

TESTING AN EMPIRICAL MODEL OF
WORKPLACE SEXUAL IDENTITY MANAGEMENT

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TESTING AN EMPIRICAL MODEL OF
WORKPLACE SEXUAL IDENTITY MANAGEMENT

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ABSTRACT

This study sought to empirically test segments 2 and 3 of Lidderdale et al.'s (2007) Social Cognitive Career Theory (SCCT) based model of workplace sexual identity management (WSIM). Workplace sexual identity management refers to the way in which sexual minority individuals make decisions regarding the disclosure of their sexual identity in their workplace. In conjunction with testing this model, this study also sought to improve upon methodological and sampling issues present in previous studies of sexual minority participants (Croteau, 1996). It was hypothesized that variables similar to those of SCCT (learning experiences, outcome expectations, self-efficacy, and contextual influences) would predict, both directly and indirectly, employee's range of acceptable WSIM strategies, strategy intentions, and actual disclosure behaviors. Participants were a national sample of sexual minority individuals who were currently employed 15 or more hours per week and who successfully completed an online survey. Structural equation modeling was used to examine model-data fit. The original SCCT-based model achieved poor fit; however, a revised version of the model eliminating nonsignificant paths and adding three suggested paths achieved excellent fit to the data ($\chi^2 = 5.86$, $p = .21$; CFI = .997; RMSEA = .05; SRMR = .03). Results thus provide support for the use of an SCCT-based model of WSIM. Limitations of the present study, relevant sampling and measurement issues, and implications for future research and professional work are discussed.

Keywords: workplace sexual identity management, social cognitive career theory, sexual minority populations, path analysis, research methodology

DEDICATION

In fond memory of Dr. James R. Rogers (1951 – 2013), Professor of Counseling, Collaborative Program in Counseling Psychology, The University of Akron, Akron, Ohio.

I also dedicate this work to my loving parents, Jeff and Pam Hanneman, who have always believed in my ability to succeed.

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CHAPTER I

STATEMENT OF THE PROBLEM

Workplace Sexual Identity Management

One of the focuses in vocational psychology that includes the study of sexual minorities is Workplace Sexual Identity Management (WSIM). Sexual identity management refers to “the way in which [lesbian, gay, bisexual, and transgendered (LGBT)] individuals handle self-disclosure of their sexual orientation¹” (Miller & Brown, 2005, p. 454). Several literature reviews on sexual minority vocational scholarship have labeled WSIM as one of the most important themes for study with respect to sexual minority workers and workplaces (see Croteau, Bieschke, Fassinger, & Manning, 2008).

Discussions of workplace sexual identity management emerged in the psychological literature in the 1990s, when two researchers identified potential strategies used by workers regarding sexual identity management. Griffin (1992) developed a schema that included 4 WSIM strategies: passing, covering, being implicitly out, and being explicitly out. *Passing* is when an individual acts in order to create the impression that s/he is heterosexual. This involves not correcting assumptions of heterosexuality, and even fabricating information about oneself in order to mislead colleagues. The objective

¹ There has been debate in the psychological literature regarding the definition of sexual identity management. Refer to Chapter II for a more detailed discussion.

with passing is to help oneself feel safe in an environment that may be hostile to sexual minorities. *Covering* is another strategy with the ultimate goal of maintaining personal safety. Here, individuals omit any personal information that might clue others in to the fact that they are a sexual minority. In a sense, the aim here is concealment, not necessarily acting or fabrication. Being *implicitly out* is where a person is honest about their personal life enough to include information that might lead others to suspect that s/he is a sexual minority; however, the individual is not direct or explicit about his or her sexual identity. Finally, being *explicitly out* is when a person openly states or provides information that s/he is a sexual minority. Clearly, this is the most direct approach in Griffin's model.

