, for two reasons. First, the sensitive nature of studying hidden populations prevents the examination of variables in any way that could potentially identify individuals as part of that hidden population (Ragins, Singh, & Cornwell, 2007). Second, and more importantly, the theoretical framework of this study concerns how individuals make decisions based on *their* appraisal of the situation. Thus, perceptions of the relationships, in terms of support and trust, are more relevant to a framework concerned with this type of cognitive appraisal than are objective measures of these relationship characteristics (Cohen & Wills, 1985).

As stated earlier, recent models of invisible stigma disclosure do not focus on disclosure from a target-driven perspective, either by not including target-related antecedents in their models (Chaudoir & Fisher, 2010; Ragins, 2008) or by only discussing target-related antecedents broadly and not viewing them as the direct antecedents to disclosure (Clair, Beatty, & MacLean, 2005). Theories regarding the development of relationships and self-disclosure (Altman & Taylor, 1973; Derlega, Metts, Petronio, & Margulis, 1993) discuss the *mutually transformative* process of disclosure and relationship formation, identifying disclosure as a reflection of *and* a catalyst to relationship quality within a relationship. As this study proposes an antecedent model to disclosure, this discussion will focus on connecting characteristics of the relationship to disclosure decision-making.

Self-Disclosure Theories and Relationship Quality. Jourard (1964) stated early on that "the most powerful determiners of self-disclosure thus far discovered are the identity of the person to whom one might disclose himself and the nature and purpose of the relationship between the two people" (p. 65). Derlega and colleagues (1993) discuss target-related characteristics as *transformative agents* that are important elements of the self-disclosure process. For this study, I view coworker relationship quality as a transformative agent in the invisible stigma disclosure process, based on self-disclosure theories and empirical evidence from the invisible stigma literature.

According to Altman and Taylor's (1973) *social penetration theory* (SPT), relationships begin with strangers sharing only superficial information with one another and gradually increasing in the amount they share with one another over time as the relationship develops. Personal information between relationship partners can increase in depth over time indefinitely, depending on the outcome of previous self-disclosures and the expectations surrounding potential future self-disclosures (Derlega, Winstead, & Greene, 2008). Thus, SPT would suggest that the disclosure of deep and personal information, such as an invisible stigma, would require a relationship that is already characterized as high in quality and is perceived to continue (or enhance) in quality.

Greene and colleagues (2006) presented an episodic model of self-disclosure that is relevant to invisible stigma disclosure and integrates relationship development theories (such as SPT) to discuss the role of relationships and target characteristics in a single act of disclosure decision-making. In their model, they put forth different types of reasons that people will choose to disclose or not disclose personal information, including relationship- and other- focused reasons. In terms of reasons related to the recipient and that relationship, the researchers

proposed that individuals may choose to disclose to another person if they have a close and trusting relationship and want to tell the person more about themselves, but may choose to not disclose if the relationship is superficial or they predict the person will not be helpful. Overall, the quality of the relationship is thought to play a large role in the potential discloser's assessment of the situation as one in which they would feel comfortable disclosing (Greene, Derlega, & Mathews, 2006).

Several researchers have discussed perceptions of the quality of the relationship as key determinants in the stigma disclosure decision-making process as well (D'Augelli, Hershberger, & Pilkington, 1998; Boon & Miller, 1999; Savin-Williams & Ream, 2003; Schope, 2002). It has been suggested that individuals with stigmatized identities may look at the status of the current relationship and relevant observances of the potential confidant as a proxy for that individual's post-disclosure reactions (Bowen & Blackmon, 2003; Brooks & Edwards, 2009; McDermott, 2006). These evaluations of the relationship are thought to influence disclosure decision-making by signaling to the individual the extent to which disclosure seems like a beneficial choice (McDermott, 2006; Ragins, 2008). Further, empirical work has supported the idea that the quality of the relationship is connected to stigma disclosure decisions. For example, individuals diagnosed with HIV tend to disclose to others when they report having more social support (Emlet, 2006) and individuals who have had abortions tend to not disclose when they feel others will be unsupportive and devalue them (Major & Gramzow, 1999).

In studies focusing on the lesbian, gay, and bisexual (LGB) employees, an examination of sexual orientation disclosure at work in general (not specific decisions) supports the idea that perceptions of coworker supportiveness relate to a greater extent of LGB disclosure across all coworkers (Ragins, Singh & Cornwell, 2007). Further, qualitative research suggests that

individuals look at specific actions of others, as "clues" to help determine how supportive those individuals will be of their disclosure and whether or not they should disclose to those individuals (Brooks & Edwards, 2009; McDermott, 2006). Qualitative research also suggests that trust relates to disclosure of sexual orientation to a parent (Boon & Miller, 1999) and that some individuals diagnosed with mental illnesses will wait until they trust their coworkers before they disclose their condition to them (Goldberg, Killeen, & O'Day, 2005). Based on this research from the self-disclosure and stigma disclosure literatures, I predict that:

> Hypothesis 1: *Individuals will be more likely to disclose to a particular coworker when they perceive a high quality relationship (more supportive and more trusting) with that coworker, as compared to a low quality relationship (less supportive and less trusting).*

Network Antecedents

In making disclosure decisions, self-disclosure and stigma disclosure theories have noted the role of relationship quality in encouraging invisible stigma disclosure, as perceived trust and support can be catalysts of increased self-disclosure (Altman & Taylor, 1973; Derlega, Metts, Petronio, & Margulis, 1993; Greene, Derlega, & Mathews, 2006). However, empirical findings linking perceptions of relationship quality to invisible stigma disclosure either examine relationship quality as monolithic across all relevant relationships (e.g. the perceived supportiveness of all of your coworkers as related to overall sexual orientation disclosure in the workplace, Ragins, Singh, & Cornwell, 2007) and ignore variation in quality between relationships or take a narrow view of the relationship quality – disclosure relationship and examine the influence of one relationship's quality on disclosure (e.g. having a high quality

relationship with one's mother/father/close friend as related to HIV-status disclosure to that specific target, Zea and colleagues, 2004). Both approaches add to our understanding of the influence of target-related characteristics in the invisible stigma disclosure decision process, but miss either the relationship-specific or network aspects of support that could shape the decisions and experiences of stigmatized individuals. As perceptions of relationship quality at the network level are likely distinct from those at the individual level (as found with perceived support; Pierce, Sarason, & Sarason, 1991), it is important to capture both levels when looking at the influence of coworker relationships on disclosure.

In previous sections, relationship quality was discussed at the target-relationship level, examining the potential influence of relationship quality *with a specific coworker* on disclosure decisions *to that specific coworker.* Supportive workplace relationships, however, do not occur in isolation of the broader context (Ragins, 2008). According to communication boundary management and communication privacy management theories (Petronio, 1991; 2002; 2007), individuals feel they have *ownership* over their private information and get to decide their own rules as to when, how, and to whom they disclose said information. Under these theories, when an individual discloses private information to someone else, they become a *co-owner* of this information and although it may be expected that they abide by the discloser's privacy rules, they may not do so, resulting in *boundary turbulence.* In applying these theories to invisible stigma disclosure, stigmatized individuals may decide to disclose based on not only the characteristics of the potential *co-owner* of their information, but also based on the qualities of those in their *coworker network,* as they have the potential to become co-owners as well in cases of boundary turbulence. As one example, an individual diagnosed with depression may not disclose to anyone if they have a particularly low-quality relationship with one coworker and would not

want that individual to find out by accident. Conversely, a bisexual individual may disclose to a particular individual at work because she knows her other coworkers are trustworthy and supportive, even if this particular individual is not. Thus, in the following sections, I will discuss the role of the broader *coworker quality networks* within which coworker relationships function and how these broader networks may influence individual disclosure decisions.

In the research on invisible stigma disclosure at work, which mostly focuses on sexual orientation disclosure, relationship quality-type variables in a group sense have been examined as an average perception of the environment as emotionally and instrumentally supportive (Bowen & Blackmon, 2003; Ellison et al., 2003; Griffith & Hebl, 2002; Jordan & Deluty, 1998; Ragins, Singh, & Cornwell, 2007; Ragins, 2008). This aggregate view of support is either examined in the empirical sense (e.g. the mean of perceptions of support; Jordan & Deluty, 1998) or it is discussed in the perceptual sense, meaning individuals' reported perceptions of overall support from coworkers (e.g. Bowen & Blackmon, 2003; Griffith & Hebl, 2002; Ragins, Singh, & Cornwell, 2007) and/or the general workplace (e.g. Ellison et al., 2003; Griffith & Hebl, 2002; Ragins, 2008), effectively treating all coworkers and workplaces as uniform entities, in terms of support. There have been no studies, to my knowledge, examining group-level trust in the disclosure literature.

Thus, past stigma disclosure research takes an additive perspective on relationship quality, in which the greater the perceptions of emotional and instrumental support, the greater the outcomes, regardless of the perceived quality of any single relationship. This additive approach ignores other potential functions of coworker quality networks, such as the influence of one high-quality or low-quality relationship on disclosure in all relationships or the relative influence of particular relationships. In this study, I introduce and compare four different

perspectives of coworker quality network perspectives and their potential influences on disclosure decision-making.

Coworker Quality Network Perspectives

Although his typology referred to group task performance, Steiner's (1972) discussion of input combinations provides a basis for discussing coworker quality networks. As part of his typology, Steiner outlined four different ways of conceptualizing a group product: *additive, conjunctive, disjunctive* and *discretionary*. An *additive* perspective is most appropriate to use when a group-level construct is best conceptualized as the *average* or summation of individual inputs. A *conjunctive* perspective is most appropriate to use when a group-level construct is best conceptualized as the efforts of the individual with the *least inputs*, whereas a *disjunctive* perspective is most appropriate when a group-level construct is best conceptualized as the efforts of the individual with the *greatest inputs.* Lastly, a *discretionary* perspective is most appropriate when a group-level construct is best conceptualized as the *weighted* inputs of all individuals based on relative influence on the construct.

Evidence from the stigma disclosure and relationship quality literature provides support for each of perspective of group input. These findings and an overall discussion of four *competing* network hypotheses are presented in the next section. Specifically, the network perspectives discussed above (*additive, conjunctive, disjunctive,* and *discretionary*) will be labeled from here on out as *average, minimum, maximum,* and *relative* perspectives, respectively. Table 2 presents each perspective in terms of how a low and high relationship quality network would be conceptualized.

Table 2

Low and High Coworker Quality Networks under Different Perspectives

Perspective	Low Quality Network	High Quality Network
Average	Relationship with average coworker is low quality	Relationship with average coworker is high quality
Minimum	The lowest quality relationship in the network is low quality	The lowest quality relationship in the network is high quality
Maximum	The highest quality relationship in the network is low quality	The highest quality relationship in the network is high quality
Relative	Influential/non-influential coworkers are of low/high quality	Influential/non-influential coworkers are of high/low quality

The *average perspective* of coworker relationship quality views the outcomes of relationship quality as limitless resources, in which the more high quality relationships one has, the more positive the outcomes. As stated above, this conceptualization has been typically used for examining group-level emotional and instrumental support in the stigma disclosure literature. For example, Jordan and Deluty (1998) combined the support received from examined coworkers, family, friends, and others and found that *overall social support* was related to disclosure for lesbian individuals, although they viewed disclosure as the antecedent variable. Other researchers assumed that support was additive without measuring specific relationships, finding that perceptions of overall coworker support and organizational support led to more positive work-related attitudes, less fear of disclosure, and greater likelihood of disclosure (Griffith & Hebl, 2002; Ragins, Singh, & Cornwell, 2007). As disclosure of invisible stigmatizing identities can be passed through second-hand information outside of the stigmatized individual's control (Ragins, 2008), particularly once another individual has become a co-owner of their private information (Petronio, 1991; 2002; 2007), the broader perceptions of coworker

support can become influential in disclosure decisions and intentions, beyond the perceived support of any specific individual.

Research on psychological work climate for stigmatized employees also discusses relationships under an average perspective, arguing that the broader, pervasive workplace characteristics that do not foster close, supportive, and/or trusting relationships will have a negative influence on work-related outcomes and disclosure (Driscoll, Kelley, & Fassinger, 1996; Fesko, 2001; Liddle, Luzzo, Hauenstein, & Shuck, 2004; Waldo, 1999). For example, in a qualitative study of HIV-positive individuals, Fesko (2001) found lack of a "trusting environment" to be one of the main reasons why individuals did not feel comfortable disclosing their HIV status at work. A sample of 123 lesbians from various occupational fields found that perceptions of a workplace climate that was unsupportive of LGB individuals were related to less disclosure at work (Driscoll, Kelley, & Fassinger, 1996). Following this climate argument, an individual with high-quality relationships with their coworkers *on average*, should be more likely to disclose to a specific coworker than an individual with low-quality relationships, regardless of the supportiveness/trustworthiness of that specific coworker.

Thus, the first competing hypothesis states:

Hypothesis 2a: For individuals, the relationship between coworker relationship quality (support and trust) and disclosure will be stronger when the mean of coworker relationship quality across their coworker network is high, as compared to low.

As opposed to the additive perspective, *minimum* and *maximum perspectives* of relationship quality (sometimes discussed jointly as a *threshold perspective*; Laursen & Mooney,

2008) take the viewpoint that relationships are redundant resources and one very low-quality or very high-quality relationship can be sufficient in influencing outcomes in individuals. Under the minimum perspective, one strong and negative relationship can have *risk properties* leading to negative outcomes in spite of other relationships. Under the maximum perspective, one strong and positive relationship can have *protective properties* against other negative relationships and additional positive relationships would not add any significant variation in outcomes.

In the general support and relationship quality literature, there is evidence lending support to minimum and maximum perspectives. For the maximum perspective, research on support and well-being/stress outcomes has found minimal differences between support and health once comparisons are made between individuals who have some level of social support, leaving out those who are effectively socially isolated (Berkman & Syme, 1979; House, Robbins, & Metzer, 1982; Kroenke et al., 2006; Varvel et al., 2007). These findings suggest that additional supportive relationships beyond one supportive relationship would provide minimal changes in outcomes (Cohen & Wills, 1985). In terms of a minimum perspective of relationship quality, Laursen and Mooney (2008) found that having one low quality relationship is associated with maladjustment, but additional negative relationships do not add any significant variation to adjustment outcomes.

The relevance of minimum and maximum models of relationship quality for stigma disclosure can be best seen in the sexual orientation literature on LGB *potential bullies* and LGB *potential allies*. Research on bullying of LGB individuals, for example, suggests a minimum relationship quality model for LGB individuals. For LGB youth, Friedman and colleagues (2006) found a positive relationship between bullying and risk of suicide. Social support did not buffer the impact of bullying, suggesting that particularly unsupportive relationships could be more

influential than the additive support of others. In the workplace, it has also been suggested that lesbian employees will try to determine who may be a potential bully and adjust disclosure-related behavior accordingly (McDermott, 2006). Thus, a potential bully may increase the potential risk of disclosure enough so that one might not disclose to anyone at work.

On the positive side of relationship quality, LGB *allies* are individuals who support and advocate for LGB individuals (Brooks & Edwards, 2009; Washington & Evans, 1991). Just as is the case with LGB bullies, it has been suggested that LGB employees look for signs that employees might be potential allies, whom they can count on to include them in social interactions, support them, and defend them against other employees who may be hostile toward them post-disclosure (Brooks & Edwards, 2009).

Research on other invisible stigmas has also referenced this idea of potential allies and bullies. Qualitative studies of HIV-positive individuals found that one very unsupportive or untrusting person was listed as a reason to not disclose to anyone at work and having an emotionally supportive supervisor as a reason to fully disclose to everyone at work (Fesko, 2001). In Ragins' general model of invisible stigma disclosure, she discusses the importance of the presence of supportive coworkers (potential allies) as an influence on disclosure decision-making for individuals with invisible stigmatizing identities. Supporting a maximum model of support, she argues that these relationships "may give the stigmatized individual a sense of safety that generalizes to other relationships" (p. 204). Thus, having (or anticipating) a potential ally might be perceived as beneficial enough to not only encourage disclosure to that individual, but to other individuals as well.

The possibility of spreading identity information second-hand (Petronio, 2002; Ragins, 2008) makes *every* relationship potentially influential on an individual's decision to disclose

their stigma in *any* given relationship. One very low- or high-quality relationship could be enough to influence disclosure decisions and future intentions for all coworkers in a given coworker network. Given the research supporting minimum and maximum perspectives and the related outcomes of LGB bully and ally relationships, I present the next two competing hypotheses:

Hypothesis 2b: For individuals, the relationship between coworker relationship quality (support and trust) and disclosure will be stronger when the minimum of coworker relationship quality across their coworker network is high, as compared to low.

Hypothesis 2c: For individuals, the relationship between coworker relationship quality (support and trust) and disclosure will be stronger when the maximum of coworker relationship quality across their coworker network is high, as compared to low.

The average, minimum, and maximum perspectives differ in their focus of influence, with the average perspective focusing on how the mean quality of all relationships might influence disclosure decisions in a given relationship and the minimum and maximum perspectives focusing on how the highest (or lowest) quality relationship might influence disclosure decisions in a given relationship. Another perspective, labeled here as the *relative perspective* focuses on how the combination of high and low quality relationships might influence disclosure decisions in a given relationship. Under this perspective, it is recognized that some relationships will be more influential than others, in terms of disclosure decisions. Thibaut and Kelly (1959) discuss *fate control* as the extent to which an individual has control

over relevant outcomes in a given context. At work, this could be outcomes such as performance evaluations or work load assignments. A major contention of Ragins' (2008) model is the role of risk assessment in making disclosure decisions for individuals with invisible stigmas. According to Ragins, individuals will disclose based on the perceived risks or rewards that could follow disclosure. This model did not look at disclosure in terms of specific relationships, but it can be inferred that individuals will see disclosure within particular relationships as more or less risky, which will affect to whom they disclose. For example, a Mormon employee may fear telling anyone at work about his/her religion if one particular coworker is unsupportive of him/her *and* has the power to influence his/her outcomes at work. Conversely, having a powerful ally could make disclosure of an identity at work seem less risky overall. Thus, I predict that:

> *Hypothesis 2d: For individuals, the relationship between coworker relationship quality (support and trust) and disclosure will be stronger when the higher-quality relationships in their network have higher fate control over the individual and the lower-quality relationships in their network do not do have lower fate control over the individual, as opposed to vice versa.*

Individual and Organizational Moderators

Although I view characteristics related to the target (and target networks) as key to understanding invisible stigma disclosure, this is not to suggest that individual and organizational variables do not play an important role in the disclosure process. Previous models of disclosure put forth several non-target-related factors which could influence disclosure, including: *identity centrality, self-monitoring, risk propensity,* and *organizational policies.*

Identity centrality refers to the extent to which a particular identity is important to one's overall self-concept (Ashforth, 2001; Ragins, 2008). For some individuals, a stigmatizing identity may be very central to their overall view of themselves and thus they will feel compelled to disclose (Ragins, 2008), regardless of coworker relationship quality. In one study of lesbian and gay employees, high centrality of sexual orientation identity was related to greater disclosure at work (Griffith & Hebl, 2002), although this was not examined looking at specific disclosure decisions.

Self-monitoring has been defined as a tendency to be aware of and attempt to control one's behavior and impressions around others (Snyder, 1974). In their model of invisible identity disclosure, Clair and colleagues (2005) argued that low self-monitors will be more likely to disclose a stigmatizing identity than high self-monitors, as low self-monitors are not as concerned with their overall impression and are more likely to be authentic in social situations.

Risk propensity refers to an individual's general tendency to take risks (Meertens & Lion, 2008). Risk propensity was also discussed by Clair and colleagues, who theorized that due to the risk often involved in disclosing a stigmatizing identity, the likelihood of disclosure will increase if an individual has a high propensity toward risk-taking. Lastly, most models of identity disclosure (e.g. Chaudoir & Fisher, 2011; Clair et al., 2005; Ragins, 2008) have suggested that the organization can influence disclosure decisions by making the individual feel more or less protected and comfortable in his/her particular work environment and more or less fearful of negative consequences following disclosure. *Organizational policies* refer to organizational structures that signal some level of organizational support to employees of a specific stigmatized group. In the context of sexual orientation, the presence of supportive organizational policies (e.g. diversity training programs) has been related to workplace disclosure (Griffith & Hebl,

2002), although specific disclosure decisions were not measured. Thus, I make the following predictions regarding individual and organizational antecedents:

Hypothesis 3a: Identity centrality will moderate the relationship between coworker relationship quality (support and trust) and disclosure such that individuals reporting high identity centrality will likely disclose their stigma, regardless of target relationship quality.

Hypothesis 3b: Self-monitoring will moderate the relationship between coworker relationship quality and disclosure such that individuals reporting low self-monitoring will likely disclose their stigma, regardless of target relationship quality.