There is no doubt that Griffin's (1992) model added much to the sexual minority vocational literature by pioneering a new understanding of the workplace sexual identity management construct. However, several criticisms of her model can be noted. First, Griffin based this model on qualitative interviews from lesbian and gay teachers. While it is understandable how WSIM is clearly relevant to this population (Kitzinger, 1991), limiting her sample to one profession means that, technically, her results are only generalizable to teachers. In addition, her participant sample did not include bisexuals or queer or questioning individuals, making the results generalizable only to lesbians and gay men. Finally, and most importantly, this model still only describes and labels strategies, and does not take into account what leads up to the decision to employ one particular strategy over another.

Woods (1993) developed a second scheme for understanding WSIM based on a sample of gay male workers in corporate settings. Three different strategies emerged:

counterfeiting, avoidance, and integration. *Counterfeiting* is analogous to Griffin's (1992) passing strategy in that the person actively works to create a false heterosexual identity. For example, the person might change the sex of his or her romantic partner when talking about her/him with colleagues to create the illusion that the person is heterosexual. *Avoidance* is similar to the covering strategy described by Griffin. With avoidance, individuals leave out references to their personal life. In this way, sexual minority persons are not pretending to be heterosexual, but they are not making others aware that they identify as a sexual minority either. Finally, *integration* is when a person openly reveals his or her sexual minority status. This can be done by openly contradicting heterosexual assumptions about oneself, displaying a picture of one's partner, or inviting a partner to a work-related event. Integration is most similar to Griffin's explicitly out strategy.

Although Woods' (1993) WSIM schema expanded the literature and proved to be similar to the strategies identified by Griffin (1992), it is also subject to a number of criticisms. Woods' schema was only based on a limited sample of gay men. No lesbians or bisexuals were included in the sample, making the results even less generalizable than those of Griffin (1992). Further, similarly to Griffin's model, Woods' list of strategies only provides a conceptual set of labels. It does not attempt to encompass the reasons why sexual minority individuals choose to use one WSIM strategy over another.

In addition to the identification of workplace sexual identity management strategies, much of the early research on WSIM has focused on simply assessing whether or not LGB individuals actually disclose their sexual identity in the workplace (e.g., Anderson, Croteau, Chung, & DiStefano, 2001; Croteau, 1996; Croteau, Anderson,

DiStefano, & Kampa-Kokesch, 2000). Limited research has examined a few isolated variables that might contribute to sexual minority persons' decisions to disclose their sexual identity in the workplace. For example, some studies have found that workplace policies affirming the sexual minority employee were associated with workers being more open about their sexual identity. In addition, these workers reported less on-the-job discrimination and hostility, and more support from colleagues (Button, 2001; Chrobot-Mason, Button, & DiClementi, 2001; Day & Schoenrade, 1997; Griffith & Hebl, 2002; Ragins & Cornwell, 2001; Rostosky & Riggle, 2002; Waldo, 1999). Other research has found a link between markers of sexual minority identity development (such as internalized homophobia) and employee disclosures of their sexual identity (Button, 2001; Rostosky & Riggle, 2002). For example, Rostosky and Riggle (2002) found that internalized homophobia accounted for 23.5% of the variance in workplace sexual identity disclosure in a national sample of 236 gay and lesbian employees.

A standing criticism of the literature mentioned above is that most of the studies provide basic information in isolation from other theoretical constructs. There has been a call for theory regarding workplace sexual identity management that is built on prior empirical results (Chung, 2003; Croteau et al., 2008; Lonborg & Phillips, 1996). Considering the above research collectively, as Croteau and colleagues (2008) aptly stated, in this early WSIM research, "the effects of a full range of individual and contextual variables on identity management were not taken into account" (p. 534). Indeed, until recently, because there were no "overarching conceptual notions to guide the understanding and study" of workplace sexual identity management, the empirical research in this area was described as "fragmented and atheoretical" (Croteau et al., 2008,

p. 534). In recent years, several researchers have attempted to remedy this problem by creating theoretical models of workplace sexual identity management.

Three Theoretical Models of Workplace Sexual Identity Management

To date, there are three proposed theoretical models of workplace sexual identity management present in the literature. Two of these models (Clair, Beatty, & MacLean, 2005; Ragins, 2004) use stigma theory to conceptualize and understand sexual identity management. The third set of researchers (Lidderdale, Croteau, Anderson, Tovar-Murray, & Davis, 2007) use Social Cognitive Career Theory as a base for their model.

Ragins (2004) described a stigma-based home-work disclosure model. The model includes the antecedents and consequences of disclosure in both the work and home domains. The model posits that in making disclosure decisions, sexual minority individuals consider the anticipated consequences of disclosing their sexual identity in the workplace in combination with variables related to the workplace environment (e.g., presence of other out sexual minority workers, presence of allies, and the presence of sexual minority-affirmative institutional policies) and their own self-identity (e.g., how central a sexual minority identity is to participants' sense of self). Because Ragins' model is grounded in stigma theory (Goffman, 1963), it places emphasis on the potential costs of disclosing an otherwise invisible stigmatized sexual minority identity. These costs are weighed against potential benefits of self-disclosure in the workplace before a disclosure decision is made. Although Ragins' model is helpful in providing a thorough look at the mechanisms that may be involved in the disclosure process, it is a highly complex model that is not well adapted for empirical testing. There is a lack of existing standardized measures of the variables present in the model, and without such measures, empirical

testing of this model would be difficult. In addition, this model was constructed to cover both the workplace (or public) domain, and the home (or private) domain, which is beyond the scope of vocational psychology and the current study.

Clair, Beatty, and McLean (2005) proposed a “generalized model of invisible identity management” (p. 78) in that they did not limit their model to sexual minority individuals. Rather, they postulated that members of any invisible minority group might choose similar identity management strategies in the workplace. Consequently, Clair and colleagues drew from the extant literature on sexual minority persons, persons with illness and disability, and “ethnoracial diversity” (p. 79) in constructing the model. They described two disclosure decisions: *passing* and *revealing*. Because Clair et al.’s model was specifically designed to be generalizable to multiple minority groups, researchers wishing to examine it in a sample limited to sexual minority persons should be cautious in applying a model that was not designed for this purpose. In addition, because the model only includes two disclosure options that represent opposite endpoints of a single bipolar disclosure continuum, it may not adequately capture the “wide range of choice, implementation, and adjustment issues experienced” by sexual minority persons in the workplace (Lonborg & Phillips, 1996, p. 177).

The final WSIM model was proposed by Lidderdale et al. (2007). These authors noted the lack of literature describing the process of how and why particular choices about sexual identity disclosure are made at work. Therefore, following Chung’s (2003) suggestion to apply traditional vocational development theories to the sexual minority population, Lidderdale and her colleagues developed a model of WSIM based in Social-

Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994). Their model asserts that sexual identity management occurs in four segments (see Figure 1).