Hypothesis 3c: Risk propensity will moderate the relationship between coworker relationship quality and disclosure such that individuals reporting high risk propensity will likely disclose their stigma, regardless of coworker relationship quality.

Hypothesis 4: Organizational policies will moderate the relationship between coworker relationship quality and disclosure such that individuals reporting supportive organizational policies will likely disclose, regardless of coworker relationship quality.

Potential Control Variables

Although not the central interest of this study, there are several variables which could potentially relate to disclosure of a stigmatizing identity and may need to serve as controls in

analyses. Research on self-disclosure has suggested a role of target similarity in the self-disclosure process (e.g. Brockner & Swap, 1976; Derlega, Winstead, Mathews, & Braitman, 2008), in that people tend to disclose to those whom they *like* (see Collins & Miller, 1994 for a meta-analysis) and *similarity* is one predictor of liking (Byrne, 1971). Thus, I gathered measures of participant-coworker similarity in terms of gender and race/ethnicity to potentially use as controls in analyses. It has also been noted that self-disclosure occurs over time (see Cozby, 1973 for a review), with individuals in relationships disclosing more intimate information to one another as they are around one another for longer amounts of time. Given this time/exposure effect, the amount of time participants have been employed at their current organizations was measured as a potential control. Lastly, a meta-analysis by Dindia and Allen (1992) found that women are slightly more likely to self-disclose than men and that sex differences increase further when the target in question is someone known to the individual (i.e. not a stranger). As such, participant gender was also measured as a potential control variable for analyses.

These hypotheses are tested using two different samples of individuals with two different invisible stigmatizing identities. In Study 1, sexual orientation disclosure to coworkers is examined using a sample of working lesbian, gay, and bisexual (LGB) employees. In Study 2, mental illness disclosure is examined using a sample of employees who have been diagnosed with clinical depression. The use of two samples allows for this study to compare its findings to past disclosure findings, which primarily have focused on sexual orientation disclosure, as well as test the generalizability of the proposed model with the more under-studied area of mental illness disclosure at work.

Study 1

The goal of Study 1 is to test the aforementioned hypotheses using a sample of lesbian, gay, and bisexual (LGB) employees. LGB sexual orientations fall under the label of *potentially stigmatized social identities,* as these identities can be associated with negative stereotypes that may cause LGB-identified individuals to be devalued and unfairly treated by others (Crocker, Major, & Steele, 1998; Goffman, 1963). Sexual orientation is an *invisible identity* and some LGB individuals decide to conceal their identities at work as a way of avoiding potential formal and informal discrimination and harassment (Clair, Beatty, & MacLean, 2005; Herrschaft & Mills, 2002; Ragins, Singh, & Cornwell, 2007).

Sexual orientation disclosure is a high-stakes decision for many LGB employees, as workplace discrimination against sexual minorities is not prohibited in many areas (Human Rights Campaign, 2008) and harassment and stigmatization are an all-too-common experience for many LGB individuals (Herek, 2009). Further, despite evidence to the contrary (Mustanski, Bailey, & Kaspar, 2002; Rahman & Wilson, 2003), many people still perceive homosexuality and bisexuality as a choice (Horvath & Ryan, 2003; King, 2001), leading to harsher prejudice toward LGB individuals than is displayed toward individuals with stigmatized identities perceived as *uncontrollable,* such as a particular ethnicity or a congenital illness (Crawford, 1996; King et al., 2006; Rodin, Price, Sanchez, & McElligot, 1989; Schwarzer and Weiner, 1991). Due to this stigmatization, as well as the dominance of sexual orientation identity in the invisible identity management literature (e.g. Cole et al., 1996; Day & Schoenrade, 1997; Ellis & Riggle, 1996; Griffith & Hebl, 2002; Ragins et al., 2007), using an LGB sample is a good first step in examining target relationship and network variables as they relate to disclosure decisions.

Participants

Due to the relatively small population of LGB individuals and the invisible nature of LGB identity, recruitment of employed LGB participants took place through LGB-related organizations, including LGB-advocacy organizations, LGB-community groups, and LGB-professional groups. These organizations create a certain sampling bias, but avoid the potentially harmful (Ragins, Singh, & Cornwell, 2007) and probably ineffective strategy of sampling many organizations to identify LGB individuals within them and their disclosure decisions.

During the month of October in 2011, I contacted 36 local, regional, and national organizations that were affiliated with the LGB community (e.g. advocacy organizations, alliance groups, etc.). Organizations were chosen that a) focused on serving the LGB community and b) had a website that indicated a means for distributing the survey link, such as an emailing list or message board. Organizations serving LGB ethnic minority populations were purposefully over-sampled (72.2% of organizations contacted), with the goal of having an ethnically-diverse sample. Of the 36 organizations contacted, 5 organizations (13.9 %) replied and agreed to send out the survey invitation to their members and/or post it on their website. With a web-based survey, however, it is impossible to know if any of the other organizations also sent out the link to their members without indicating that they would do so in an email response.

Of the 174 individuals who visited the survey website, 2 individuals (1.2 %) were disqualified for not being employed and 12 (6.9 %) did not fully complete the survey, resulting in a sample size of 160 participants (31.3 % Female; Age M = 32.71, SD = 6.92) responding to items concerning 406 coworkers (mean number of coworkers per participant = 2.55). Table 3 displays demographic frequencies and percentages from this sample.

Table 3

Study 1 Demographic Frequencies

Participant Characteristics	# of participants (% of sample)	Participant Characteristics	# of participants (% of sample)
Sexual Orientation:		**Workplace Industry:**	
Bisexual	21 (13.1)	Education	17 (10.6)
Lesbian	38 (23.8)	Finance	24 (15.0)
Gay	100 (62.5)	Health Care	16 (10.0)
Other non-heterosexual	1 (.6)	High Tech	14 (8.8)
		Manufacturing	13 (8.1)
Gender:		Military	2 (1.3)
Female	50 (31.3)	Other	11 (6.9)
Male	107 (66.9)	Other Services	20 (12.5)
Transgender	3 (1.9)	Restaurant	11 (6.9)
		Retail	20 (12.5)
Race / Ethnicity:		Transportation	12 (7.5)
American Indian / Alaskan Native	3 (1.9)		
Asian/ Asian American	2 (1.3)		
Black / African American	8 (5.0)		
Hispanic / Latino	29 (18.1)		
White	116 (72.5)		
Multi-Racial	1 (.6)		
Other	1 (.6)		
Location:			
Midwest U.S.	43 (26.9)		
Northeast U.S.	53 (33.1)		
South U.S.	31 (19.4)		
West U.S.	32 (20.0)		
Outside of U.S.	1 (.6)		

Procedure

Participants who visited the survey site were taken to an informed consent page, informing them of their rights as participants and the anonymity of the survey (see Appendix A). If they agreed to participate in this study, they were asked two filter questions to determine if they were eligible for the study. If they either 1) listed they were not currently employed or 2)

identified as heterosexual, they were not allowed to enter the survey. If they passed the filter questions, participants then entered the survey and were asked to identify (with initials) up to five coworkers with whom they work the most often. They then completed a series of measures related to their disclosure choices to each coworker they listed (current decisions, future decisions, time to disclose), as well as other characteristics about each coworker (supportiveness, trust, fate control, gender, race, and age). The survey ended with a series of questions about the respondent themselves (propensity to take risks, identity centrality, self-monitoring), the LGB-related policies of their workplace, and their own demographic characteristics. After completing the survey, participants were given a debriefing form explaining the purpose of the survey (see Appendix B) and then taken to a separate website where they could submit their email to receive a $10 gift card for their participation.

Measures

The full Study 1 survey including all measures is available in Appendix C.

Coworker Relationship Measures. Current disclosure was measured using a one-item forced-choice measure asking the participant to choose one of four disclosure decisions ranging from completely disclosed to completely concealed (*explicitly out as LGB, implicitly out as LGB, avoiding the topic of LGB identity, actively hiding LGB identity/creating a false heterosexual identity)* that best describes their LGB identity management decision with each specific coworker. Each disclosure decision was explained to the participant in greater detail, providing a few examples for each. These identity management choices were adapted from Anderson and colleagues' (2001) sexual identity management scale, which was aimed at reflecting the more nuanced decisions made by LGB individuals. This scale was treated as a continuous ordinal variable, with decisions coded in order of their amount of disclosure (*hiding* = 1, *avoiding* = 2,

implicitly out = 3, *explicitly out* = 4). This continuum is the same as was conceptualized originally by Anderson and colleagues.

For each *non-disclosed* (i.e. implicitly out, avoiding, or hiding) coworker relationship, participants provided their *future disclosure*, responding to the same one-item forced-choice measure, now asking participants to describe their *intended* LGB identity management decision with each specific coworker to whom they have not disclosed. Also, to capture variation in the time it took to disclose to certain employees as compared to others, participants who disclosed to a coworker were asked how long it took to disclose to that coworker after meeting them. All responses were converted into months to create a *disclosure in months* variable. See Appendix C for all disclosure items.

Participants responded to four items (for *each* coworker) on a 1-to-4 scale (*not at all* to *very much*) concerning *coworker supportiveness*. These items were adapted from a coworker support measure by Caplan and colleagues (1975), with two reflecting instrumental support (e.g. *how much does coworker 2 go out of his/her way to do things to make it easier at work for you?*) and two reflecting emotional support (e.g *how much is coworker 3 willing to listen to your personal problems?*). Ragins and colleagues (2007) pre-tested this measure with a pilot group of LGB individuals in their study, to check for clarity and understanding of items, and found it to be a reliable scale in their actual study with LGB working individuals. The average of the four scale items (level 1 $\alpha = .79$) created a scale score for each coworker. See Appendix C for the full measure.

Participants responded to four items (for each coworker) on a 1-to-5 scale (*strongly disagree* to *strongly agree*) adapted from Mayer and Davis (1999) to capture their reported *coworker trust* (e.g. *I would be willing to let this coworker have complete control over my*

future). The average of the four scale items (level 1 $\alpha = .65$) created a scale score for each coworker. Internal consistency for this scale, according to rule-of-thumb guidelines (George & Mallery, 2003), is considered low and in the "questionable" range, but above both "poor" and "unacceptable" ranges.

A confirmatory factor analysis (CFA) was conducted to examine the separation of *coworker trust* and *coworker supportiveness* scales. Although scales are correlated ($r = .35$), a two-factor solution (i.e. trust and supportiveness as separate scales) fit the data better than a one-factor solution (i.e. one *relationship quality scale* including both trust and supportiveness; $\chi 2$ difference = 101.226, *df difference* = 1, $p < .01$). Separating instrumental and emotional support to create a total of 3 factors did not fit the data better than a two-factor solution ($\chi 2$ difference = 3.1, *df difference* = 2, *ns*). As such, *coworker supportiveness* was created as one scale with four items and *coworker trust* was created as a separate scale with four items.

Participants also responded to five items (for each coworker) on a 1-to-5 scale (*strongly disagree* to *strongly agree*) concerning how much influence they believed a particular coworker had over them (or coworker *fate control,* Thibaut & Kelly, 1959). As the context of this study is the workplace, fate control items concerned areas of influence relative to the workplace (e.g. influence over work-related stress levels, influence over performance ratings), adapted from important workplace outcomes in an outcome costs scale from Ragins and colleagues (2007). The average of the five scale items (level 1 $\alpha = .92$) created a scale score for each coworker.

Lastly, participants answered demographic items concerning each coworker they listed. Specifically, they were asked to report the gender, race/ethnicity, and age category (1 = *less than 21 years,* 2 = *21-30 years,* 3 = *31-40 years,* 4 = *41-50 years,* 5 = *51+ years)* of each coworker. *Race/ethnicity dissimilarity* and *gender dissimilarity* variables were created in which a value of 0

indicated that the participant and coworker shared the same gender or race/ethnicity and a value of 1 indicated that the participant and coworker were not of the same gender or race/ethnicity.

Network Variables. *Mean/minimum/maximum support* variables were calculated by taking the mean/minimum/maximum of *coworker supportiveness* scales for the coworkers connected to each participant. For example, if a participant reported having three coworkers with *coworker supportiveness* scale values of 3.7, 4.2, and 2.4, that participant would have a *mean support* value of 3.43, a *minimum support* value of 2.4, and a *maximum support* value of 4.2. *Mean, minimum,* and *maximum* trust scales were created similarly, based on *coworker trust* scales. Network variables were not created for participants that only reported having one coworker (N = 35), as there would be no variation between coworker network and coworker relationship effects.

For *relative support* and *relative trust* variables, adjustments were made to the initial plans for variable operationalization, due to data constraints. Originally, relative values were to be constructed by weighting the *maximum* and *minimum support* (or *trust*) variables by the amount of *fate control* associated with that particular coworker. However, for several participants, there was more than one least supportive and/or most supportive (or trustworthy) coworker, making there more than one fate control value associated with *minimum* and/or *maximum* support. Thus, it was decided to weight the role of *coworker supportiveness* and *coworker trust* by *coworker fate control* at the coworker relationship level, in order to examine the effect of a specific coworker's fate control and support on disclosure decisions made regarding that coworker. This decision makes *relative support* an interaction variable of *coworker supportiveness* and *coworker fate control* and *relative trust* an interaction variable of *coworker trust* and *coworker fate control,* rather than a network-level variable.

Organizational Policies. Participants completed four yes-or-no items concerning policies offered by the participants' organizations that are viewed as LGB-friendly (e.g. *my current workplace has a written nondiscrimination policy that includes sexual orientation*), adapted from organizational policies that were shown to be related to LGB disclosure in Griffith and Hebl (2002). There was also an "I don't know" option for each policy item. *LGB-friendly policies* were operationalized as the number of "yes" responses participants gave to policy items.

Individual Difference Variables. Participants answered four items assessing how important their sexual orientation identity was to their overall identity or sense of self (e.g. o*verall, being lesbian/gay/bisexual is an important part of my self-image*). Items were adapted from Luhtanen and Crocker's (1992) scale of race identity. The scale was not reliable (level 2 α = .44) and reliability could not be improved by removing specific items. Thus, *identity centrality* was not calculated as a scale nor used in analyses.

Participants also answered eight *self-monitoring* items assessing how concerned they are with how they present themselves (e.g. *I can only argue for ideas which I already believe*), adapted from Snyder's (1974) Self-Monitoring Scale. The scale was also not reliable (level 2 α = .15) and reliability could not be improved by removing specific items. Thus, *self-monitoring* was not calculated as a scale nor used in analyses.

Lastly, participants responded to six items concerning their tendency toward taking risks in life (e.g. *I take risks regularly*), adapted from Meertens and Lion's (2008) Risk Propensity Scale. Reliability was low (level 2 α = .41), however, removing one item that may have been confusing due to double negative wording (*I really dislike not knowing what is going to happen*) increased reliability (level 2 α = .60) to "questionable internal consistency," which is low but not in the "poor" or "unacceptable" ranges according to rule-of-thumb guidelines (George &

Mallery, 2003). Thus, a *risk propensity* scale was created by averaging the responses to the remaining five items. All individual difference items were on a 1-to-5 scale ranging from *strongly disagree* to *strongly agree.*

Participant Demographics. All participants were asked to provide their gender, sexual orientation, race/ethnicity, highest degree earned, the industry in which they work, the size of their workplace, and how long they have been working at their current workplace (in years).

Study 1 Results

Analytic Approach

This set of data concerns relationships between several targets (the coworkers) and one focal individual (the LGB employee) and *not* the relationship between the targets themselves, falling under a One-with-Many (OWM) design of multi-level group research (Kashy & Hagiwara, 2011; Marcus, Kashy, & Baldwin, 2009). This is a specific subtype of the OWM design, called the one-perceiver-many-targets (1PMT) design, as the LGB individual provides perceptions of several coworkers, as opposed to several coworkers making perceptions about the LGB individual or a reciprocal design. I used hierarchical linear regression modeling to test hypotheses concerning relationships between support/trust and disclosure at two levels: the coworker relationship and the coworker relationship network. Table 4 displays the means, standard deviations, and interrcorrelations of all tested variables at level 1 and Table 5 displays the means, standard deviations, and interrcorrelations of all level 2 tested variables at level 2.

These tables produced some expected correlations and some unexpected relationships. In line with hypotheses, Table 4 reveals that disclosure decisions correlated positively with coworker support, coworker trust, and fate control and negatively with race dissimilarity,

although these correlations do not account for clustering of data. Also, relationship quality variables (i.e. support and trust) correlated significantly with one another. Gender dissimilarity was discussed as a potential control variable, but did not correlate significantly with disclosure. Fate control was not predicted to have direct relationships with relationship quality variables, but Table 4 shows a positive relationship with coworker trust, indicating that participants in this sample who trust a particular coworker are also more likely to view that participant as having control over outcomes.

Table 4

Means, Standard Deviations, and Intercorrelations of Level 1 Variables

Variable	M	SD	1	2	3	4	6
Disclosure Decision	3.15	.94					
Support	3.25	.60	.26**	(.79)			
Trust	3.08	.82	.32**	.35**	(.65)		
Fate Control	2.43	1.07	.17**	-.08	.38**	(.92)	
Gender Dissimilarity	.38	.49	-.05	.08	.18**	.12*	
Race Dissimilarity	.45	.50	-.25**	.02	-.22**	-.21**	-.14**

Note. * $p < .05$, ** $p < .01$. For gender and race dissimilarity, 0 = similar, 1 = dissimilar.

Table 5 shows strong and positive relationships between mean support and maximum ($r = .82$) and minimum ($r = .70$) support, as well as between mean trust and maximum ($r = .91$) and minimum trust ($r = .71$) level 2 variables. A level 2 disclosure variables representing aggregated values for each individual, significantly and positively related mean and maximum support and trust, risk propensity and organizational policies. Disclosure also significantly related to the two proposed level 2 control variables: participant gender (i.e. female) and time at the organization (i.e. tenure).

Table 5

Means, Standard Deviations, and Intercorrelations of Level 2 Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
Disclosure†	3.01	.83										
Mean Support	3.28	.40	.43**									
Minimum Support	2.97	.64	.12	.82**								
Maximum Support	3.55	.40	.58**	.70**	.20*							
Mean Trust	2.89	.60	.33**	.05	-.26**	.37**						
Minimum Trust	2.52	.55	.12	.18*	.18**	.09	.71**					
Maximum Trust	3.23	.82	.36**	-.02	-.41**	.45**	.91**	.42**				
Risk Propensity	2.93	.88	.37**	.30**	.17*	.35**	.01	-.08	.06	(.60)		
OrgPolicies	.90	1.29	.53**	.12	-.15	.35**	.47**	.16*	.46**	.14		
Female	.31	.46	.23**	-.01	-.14	.16*	.07	-.16*	.14	.11	.05	
Tenure	3.48	2.95	.16*	.08	-.08	.22**	.21**	.13	.23**	.05	.26**	-.01

† Disclosure values aggregated for each participant

Note. * $p < .05$, ** $p < .01$. OrgPolicies = Organizational Policies; Female = Female participant (0 = no, 1 = yes), Tenure = Time at the Organization (in years).

HLM Justification

Before testing hypotheses, it is important to justify the use of hierarchical linear modeling for the dependent variable of disclosure decisions. That is, variance in the dependent variable accounted for by differences between participants should be sufficiently high enough to necessitate a multi-level model. The intraclass correlation for the dependent variable *disclosure decision* was calculated for all participants that reported having more than one coworker (N = 125). The result (ICC1 = .48) meets the suggested criteria of a greater than 10 % explanation of variance in the dependent variable (Lee, 2000) and 85 (68 %) participants reported making at least two distinct disclosure decisions within their network (e.g. explicitly disclosed to two coworkers, avoided with one coworker), thus warranting the use of HLM in analyses.

Hypothesis Testing

All analyses included control variables at level 1 (race dissimilarity) and level 2 (participant gender and time at organization). Age dissimilarity and gender dissimilarity were not included as level 1 control variables as they did not significantly correlate with the dependent variable. Control variables are included in all tables summarizing tests of hypotheses, but are excluded from level 1 and level 2 models discussed here in order to maintain clarity in the presentation of results. All variables were grand mean centered.

Hypothesis 1 predicted that coworker support and coworker trust would be related to a higher level of disclosure. This hypothesis was tested with two separate hierarchical linear models (to control for nesting of coworker relationships within persons), one for support and one for trust. Both models tested these relationships at level 1:

Level 1: $Y_{ij} = b_{0j} + b_{1j}Support_{ij} + r_{ij}$

Level 1: $Y_{ij} = b_{0j} + b_{1j}Trust_{ij} + r_{ij}$

where Y_{ij} is disclosure for the ith target relationship for the jth focal person, b_{0j} is the focal person intercept for disclosure (average disclosure to all targets by focal person *j*), *Support/trust* is the perception of supportiveness/trustworthiness for ith target relationship for the jth focal person, weighted by slope b_{1j}, and r_{ij} is the error term.