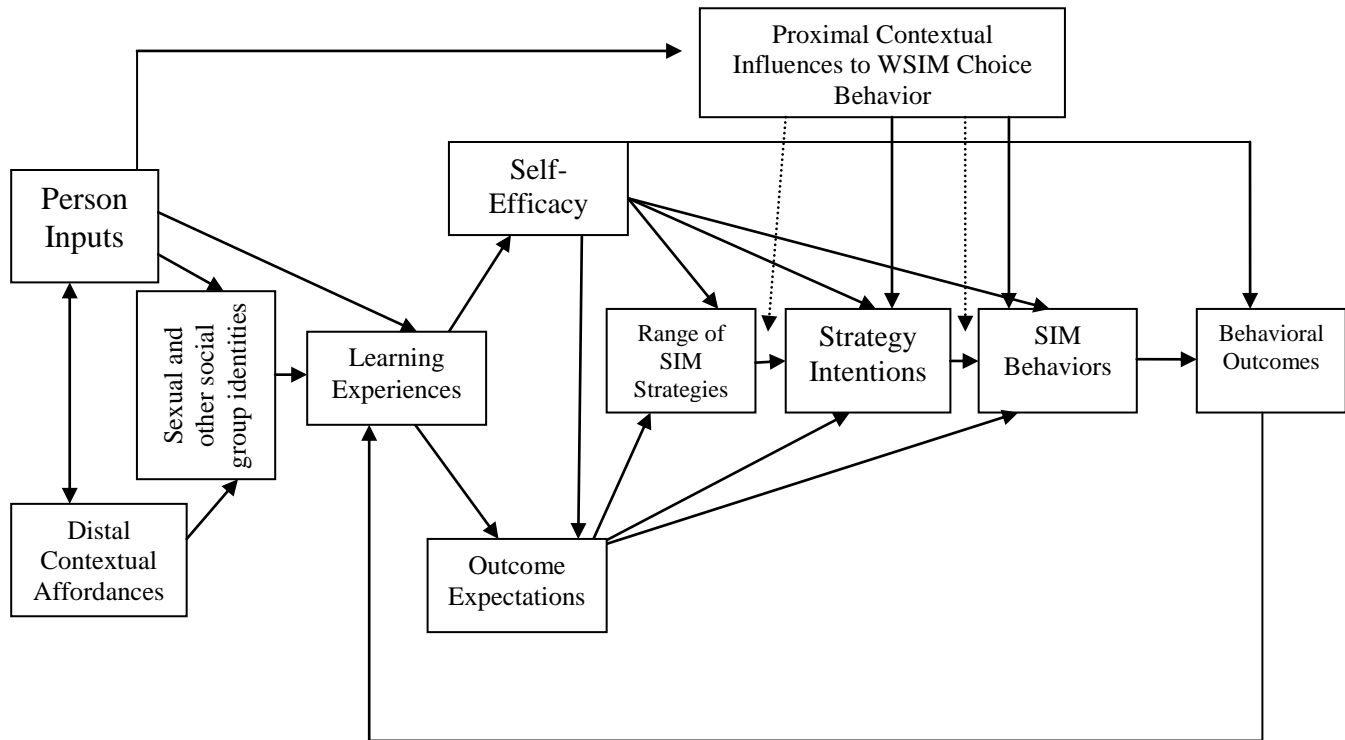


Figure 1. Lidderdale et al.'s (2007) model of workplace sexual identity management. Note. From "Building Lesbian, Gay, and Bisexual Vocational Psychology: A Theoretical Model of Workplace Sexual Identity Management." by M.A. Lidderdale, J.M. Croteau, M.Z. Anderson, D. Tovar-Murray, and J.M. Davis, 2007. In K.J. Bieschke, R.M. Perez, & K.A. DeBord (Eds.), *Handbook of Counseling and Psychotherapy with Lesbian, Gay, Bisexual, and Transgender Clients* (pp. 245-270), Washington, DC: American Psychological Association. Note. Dashed line indicates an indirect pathway. Solid lines indicate direct pathways.

In segment one, person inputs (e.g., predispositions, age, health status, race, ethnicity, gender), distal contextual variables (e.g., influential environmental factors such as familial and cultural messages related to sexual orientation, economic and educational opportunities, exposure to sexual minorities, and community norms concerning tolerance), and different sexual and non-sexual group identities (e.g., sexual identity;

cultural identification, religion) interact to shape the person's learning experiences about sexual identity management (e.g., the consequences of being open about one's sexual identity). Lidderdale and colleagues (2007) provide the following illustration of segment one (p. 253, brackets added):

A White man [person input] who grew up in an affluent suburban southern setting [distal contextual variable] with little exposure to diversity generally—and to LGB people in particular—might have had very little direct learning in his youth about sexual identity and its management [learning experiences]. Being from an affluent family [person input], however, would allow easy economic access to a college education, during which exposure to LGB people and issues would be likely [distal contextual variable].

In segment two, the learning experiences lead to self-efficacy beliefs and outcome expectations about the range of sexual identity management strategies (per Griffin, 1992) that the person finds useful for him/her. Self-efficacy beliefs in relation to sexual identity management refer to “the person's beliefs about his or her ability to perform a given identity management behavior” (Lidderdale et al., 2007, p. 255). Outcome expectations, in turn, refer to the person's beliefs about the outcomes of performing the sexual identity management behaviors. An example is again provided by Lidderdale et al. (p. 255, brackets added):

A bisexual woman who recently started a relationship with a lesbian believes that she can successfully continue to assert her bisexual identity to her lesbian friends [self-efficacy beliefs]...because of having seen an admired friend be successfully open about her bisexuality in the lesbian community [outcome expectations].

In segment three, actual identity management is enacted in the workplace. This begins with a range of personally acceptable identity management strategies and moves to workplace-specific sexual identity management intentions and behaviors. This is

analogous to the flow in the SCCT model from career interests to career choice goals to career choice actions (see Figure 2).

In the fourth and final segment, a feedback loop occurs where the outcomes of identity management behaviors function as new learning experiences that are incorporated into self-efficacy and outcome expectations for future sexual identity management decisions and behaviors. Thus, one can see how Lidderdale et al.'s (2007) model draws from key components of SCCT.

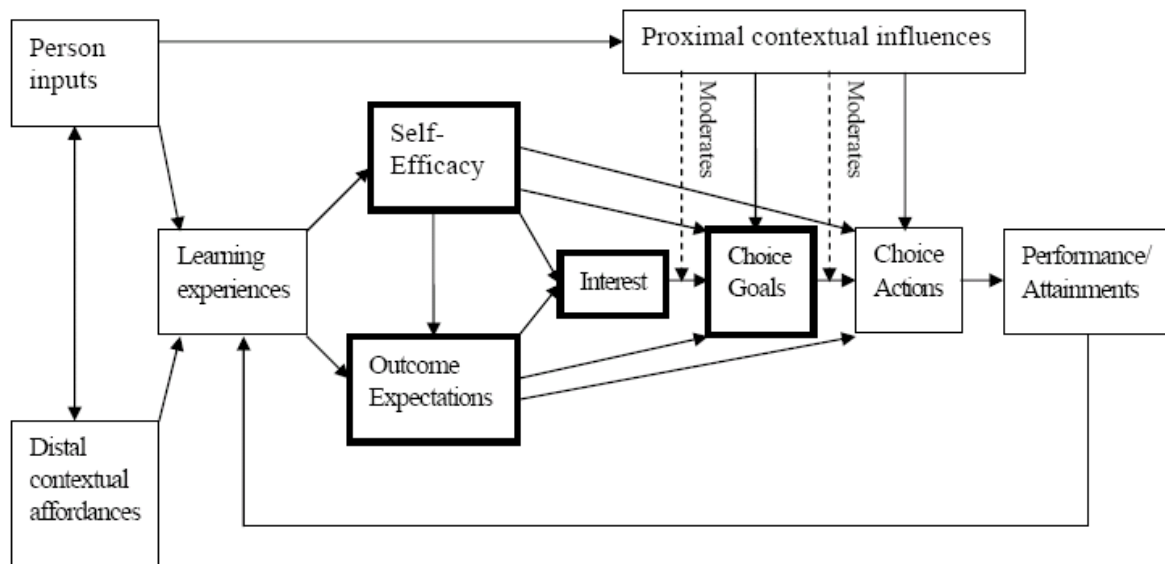


Figure 2. Model of Social Cognitive Career Theory. Note. From “A Social Cognitive View of Career Development and Counseling” by R.W. Lent, 2005. In S.D. Brown and R.W. Lent *Career Development and Counseling: Putting Theory and Research to Work* (pp. 101-127). Hoboken, NJ: Wiley & Sons.