Table 6

Hypothesis 1 Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)
Intercept	3.06** (.06)	3.05** (.06)
Controls		
L1RaceDiss	-.28** (.09)	-.29** (.08)
L2PartGender	.35** (.13)	.38** (.06)
L2OrgTime	.04*(.02)	.04* (.12)
Predictor		
L1Support		.38** (.06)
Random Effects	**Model 1** variance	**Model 2** variance
Intercept	.35	.31
Residual	.46	.43
Model Fit	**Model 1**	**Model 2**
Deviance	1006.24	974.42**
Parameters	6	7

Note. * $p < .05$, ** $p < .01$

Table 6 shows the results for coworker support. Including coworker support (Table 6, Model 2) improved model fit compared to a model that only included control variables (Table 6, Model 1; $\chi 2$ difference = 31.83, *df difference* = 1, $p < .01$). As seen in Table 7, including coworker trust (Table 7, Model 2) also improved model fit compared to the control variables

model (Table 7, Model 1; $\chi 2$ difference = 14.23, *df difference* = 1, $p < .01$). Greater coworker support ($b = .38$, $p < .01$) and coworker trust ($b = .22$, $p < .01$) were significantly related to greater disclosure, supporting Hypothesis 1.

Table 7

Hypothesis 1 Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)
Intercept	3.06** (.06)	3.08** (.06)
Controls		
L1RaceDiss	-.28** (.09)	-.24** (.09)
L2PartGender	.35** (.13)	.33** (.12)
L2OrgTime	.04*(.02)	.03† (.02)
Predictor		
L1Trust		.22** (.05)
Random Effects	**Model 1** variance	**Model 2** variance
Intercept	.35	.31
Residual	.46	.46
Model Fit	**Model 1**	**Model 2**
Deviance	1006.24	992.01**
Parameters	6	7

Note. * $p < .05$, ** $p < .01$

To test Hypotheses 2a-2c, which predicted moderating effects of the mean, minimum, and maximum values of support/trust on the relationship between level 1 support/trust and disclosure, I conducted HLM analyses testing for the main effects and interactions of the level 2 variables (mean, minimum, maximum) separately for both support and trust. Only participants with more than one coworker (N = 125) were included in HLM models. Level 2 equations were included in six separate HLM models to test for main effects and cross-level interactions of each person-level (level 2) network variable:

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Support}_{ij} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{MeanSupport} + r_{0j}$

$b_{1j} = a_{10} + a_{11}\text{MeanSupport} + r_{1j}$

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Support} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{MinSupport} + r_{0j}$

$b_{1j} = a_{10} + a_{11}\text{MinSupport} + r_{1j}$

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Support}_{ij} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{MaxSupport} + r_{0j}$

$b_{1j} = a_{10} + a_{11}\text{MaxSupport} + r_{1j}$

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Trust}_{ij} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{MeanTrust} + r_{0j}$

$b_{1j} = a_{10} + a_{11}\text{MeanTrust} + r_{1j}$

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Trust}_{ij} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{MinTrust} + r_{0j}$

$b_{1j} = a_{10} + a_{11}\text{MinTrust} + r_{1j}$

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Trust} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{MaxTrust} + r_{0j}$

$b_{1j} = a_{10} + a_{11}\text{MaxTrust} + r_{1j}$

with a_{00} representing the grand mean intercept of support/trust across persons, a_{01} representing the extent to which each participant varied in disclosure based on the mean/maximum/minimum of their coworker support/trust network, a_{10} representing the grand mean slope of support/trust across persons, and a_{11} representing the interaction between coworker support/trust and the mean/maximum/minimum of the support/trust network. In these models, support and trust variables at level 1 were also entered into the models as random effects, as allowing them to vary randomly across participants improved both support and trust models ($\chi 2$ difference = 14.78, *df difference* = 1, $p < .01$; $\chi 2$ difference = 8.80, *df difference* = 1, $p < .01$; respectively).

Before testing the slopes-as-outcomes models, I tested the intercepts-as-outcomes models to examine the main effect of the mean, minimum, and maximum on disclosure, for both support (see Tables 8-10) and trust (see Tables 11-13) networks. For support, the addition of the mean support of the network as a level 2 main effect (Table 8, Model 3) did not significantly improve the fit of the model compared to a model including only coworker support as a level 1 fixed and random effect (Table 8, Model 2; $\chi 2$ difference = 2.591, *df difference* = 1, *ns*) of nor did mean support of the network relate to disclosure. In the slopes-as-outcomes model, mean support of the network did not interact significantly with coworker support (Table 8, Model 4) nor improve

the fit of the model compared to the level 2 main effects model (Table 8, Model 3; $\chi 2$ difference = -2.44, *df difference* = 1, *ns*).

Table 8

Hypothesis 2a Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	3.09** (.06)	3.09** (.06)	3.08** (.06)	3.06** (.07)
Controls				
L1RaceDiss	-.27** (.09)	-.25**(.08)	-.26** (.08)	-.26* (.08)
L2PartGender	.34* (.13)	.21† (.12)	.23† (.12)	.23† (.12)
L2OrgTime	.04* (.02)	.04*(.02)	.04* (.02)	.04* (.02)
Predictor				
L1Support	.33** (.06)	.43**(.08)	.40** (.08)	.44** (.09)
L2MeanSupport			.27 (.17)	.20 (.18)
L1Support* L2MeanSupport				.17 (.22)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.31	.31	.31	.30
L1Support		.08	.08	.08
Residual	.43	.40	.40	.40

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	884.21	869.43**	866.84	869.28
Parameters	7	8	9	10

Note. * $p < .05$, ** $p < .01$

The addition of minimum support of the network as a level 2 main effect (Table 9, Model 3) also did not significantly improve the fit of the model compared to a model including only coworker support as a level 1 fixed and random effect (Table 9, Model 2; $\chi 2$ difference = -.91, *df difference* = 1, *ns*), nor did it significantly relate to disclosure. However, minimum support of the network did interact significantly with level 1 coworker support ($b = .30$, $p < .05$), although

this interaction (Table 9, Model 4) did not significantly improve model fit compared to the level 2 main effects model (Table 9, Model 3; $\chi 2$ difference = 1.49, *df difference* = 1, *ns*).

Table 9

Hypothesis 2b Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)	**Model 5** coefficient (standard error)	**Model 6** coefficient (standard error)
Intercept	3.09** (.06)	3.09** (.06)	3.09** (.06)	3.03** (.06)	3.03** (.06)	3.04** (.06)
Controls						
L1RaceDiss	-.27** (.09)	-.25**(.08)	-.24** (.08)	-.24** (.08)	-.20* (.08)	-.20* (.08)
L2PartGender	.34* (.13)	.21† (.12)	.20 (.12)	.18 (.12)	.13 (.12)	.11 (.12)
L2OrgTime	.04* (.02)	.04*(.02)	.04* (.02)	.04* (.02)	.02 (.02)	.03 (.02)
Predictor						
L1Support	.33** (.06)	.43**(.08)	.43** (.07)	.64** (.11)	.46** (.12)	.43** (.12)
L2MinSupport			-.04 (.09)	-.20† (.11)	-.63** (.16)	-.17 (.10)
L1Support* L2MinSupport				.30* (.12)	.20 (.12)	.17 (.12)
L2MeanSupport					1.09** (.31)	
L2MaxSupport						.79** (.20)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance	**Model 5** variance	**Model 6** variance
Intercept	.31	.31	.31	.28	.25	.25
L1Support		.08	.08	.08	.07	.08
Residual	.43	.40	.40	.41	.40	.40

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Deviance	884.21	869.43**	870.34	868.86	855.54**	853.74**
Parameters	7	8	9	10	11	11

Note. * $p < .05$, ** $p < .01$

As Hypothesis 2a-2c are competing hypotheses, it is important that for significant findings, model fit is *not* improved with the addition of other network variables. Compared to

the model including an interaction effect between minimum support of the network and level 1 support (Table 9, Model 4), model fit was significantly improved with the addition of mean support of the network as a main effect variable (Table 9, Model 5; $\chi 2$ difference = 13.32, *df difference* = 1, $p < .01$) and was also significantly improved with the addition of maximum support of the network as a main effect (Table 9, Model 6; $\chi 2$ difference = 15.12, *df difference* = 1, $p < .01$). In both models, minimum support no longer revealed a significant cross-level interaction with level 1 support with the addition of either mean or maximum support of the network as main effects. These results do *not* support a significant cross-level interaction of minimum support and level 1 support, controlling for mean and maximum support.

The addition of maximum support of the network as a level 2 main effect (Table 10, Model 3) significantly improved the fit of the model compared to a model including only coworker support as a level 1 fixed and random effect (Table 10, Model 2; $\chi 2$ difference = 18.27, *df difference* = 1, $p < .01$) and positively related to disclosure ($b = .85$, $p < .01$); however, the addition of maximum support as cross-level interaction variable (Table 10, Model 4) did not improve model fit compared to the level 2 main effects model (Table 10, Model 3; $\chi 2$ difference = -1.74, *df difference* = 1, *ns*) and was not related to disclosure.

Compared to a model with a level 2 maximum support of the network main effect only (Table 10, Model 4), model fit was not improved with the addition of a mean support of the network main effect (Table 10, Model 5; $\chi 2$ difference = -2.59, *df difference* = 1, *ns*), nor was it improved with the addition of a minimum support of the network main effect (Table 10, Model 6; $\chi 2$ difference = -3.93, *df difference* = 1, *ns*). In both Models 5 and 6, the regression coefficient for maximum support of the network remained significant ($b = .96$, $p < .01$; $b = .87$, $p < .01$; respectively). These results indicate a significant main effect of maximum support of the

network on disclosure, *above and beyond* the effects of mean and minimum support of the network. Overall for support, Hypotheses 2a-2c were not supported, although maximum support of the network did reveal a main and positive relationship with disclosure.

Table 10

Hypothesis 2c Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)	**Model 5** coefficient (standard error)	**Model 6** coefficient (standard error)
Intercept	3.09** (.06)	3.09** (.06)	3.07** (.06)	3.05** (.06)	3.07** (.06)	3.07** (.06)
Controls						
L1RaceDiss	-.27** (.09)	-.25**(.08)	-.21* (.08)	-.20* (.08)	-.20* (.08)	-.19* (.08)
L2PartGender	.34* (.13)	.21†(.12)	.14 (.11)	.14 (.11)	.12 (.12)	.11 (.12)
L2OrgTime	.04* (.02)	.04*(.02)	.03† (.02)	.03† (.02)	.03 (.02)	.03 (.02)
Predictor						
L1Support	.33** (.06)	.43**(.08)	.30** (.08)	.25** (.09)	.31** (.08)	.31** (.12)
L2MaxSupport			.85** (.20)	.88** (.20)	.96** (.23)	.87** (.20)
L1Support* L2MaxSupport				.25 (.23)		
L2MeanSupport					-.16 (.19)	
L2MinSupport						-.09 (.08)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance	**Model 5** variance	**Model 6** variance
Intercept	.31	.31	.26	.28	.27	.26
L1Support		.08	.08	.08	.08	.08
Residual	.43	.40	.40	.41	.40	.40

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Deviance	884.21	869.43**	851.16**	852.90	853.75	855.09
Parameters	7	8	9	10	10	10

Note. * $p < .05$, ** $p < .01$

For trust, the addition of the mean of the network as a main effect (Table 11, Model 3) significantly improved the fit of the model compared to a model including only coworker trust as

a level 1 fixed and random effect (Table 11, Model 2; $\chi 2$ difference = 5.60, *df difference* = 1, $p < .02$) and positively related to disclosure ($b = .28$, $p < .02$), but mean trust of the network did not interact significantly with level 1 coworker trust nor improve the fit of the model compared to the level 2 main effect model (Table 11, Model 3; $\chi 2$ difference = -4.87, *df difference* = 1, *ns*).

Table 11

Hypothesis 2a Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)	**Model 5** coefficient (standard error)	**Model 6** coefficient (standard error)
Intercept	3.12** (.06)	3.14** (.06)	3.10** (.06)	3.09** (.07)	3.09** (.06)	3.09** (.06)
Controls						
L1RaceDiss	-.22* (.09)	-.21* (.08)	-.20* (.08)	-.20* (.08)	-.19* (.08)	-.18* (.08)
L2PartGender	.29* (.13)	.20 (.12)	.21† (12)	.21† (.12)	.09 (.13)	.14 (.12)
L2OrgTime	.04* (.02)	.03† (.02)	.03† (.02)	.03† (.02)	.03† (.02)	.02 (.02)
Predictor						
L1Trust	.22* (.05)	.27** (.05)	.17* (.07)	.16* (.07)	.14* (.07)	.15* (.07)
L2MeanTrust			.28* (.11)	.27* (.12)	.54** (.16)	-.05 (.20)
L1 Trust * L2MeanTrust				.02 (.09)		
L2MinTrust					-.30* (.13)	
L2MaxTrust						32* (.16)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance	**Model 5** variance	**Model 6** variance
Intercept	.28	.29	.28	.28	.26	.27
L1Trust		.03	.03	.03	.04	.03
Residual	.45	.42	.42	.42	.42	.42

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Deviance	893.21	884.41**	878.81*	883.68	877.69	878.57
Parameters	7	8	9	10	10	10

Note. * $p < .05$, ** $p < .01$

Compared to the trust mean of the network main effect model (Table 11, Model 3), model fit was not significantly improved with the addition of minimum trust of the network as a

main effect (Table 11, Model 5; $\chi 2$ difference = 1.12, *df difference* = 1, *ns*) nor did it improve with the addition of maximum trust of the network as a main effect (Table 11, Model 6; $\chi 2$ difference = .24, *df difference* = 1, *ns*). However, the regression coefficient for mean trust of the network was no longer significant when the maximum trust of the network variable was included in the model. These results do not support mean trust as a significant predictor of disclosure controlling for the effects of other network variables.

The addition of minimum trust of the network as a level 2 main effect (Table 12, Model 3) also did not significantly improve the fit of the model compared to a model including only coworker trust as a level 1 fixed and random effect (Table 12, Model 2; $\chi 2$ difference = -.92, *df difference* = 1, *ns*), nor did it significantly relate to disclosure. Minimum trust also did not significantly interact (Table 12, Model 4) with level 1 coworker trust nor did it improve model fit ($\chi 2$ difference = -3.26, *df difference* = 1, *ns*) compared to the level 2 minimum trust of the network main effects model (Table 12, Model 3).

Table 12

Hypothesis 2b Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	3.12** (.06)	3.14** (.06)	3.14** (.06)	3.11** (.06)
Controls				
L1RaceDiss	-.22* (.09)	-.21* (.08)	-.21* (.08)	-.21* (.08)
L2PartGender	.29* (.13)	.20 (.12)	.21 (.13)	.22† (.13)
L2OrgTime	.04* (.02)	.03† (.02)	.03† (.02)	.03† (.02)
Predictor				
L1Trust	.22* (.05)	.27** (.05)	.27** (.06)	.28** (.06)
L2MinTrust			.03 (.10)	-.08 (.13)
L1 Trust * L2MinTrust				.11 (.08)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.28	.29	.29	.28

Table 12 (cont'd)

L1Trust		.03	.03	.03
Residual	.45	.42	.42	.42
Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	893.21	884.41**	885.33	888.59
Parameters	7	8	9	10

Note. * $p < .05$, ** $p < .01$

The addition of maximum trust of the network as a level 2 main effect (Table 13, Model 3) significantly improved the fit of the model compared to a model including only coworker trust as a level 1 fixed and random effect (Table 13, Model 2; $\chi 2$ difference = 9.00, *df difference* = 1, $p < .005$) and positively related to disclosure ($b = .28$, $p < .005$); however, the addition of maximum trust of the network as cross-level interaction variable (Table 13, Model 4) did not improve model fit ($\chi 2$ difference = -4.13, *df difference* = 1, *ns*) compared to the level 2 main effects model (Table 13, Model 3) and was not related to disclosure.

Table 13

Hypothesis 2c Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)	**Model 5** coefficient (standard error)	**Model 6** coefficient (standard error)
Intercept	3.12** (.06)	3.14** (.06)	3.09** (.06)	3.05** (.07)	3.09** (.06)	3.09** (.06)
Controls						
L1RaceDiss	-.22* (.09)	-.21* (.08)	-.18* (.08)	-.18* (.08)	-.18* (.08)	-.18* (.08)
L2PartGender	.29* (.13)	.20 (.12)	.15 (.12)	.16 (.12)	.14 (.12)	.11 (.13)
L2OrgTime	.04* (.02)	.03† (.02)	.02 (.02)	.02 (.02)	.02 (.02)	.02 (.02)
Predictor						
L1Trust	.22* (.05)	.27** (.05)	.14* (.07)	.08 (.09)	.15* (.07)	.15* (.07)
L2MaxTrust			.28** (.09)	.28** (.09)	.32* (.16)	.31** (.09)
L1 Trust * L2MaxTrust				.08 (.07)		
L2MeanTrust					-.05 (.20)	
L2MinTrust						-.09 (.10)

Table 13 (cont'd)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance	**Model 5** variance	**Model 6** variance
Intercept	.28	.29	.27	.27	.27	.27
L1Trust		.03	.03	.03	.03	.03
Residual	.45	.42	.42	.42	.42	.42
Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Deviance	893.21	884.41**	875.41**	879.54	878.57	879.28
Parameters	7	8	9	10	10	10

Note. * $p < .05$, ** $p < .01$

Compared to the trust maximum of the network main effect model (Table 13, Model 3), model fit was not improved with the addition of mean trust of the network as a main effect (Table 13, Model 5; $\chi 2$ difference = -3.16, *df difference* = 1, *ns*) nor did it improve with the addition of minimum trust as a main effect (Table 13, Model 6; $\chi 2$ difference = -3.87, *df difference* = 1, *ns*). In both Models 5 and 6, the regression coefficient for maximum trust of the network remained significant ($b = .32$, $p < .05$; $b = .31$, $p < .01$; respectively). These results indicate a significant main effect of maximum support on disclosure, *above and beyond* the effects of mean and minimum trust. Overall for trust, Hypotheses 2a-2c were not supported. Similar to the support models, results revealed a significant and positive relationship between maximum trust of the network and disclosure.

As discussed in the methods section, Hypothesis 2d was tested at level 1, examining the interaction between coworker support/trust and fate control at the coworker relationship level, and is no longer viewed as a competing hypothesis,. Thus, the final models only included Level 1 equations:

$$\text{Level 1: } Y_{ij} = b_{0j} + b_{1j}\text{Support} + b_{2j}\text{FateControl} + b_{3j}\text{Support*FateControl} + r_{ij}$$

Level 1: $Y_{ij} = b_{0j} + b_{1j}Trust + b_{2j}FateControl + b_{3j}Trust*FateControl + r_{ij}$

The addition of fate control as a Level 1 main effect (Table 14, Model 3) did not improve the fit of the model compared to a model including only coworker support as a level 1 fixed and random effect (Table 14, Model 2; $\chi 2$ difference = -2.51, *df difference* = 1, *ns*) nor did it relate to disclosure. The addition of the interaction term (support*fate control; Table 14, Model 4) compared to the level 1 fate control main effect model (Table 14, Model 3) did not improve the fit of the model ($\chi 2$ difference = -5.66, *df difference* = 1, *ns*) nor did it relate to disclosure.

Table 14

Hypothesis 2d Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	3.09** (.06)	3.09** (.06)	3.09** (.06)	3.09** (.06)
Controls				
L1RaceDiss	-.27** (.09)	-.25**(.08)	-.24**(.08)	-.25**(.08)
L2PartGender	.34* (.13)	.21†(.12)	.20†(.12)	.20†(.12)
L2OrgTime	.04* (.02)	.04*(.02)	.04*(.02)	.04*(.02)
Predictor				
L1Support	.33** (.06)	.43**(.08)	.43** (.07)	.49** (.17)
L1FateControl			.02 (.04)	.09 (.19)
L1Support* L1FateControl				-.02 (.06)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.31	.31	.31	.31
L1Support		.08	.08	.08
Residual	.43	.40	.40	.41

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	884.21	869.43**	871.94	877.60
Parameters	7	8	9	10

Note. * $p < .05$, ** $p < .01$

The results for trust were similar: the addition of fate control as a Level 1 main effect (Table 15, Model 3) to the trust main effect model did not improve model fit compared to a model including only coworker trust as a level 1 fixed and random effect (Table 15, Model 2; $\chi 2$ difference = -2.32, *df difference* = 1, *ns*) or relate to disclosure. The addition of the interaction term (trust*fate control; Table 15, Model 4) did not improve the fit of the model compared to the level 1 fate control main effect model (Table 14, Model 3; $\chi 2$ difference = -6.29, *df difference* = 1, *ns*) or relate to disclosure. Thus, Hypothesis 2d was not supported.