Rationale for an SCCT-based Model of Workplace Sexual Identity Management

Lidderdale et al. (2007) describe their WSIM model as a mechanism that can be used “to generate theory-based understanding of many existing research findings” (p. 266). However, neither the authors of this article, nor any other researchers to date, have

provided any empirical evidence to offer support for the WSIM model. The WSIM model is based in social cognitive career theory, borrowing the sociocognitive constructs of learning experiences, self-efficacy beliefs, and outcome expectations, as well as theorized precursors of these sociocognitive variables (e.g., person inputs, contextual affordances). The original theory of SCCT, which ultimately explains interest formation and career choice behavior, has received empirical support in predominately heterosexual samples (e.g., Bandura, 1997; Lent, Brown, & Hackett, 1994; Rottinghaus, Larson, & Borgen, 2003; Swanson & Gore, 2000; Stajkovic & Luthans, 1998). However, only two studies have even investigated whether SCCT itself holds up in a sample of sexual minorities (Mancuso, 2005; Plaufcan, 2011). In an unpublished doctoral dissertation, Plaufcan (2011) showed that SCCT was generally invariant across samples of heterosexual and lesbian women. However, Mancuso (2005) only examined portions of SCCT in a sample of lesbian women and gay men, and found limited initial support for sociocognitive variables such as outcome expectations and self-efficacy as predictors of lesbians' and gay men's vocational interests. Therefore, it would be unwise to assume that simply because the WISM model is based in SCCT, it will be empirically supported. Direct testing of the SCCT-based WSIM model is necessary in order to reach this conclusion. The empirical testing of Lidderdale et al.'s (2007) model was not practical, if even possible, at the time it was published, because there were no existing measures of self-efficacy beliefs about performing identity management behaviors or for outcome expectations of WSIM behaviors at that time. In recent years, a measure of WSIM self-efficacy beliefs has been developed based on a measure of perceived career and educational barriers (Lance, Anderson, & Croteau, 2008).

The SCCT-grounded WSIM model described by Lidderdale and colleagues (2007) responds to the aforementioned call for theories of WSIM decision-making that are based on previously empirically supported theoretical models. SCCT includes types of constructs that are prominent in each of the major theories of career choice and development; namely, constructs pertaining to the self, self-concept, and identity (Blustein & Fouad, 2008). In addition, a sociocognitive framework is especially helpful in understanding how individual differences (such as variations in sexual identity development) and present contextual influences (such as workplace climate) interact in shaping the choice and execution of WSIM strategies (Lidderdale et al., 2007). Prominent vocational psychology researchers contend that theoretically, Lidderdale et al.'s (2007) model seems strong (e.g., Chung, 2001; Chung, Williams, & Dispenza, 2009; Croteau et al., 2008); however, it remains to be tested.

Another reason why SCCT is a relevant model to employ in conceptualizing decisions regarding workplace sexual identity management is because the model was developed to be inclusive of the career experiences of diverse groups (Lent, Brown, & Hackett, 1994). SCCT has been shown to be applicable in examining the ways in which person inputs, such as sex and race, influence career development (e.g., Fouad & Smith, 1996; Gainor & Lent, 1998; Hackett & Byars, 1996; Williams & Subich, 2005). Thus, it would make sense to apply this model when considering sexual orientation as a person input variable (Plaufcan, 2011). Further, Morrow, Gore, and Campbell (1996) asserted that SCCT might be a particularly useful framework for understanding the career development process of gay and lesbian individuals, at the least. Further, Social Cognitive Career Theory has received a great deal of empirical support. Several studies

have found good overall model-data fit ratios for the hypothesized relationships among learning experiences, self-efficacy, outcome expectations, interests, and choice goals (e.g., Gainor & Lent, 1998; Lent, Brown, Nota, & Soresi, 2003; Lent et al., 2005; Navarro, Flores, & Worthington, 2007; Rottinghaus et al., 2003; Schaub & Tokar, 2005; Tokar, Thompson, Plaufcan, & Williams, 2007). Because SCCT was developed to explain career development broadly through the variables of interests and career choice, this makes SCCT an ideal empirically supported theoretical model upon which to base a model of WSIM.