Table 15

Hypothesis 2d Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	3.12** (.06)	3.14** (.06)	3.14** (.06)	3.14** (.06)
Controls				
L1RaceDiss	-.22* (.09)	-.21* (.08)	-.22* (.09)	-.22* (.09)
L2PartGender	.29* (.13)	.20 (.12)	.20 (.12)	.20 (.12)
L2OrgTime	.04* (.02)	.03† (.02)	.03* (.02)	.03* (.02)
Predictor				
L1Trust	.22* (.05)	.27** (.05)	.28** (.05)	.28* (.14)
L1FateControl			-.02 (.04)	-.02 (.16)
L1 Trust * L1FateControl				.00 (.04)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.28	.29	.30	.30
L1Trust		.03	.03	.03
Residual	.45	.42	.42	.42

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	893.21	884.41**	886.73	893.02
Parameters	7	8	9	10

Note. * $p < .05$, ** $p < .01$

Hypotheses 3a – 3c and Hypothesis 4 predicted that identity centrality, self-monitoring, risk propensity, and organizational policies would moderate the relationships between support/trust and disclosure. As explained in the methods section, only risk propensity and organizational policies were examined (due to low reliabilities for self-monitoring and identity centrality scales), using separate HLM models for support and trust:

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Support} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{OrganizationalPolicies} + a_{02}\text{RiskPropensity} + r_{0j}$

Level 2: $b_{1j} = a_{10} + a_{11}\text{OrganizationalPolicies} + a_{12}\text{RiskPropensity} + r_{1j}$

Level 1: $Y_{ij} = b_{0j} + b_{1j}\text{Trust} + r_{ij}$

Level 2: $b_{0j} = a_{00} + a_{01}\text{OrganizationalPolicies} + a_{02}\text{RiskPropensity} + r_{0j}$

Level 2: $b_{1j} = a_{10} + a_{11}\text{OrganizationalPolicies} + a_{12}\text{RiskPropensity} + r_{1j}$

I first examined the intercepts-as-outcomes models, followed by slopes-as-outcomes models, for both support and trust models. Risk propensity and organizational policies, entered as level 2 main effects (Table 16, Model 3) improved model fit compared to the level 1 support fixed and random effects model (Table 16, Model 2; $\chi 2$ difference = 50.66, *df difference* = 1, $p < .01$). Risk propensity and organizational policies related significantly and positively to disclosure ($b = .20$, $p < .01$; $b = .25$, $p < .01$; respectively). The addition of risk propensity and organizational policies as cross-level interaction variables with support (Table 16, Model 4)

indicated that organizational policies significantly interacted with support to predict disclosure (b = -.09, p < .05),

Entering risk propensity and organizational policies as main effects (Table 17, Model 3) also improved model fit compared to the level 1 trust fixed and random effects model (Table 17, Model 2; $\chi 2$ difference = 43.53, *df difference* = 1, p < .01). Risk propensity and organizational policies related significantly and positively to disclosure (b = .26, p < .01; b = .22, p < .01; respectively),

Table 16

Hypothesis 3c and 4 Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	3.04** (.06)	3.05** (.06)	3.01** (.05)	3.02** (.05)
Controls				
L1RaceDiss	-.29** (.08)	-.26**(.08)	-.27**(.08)	-.26** (.08)
L2PartGender	.34** (.12)	.19 (.11)	.19* (.10)	.18† (.10)
L2OrgTime	.04* (.02)	.04*(.02)	.01 (.01)	.01 (.01)
Predictor				
L1Support	.36** (.06)	.50**(.08)	.41** (.07)	.45** (.07)
L2RiskPropensity			.20** (.05)	.20** (.06)
L2OrgPolicies			.25** (.03)	.27** (.04)
L1Support* L2RiskProp				-.07 (.08)
L1Support* L2OrgPolicies				-.09* (.05)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.32	.32	.15	.16
L1Support		.10	.06	.06
Residual	.43	.40	.40	.40

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	956.42	938.47**	887.81**	890.18
Parameters	7	8	10	12

Note. * p < .05, ** p < .01

As with support, the addition of risk propensity and organizational policies as cross-level interaction variables with trust (Table 17, Model 4) indicated that organizational policies significantly interacted with support to predict disclosure (b = -.09, p < .05),

Table 17

Hypothesis 3c and 4 Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	3.08** (.06)	3.10** (.06)	3.05** (.05)	3.09** (.05)
Controls				
L1RaceDiss	-.25** (.09)	-.23** (.08)	-.26** (.08)	-.22** (.08)
L2PartGender	.30* (.12)	.21† (.12)	.19† (.10)	.18† (.10)
L2OrgTime	.04† (.02)	.03† (.02)	.01 (.01)	.01 (.01)
Predictor				
L1Trust	.24** (.05)	.29** (.05)	.18** (.05)	.26** (.06)
L2RiskPropensity			.26** (.06)	.26** (.06)
L2OrgPolicies			.22** (.04)	.25** (.04)
L1Trust* L2RiskProp				-.08 (.05)
L1Trust* L2OrgPolicies				-.09** (.03)

Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.31	.31	.17	.17
L1Trust		.03	.01	.01
Residual	.45	.42	.42	.41

Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	968.72	958.41**	914.88**	914.09
Parameters	7	8	10	12

Note. * p < .05, ** p < .01

Figure 2 depicts the nature of the interaction between support and organizational policies. Tests of simple slopes, using Preacher, Curran, & Bauer's (2006) computations for examining cross-level interactions, suggest that when organizational policies are present, the relationship between relationship quality variables (support and trust) is less strong than when those policies

are not present, as predicted. Specifically, when organizational policies are low (i.e. 1 standard deviation below the mean of organizational policies), the relationship between support and disclosure are large and positive (b = .59, p < .01). When organizational policies are high (i.e. 1 standard deviation below the mean of organizational policies), the relationship between support and disclosure is also positive, but smaller in size (b = .33, p < .01).

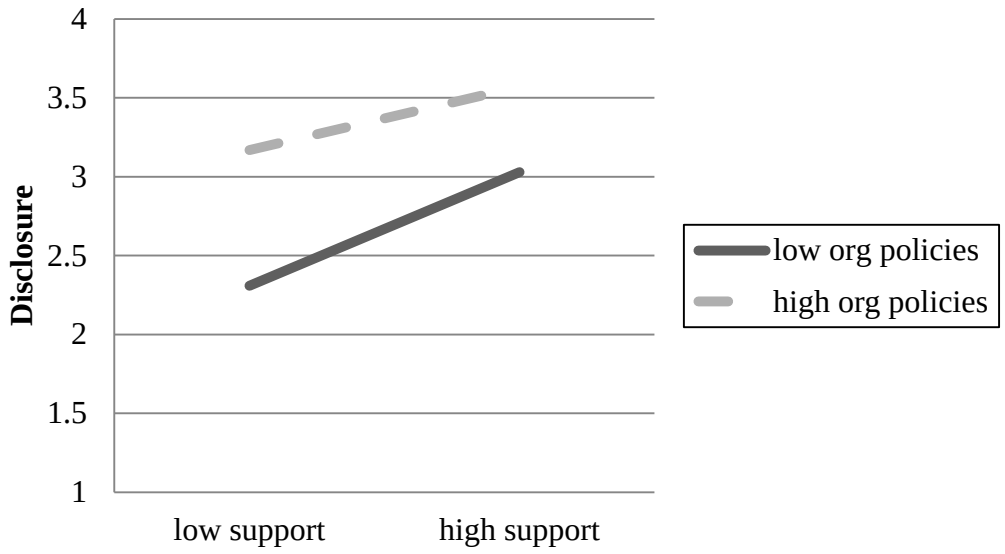

Figure 2. Coworker Support X Organizational Policies Interaction

This same pattern emerged for interactions between trust and organizational policies (see Figure 3). When organizational policies are low, the relationship between trust and disclosure was larger (b = .38, p < .01) than when organizational policies are high (b = .14, p < .01). Together, these results support Hypothesis 4. Hypothesis 3c was not supported, although risk propensity did show a significant relationship with disclosure, controlling for level 1 main effects of support and trust.

Additional Analyses

As stated in the methods, the LGB-friendly policies variable was conceptualized as the number of times the individual indicated "yes" for having a particular policy. This effectively treats individuals who said "I don't know" the same as those who said "no" to particular policies. In order to correctly interpret the organizational policies interaction findings with support and trust, it is necessary to be able to separate the effects of those individuals who said "I don't know" from those who said "no". One way to correct for this would be to analyze the LGB-policies effect with individuals who responded "I don't know" to any single policy item taken out of the sample. This was deemed to be an undesirable option, however, due to the low resulting N (45 participants left). Although missing data on single policy items ranged from 23.1% of the sample to 41.9% of the sample, the data indicates that the group of individuals who said they did not know about the existence of a particular policy (e.g. same-sex benefits) were not the same group of individuals who did not know about the existence of another policy (e.g. diversity training), leading to the exclusion of more than two-thirds of the original sample.

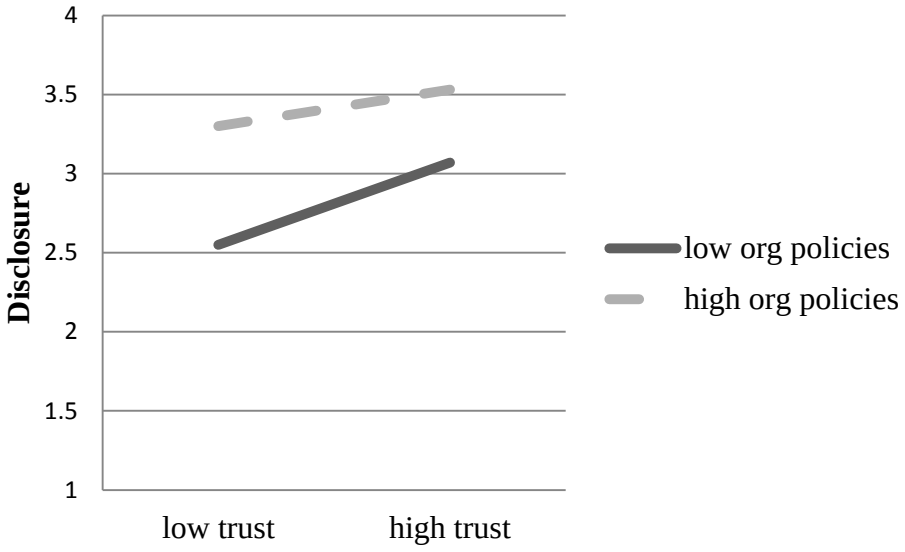

Figure 3. Coworker Trust X Organizational Policies Interaction

Instead, another strategy was taken and the main and interactive effects of each of the four organizational policies (i.e. non-discrimination policy, diversity training, same-sex partner benefits, support for LGB-related events) were examined separately, taking out only those individuals who responded "I don't know" to the particular policy being tested. HLM analyses similar to the ones conducted for Hypothesis 4 were used, with the specific organizational policy substituted for the LGB-friendly policy variable. The pattern of the results was similar to the results found using the LGB-friendly policy variable. Specifically, each policy had a significant and positive relationship with disclosure and the interactions between each policy and support/trust showed the same buffering pattern shown in Figures 1 and 2. Although displaying a pattern similar to the interactions found for Hypothesis 4, it is important to note that interactions between two of the policies and support (diversity training: $b = -.27$, $p = .11$; same-sex partner benefits: $b = -.36$, $p = .05$) and one of the policies and trust (same-sex partner benefits: $b = -.25$, $p = .05$) were no longer significant, although this could be due to the decrease in sample size by fifty-six (diversity training policy) and fifty-nine (same-sex partner benefits) people.

Post-Hoc Power Analyses

Post-hoc power analyses were conducted to examine the sufficiency of the sample size to detect certain effects, if present. These analyses indicated that power was low ($.08 \leq 1\text{-}\beta \leq .52$) to detect cross-level interactions and main effects for nonsignificant network variables, as well as for cross-level interactions for risk propensity. Inputting parameters from analyses into PINT software (Snijders & Bosker, 1993; Snijders, Bosker, & Guldemond, 2003) to determine needed sample size for a two-level design with an average of 3 coworkers per individual indicated that

for the nonsignificant effect with the largest amount of power (minimum support main effect, 1-β = .52), the level 2 sample size would have had to have been at least 820 participants.

Study 1 Discussion

The purpose of Study 1 was to examine the antecedents of stigma disclosure to coworkers at both coworker relationship (level 1) and between-persons (level 2) levels, using a sample of lesbian, gay, and bisexual (LGB) employees. Survey results indicated that LGB employees disclosed to a greater extent to a coworker who was perceived as supportive and trustworthy, as opposed to one who was perceived as less supportive and less trustworthy. Further, examination of relationships at the coworker network level (i.e. representation of one's group of coworkers) indicated that LGB employees disclosed to a greater extent to a given coworker when the maximum value of support and trust among their coworkers was high, as compared to low. Extent of disclosure was also predicted by the employee's propensity to take risks (i.e. greater propensity to risk related to greater disclosure) and organizational policies. The organizational policies main effect was qualified by an interaction, in which having a greater amount of LGB-friendly policies in place seemed to buffer the relationship between support/trust and disclosure. That is, LGB employees were more likely to disclose to coworkers *regardless of their support or trust* if LGB-friendly policies were in place.

The two significant coworker relationship findings (coworker support and coworker trust) in testing Hypothesis 1 support self-disclosure theories (e.g. Altman & Taylor, 1973; Derlega, Metts, Petronio, & Margulis, 1993) that have discussed the importance of a high quality relationship as a precursor for disclosing highly personal information. These results, as well as the fact that over two-thirds of participants who had more than one coworker made different

disclosure decisions to those coworkers, highlight the need for research examining the characteristics of specific relationships that may affect disclosure. Although almost half of the variance (ICC1 = .48) was explained by between-person effects, an individual is a very strong context and that statistic also means that a significant amount of variance *cannot* be accounted for by between-person effects.

Although the tests examining the effects of coworker network variables on disclosure (competing Hypothesis 2a – 2c) were not supported, conclusions regarding the usefulness of different support/trust network perspectives can be drawn from the examination of the network variable main effects. Specifically, maximum support and trust of the network predicted disclosure above and beyond the effects of the other network variables (mean and minimum support/trust). The same could not be said for the relationships between mean and minimum support/trust of the network and disclosure. These results suggest that having at least one highly supportive and trustworthy coworker is more important than the absence of a less supportive and trustworthy coworker or a group of coworkers who, on average, are supportive and trustworthy. This supports a potential positive threshold effect of supportive relationships, in which having at least one supportive person can lead to positive outcomes (e.g. Berkman & Syme, 1979; House, Robbins, & Metzer, 1982; Kroenke et al., 2006; Varvel et al., 2007). It also more specifically speaks to the importance of LGB individuals having an *ally,* or a person to count on to support them and treat them positively (Brooks & Edwards, 2009; Washington & Evans, 1991). Importantly, this is the first study that has examined different conceptualizations of support and trust at a group or network level, in the context of stigma disclosure.

Although Hypothesis 3c was not supported, the significant main effect of risk propensity on disclosure supports past theory on stigma disclosure (Clair et al., 2005) which predicted that

individuals more likely to take risks will be more likely to disclose. This finding may seem intuitive, as disclosure can be a risky decision. However, few empirical studies have examined personality-type variables in the context of disclosure (see Chrobot-Mason, Button, & DiClementi, 2001 and Griffith & Hebl, 2002 for two exceptions), making this finding important to the development of the stigma disclosure literature.

The support for Hypothesis 4 supports the idea that the environment influences disclosure of invisible stigmas in general (Clair et al., 2005; Ragins, 2008) and for sexual orientation disclosure specifically (Griffith & Hebl, 2002). This study is the first (to my knowledge) that examined supportive organizational policies as a moderator of the relationship between target characteristics and disclosure. These results indicate that having a workplace that shows its support of one's identity through policies can encourage (or allow for) disclosure to a coworker, even in cases of a low quality relationship.

Although this study contributes to the disclosure literature through its integration of target relationship characteristics taken from self-disclosure theories, inclusion of relationship network variables that have not been previously examined nor compared, and examination of previously untested individual and organizational relationships with disclosure, there are several limitations to be addressed. First, although this sample was diverse in terms of age (age range from 20 years old to 70 years old), the sample was not diverse in terms of race/ethnicity, with an over 70 percent White sample. Further, most non-White race/ethnicity groups were too small ($N < 10$) for meaningful comparisons. It is impossible with a hidden population such as LGB individuals to know the exact representativeness of one's sample; however, there is the potential that these results cannot be generalized to certain LGB populations with low numbers in this sample, such as African American LGB individuals. Future research specifically targeting these groups (and

potential intersections between racial/ethnic identity and sexual orientation identity) will be needed to understand the extent to which these results generalize across racial/ethnic groups.

Another limitation of this sample is the size of the networks and the size of the sample overall. Over half of participants (N = 66) with more than one coworker only reported two coworkers in their network, which makes the minimum/maximum and mean support and trust highly correlated. The testing of model fit indices with the addition of different network variables helped parse apart the different network variable effects; however, future research with larger networks will enable researchers to test minimum, maximum, and mean values in the same model simultaneously. Further, post-hoc power analyses indicate that analyses for certain main effects (minimum, mean) and interactive effects (mean, minimum, maximum, risk propensity) were under-powered. These particular effects, if present, are small in comparison to other significant effects (e.g. organizational policies, maximum support/trust), but it is still important to note that they could not be detected with the current sample size.

Lastly, this study examined antecedents of disclosure using an LGB sample, which is arguably the most frequently-examined identity in the stigma disclosure literature. Thus, this area of research needs to examine relationships using other identities in order to substantiate the claims of the model across invisible stigmas. This limitation is directly addressed in Study 2.

Study 2

The goal of Study 2 is to generalize hypotheses to another invisible stigmatizing identity. Specifically, Study 2 examines the extent to which predictions made about identity disclosure (as reflected in the hypotheses) are useful in explaining the disclosure experiences of individuals diagnosed with depression.

Depression is not a singularly-defined mental diagnosis, with several types of depression outlined in the DSM-IV-TR under the category of *mood disorders,* or disorders characterized by mood disturbances (APA, 2000). For this study, individuals diagnosed with depression refer to *individuals who have been clinically diagnosed with any disorder that primarily involves the presence of depressive symptoms.* This definition includes, but is not limited to, major depression (depressive symptoms recur in two or more episodes), dysthymia (depressive symptoms are ongoing for two or more years), and bipolar (one or more episodes of manic symptoms followed by depressive symptoms) disorders (APA, 2000). Depression was focused on for this second sample for two main reasons: 1) the need for research on mental illness stigma and disclosure in general and 2) characteristics specific to depression that makes it a desirable choice for this first attempt to generalize this model to a mental illness.

Mental illness has not been a primary focus in stigma disclosure literature, but evidence suggests that many individuals with mental illness diagnoses experience difficult disclosure decisions similar to those associated with other invisible stigmas. The struggle to decide whether or not to disclose one's mental health status in the workplace has been equated with the "coming out" process associated with the LGB community, in that both groups have experienced stigmatization based on negative assumptions and stereotypes connected to their identities and both may fear interpersonal and formal discrimination if they disclose to others at work (Corrigan & Mathews, 2003). As with sexual orientation, it has been suggested that concealing mental health issues can lead to negative personal consequences, such as increased feelings of anxiety, stress, and shame (Dinos et al., 2004). Further, individuals with a mental illness may worry about disclosing their condition for fear that any accommodations they might be granted will be seen as unnecessary by other employees (Colella, 2001). Although mental health status

differs from sexual orientation in that discrimination is federally prohibited in many countries (e.g. United States, Americans with Disabilities Act of 1990; United Kingdom under the Equality Act, 2010), evidence suggests that many employers still have reservations in hiring individuals with psychiatric disabilities (Diksa & Rogers, 1996), which may translate into subtle and legal (or illegal but undocumented) forms of discrimination. Thus, mental illness represents an identity that can be both invisible and risky to disclose.

Depression was chosen as the specific mental illness diagnosis of interest for several reasons. First, although symptoms can be extremely severe in some cases, they tend to be less severe and thus, more easily hidden than those associated with schizophrenia (speech abnormalities, hallucinations; DSM-IV-TR) or other psychotic disorders involving delusions and hallucinations that can directly and severely impair daily functioning (APA, 2000; Baron & Salzer, 2002). Second, the tendency for individuals with mental illnesses to be unemployed at higher rates than those of the overall population (NAMI, 2010) presents data collection concerns. Focusing on depression helps abate these concerns, as depression is one of the more common mental illnesses (lifetime prevalence rate of 20.8 % of the U.S. adult population, Kessler et al., 2005) and individuals with mood disorders have been shown to have a lower likelihood of long-term unemployment as compared to individuals diagnosed with psychotic disorders (Goldberg et al., 2001), resulting in a relatively larger potential participant pool as compared to other mental illnesses.

Lastly, although depression is more common than many other mental illnesses, it is still an identity that encounters stigmatization. Studies examining depression stigma have found negative public attitudes toward individuals with depression, including the beliefs that individuals diagnosed with depression are unpredictable, dangerous, and even violent (Link et

al., 1999; Wang & Lai, 2008). Also, research has shown that many individuals believe depression is not a serious mental illness, but rather a "life crisis" that does not necessitate medical treatment (Angermeyer & Matschinger, 2003; Lauber et al., 2001), which suggests that this identity may be assumed to be under one's personal control, similar to the controllability beliefs some have toward LGB individuals. Thus, Study 2 tests the same hypotheses as Study 1, using a sample of employees who are currently diagnosed with depression.

Participants

Similar to Study 1, participants were recruited using organizations that were affiliated with the community of interest. Specifically, mental health advocacy and support groups were contacted that had an online presence and a means for which to distribute the link to the survey. From October 2011 to January 2012, organizations and online communities were contacted and asked if they would distribute a survey to their members. Due to confidentiality issues surrounding mental health, reaching this sample was particularly challenging. An attempt was made to include organizations that serve ethnic minority (eight organizations/ communities) and male (two organizations/ communities) populations, although the vast majority of organizations/ communities found were not connected to any particular demographic group. Of the 192 organizations/communities that were contacted, 20 (10.42 %) replied and agreed to send out the survey invitation to their members and/or post it on their website. Six (3.13 %) replied to the email to decline to participate in the survey. As in Study 1, the survey could have also been sent out by organizations to their members without indicating so in a response.

Survey disruption. During one day of the survey being open, one of the contacts of an online community put the survey link up on a social media site that was not strictly connected to a mental health-related community or organization, was open to public viewing, and appeared to

have regular traffic from numerous individuals who did not identify as being diagnosed with depression. Most likely due to the monetary incentive, 106 individuals completed the survey during that day. Upon review of responses, it became clear that certain individuals who filled out the survey that day were not filling out the survey truthfully (e.g. celebrity names as coworker first names, inconsistencies in certain demographic items, seemingly random response patterns) and may not be diagnosed with depression. I chose to be as conservative as possible and not use any of the data collected that day in analyses. The survey was shut down and reopened *without* a monetary incentive (which was made clear several times to participants before they agreed to enter the survey site). Thus, it can be reasonably deduced that participants who filled out the survey after its reopening were filling it out due to their membership in the community and not for a monetary incentive. These 106 participants are not included in the discussion of participant response rates below.

Final Sample. Of the 244 individuals who visited the survey website, 11 individuals (4.51 %) were disqualified for not being employed, 12 (4.92 %) were disqualified for not currently being diagnosed with depression, 10 (4.10 %) were disqualified for not being employed *and* for not currently being diagnosed with depression, and 135 (55.74 %) did not fully complete the survey, resulting in a sample size of 75 participants (82.9 % Female; Age M = 37.68, SD = 11.34) who responded to items concerning 304 coworkers (mean number of coworkers = 4.08). Table 18 displays demographic frequencies and percentages from this sample.

Procedure

Participants who visited the survey site were taken to an informed consent page, informing them of their rights as participants and the anonymity of the survey (see Appendix D). If they agreed to participate in this study, they were asked two filter questions to determine if

they were eligible for the study. If they either 1) listed they were not currently employed or 2) were not currently diagnosed with any form of depression (including major depressive disorder dysthymia, bipolar disorder, and others), they were not allowed to enter the survey. If they passed the filter questions, participants then entered the survey.

Table 18

Study 2 Demographic Frequencies

Participant Characteristics	# of participants (% of sample)	Participant Characteristics	# of participants (% of sample)
Depression Diagnosis:		**Workplace Industry:**	
Major Depression	42 (56.0)	Education	13 (17.3)
Dysthymia	12 (16.0)	Finance	4 (5.3)
Bipolar/ manic-depression	14 (18.7)	Health Care	22 (29.3)
Other	7 (9.3)	Manufacturing	3 (4.0)
		Other	17 (22.7)
Gender:		Other Services	20 (12.5)
Female	62 (82.7)	Restaurant	4 (5.3)
Male	11 (14.7)	Retail	4 (5.3)
Race / Ethnicity:			
Asian/ Asian American	1 (1.3)		
Black / African American	7 (9.3)		
Hispanic / Latino	2 (2.7)		
White	62 (82.7)		
Multi-Racial	3 (4.0)		
Location:			
Midwest U.S.	25 (33.3)		
Northeast U.S.	13 (17.3)		
South U.S.	12 (16.0)		
West U.S.	14 (18.7)		
Outside of U.S.	10 (12.3)		

The procedure at this point mirrors that of Study 1, with two exceptions. For one, participants were asked about mental health-friendly work policies, instead of LGB-friendly policies. Also, not all survey participants were compensated for their participation, due to an

unforeseen survey disruption (see above). Those who were not compensated were informed several times before entering the survey in both the informed consent and a separate paragraph highlighting the change. All participants received a debriefing form (see Appendix E).

Measures

The full Study 2 survey including all measures is available in Appendix F. *Coworker trust* (level 1 $\alpha = .62$), *coworker fate control* (level 1 $\alpha = .93$), coworker demographic variables, network variables, and participant *risk propensity* (level 2 $\alpha = .67$) were identical to those used in Study 1. Similar to study 1, *self-monitoring* items had poor internal consistency (level 2 $\alpha = .50$) and a *self-monitoring* scale was not used in analyses.

A confirmatory factor analysis (CFA) was conducted to examine the separation of *coworker trust* and *coworker supportiveness* scales. In contrast to Study 2, a two-factor solution (i.e. trust and supportiveness as separate scales) did not fit the data better than a one-factor solution (i.e. one *relationship quality scale* including both trust and supportiveness) ($\chi 2$ difference = 2.5, *df difference* = 1, *ns*). Instead, a three-factor solution that separated instrumental and emotional support did fit the data better than the two-factor solution ($\chi 2$ difference = 62.1, *df difference* = 2, *ns*). However, the internal reliability of a 4-item support scale (including both emotional and instrumental support) was acceptable (level 1 $\alpha = .85$), higher than that of separate 2-item instrumental support (level 1 $\alpha = .78$) and emotional support (level 1 $\alpha = .84$) scales, and allowed for direct comparison of findings across studies. Thus, *coworker supportiveness* was maintained as a 4-item scale, as in Study 1.

Several changes were made in measures, compared to Study 1. *Disclosure* options were modified to reflect the particular identity of the sample (e.g. *I will actively hide the fact that I am diagnosed with depression from this coworker*). *Identity centrality* items were also reworded to

reflect the identity of the sample (e.g. *being diagnosed with depression is an important reflection of who I am*). These items showed better internal consistency (level 2 α = .68) than in Study 1 and were aggregated to form an *identity centrality* scale. *Mental health-friendly* policies were modeled after *LGB-friendly policies* and combined similarly to form a scale, but included different items to reflect policies related to mental health (e.g. *my current workplace has diversity training that includes mental health issues*). Lastly, an additional item was added to participant demographics measures concerning mental health diagnosis, with the options of *major depressive disorder, bipolar disorder, dysthymia,* and *other.*

Table 19

Means, Standard Deviations, and Intercorrelations of Level 1 Variables

	M	SD	1	2	3	4	5	6
Disclosure Decision	2.69	1.12						
Support	2.85	.85	.42**	(.85)				
Trust	3.11	.80	.37**	.69**	(.62)			
Fate Control	2.86	1.17	-.18**	.01	.03	(.93)		
Age Dissimilarity	.84	.87	.04	-.01	-.01	-.02		
Gender Dissimilarity	.29	.46	-.07	-.11	-.09	.07	-.06	
Race Dissimilarity	.29	.46	-.08	-.10	-.07	-.07	.00	.07

Note. * $p < .05$, ** $p < .01$. For gender and race dissimilarity, 0 = similar, 1 = dissimilar.

Study 2 Results

Table 19 displays the means, standard deviations, and interrcorrelations of all tested variables at level 1 and Table 20 displays the means, standard deviations, and interrcorrelations of all level 2 tested variables at level 2. Disclosure correlated positively with support (r = .42) and trust (r = .37), but negatively with fate control (r = -.18). The two level 1 relationship quality variables (support and trust) correlated positively with one another (r = .69). Fate control did not correlate with trust and race dissimilarity did not correlate with disclosure, in contrast with Study 1.

Table 20

Means, Standard Deviations, and Intercorrelations of Level 2 Variables

	M	SD	1	2	3	4	5	6	7	8	9	10
Disclosure Aggregated†	2.65	.90										
Mean Support	2.83	.55	.41**									
Minimum Support	2.00	.75	.31**	.78**								
Maximum Support	3.51	.55	.36**	.75**	.30**							
Mean Trust	3.01	.54	.24*	.49**	.48**	.32**						
Minimum Trust	2.26	.75	.11	.31	.58**	-.05	.64**					
Maximum Trust	3.70	.75	.14	.29*	.08	.43**	.71**	.06				
Identity Centrality	3.36	1.00	-.06	-.02	-.04	.05	.02	-.16	.12	(.68)		
Risk Propensity	2.90	.86	-.05	.19	.30**	.05	.11	.18	.05	-.04	(.67)	
OrgPolicies	1.54	1.50	.13	.19	.06	.23	.13	.06	.13	.06	-.13	
Female	.85	.36	.07	-.04	-.18	.03	-.02	-.07	.05	-.02	.00	-.05
Tenure	5.41	6.21	.12	.08	-.17	.21	-.13	-.22	.01	.11	-.06	.17

† Disclosure values aggregated for each participant

Note. * $p < .05$, ** $p < .01$. OrgPolicies = Organizational Policies; Female = Female participant (0 = no, 1 = yes), Tenure = Time at the Organization (in years).

For level 2 variables, disclosure (aggregated for each participant) correlated with mean, minimum, and maximum support of the network (r = .41, r = .31, r = .36; respectively) and mean trust of network (r = .24). Mean support of network correlated strongly with minimum support of the network (r = .78) and maximum support of the network (r = .75). Mean trust of network also correlated strong with both minimum (r = .64) and maximum (r = .71) support of the network. Unlike Study 1, risk propensity and organizational policies did not correlate significantly with disclosure.

Study Comparisons

Prior to testing hypotheses, comparisons between the two study samples were conducted, using independent samples t-tests to assess differences in means for disclosure, support, trust, fate control, risk propensity, and organizational policies (see Table 21). Frequencies for each of the four disclosure options (*hiding, avoiding, indirectly acknowledging, directly acknowledging*) were also compared by conducting chi-square tests of independence (see Table 22). LGB employees from Study 1 reported significantly higher levels of coworker supportiveness (M = 3.25, SD = .60), and overall disclosure (M = 3.15, SD = .94) than employees diagnosed with depression in Study 2 (M = 2.85, SD = .85, M = 2.69, SD = 1.12; respectively). Employees diagnosed with depression reported higher levels of coworker fate control (M = 2.86, SD = 1.17) and a greater amount of supportive organizational policies (M = 1.54, SD = 1.50) than did LGB employees (M = 2.14, SD = 1.07, M = .90, SD = 1.29; respectively). These two samples did not differ in terms of coworker trust and risk propensity.

Table 21

Mean comparisons of variables between Study 1 and Study 2

	Study 1 – LGB sample		Study 2 – Depression sample			
	M	SD	M	SD	*t*	*df*
Support	3.25	0.6	2.85	0.85	7.35**	708
Trust	3.08	0.82	3.11	0.8	.49	708
Fate Control	2.14	1.07	2.86	1.17	8.52**	708
Disclosure	3.15	0.94	2.69	1.12	5.94**	708
Risk Propensity	2.93	0.88	2.9	0.86	.25	233
Organizational Policies	0.9	1.29	1.54	1.5	3.25**	221

Note. * $p < .05$, ** $p < .01$.

Examining differences in disclosure more closely, Table 22 shows that employees diagnosed with depression were more likely to choose hiding disclosure strategies in their coworker relationships (N = 67; 22.04%) and less likely to choose direct acknowledgement disclosure strategies (N = 90; 29.61%), as compared to LGB employees (N = 23; 5.67%, N = 190; 46.80%; respectively). Samples from the two studies did not differ in their choice of avoidance and indirect acknowledgement strategies.

Table 22

Frequency comparisons of disclosure choices between Study 1 and Study 2

Disclosure Choices	Study 1 – LGB sample	Study 2 – Depression sample	$\chi 2$
Hide	23	67	42.11**
Avoid	84	51	1.73
Indirect	109	96	1.9
Direct	190	90	21.51**
Total	406	304	

Note. * $p < .05$, ** $p < .01$. Degrees of freedom = 1.

HLM Justification

The variance in the dependent variable accounted for by differences between participants was calculated using the intraclass correlation coefficient (ICC1) for all participants that reported having more than one coworker (N = 70). The result (ICC1 = .50) meets the suggested criteria of a greater than 10 % explanation of variance in the dependent variable (Lee, 2000) and 50 (71.40 %) participants reported making at least two distinct disclosure decisions within their network (e.g. explicitly disclosed to two coworkers, avoided with one coworker), thus warranting the use of HLM in analyses.

Hypothesis Testing

Control variables were not used in analyses, as participant gender, time at organization, age dissimilarity, gender dissimilarity, and race dissimilarity did not correlate with the dependent variable. All variables were grand mean centered.

Hypothesis 1 predicted that coworker support and coworker trust would be related to a higher level of disclosure. Including coworker support (Table 23, Model 2) improved model fit compared to the unconditional means model (Table 23, Model 1; $\chi 2$ difference = 55.31, *df difference* = 1, $p < .01$). Including coworker trust (Table 24, Model 2) also improved model fit compared to the unconditional means model (Table 24, Model 1; $\chi 2$ difference = 30.35, *df difference* = 1, $p < .01$). Greater coworker support ($b = .47$, $p < .01$) and coworker trust ($b = .40$, $p < .01$) were significantly related to greater disclosure, supporting Hypothesis 1.

Table 23

Hypothesis 1 Model Testing – Coworker Support

	Model 1	**Model 2**
Fixed Effects	coefficient (standard error)	coefficient (standard error)
Intercept	2.66** (.10)	2.67** (.10)
Predictor		

Table 23 (cont'd)

L1Support		.47** (.06)
	Model 1	**Model 2**
Random Effects	variance	variance
Intercept	.63	.53
Residual	.64	.52
Model Fit	**Model 1**	**Model 2**
Deviance	841.77	786.47**
Parameters	3	4

Note. * p < .05, ** p < .01.

Hypothesis 2a – 2c predict cross-level moderating effects between support/trust and disclosure, based on only those participants with more than one coworker (N = 70). However, allowing support and trust to vary randomly across participants did not significantly improve the fit of either model ($\chi 2$ difference = .31, *df difference* = 1, *ns*; $\chi 2$ difference = .76, *df difference* = 1, *ns*; respectively) compared to level 1 fixed effects models, indicating that the relationships between support/trust and disclosure do not significantly vary across groups and tests of moderation would be nonsignificant.

Table 24

Hypothesis 1 Model Testing – Coworker Trust

	Model 1	**Model 2**
Fixed Effects	coefficient (standard error)	coefficient (standard error)
Intercept	2.66** (.10)	2.67** (.10)
Predictor		
L1Trust		.40** (.06)
	Model 1	**Model 2**
Random Effects	variance	variance
Intercept	.63	.52
Residual	.64	.58
Model Fit	**Model 1**	**Model 2**
Deviance	841.77	811.42**
Parameters	3	4

Table 24 (cont'd)

Note. * p < .05, ** p < .01.

Tests of intercepts-as-outcomes models indicated that including mean support of the network (Table 25, Model 3), minimum support of the network (Table 26, Model 3), and maximum support of the network (Table 27, Model 3) as main effects do not improve fit for any of the three models compared to the level 1 support fixed effects model (Tables 25-27, Model 1; $\chi 2$ difference = -1.68, *df difference* = 1, *ns*; $\chi 2$ difference = 1.34, *df difference* = 1, *ns*; $\chi 2$ difference = .90, *df difference* = 1, *ns*; respectively) .

Table 25

Hypothesis 2a Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Intercept	2.68** (.10)	2.68** (.10)	2.67** (.10)
Predictor			
L1Support	.47** (.06)	.47** (.06)	.44** (.06)
L2MeanSupport			.25 (.19)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance
Intercept	.55	.54	.54
L1Support		.00	
Residual	.52	.52	.52
Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	772.90	772.60	774.58
Parameters	4	5	5

Note. * p < .05, ** p < .01.

Similarly, tests of intercepts-as-outcomes models indicated that including the mean trust of the network (Table 28, Model 3), minimum trust of the network (Table 29, Model 3), and the maximum trust of the network (Table 30, Model 3) as main effects did not improve model fit

compared to the level 1 trust fixed effects model (Tables 28-30, Model 1; $\chi 2$ difference = -3.21, *df difference* = 1, *ns*; $\chi 2$ difference = .17, *df difference* = 1, *ns*; $\chi 2$ difference = .25, *df difference* = 1, *ns*; respectively). Overall, Hypothesis 2a-2c were not supported.

To test Hypothesis 2d, which examined the interaction between coworker support/trust and fate control at the coworker relationship level, separate HLM models were tested for support and trust. Fate control did not significantly interact with support to predict disclosure (Table 31, Model 4) and the inclusion of the interaction term failed to improve model fit compared to the level 1 support and fate control fixed effects model (Table 31, Model 3, $\chi 2$ difference = -5.32, *df difference* = 1, *ns*). Fate control also did not significantly interact with trust to predict disclosure (Table 32, Model 4) and the inclusion of the interaction term failed to improve model fit compared to the level 1 trust and fate control fixed effects model (Table 32, Model 3; $\chi 2$ difference = -3.77, *df difference* = 1, *ns*; respectively). Thus, Hypothesis 2d was not supported

Table 26

Hypothesis 2b Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Intercept	2.68** (.10)	2.68** (.10)	2.67** (.10)
Predictor			
L1Support	.47** (.06)	.47** (.06)	.45** (.06)
L2MinSupport			.17 (.15)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance
Intercept	.55	.54	.55
L1Support		.00	
Residual	.52	.52	.52
Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	772.90	772.60	772.00
Parameters	4	5	5

Note. * p < .05, ** p < .01.

Hypotheses 3a – 3c and Hypothesis 4 predicted that identity centrality, self-monitoring, risk propensity, and organizational policies would moderate the relationships between support/trust and disclosure. In this sample, only identity centrality, risk propensity, and organizational policies were examined, due to low internal reliability for the self-monitoring scale. All participants with non-missing scales were included in these analyses (N = 69). Again, allowing support ($\chi 2$ difference = .08, *df difference* = 1, *ns*) and trust ($\chi 2$ difference = .78, *df difference* = 1, *ns*) to vary randomly across participants in their respective models did not significantly improve model fit, necessitating an examination of main effects only. For support, the inclusion of identity centrality, risk propensity, and organizational policies as level 2 main effects (Tables 33, Model 3) did not improve model fit compared to a level 1 support fixed effects model (Table 33, Model 1; $\chi 2$ difference = -9.79, *df difference* = 1, *ns*).

Table 27

Hypothesis 2c Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Intercept	2.68** (.10)	2.68** (.10)	2.67** (.10)
Predictor			
L1Support	.47** (.06)	.47** (.06)	.45** (.06)
L2MaxSupport			.22 (.19)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance
Intercept	.55	.54	.55
L1Support		.00	
Residual	.52	.52	.52
Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	772.90	772.60	771.56
Parameters	4	5	5

Note. * p < .05, ** p < .01.

For trust, the inclusion of identity centrality, risk propensity, and organizational policies as level 2 main effects (Tables 34, Model 3) did not improve model fit compared to a level 1 trust fixed effects model (Table 34, Model 1; $\chi 2$ difference = -9.67, *df difference* = 1, *ns*). Further, regression coefficients of all level 2 predictor variables were nonsignificant in both support and trust models. Hypotheses 3a, 3c, and 4 were not supported.

Table 28

Hypothesis 2a Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Intercept	2.67** (.10)	2.67** (.10)	2.67** (.10)
Predictor			
L1Trust	.39** (.06)	.40** (.07)	.39** (.07)
L2MeanTrust			.06 (.19)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance
Intercept	.54	.54	.55
L1Trust		.04	
Residual	.58	.56	.58
Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	797.87	797.11	801.08
Parameters	4	5	5

Note. * $p < .05$, ** $p < .01$.