In addition, other researchers have adapted SCCT for studying constructs other than those for which it was originally intended. For example, Kahn and Scott (1997) used a social-cognitive-based model to examine predictors of research productivity in counseling psychology graduate students. They included the variables of career goals, research interests, research self-efficacy, research training environment, gender and year in doctoral program. Brown and colleagues (2008) have also adapted SCCT to test a model of college students' academic performance and persistence, and Lent, Singley, Sheu, Schmidt, & Schmidt (2007) adapted SCCT to test a model of social-cognitive factors as related to academic satisfaction in engineering students. Several studies have also looked at SCCT as adopted to study subjective well-being and job satisfaction (Duffy & Lent, 2009; Lent & Brown, 2006, 2008). This research is consistent with Lent, Brown, and Hackett's (1994) suggestion that the SCCT framework be adapted and applied to the study of other constructs. Thus, SCCT is a theory that lends itself well to expansion and application to other domains.

The Present Study

SCCT is a central theory of career development that has received a wealth of empirical support. It was originally designed to be inclusive of the career experiences of diverse groups, and has been shown to hold up in such samples. Several studies have also shown the model's versatility in being expanded to the study of other domains.

Therefore, the purpose of the current study is to respond to the call for an empirically-supported model of workplace sexual identity management by testing a portion of Lidderdale et al.'s (2007) Social Cognitive Career Theory-based model of workplace sexual identity management in a sample of employed sexual minority individuals (see Figure 1). A study of this type will improve upon the extant vocational psychological literature by grounding new workplace sexual identity management research in a supported theoretical framework.

For the present study, the author chose to examine segments 2 and 3 of the existing model in a sample of sexual minority adults who are employed 15 or more hours per week. In segment 2, learning experiences about sexual identity management consequences are seen as a predictor of both self-efficacy beliefs and outcome expectations for sexual identity management strategies. In segment 3, self-efficacy beliefs and outcome expectations predict the range of sexual identity management strategies considered by the individual, as well as WSIM strategy intentions and behaviors. Contextual variables (such as workplace climate) also directly influence WSIM strategy intentions and behaviors. It is predicted that these segments of the model will be empirically supported in the participant sample.

CHAPTER II

REVIEW OF THE LITERATURE

The following sections provide a review of the literature on workplace sexual identity management and Social Cognitive Career Theory. First, some general definitions are presented for clarification. Next, the literature on workplace sexual identity management (WSIM) and its correlates will be reviewed and critiqued. In addition, some research on Social Cognitive Career Theory, as relevant to Lidderdale et al.'s (2007) model of workplace sexual identity management, will be described and discussed. Finally, the rationale and specific hypotheses for the current study are presented.

Definitions

Sexual Minority Persons

In the psychological literature, there are many terms used to refer to sexual minorities. Some researchers choose acronyms like LGBT to stand for lesbian, gay, bisexual and transgendered individuals. However, consistent with the ideology of the APA Task Force on Appropriate Therapeutic Responses to Sexual Orientation (2009), in the current discussion the term sexual minority will be used (cf. Bluemfeld, 1992; McCarn & Fassinger, 1996; Ullerstam, 1966). This term designates “the entire group of individuals who experience significant erotic and romantic attractions to adult members of their own sex, including those who experience attractions to members of their own and of the other sex” (APA, 2009, p. 1). This term is used because not all sexual minority

individuals adopt a lesbian, gay, or bisexual identity. For example, some individuals may choose to adopt a queer identity, or may still be going through the questioning process. However, these individuals can still be constituted as sexual minorities. I will return to this discussion later in the chapter.