Additional Analyses

As with Study 1, the organizational policies variable (*mental health-friendly policies*) was conceptualized as the number of times the individual indicated "yes" for having a particular policy. For Study 2's sample, missing data on single policy items ranged from 24 % of the sample to 42.7 % of the sample. Deleting all participants who responded "I don't know" to any

single item would have resulted in a sample of thirty-two; thus, the same strategy used in Study 1 of examining the main effects of each policy (i.e. non-discrimination policy, diversity training, mental health accommodations, support for mental health-related events) separately was used here.

Similar to the results for the mental health-friendly policies variable, each policy revealed a nonsignificant relationship with disclosure. Interestingly, the presence of diversity training that included mental health issues had a negative (although nonsignificant) relationship with disclosure (b = -.17, p =.45), which differs from the positive (and nonsignificant) findings for the other policies, as well as the mental health-friendly policies variable.

Table 29

Hypothesis 2b Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Intercept	2.67** (.10)	2.67** (.10)	2.67** (.10)
Predictor			
L1Trust	.39** (.06)	.40** (.07)	.40** (.07)
L2MinTrust			-.03 (.14)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance
Intercept	.54	.54	.56
L1Trust		.04	
Residual	.58	.56	.58
Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	797.87	797.11	797.62
Parameters	4	5	5

Note. * p < .05, ** p < .01.

Post-Hoc Power Analyses

As this sample (N = 75) is smaller than the Study 1 sample, power analyses were conducted to examine the sufficiency of the sample size to detect all level 2 main effects. These analyses indicated that power was low ($.08 \leq 1\text{-}\beta \leq .37$) for detecting main effects for network variables, individual difference variables, and the organizational policies variable. Inputting parameters from analyses into PINT software (Snijders & Bosker, 1993; Snijders, Bosker, & Guldemond, 2003) to determine needed sample size for a two-level design with an average of 4 coworkers per individual indicated that that for the nonsignificant effect with the largest amount of power (mean support main effect, $1\text{-}\beta = .37$), the level 2 sample size would have had to have been at least 240 participants.

Table 30

Hypothesis 2c Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Intercept	2.67** (.10)	2.67** (.10)	2.67** (.10)
Predictor			
L1Trust	.39** (.06)	.40** (.07)	.40** (.07)
L2MaxTrust			-.03 (.14)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance
Intercept	.54	.54	.56
L1Trust		.04	
Residual	.58	.56	.58
Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	797.87	797.11	797.70
Parameters	4	5	5

Note. * $p < .05$, ** $p < .01$.

Study 2 Discussion

Study 2 aimed to test hypotheses from Study 1 using a sample of employees diagnosed with clinical depression. Hypotheses were largely unsupported by the data, with the exception of level 1 coworker support and coworker trust effects. Hypothesis 1 findings that employees are more likely to disclose a depression diagnosis to a supportive and trustworthy coworker (compared to a less supportive and less trustworthy coworker) again support self-disclosure theories (Altman & Taylor, 1973; Derlega, Metts, Petronio, & Margulis, 1993) that stress the importance of a high quality relationship in the self-disclosure process. The lack of evidence to support the relationship between network, individual, and organizational antecedents and depression disclosure question the generalizability of stigma disclosure models to other invisible stigmatizing identities. Potential explanations for inconsistencies in Study 1 and Study 2 findings are discussed in the General Discussion section.

Table 31

Hypothesis 2d Model Testing – Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	2.68** (.10)	2.68** (.10)	2.68** (.10)	2.68** (.10)
Predictor				
L1Support	.47** (.06)	.47** (.06)	.47** (.06)	.59** (.15)
L1FateControl			-.07 (.05)	.05 (.14)
L1Support* L1FateControl				-.04 (.05)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.55	.54	.52	.52
L1Support		.00		
Residual	.52	.52	.52	.53
Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	772.90	772.60	773.61	778.93
Parameters	4	5	5	6

Note. * $p < .05$, ** $p < .01$.

Potential limitations for Study 2 include the lack of gender diversity and racial/ethnic diversity in the sample. In contrast to Study 1, Study 2's sample was largely female (over 80 %), although participant gender did not relate to disclosure. Similar to Study 1, this sample was mostly White and results may not generalize to populations of individuals with depression who are members of minority racial/ethnic groups. Another limitation is the overall size of the sample. Although networks were larger, on average, compared to Study 2 (average number of coworkers = 4.08 in Study 2 compared to 2.55 in Study 1), the actual number of participants used in analyses ranged from 69 to 75 and post-hoc analyses indicated low power to detect these effects. Thus, it is possible that these effects would be detected with a larger sample size, as it is also possible that network, individual, and organizational variables measured did not play a significant role in disclosure decisions for this sample.

Table 32

Hypothesis 2d Model Testing – Coworker Trust

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)	**Model 4** coefficient (standard error)
Intercept	2.67** (.10)	2.67** (.10)	2.67** (.10)	2.67** (.10)
Predictor				
L1Trust	.39** (.06)	.40** (.07)	.40** (.06)	.62** (.16)
L1FateControl			-.08 (.05)	.16 (.16)
L1Trust* L1FateControl				-.07 (.05)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance	**Model 4** variance
Intercept	.54	.54	.51	.51
L1Trust		.04		
Residual	.58	.56	.58	.58
Model Fit	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deviance	797.87	797.11	797.28	801.05

Table 32 (cont'd)

Parameters	4	5	5	6

Note. * $p < .05$, ** $p < .01$.

General Discussion

Overall, these two studies suggest both antecedents that may be universally related to stigma disclosure and antecedents that may be more identity-specific in their effects.

Study Similarities

In terms of similarities, results of both studies revealed the importance of coworker relationship characteristics in the disclosure process. Specifically, Study 1 and Study 2 found that support and trust *at the coworker relationship level* was related to disclosure decisions to coworkers. These findings align with general self-disclosure theories that emphasize the importance of *relationship quality* as a precursor for the disclosing of intimate and personal information to another individual (Altman & Taylor, 1973; Derlega, Metts, Petronio, & Marguiles, 1993; Jourard, 1964).

Table 33

Hypothesis 3a, 3c, and 4 Model Testing—Coworker Support

Fixed Effects	**Model 1** coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Intercept	2.63** (.10)	2.64** (.10)	2.63** (.10)
Predictor			
L1Support	.48** (.06)	.48** (.06)	.48** (.06)
L2IdentityCentrality			-.05 (.10)
L2RiskPropensity			-.07 (.11)
L2OrgPolicies			.04 (.07)
Random Effects	**Model 1** variance	**Model 2** variance	**Model 3** variance
Intercept	.51	.51	.53
L1Support		.00	
Residual	.49	.49	.49

Table 33 (cont'd)

Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	715.66	715.58	725.45
Parameters	4	5	7

Note. * p < .05, ** p < .01

Further, both studies had similar ICC1 values for disclosure (.48 for Study 1, .50 for Study 2) and similar rates of participants making different disclosure decisions across their coworker networks (68.00% for Study 1, 71.40 % for Study 2), revealing a significant amount of the variance in disclosure not accounted for by between-person (level 2) effects. Taken together, these results empirically support the claim that disclosure is not just an individual disposition, but also a distinct event that depends, in part, on the specific target individual with whom one is interacting (Greene et al., 2006).

Table 34

Hypothesis 3a, 3c, and 4 Model Testing—Coworker Trust

	Model 1 coefficient (standard error)	**Model 2** coefficient (standard error)	**Model 3** coefficient (standard error)
Fixed Effects			
Intercept	2.64** (.10)	2.65** (.10)	2.64** (.10)
Predictor			
L1Trust	.39** (.07)	.50** (.07)	.38** (.07)
L2IdentityCentrality			-.05 (.10)
L2RiskPropensity			-.02 (.12)
L2OrgPolicies			.05 (.07)
	Model 1 variance	**Model 2** variance	**Model 3** variance
Random Effects			
Intercept	.53	.53	.55
L1Trust		.04	
Residual	.56	.53	.55
Model Fit	**Model 1**	**Model 2**	**Model 3**
Deviance	745.26	744.48	754.93
Parameters	4	5	7

Note. * p < .05, ** p < .01

Study Differences

Beyond level 1 coworker relationship effects, these two studies diverged in their results. Whereas Study 1 found that maximum values of support and trust, participant risk propensity, and supportive organizational policies all related to disclosure decisions made to coworkers, Study 2 only found evidence for coworker relationship (support and trust) antecedents. As such, findings from these studies differ in their support of the underlying theories in the proposed target-driven model.

Specifically, findings from Study 1 support relationships proposed by prominent stigma disclosure theories tying risk propensity (Clair et al., 2005) and organizational policies and support (Ragins, 2008) to disclosure decision-making. Further, the emergence of maximum support and trust as the dominant network predictor of disclosure supports the idea of a threshold effect (Laursen & Mooney, 2005), the importance of LGB *allies* (Brooks & Edwards, 2009) and the more general statement that psychological studies may find more valuable information by looking beyond the mean when examining higher-level variables (Barrick, Stewart, Neuberg, & Mount, 1998). Findings from Study 2, however, only provide support for integrating self-disclosure theory into stigma disclosure models, as there was only evidence to support level 1 relationship quality variables as related to disclosure.

There are several potential explanations for these different findings. Specifically, individuals diagnosed with depression diagnosis and LGB individuals may differ in their 1) specific reasons behind disclosure choices, 2) expectation of second-hand disclosure among coworkers, 3) needs related to the organization, and 4) the stigmatization of the identity. Each of these potential explanations will be outlined in the sections below, followed by an overall discussion of risk level and disclosure.

Reasons for disclosure. Specific reasons for disclosure were not explicitly measured in these studies and may explain why evidence was only found for relationship-level antecedents when examining the disclosure of depression. Goldberg and colleagues (2005) and Ellison and colleagues (2003) qualitatively examined reasons behind the workplace disclosure decisions of individuals with psychiatric disabilities. The reasons they found for *nondisclosure* were similar to those cited for sexual orientation (fear of rejection, prejudice, discrimination; Ragins, Singh, & Cornwell, 2007); however, the reasons behind *revealing* one's mental health status to others were different.

Specifically, the LGB literature discusses disclosure as an important part of sexual identity development that indicates (and reflects) self-acceptance (Cass, 1979; Jordan & Deluty, 1998; Rostosky & Riggle, 2002). Although this language has also been used when describing mental health disclosure (e.g. Corrigan and Mathews, 2003), it is also the case that individuals with psychiatric disabilities who have disclosed, may have been *compelled* to disclose their condition at work for reasons such as explaining gaps in employment, explaining use of vocational rehabilitation services, obtaining accommodations, explaining behavioral symptoms, or explaining hospitalization (Ellison et al., 2003; Goldberg et al., 2005). In fact, Ellison and colleagues found that only 38 % of their sample disclosed symptoms "because they felt comfortable", with many others reporting that their disclosure was necessary due to an unfavorable event, such as experiencing psychiatric symptoms at work. Although employees diagnosed with depression (Study 2) had a lower rate of direct acknowledgement than LGB employees (Study 1), it is plausible that the rate of *compelled* disclosure was higher in Study 2 than in Study 1.

Although the data does not show how many of the participants in Study 2 were compelled to disclose their identity, as compared to those in Study 1, a higher prevalence of "forced disclosure" in the Study 2 sample would explain the lack of evidence to support non-relationship variables. That is, if an individual *must* disclose a stigma due to uncontrollable circumstances, then the question becomes not *if* one discloses, but *to whom.* In this scenario, an individual does not have the opportunity to wait for the environment to improve, thus making network (e.g. maximum support) and organizational variables (e.g. organizational policies) irrelevant to the disclosure process.

This explanation, if accurate, reveals two interesting areas largely missing from past stigma disclosure models (Chaudoir & Fisher, 2010; Clair et al., 2005; Ragins, 2008) and risky decision-making models (Kahneman & Tversky, 1978; Tversky & Kahneman, 1992). First, several of these models assume that individuals make disclosure decisions largely based on the avoidance/seeking of anticipated negative/positive outcomes (Chaudoir & Fisher, 2010; Ragins, 2008) and an overall assessment of the risk involved (Kahneman & Tversky, 1978; Tversky & Kahneman). These theories do not, however, compare specific reasons for disclosure (e.g. need to explain a behavior/event that was identity-related, desire to show true self to others) that may change the nature of the disclosure decision-making process.

Second, these theories refer to scenarios when individuals are free to make a disclosure decision, but are less well-equipped to explain what specific disclosure decisions an individual will make when disclosure becomes necessary (e.g. a depressed individual must explain the presence of symptoms) and the choice is now the target of that disclosure. However, one would also assume, under this explanation, that risk propensity would moderate the relationship between coworker support/trust and disclosure (which it did not), as risk-averse individuals

would particularly want to disclose to the most supportive and trustworthy individual. Further, I cannot know for certain from these studies if differences in reasons for disclosure choices explain differential findings, although it remains an interesting question for future research.

Expectations of second-hand disclosure. Differential expectations of second-hand disclosure could be another potential explanation for inconsistent findings between study samples, specifically as an explanation for inconsistencies in the maximum support and maximum trust findings. As discussed in the literature review, the *communication privacy management* model (Petronio, 1991; 2002; 2007) proposes that people *own* their personal, private information and that when they disclose it to others, those individuals become *co-owners* of that information, as they have the power to share it with others or not. This theory served as one of the arguments for the proposed influence of maximum support/trust on disclosure decisions, as a person with an invisible stigma should feel more comfortable with potential unauthorized second-hand disclosure (i.e. *boundary turbulence*) if they knew they had at least one person who would be supportive of them and who they trusted (i.e. an *ally*). This argument was supported by the data for LGB employees, but not for employees diagnosed with depression.

The lack of evidence to support maximum support and maximum trust hypotheses for employees diagnosed with depression could be explained if those individuals were less likely to expect second-hand stigma disclosure to others, as compared to LGB employees. Workplace gossip research has suggested that individuals are more likely to divulge information about others when it is relevant to the particular context and/or conversation (Michelson & Mouly, 2000). Although both LGB individuals and individuals diagnosed with depression could potentially expect second-hand disclosure to others, there may be more instances in which normal workplace social conversations, such as those concerning family and romantic

relationships, could lead to an individual disclosing another's sexual orientation, than there are instances in which normal workplace conversations could lead to discussion of another coworker's mental health. Again, the current studies cannot tell us the extent to which participants in either sample anticipated second-hand disclosure of their stigma, but it provides one potential explanation for why individuals with depression were not influenced by any network variables, in terms of their disclosure decisions.

Legal protection differences. Specifically concerning differential findings for the organizational policies variable, one can compare the legal protection afforded to individuals diagnosed with mental illnesses as compared to LGB individuals (specifically focusing on the United States, as the majority of participants from both studies were working in the U. S.). As depression-based workplace discrimination is prohibited under the Americans with Disabilities Act in the United States, employees with depression may worry less about specific friendly and protective workplace policies. In contrast, many areas of the United States have no legal workplace protections related to sexual orientation (Human Rights Campaign, 2008); making organizational policies a potentially important indicator for LGB employees that they will be protected against discrimination at work. Perhaps for individuals diagnosed with depression, other organizational indicators that relate to more subtle discrimination (such as perceptions of management attitudes toward disabilities) may be more predictive of disclosure decisions. It is important to note that this assumes employees diagnosed with depression are aware of their rights, which sometimes they are not (Goldberg et al., 2005).

Stigmatization. Lastly, these two identities may differ in their overall stigmatization in the workplace context, which could explain differential findings across samples. This data allowed for comparison of disclosure choice frequencies of two invisible stigma samples that

were collected via similar methods and found that LGB employees reported disclosing to a greater extent to their coworkers than employees diagnosed with depression, which can be primarily explained by the greater likelihood of LGB employees choosing an *explicit acknowledgement* strategy and the greater likelihood of employees with depression choosing a *hiding* strategy. This is interesting given that women have been shown to be more prone to disclosure of intimate information to non-strangers than are men (Dindia & Allen, 1992), yet the depression sample had a much larger proportion of women than the LGB sample and a lower rate of explicit disclosure.

Looking at the specific stereotype content of both groups may explain these differences, as mental illness stereotypes involve work-related negative characteristics such as incompetence (Goldberg et al., 2005), helplessness (Stone & Colella, 1996), and being unpredictable (Wang & Lai, 2008), suggesting that mental illness is particularly stigmatizing in workplace contexts and that individuals with depression may find it particularly desirable to avoid these stereotypes. Stereotypes of LGB individuals also exist (gay men as overly effeminate, lesbian women as overly masculine, Haddock, Zanna, & Esses, 1993, LaMar & Kite, 1998; bisexual individuals as promiscuous, Lingel, 2009), but tend to be more neutral in reference to competence (Fiske et al., 2002). Although Ragins' (2008) model of stigma disclosure discusses several stigma characteristics (based on those proposed by Jones et al., 1984) that may influence stigma disclosure (e.g. controllability, disruptiveness, peril, course), the extent to which the stigma is associated with *low competence* or low performance is not one of them, suggesting an area where stigma disclosure theory and stigma characteristics could be expanded.

The explanation that level of stigmatization would influence the disclosure decision-making process would support Chaudoir and Fisher's (2010) model of disclosure, which

proposed that individuals make different disclosure decisions depending on their *goals* in an interaction, whether it be to approach positive outcomes (e.g. a closer relationship) or avoid negative outcomes (e.g. prejudice). Perhaps LGB participants, if they are in fact less stigmatized in a work context than participants with depression, were more often disclosing with the hopes of gaining positive outcomes, whereas participants with depression were more often disclosing only to those that they were certain would react positively, in an attempt to avoid negative outcomes. However, differences in disclosure choice frequencies could also be random, as both studies use convenience samples and could have issues of self-selection, so explanations for these differences should be taken as tentative. Examinations of multiple invisible stigmas that vary in their associated negative stereotypes will more clearly illuminate differences in disclosure based on stereotype content.

Risk and Disclosure. The potential explanations given above all share a common theme of risk assessment and disclosure. Specifically, it is proposed that participants diagnosed with depression may have been primarily influenced by relationship quality variables because 1) they have to disclose to someone and it is the least *risky option*, 2) the decreased chance of knowledge sharing make a maximally supportive or trustworthy individual less of a *risk reducer* than it would be for LGB participants, 3) legal protections exist making organizational policies less of a *risk reducer* than it would be for LGB participants, and 4) depression may be stigmatized more in a work context than sexual orientation, making disclosure *riskier*. The importance of risk assessment is a key element of prospect theory (Kahneman & Tversky, 1987) and Ragins' (2008) stigma disclosure model, but neither can account for relationship variables that are already present with a specific target (e.g. support, trust), only what is *anticipated* by the individual to occur post-disclosure (e.g. acceptance, rejection). Further, Ragins model suggests an overall

mediating effect of risk assessment on the relationship between different antecedents and disclosure, but does not include target-related characteristics in that model. Thus, risk assessment could be integrated into the current target-driven model as a way of explaining *when* support and trust are important indicators of disclosure.

One would think, however, that if risk assessment was a key element in disclosure decision-making, that the likelihood of disclosure would depend on a combination of the support and trust associated with the target relationship *and* the extent to which that coworker has influence over the potential discloser's outcomes, yet measures of *fate control* were not significant moderators of support/trust—disclosure relationships in either study. Perhaps the outcomes in the fate control measure (e.g control over evaluations, control over work load) do not capture the type of influence that would lead to assessments of risk. That is, maybe risks related specifically to the relationship are more emotional and the type of fate control that matters to disclosure decision-making would be control of over emotional well-being or social inclusion. Overall, there appears to be a need to better integrate risk assessment into the current model, building off of findings from prospect theory and Ragins' model and accounting for relationship-specific risks.

Theoretical Contributions

Although studies have examined *relationship-specific* characteristics (e.g. support, trust) as they relate to *relationship-specific* stigma disclosure (e.g. Boon & Miller, 1999) and other studies have examined *broader* characteristics (e.g. supportive climate, organizational policies) as they relate to *broader* stigma disclosure (e.g. Griffith & Hebl, 2002; Ragins et al., 2007), this is the first study to examine these effects simultaneously in a one-with-many design (Kashy & Hagiwara, 2011) that can control for nesting of relationships within persons. As suggested

(though not formally tested) in past research (Croteau et al., 2008), both studies found that the majority of individuals sampled (who had more than one coworker) made different disclosure decisions across their relationships, making it essential to understand the role of relationship effects in the disclosure decision-making process. Results from this study took an important step towards understanding relationship characteristics, by separating effects related to the *coworker relationship* (e.g. coworker support) from effects related to the focal employee (e.g. risk propensity), their organization (e.g. organizational policies), and their coworker network (e.g. maximum trust).

In the Study 1 sample of LGB employees, the one-with-many design allowed for conclusions regarding the types of *relationships* (i.e. supportive and trustworthy), *networks* (i.e. high maximum support values), *individuals* (i.e. high risk propensity), and *organizations* (i.e. LGB-friendly in policies) in which stigma disclosure occurs. Although some of these variables had been examined as antecedents for sexual orientation disclosure in past studies (e.g. individual trust, Boon & Miller, 1999; organizational policies, Griffith & Hebl, 2002), this is the first instance in which they were tested as antecedents for *specific disclosure decisions,* while also accounting for *between-person variation* in disclosure. For the Study 2 depression sample, significant findings of coworker support and coworker trust can be attributed to relationship effects and *not* to between-person effects, as analyses accounted for nesting of relationships within persons.

The examination of coworker support and coworker trust in these studies not only moves forward the extant literature by considering both the target relationship and relationship networks in disclosure decision-making, it also incorporates aspects of the self-disclosure literature that have been missing from previous models of disclosure. That is, self-disclosure theories such as

Altman's (1973) social penetration theory and Greene and colleagues' (2006) episodic model emphasize the relationship between two individuals as a key part of the self-disclosure process, yet target relationship characteristics were not included at all as antecedents of disclosure in some models of stigma disclosure (Chaudoir & Fisher, 2011; Ragins, 2008) and in the case of the workplace, has been measured only as overall support of *all* people at work in empirical studies of stigma disclosure (e.g. Ragins et al., 2007). As such, this research further integrates the established and relevant self-disclosure literature to the area of stigma disclosure.

These studies also contribute to the stigma disclosure literature by expanding upon the role of an individual's broader network in making disclosure decisions. Previous stigma disclosure research has tested broader conceptualizations of relationship quality (e.g. Griffith & Hebl, 2002; Jordan & Deluty, 1998), but 1) has not examined them as they affect specific disclosure decisions and 2) does not consider positive and negative *threshold* models of relationship quality (Laursen & Mooney, 2008), in which very high-quality or very low-quality relationships are thought to affect personal outcomes more strongly than would the aggregate. These studies addressed both of these gaps in previous research and found a positive threshold effect for supportive and trustworthy relationships in the Study 1 LGB sample. This significant effect of maximum support/trust held *controlling for the mean*, indicating that typical conceptualizations of broader support and trust in the context of sexual orientation disclosure may be missing key influential network relationships.

Another contribution of this study is the examination of individual difference variables that have been proposed in the literature, but were previously untested. Clair and colleagues' (2005) model of stigma disclosure proposed that individual risk propensity and self-monitoring would relate to disclosure decision-making. Self-monitoring could not be assessed due to low

internal reliability for the scale, but Study 1 findings supported the link for risk propensity, as LGB participants with high risk propensity were more likely to disclose to a given coworker than participants with low risk propensity. Study 2 results, on the other hand, did not find evidence for this link. Findings from Study 2 participants (employees diagnosed with depression) also did not find evidence for a link between identity centrality of stigma and depression disclosure, which was proposed by Ragins' (2008) model and empirically supported by Griffith and Hebl (2002). Specifically, participants who reported that their depression diagnosis was a more central part of their identity were not more likely to disclose to a given coworker than employees who reported that their depression diagnosis was not a central part of their identity. Although the lack of evidence to support individual difference antecedents for the Study 2 sample could be explained by low power or scaling issues (to be discussed at greater length in the Limitations section), the examination of these variables using two samples with stigmatizing identities contributes to the literature as a first empirical test of these relationships for specific disclosure decisions.

A last important theoretical contribution of this study lies in the comparison of findings across Study 1 and Study 2 samples. Findings at the coworker relationship level highlight the generalizability of self-disclosure theories (Altman, 1973; Greene et al. 2006), as the supportiveness and trust in specific relationships related to stigma disclosure decisions in both samples. Lack of significant level 2 findings for the Study 2 sample, however, highlight areas where assumptions of stigma disclosure models may not be universal. Although both samples revealed similar amounts of variance in disclosure explained by between-persons variables, results suggest that network, organizational, and individual difference variables in the proposed model did not explain said variance for individuals diagnosed with depression. Ragins' (2008)

model of stigma disclosure discusses aspects of the stigma itself that may relate to extent of disclosure at work, such as perceived *threat* and *controllability* of stigma, and future models could expand upon this by examining how different stigmatizing identities might change the actual *variables of interest* for individuals making stigma disclosure decisions.

Practical Contributions

Although disclosure may not be the most personally beneficial option for *all* employees with stigmatizing identities, research has shown the negative effects of concealing one's sexual orientation on one's health and job satisfaction (Cole et al., 1996; Day & Schoenrade, 1997). It has also been suggested that concealing a mental illness at work will lead to negative personal outcomes (Corrigan & Mathews, 2003; Dinos et al., 2004). Further, if employees only disclose a mental illness when symptoms occur at work (Ellison et al., 2003), organizations may not be prepared for dealing with mental health issues that they could be legally bound to accommodate. Thus, human resource managers and organizations can benefit from promoting a workplace environment in which individuals who would like to disclose an invisible stigmatizing identity feel comfortable in doing so.

Based on Study 1 results, sexual orientation disclosure could be increased if LGB-friendly policies are put in place and communicated to employees. Also, as maximum support of the network was a better predictor of disclosure than minimum or mean support of the network, it may be beneficial to have an *LGB ally* program within larger organizations, which would highlight the presence of highly supportive individuals within an organization. Sexual orientation and depression disclosure were both influenced by having supportive and trusting coworkers. Although there is little organizations could or would do to foster supportive and trustworthy relationships between specific coworkers, promoting an atmosphere of collegiality, non-

competitiveness, and loyalty could lead to employees with stigmatizing identities feeling more comfortable and able to disclose to others at work.

The practical contributions proposed here do not suggest, however, that every individual will want to disclose, even if presented with an "ideal" coworker in an "ideal" work environment. Nor do they suggest that disclosure is the right disclosure option for every individual. Ragins and colleagues' (2007) have suggested, based on findings on LGB employees, that the *fear* of negative outcomes following disclosure had a stronger effect on negative job-related outcomes than actual disclosure decisions. Thus, suggestions for improving workplace climates are not aimed at creating a work environment where every person with an invisible stigmatizing identity discloses, but rather creating an environment where every person with an invisible stigmatizing identity *feels free* to disclose if he/she would like to do so.

Overall Limitations and Future Directions

Coworker supportiveness and coworker trust were both focused on due to their association with overall relationship quality in the workplace (Berman, West, & Richter, 2002; Sherony & Green, 2002; Tse & Dasborough, 2008); however, there may be other relationship-related variables that are just as or more influential. Chaudoir and Fisher (2010) distinguish those individuals who have approach goals (i.e. seeking positive outcomes) from those who have avoidance goals (i.e. avoiding negative outcomes), in terms of disclosure decision-making. This distinction would suggest that individuals with avoidance goals may not be as interested in gaining support and trust, but rather in avoiding discrimination and prejudice. Individuals with avoidance goals for disclosure are more likely to attend to negative cues and would be mainly concerned with finding an individual who will not stereotype or exclude them (i.e. accept them), which is different from finding individuals who will actively support you post-disclosure. Thus,

it is possible that coworker support and trust findings reflect a relationship between coworker *acceptance* and disclosure and that support and trust are not necessary for disclosure. However, self-disclosure theory would support the importance of more active relationship-quality variables in the disclosure of intimate information, as self-disclosure is thought to increase through the development of a close relationship (Altman & Taylor, 1973), which goes beyond being tolerant of another individual. Future research examining current and anticipated *acceptance* in coworker relationships will be able to distinguish this potential influence from that of coworker supportiveness and coworker trust.

Another potential limitation is the validity of results when using an online, single-source survey. Common method variance is a concern when one individual is responding to all measures; however, precautions were taken to limit CMV based on Podsakoff and colleagues' (2003) suggestions, including varying response format throughout the survey and maintaining respondent anonymity to elicit more truthful responses. Security is also a concern when participants are paid and identity of the individual cannot be verified face-to-face, although distribution of the survey to organizations was highly selective and one instance of unauthorized mass survey distribution (see Study 2 Methods) was handled very conservatively by excluding all potentially contaminated data. Lastly, self-selection biases can occur when data is reliant on individuals choosing to enter a survey. Particularly when studying two separate and distinct populations, it is important to note that level and type of self-selection may differ across populations. For example, Study 2 (depression) participants may have been more likely to join online affiliated groups to find support than did participants in Study 1 (LGB), which involves a different kind of self-selection than joining a group with the goal of advocating for one's community. Particularly in Study 2, in which a significant portion of individuals visited the

survey but did not complete it, data may not be representative of the population of interest. These methodological limitations are inherent to the study of "hidden" populations, as the internet is one of the most effective ways of reaching these populations and obtaining a second source concerning an individual who has not fully disclosed a stigma would be difficult and potentially unethical (e.g. if an individual's identity accidentally is disclosed through survey procedures).

The cross-sectional nature of the survey is also a potential limitation. Although this research moves closer to examining the episodic nature of disclosure by examining *specific relationships*, it did not study *specific events* as they occurred. This presents an issue of causal inference. Although the model proposes that supportive and trustworthy relationships lead to greater levels of disclosure, it could also be that relationships become more supportive and trustworthy following disclosure of intimate and personal information. In line with social penetration theory (Altman & Taylor, 1973), it is likely that the relationship is reciprocal, meaning that high-quality relationships lead to greater disclosure, which in turn lead to higher-quality relationships. These effects cannot be parsed apart in these two studies, but could be in future research using an artificial laboratory context or a longitudinal study that could establish temporal precedence.

Further, the effects of disclosure to one coworker on the disclosure decision-making process regarding another coworker cannot be assessed with cross-sectional data. Although both Clair and colleagues' (2005) and Chaudoir and Fisher's (2010) stigma disclosure models include a feedback loop that addresses this exact issue, methodologies have yet to be implemented by stigma disclosure researchers that could capture disclosure decisions as they happen. Experience sampling methodology has been used in the past to study the daily experiences of stigmatized individuals (Frable, Platt, & Hoey, 1998) and could potentially be adapted to study stigma

disclosure episodically. This type of methodology would be difficult to implement with stigma disclosure; however, as disclosure events in a given environment may be spaced out by long periods of time, making daily surveys at random time-points ineffective. Further, tracking a group of individuals in a given environment would still likely include individuals who have already disclosed to some individuals, making data on those decisions retrospective. One approach that could improve upon current methodologies would be to survey a sample of individuals as they enter a new environment (e.g. freshman entering college). Longitudinal surveys spaced out over longer periods of time (e.g. six months, a year) could then track this group, examining current relationship characteristics at earlier time points to disclosure decisions at later time points.

As another potential limitation, survey measures may have left out specific between-persons characteristics that would be more relevant to the Study 2 sample of employees diagnosed with depression, given that a significant amount of the variance in disclosure was accounted for by between-person (level 2) effects. Although I can conclude from these results that the Study 2 sample's disclosure decisions were not significantly influenced by organizational policies or identity centrality, I cannot conclude that between-persons characteristics have no place in a model of depression disclosure. There may be individual differences or organizational policies that are more related to a tendency to disclose a stigma than are the variables proposed in the current model. For example, some individuals may value privacy more or have less extraverted personalities, all of which could lessen the likelihood of disclosure of *any* personal information. Future qualitative research could explore the specific organizational needs of employees diagnosed with depression, as well as personality differences

that may influence disclosure, in order to identify constructs related to depression disclosure which may be missing from overall models of stigma disclosure.

The lack of evidence to support minimum support/trust hypotheses in both samples suggest that minimum values of support/trust are not as influential as maximum values of support/trust; however, they do not completely exclude the possibility of a negative threshold effect for relationship quality. Support and trust was operationalized in such a way that lower values on these scales indicated a *lack* of support and *lack* of trust, not necessarily the *presence* of unsupportive or untrustworthy behaviors and actions. Future stigma disclosure research examining more negative (rather than neutral) aspects of relationships, such as bullying, aggression, and/or hostility, will be able to more appropriately test for a negative threshold effect in relationship quality networks.

Another limitation involving the networks is both theoretical and methodological. Studies suggesting positive and negative threshold effects for supportive relationships (Berkman & Syme, 1979; House, Robbins, & Metzer, 1982; Kroenke et al., 2006; Laursen & Mooney, 2005; Varvel et al., 2007) and specifically for ally (Brooks & Edwards, 2009; Washington & Evans, 1991) and bully (McDermott, 2006) effects, have not yet examined the interaction of different network aspects to one another. That is, does the distance between the minimum and maximum support influence disclosure? Does the presence of a bully outweigh the presence of an ally? Practically speaking for these studies, the size of the networks was too small (and the variables too highly correlated) as to explore mean, minimum, and maximum effects all together in the same equation due the amount of overlap in variance explained. Future research using larger networks (e.g. ten or more) where the means, minimums, and maximums would be

potentially less highly correlated, would allow for a more in-depth examination of how network variables influence disclosure decisions

The relative network hypothesis could not be properly tested, as it necessitated specific relationships being deemed as the "most" and "least" supportive/trustworthy. Level 1 fate control fixed effects tests indicated that this hypothesis might not have been significant if properly tested; however, future researchers may want to ask participants to rank-order coworkers in terms of their support and trust, in order to properly weight those relationships based on their influence. Further, relationships that occur across status-hierarchies (e.g. superior-subordinate, subordinate-superior) could also be measured to examine relevant influence effects for stigma disclosure.

Lastly, several individual difference variables were not tested (identity centrality and self-monitoring in Study 1, self-monitoring in Study 2) due to low scale reliabilities and three other scales (trust and risk propensity in both studies, identity centrality in Study 2) had less than desirable alphas ($.60 \leq \alpha \leq .68$). The individual difference items were near the end of the survey and the low alphas could be attributed to survey fatigue, although that would not explain why risk propensity had significantly higher alphas than were found for self-monitoring, or identity centrality in Study 1.

It is also possible that individuals from these two samples interpreted these questions differently, as compared to the general population. Identity centrality questions, as explained above, were based on a racial-identity scale (Luhtanen &Crocker, 1992), which may not be as adaptable to other identities. Self-monitoring questions refer to the ways in which individuals present themselves to others in general. As the survey began by asking questions about disclosure decisions, self-monitoring related specifically to one's stigma may have been

particularly salient for some people, meaning that participants may have differed in the way they framed the items. Certain items (e.g. I can look anyone in the eye and tell a lie) may provide very different responses, dependent on whether the individual is thinking about their self-monitoring *in general* (e.g. I rarely lie in general) or their self-monitoring *specific to stigma* (e.g. I do lie about my identity). In the future, perhaps individual difference items should be asked prior to disclosure-related items.

Trust also had fairly low internal reliabilities in both Study 1 (level 1 $\alpha = .65$) and Study 2 (level 1 $\alpha = .62$), limiting the inferences that can be made from trust-related findings. The trust scale used included fairly extreme examples of trust (e.g. I would be willing to let this coworker have complete control over my future in this company) and some less extreme examples (e.g. I really wish I had a good way to keep an eye on this coworker), which could explain why responses were not more internally consistent within the scale. Further, these items did not distinguish trust from distrust, which can be seen as related but distinct concepts (Lewicki, Mcallister, & Bies, 1998) that may influence disclosure differently. As Lewicki and colleagues point out, a relationship can include a complex combination of trust and distrust and many relationships are characterized by ambivalence, rather than by completely positive or completely negative feelings or appraisals. With disclosure of stigmas, it may be that distrust matters more than trust, as a lack of trust does not necessarily indicate the presence of fear that is associated with distrust (ibid). Lastly, trust in the context of disclosure may be most closely tied to a specific kind of trust related to keeping secrets and not spreading information. Tapping into a more specific type of trust (or distrust) in future research on disclosure would help further illuminate the role of trust in this area. Despite low internal reliability, trust as a relationship quality variable functioned fairly similarly to another (more reliable) relationship quality variable

(support), suggesting that the trust scale did tap into the quality of the relationship. However, future research could examine specific types of trust that may lead to more reliable measures of trust and help distinguish the influence of more extreme examples of trust from less extreme examples and cognitive trust from affective trust.

Lastly, the stigmatization of certain identities can vary by culture, and sexual orientation and mental illness are no exceptions. The stigmatization of LGB individuals in the U. S. is likely less severe than what occurs in countries that criminalize homosexuality (e.g. Iran; IGLHRC, 2011), but perhaps more severe than countries that have federal same-sex marriage laws (e.g. Sweden; ILGA-E, 2012). The Americans with Disabilities act of 1990 has protections similar to those in some other countries (e.g. United Kingdom under the Equality Act, 2010), but there still exist cultures where individuals with disabilities have little or no employment discrimination protection available to them (e.g. Vietnam; IDRM, 2005). As this study primarily includes participants from the United States, findings are culture-bound pending future research that replicates these relationships in other cultural contexts.

Conclusion

Individuals with invisible and potentially stigmatizing identities are frequently making disclosure decisions as they interact with different people in different situations, although research tends to discuss stigma disclosure in terms of broad-based decisions or tendencies. The primary goal of these studies was to further our understanding of *specific* stigma disclosure decisions at work. Attempts were also made to generalize hypothesized stigma disclosure relationships across two very different invisible stigmas: lesbian, gay, and bisexual (LGB) identity and depression diagnosis identity. Differential findings between these two identities

suggest potential limitations of general stigma disclosure models. Results indicate that many LGB employees and employees diagnosed with depression make different disclosure decisions to different coworkers and that these decisions can be explained, in part, by the employee's perceptions of that coworker's supportiveness and their trust in that coworker. Further, results suggested that for LGB employees, disclosure to a specific coworker was also encouraged by having at least one very supportive/trustworthy coworker in their overall network, working for an organization with LGB-friendly policies, and by a high propensity to take risks. Overall, stigma disclosure remains a complex process that is most likely influenced by the individual, their relationships, their environment, and the stigmatizing identity itself.

APPENDICES

Appendix A

Study 1 Informed Consent

Research Participation and Consent Form: Identity Disclosure at Work

You are being asked to participate in a research project. Researchers are required to provide a consent form to inform you about the study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

PURPOSE OF RESEARCH: You are being asked to participate in a research study concerning disclosure of sexual orientation identity in the workplace. You have been selected as a possible participant in this study because of your sexual orientation identity and employment status. If you do not identify as gay, lesbian, or bisexual OR you are not currently employed, please exit the survey now. From this study, the researchers hope to learn more about the experiences of lesbian, gay, and bisexual employees in the workplace. Your participation in this study will take about 30 minutes. If you are under 18, you cannot participate in this study without parental permission.

WHAT YOU WILL DO: In this study, you will be asked a series of questions about your current workplace and your disclosure status. You will NOT be asked to provide your name, anyone else's name, your organization's name, or any other information that could potentially identify you or your place of work. You will then be asked several demographic questions (example: age, race/ethnicity) about yourself and several questions about your workplace (example: approximate size of organization, industry).

POTENTIAL BENEFITS AND RISKS: The potential benefits to you for taking part in this study are a chance to gain further understanding on your own thoughts and feelings concerning your work environment. Also, your participation in this study may contribute to a better understanding of LGB issues and experiences in the workplace. There are no foreseeable risks associated with participation in this study.

PRIVACY AND CONFIDENTIALITY: The data for this project are being collected anonymously. Neither the researchers nor anyone else will be able to link data to you and we will NOT be collecting IP addresses. The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain anonymous.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW: Participation in this research project is completely voluntary. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time.

COMPENSATION FOR BEING IN THE STUDY: You will be compensated with at $ 10 gift card for your participation. After completing this study, you will be taken to a separate website in which you can submit your email address to receive the online gift card code. Your email address will NOT be connected to your data at any time. If you submit your email here, a code to redeem your gift card online will be sent to your email address in an email that will NOT reference the study in any way. Your email address will be deleted from the researchers computer immediately following sending you the online gift card and we will no longer have any record of your email address.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS : If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researchers: Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: 517-353-8855, e-mail: ryanan@msu.edu or Jennifer Wessel, M. A., wesselje@msu.edu.If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 207 Olds Hall, MSU, East Lansing, MI 48824.

By clicking the button marked SUBMIT, you are indicating your consent to participate in this study. If you do not consent to participate, please exit the survey now. Thank you for your participation.

Appendix B

Study 1 Debriefing

Debriefing Form: Sexual Orientation Identity Disclosure at Work

Thank you for participating in our study. This form is designed to provide you with information about the purpose and importance of this study.

Psychological research has shown that lesbian, gay, and bisexual (LGB) individuals disclose their sexual orientation at work due to a host of factors, including characteristics of their coworkers. For example, some research has shown that LGB employees will disclose to more people at work when they view their coworkers as supportive. For more information on LGB disclosure and supportiveness of others, we refer you to the following studies:

Jordan, K. M., & Deluty, R. H. (1998). Coming out for lesbian women: Its relation to anxiety, positive affectivity, self-esteem and social support. *Journal of Homosexuality, 35*, 41-63.

Ragins, B. R., Singh, R., & Cornwell, J. M. (2007). Making the invisible visible: Fear and disclosure of sexual orientation at work. *Journal of Applied Psychology, 92*, 1103-1118.

We are currently examining how coworker supportiveness relates to LGB identity disclosure at work. We wanted to focus on experiences of support and disclosure within individual relationships, in order to capture the complex nature of disclosure patterns for certain LGB individuals. We gathered this information through survey questions concerning your actual coworker relationships. Your responses will help us further explore the topic of LGB disclosure and support.

The survey was relatively straightforward and of the type often encountered in psychological research. Given the mild nature of this research study, we anticipate that there are and will be no risks involved for any of our participants. However, if you have questions or concerns regarding this study, please do not hesitate to contact the investigators. Additionally, if you would like more information about the study or have further questions about it, please feel free to contact Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: 517-355-0203, or Jennifer Wessel, M. A., Department of Psychology, Michigan State University, East Lansing, MI 48824, e-mail: wesselje@msu.edu.

Appendix C

Study 1 Survey[1]

Thank you for your participation in this survey. The following survey will ask you to respond to items concerning your ***current*** *workplace and your disclosure status, or "outness" to your coworkers. Please answer as honestly as possible. Before beginning this survey, please answer the following item:*

I identify as: Gay or Lesbian Bisexual Heterosexual Other _____

Are you currently employed? Yes No

[Participants who answered "Heterosexual" to the first item or "No" to the 2nd item will be told they do not meet the criteria to participate in this survey and thanked for their time]

In this survey, we will be asking questions concerning specific coworkers. In order to keep track of which coworker is being referenced, ***please write the initials of five coworkers*** *with whom you interact the most at work in the space provided below. These coworkers should not include any direct supervisors. **If you have less than five coworkers, please list as many as you have. THIS IS A CONFIDENTIAL SURVEY, SO PLEASE DO NOT INCLUDE FULL NAMES. The initials are only there to help you keep track throughout this survey.*

Coworker Initials:

_____	_____	_____	_____	_____
Coworker 1	Coworker 2	Coworker 3	Coworker 4	Coworker 5

[Disclosure Decisions][2]

1. *Please choose the statement that* ***best*** *describes how you discuss your sexual orientation with Coworker 1:*

A. I actively hide my sexual orientation from this coworker (examples: make up stories that make me seem heterosexual, purposefully try to make him/her believe I am heterosexual).
B. I avoid the topic of sexual orientation with this coworker and let him/her assume I am heterosexual (examples: omit gender pronouns when discussing romantic relationships, avoid socializing with this coworker so he/she won't find out about my sexual orientation).
C. I have not directly acknowledged my sexual orientation to this coworker, but I do not care if he/she knows and I do not change my behavior to hide or avoid the subject (examples: speaking out about LGB-related issues without discussing my sexual orientation, letting this coworker assume I am LGB without confirming it explicitly)

[1]Statements *in italics* are instructions that will appear to the participant. Statements [in brackets] are notes for the reader or labels of the measures.
[2]All items referencing *Coworker 1* (disclosure decisions, intentions, and coworker demographics) will be repeated for each coworker, for up to five coworkers.

D. I have directly acknowledged my sexual orientation to this coworker (examples: directly telling this coworker my sexual orientation, introducing or openly discussing a romantic partner to/with this coworker)

[Only participants who chose response options A., B., or C. for Question 1 will be shown Question 2]

2. *Please choose the statement that* ***best*** *describes how you* ***intend to*** *discuss your sexual orientation with Coworker 1 in the future:*
A. I will actively hide my sexual orientation from this coworker (examples: make up stories that make me seem heterosexual, purposefully try to make him/her believe I am heterosexual).
B. I will avoid the topic of sexual orientation with this coworker and let him/her assume I am heterosexual (examples: omit gender pronouns when discussing romantic relationships, avoid socializing with this coworker so he/she won't find out about my sexual orientation).
C. I will not directly acknowledge my sexual orientation to this coworker, but will not care if he/she knows and will not change my behavior to hide or avoid the subject (examples: speaking out about LGB-related issues without discussing my sexual orientation, letting this coworker assume I am LGB without confirming it explicitly)
D. I will directly acknowledge my sexual orientation to this coworker (examples: directly telling this coworker my sexual orientation, introducing or openly discussing a romantic partner to/with this coworker)

[Only LGB participants who chose response option D. for question 1 will be shown question 3]

[Time to Disclose]
3. Approximately how long after meeting Coworker 1 did you disclose to him/her?__yrs __mo

[Instructions for ALL participants]

Please answer the following items about Coworker 1, to the best of your knowledge:

[Relationship Quality Variables for ALL participants]
[Emotional Support, 1-4 scale ranging from *not at all* to *very much*]
4. How much is Coworker 1 willing to listen to your personal problems?
5. How easy is it to talk with Coworker 1?

[Instrumental Support, 1-4 scale ranging from *not at all* to *very much*]
6. How much can Coworker 1 be relied on when things get tough at work?
7. How much does Coworker 1 go out of (his/her) way to do things to make your work life easier for you?

[Trust, 1-5 scale ranging from *strongly disagree* to *strongly agree*]
8. If I had my way, I wouldn't let this coworker have any influence over issues that are important to me. (reverse-coded)
9. I would be willing to let this coworker have complete control over my future in this company.
10. I really wish I had a good way to keep an eye on this coworker. (reverse-coded)
11. I would be comfortable giving this coworker a task or problem which was critical to me, even if I could not monitor his/her actions.

[Perceived Fate Control of Coworker, 1-5 scale ranging from strongly disagree to strongly agree]
This coworker has influence over:
12. How I am viewed by my supervisor(s).
13. My chances of getting promoted.
14. My work load.
15. How my performance is rated.
16. My stress levels at work.

[Coworker Demographics]
16. Coworker 1's Approximate Age: less than 21 years 21-30 yrs 31-40 yrs 41-50 yrs 51+ yrs

17. Coworker 1's Gender: Male Female

18. Coworker 1's Race/Ethnicity: White Black or African American American Indian or Alaskan Native Hispanic, Latino, or Spanish Origin Asian or Asian American Multi-Racial Do Not Know Other_____

Please answer the following items about yourself and your place of work:

[Identity Centrality for LGB participants, 1-5 scale ranging from *strongly disagree* to *strongly agree*]
19. Overall, being lesbian/gay/bisexual has very little to do with how I feel about myself. (reverse-coded)
20. Being lesbian/gay/bisexual is an important reflection of who I am.
21. Being lesbian/gay/bisexual is unimportant to my sense of what kind of person I am. (reverse-coded)
22. In general, being lesbian/gay/bisexual is an important part of my self-image.

[Self-monitoring, 1-5 scale ranging from *strongly disagree* to *strongly agree*]

23. I can only argue for ideas which I already believe. (reverse-coded)
24. When I am not certain how to act in social situations I look to the behavior of others.

25. I laugh more when I watch a comedy with other than when alone.
26. I would not change or modify my opinions in order to please someone else or win favor. (reverse-coded)
27. I am not always the person I appear to be.
28. My behavior is usually an expression of my true attitudes and beliefs. (reverse-coded)
29. I am not particularly good at making other people like me. (reverse-coded)
30. I can look anyone in the eye and tell a lie.

[Risk propensity, 1-5 scale ranging from *strongly disagree* to *strongly agree*]
31. I believe in safety first. (reverse-coded)
32. I do not take risks with my health. (reverse-coded)
33. I prefer to avoid risks. (reverse-coded)
34. I take risks regularly.
35. I really dislike not knowing what is going to happen.
36. I usually view risks as a challenge.

[Organizational policies for LGB participants, response options: yes, no, not sure]
37. My current workplace has a written nondiscrimination policy that includes sexual orientation.
38. My current workplace has diversity training that includes LGB issues.
39. My current workplace has same-sex partner benefits.
40. My current workplace has supported or taken part in LGB-related events.

[Demographic Items]
41. Your Age: _____ yrs
42. Your Gender: Male Female Transgender
43. Your Race/Ethnicity: White Black or African American American Indian or Alaskan Native Hispanic, Latino, or Spanish Origin Asian or Asian American Multi-Racial Do Not Know Other_____
44. Your Highest Degree Earned: Not a highschool graduate Highschool graduate/GED Some college, but no degree Associate's degree Bachelor's degree Some graduate school, but no advanced degree Advanced degree
45. You currently work in which of the following industries: Manufacturing Finance Education Health Care Transportation Restaurant Retail Other Services High Tech Other_____
46. About how many employees work in your current workplace? Less than 15 employees 15-30 employees 30-60 employees 60-100 employees Over 100 employees
47. How many years you been working at your current workplace?_____

Appendix D

Study 2 Informed Consent

Research Participation and Consent Form: Identity Disclosure at Work

You are being asked to participate in a research project. Researchers are required to provide a consent form to inform you about the study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

PURPOSE OF RESEARCH: You are being asked to participate in a research study concerning disclosure of your depression diagnosis in the workplace. You have been selected as a possible participant in this study because of your diagnosis and employment status. If you are not diagnosed or clinical depression OR you are not currently employed, please exit the survey now. From this study, the researchers hope to learn more about the experiences of employees with clinical depression in the workplace. Your participation in this study will take about 30 minutes. If you are under 18, you cannot participate in this study without parental permission.

WHAT YOU WILL DO: In this study, you will be asked a series of questions about your current workplace and your disclosure status. You will NOT be asked to provide your name, anyone else's name, your organization's name, or any other information that could potentially identify you or your place of work. You will then be asked several demographic questions (example: age, race/ethnicity) about yourself and several questions about your workplace (example: approximate size of organization, industry).

POTENTIAL BENEFITS AND RISKS: The potential benefits to you for taking part in this study are a chance to gain further understanding on your own thoughts and feelings concerning your work environment. Also, your participation in this study may contribute to a better understanding of mental health issues and experiences in the workplace. There are no foreseeable risks associated with participation in this study.

PRIVACY AND CONFIDENTIALITY: The data for this project are being collected anonymously. Neither the researchers nor anyone else will be able to link data to you and we will NOT be collecting IP addresses. The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain anonymous.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW: Participation in this research project is completely voluntary. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time.

COMPENSATION FOR BEING IN THE STUDY: You will be compensated with a $10 gift card for your participation. After completing this study, you will be taken to a separate website in which you can submit your email address to receive the online gift card code. Your email address will NOT be connected to your data at any time. If you submit your email here, a code to redeem your gift card online will be sent to your email address in an email that will NOT reference the study in any way. Your email address will be deleted from the researchers computer immediately following sending you the online gift card and we will no longer have any record of your email address.

CONTACT INFORMATION FOR QUESTIONS AND CONCERNS : If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researchers: Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: 517-353-8855, e-mail: ryanan@msu.edu or Jennifer Wessel, M. A., wesselje@msu.edu.If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 207 Olds Hall, MSU, East Lansing, MI 48824.

By clicking the button marked NEXT, you are indicating your consent to participate in this study. If you do not consent to participate, please exit the survey now. Thank you for your participation.

Appendix E

Study 2 Debriefing

Debriefing Form: Clinical Depression Disclosure at Work

Thank you for participating in our study. This form is designed to provide you with information about the purpose and importance of this study.

Psychological research has shown that individuals diagnosed with psychiatric or mental illnesses, such as being diagnosed with depression, decide whether or not to disclose their mental health status at work due to a host of factors, including characteristics of their coworkers. For example, some research has shown that individuals with psychiatric conditions will be less likely to disclose their mental health status at work if they feel pressure to fit in with others. For more information on mental health disclosure, we refer you to the following studies:

Ellison, M. L., Russinova, Z., MacDonald-Wilson, K. L., & Lyass, A. (2003). Patterns and correlates of workplace disclosure among professionals and managers with psychiatric conditions. *Journal of Vocational Rehabilitation, 18,* 3-13.

Corrigan & Mathews (2003). Stigma and disclosure: Implications for coming out of the closet. *Journal of Mental Health, 12,* 235-248.

We are currently examining how coworker supportiveness relates to depression disclosure at work. We wanted to focus on experiences of support and disclosure within individual relationships, in order to capture the complex nature of disclosure patterns for certain individuals. We gathered this information through survey questions concerning your actual coworker relationships. Your responses will help us further explore the topic of invisible identity disclosure and support.

The survey was relatively straightforward and of the type often encountered in psychological research. Given the mild nature of this research study, we anticipate that there are and will be no risks involved for any of our participants. However, if you have questions or concerns regarding this study, please do not hesitate to contact the investigators. Additionally, if you would like more information about the study or have further questions about it, please feel free to contact Ann Marie Ryan, Ph.D., Department of Psychology, Michigan State University, East Lansing, MI 48824, phone: 517-355-0203, or Jennifer Wessel, M. A., Department of Psychology, Michigan State University, East Lansing, MI 48824, e-mail: wesselje@msu.edu.

Appendix F

Study 2 Survey[1]

Thank you for your participation in this survey. The following survey will ask you to respond to items concerning your ***current*** *workplace and how/if you discuss your mental health with your coworkers. Please answer as honestly as possible. Before beginning this survey, please answer the following item:*

I have been diagnosed with some form of clinical depression (INCLUDING-but NOT limited to-major depressive disorder, bipolar disorder, and dysthymia).: Yes No

Are you currently employed? Yes No

[Participants who answered "No" to either question be told they do not meet the criteria to participate in this survey and thanked for their time]

In this survey, we will be asking questions concerning specific coworkers. In order to keep track of which coworker is being referenced, ***please write the initials of five coworkers*** *with whom you interact the most at work in the space provided below. These coworkers should not include any direct supervisors. **If you have less than five coworkers, please list as many as you have. THIS IS A CONFIDENTIAL SURVEY, SO PLEASE DO NOT INCLUDE FULL NAMES. The initials are only there to help you keep track throughout this survey.*

Coworker Initials:

_____	_____	_____	_____	_____
Coworker 1	Coworker 2	Coworker 3	Coworker 4	Coworker 5

[Disclosure Decisions][2]

1. *Please choose the statement that* ***best*** *describes how you discuss your depression diagnosis with Coworker 1:*

A. I actively hide the fact that I am diagnosed with depression from this coworker (examples: make up stories to explain any absences due to mental health issues or physician/counseling appointments related to mental health, purposefully try to make him/her believe I have no mental health issues).

B. I avoid the topic of mental health or depression with this coworker and let him/her assume I have no mental health issues (examples: avoid discussing mental health issues with this person, avoid socializing with this coworker so he/she won't find out about my mental health issues).

[1]Statements *in italics* are instructions that will appear to the participant. Statements [in brackets] are notes for the reader or labels of the measures.

[2]All items referencing *Coworker 1* (disclosure decisions, intentions, and coworker demographics) will be repeated for each coworker, for up to five coworkers.

C. I have not directly acknowledged my depression diagnosis to this coworker, but I do not care if he/she knows and I do not change my behavior to hide or avoid the subject (examples: speaking out about mental health-related issues without discussing my mental health issues, letting this coworker assume I have had some mental health issues in the past without confirming it explicitly)
D. I have directly acknowledged my depression diagnosis to this coworker (examples: directly telling this coworker that I am diagnosed with depression, directly discussing my course of treatment)

[Only participants diagnosed with depression who chose response options A., B., or C. for Question 1 will be shown Question 2]

2. *Please choose the statement that **best** describes how you **intend to** discuss your depression diagnosis with Coworker 1 in the future:*
A. I will actively hide the fact that I am diagnosed with depression from this coworker (examples: make up stories to explain any absences due to mental health issues or physician/counseling appointments related to mental health, purposefully try to make him/her believe I have no mental health issues).
B. I will avoid the topic of mental health or depression with this coworker and let him/her assume I have no mental health issues (examples: avoid discussing mental health issues with this person, avoid socializing with this coworker so he/she won't find out about my mental health issues).
C. I will not directly acknowledge my depression diagnosis to this coworker, but I will not care if he/she knows and I will not change my behavior to hide or avoid the subject (examples: speaking out about mental health-related issues without discussing my mental health issues, letting this coworker assume I have had some mental health issues in the past without confirming it explicitly)
D. I will directly acknowledge my depression diagnosis to this coworker (examples: directly telling this coworker that I am diagnosed with depression, directly discussing my course of treatment)

[Only participants diagnosed with depression who chose response option D. for question 1 will be shown question 3]

[Time to Disclose]
3. Approximately how long after meeting Coworker 1 did you disclose to him/her?__yrs __mo

Please answer the following items about Coworker 1, to the best of your knowledge:

[Relationship Quality Variables]
[Emotional Support, 1-4 scale ranging from *not at all* to *very much*]
4. How much is Coworker 1 willing to listen to your personal problems?
5. How easy is it to talk with Coworker 1?

[Instrumental Support, 1-4 scale ranging from *not at all* to *very much*]
6. How much can Coworker 1 be relied on when things get tough at work?
7. How much does Coworker 1 go out of (his/her) way to do things to make your work life easier for you?

[Trust, 1-5 scale ranging from *strongly disagree* to *strongly agree*]
8. If I had my way, I wouldn't let this coworker have any influence over issues that are important to me. (reverse-coded)
9. I would be willing to let this coworker have complete control over my future in this company.
10. I really wish I had a good way to keep an eye on this coworker. (reverse-coded)
11. I would be comfortable giving this coworker a task or problem which was critical to me, even if I could not monitor his/her actions.

[Perceived Fate Control of Coworker 1, 1-5 scale ranging from strongly disagree to strongly agree]
This coworker has influence over:
12. How I am viewed by my supervisor(s).
13. My chances of getting promoted.
14. My work load.
15. How my performance is rated.
16. My stress levels at work.

[Coworker Demographics for ALL participants]
16. Coworker 1's Approximate Age: less than 21 years 21-30 yrs 31-40 yrs 41-50 yrs 51+ yrs

17. Coworker 1's Gender: Male Female

18. Coworker 1's Race/Ethnicity: White Black or African American American Indian or Alaskan Native Hispanic, Latino, or Spanish Origin Asian or Asian American Multi-Racial Do Not Know Other_____

[Identity Centrality, 1-5 scale ranging from *strongly disagree* to *strongly agree*]
19. Overall, being diagnosed with depression has very little to do with how I feel about myself. (reverse-coded)
20. Being diagnosed with depression is an important reflection of who I am.
21. Being diagnosed with depression is unimportant to my sense of what kind of person I am. (reverse-coded)
22. In general, being diagnosed with depression is an important part of my self-image.

[Self-monitoring 1-5 scale ranging from strongly disagree to strongly agree]

23. I can only argue for ideas which I already believe. (reverse-coded)
24. When I am not certain how to act in social situations I look to the behavior of others.
25. I laugh more when I watch a comedy with other than when alone.
26. I would not change or modify my opinions in order to please someone else or win favor. (reverse-coded)
27. I am not always the person I appear to be.
28. My behavior is usually an expression of my true attitudes and beliefs. (reverse-coded)
29. I am not particularly good at making other people like me. (reverse-coded)
30. I can look anyone in the eye and tell a lie.

[Risk propensity, 1-5 scale ranging from strongly disagree to strongly agree]
31. I believe in safety first. (reverse-coded)
32. I do not take risks with my health. (reverse-coded)
33. I prefer to avoid risks. (reverse-coded)
34. I take risks regularly.
35. I really dislike not knowing what is going to happen.
36. I usually view risks as a challenge.

[Organizational policies; response options: yes, no, not sure]
37. My current workplace has a written nondiscrimination policy that includes mental health.
38. My current workplace has diversity training that includes mental health issues.
39. My current workplace accommodates the mental health issues of its employees.
40. My current workplace has supported or taken part in mental health promotion events and/or training.

[Demographic Items]
41. Your Age: _____ yrs
42. Your Gender: Male Female Transgender

43. Your Race/Ethnicity: White Black or African American American Indian or Alaskan Native Hispanic, Latino, or Spanish Origin Asian or Asian American Multi-Racial Do Not Know Other_____

44. I identify as: Gay or Lesbian Bisexual Heterosexual Other_____

45. Your Highest Degree Earned: Not a highschool graduate Highschool graduate/GED Some college, but no degree Associate's degree Bachelor's degree Some graduate school, but no advanced degree Advanced degree

46. You currently work in which of the following industries: Manufacturing Finance Education Health Care Transportation Restaurant Retail Other Services High Tech Other_____

47. About how many employees work in your current workplace? Less than 15 employees 15-30 employees 30-60 employees 60-100 employees Over 100 employees

48. How many years you been working at your current workplace?_____

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