Sexual Orientation and Sexual Identity

Before a discussion of sexual identity management can take place, it is important to clarify the distinction between sexual orientation and sexual identity. Sexual orientation consists of multiple components, such as emotional, physical, sexual, and romantic attractions to members of the opposite sex, same sex, or both sexes (Carroll, 2006; Rosario et al., 1996). Sexual identity, on the other hand, denotes a person's self-identification as lesbian/gay, bisexual, queer, questioning, or straight (Rosario et al., 1996). It is possible that a person's sexual orientation and sexual identity could be in disagreement with each other; for example, an individual who self-identifies as lesbian, but has a past history of sexual activity with men and still finds certain men attractive. In this case, how she self-identifies and what her attractions and behaviors indicate are different. In addition, it is possible that both a person's sexual orientation and sexual identity can change over time (Diamond, 2008; Rosario et al., 1996). As indicated by the term, sexual identity management regards one's personal sexual identity, not one's sexual orientation. Unfortunately, many researchers use these terms interchangeably.

Workplace Sexual Identity Management

There has been some debate in the literature regarding the construct of workplace sexual identity management. In a review of the WSIM literature by Croteau and colleagues (2008), it was noted that there appeared to be three distinct definitions of

WSIM employed in the literature. The first definition regards identity management as a summary of actual disclosure actions over time. The second considers identity management as a particular approach or strategy for presenting one's identity in the workplace. The third holds identity management as a specific decision to disclose or not. In order to create a more parsimonious and precise definition of workplace sexual identity management, Croteau and colleagues (2008) recommended making a distinction between the terms *identity management* and *disclosure*. They define identity management as "discussion of various [disclosure] strategies that can be employed," (p. 550) and define disclosure as particularly focusing on the actual choices one makes regarding disclosure or nondisclosure in particular instances.

Other researchers have chosen to employ different terms and to conceptualize unique constructs related to WSIM. For example, Lasser, Ryser, and Price (2010) used the term *visibility management*, and defined it as "the process by which individuals regulate the degree to which they disclose traits or characteristics that would otherwise be inconspicuous" (p. 416). However, they reported that visibility management is distinct from identity management in that visibility management was developed to integrate the components of identity management and disclosure into a comprehensive process model. Others (e.g., Frost & Bastone, 2007) have used the term *stigma concealment*. However, this term refers more to the avoidance of sharing a stigmatized identity than to specific identity management strategies.

In the present study, the author chose to use the definitions for identity management and disclosure, as suggested by Croteau and colleagues (2008). Because Lidderdale et al.'s (2007) WSIM model has separate variables for potential sexual

identity management strategies and actual workplace sexual identity management behaviors, in this study WSIM will refer to the former and actual disclosure decisions will refer to the latter.

Theoretical and Empirical Literature on Workplace Sexual Identity Management

An extensive literature search shows that there has been much theoretical discussion of sexual identity management in the research literature; however, these publications are fragmented and come from a wide variety of fields (e.g., social work, I/O psychology, counseling/vocational psychology, social psychology, and counselor education). Some useful empirical studies were published as book chapters in texts about gay and lesbian mental health (e.g., Bieschke, Perez, & DeBord, 2007; Fassinger & Israel, 2010; Greene & Herek, 1994; Omoto & Kurtzman, 2006; Perez, DeBord, & Bieschke, 2000; Stein, 1996; Walsh, 2008) or gay and lesbian workers (e.g., Davidson & Earnshaw, 1991; Diamant, 1993; Ellis & Riggle, 1996; Harbeck, 1992; Kirby, 2002; McNaught, 1993), but not as peer-reviewed journal articles. When included under broad categories such as mental health or gay and lesbian employees, the information provided in these studies becomes somewhat lost among the literature. In addition, book chapters are more difficult to search for and obtain than are peer reviewed journal articles, making a comprehensive summary of relevant literature complicated. This may be one reason why relatively little empirical research exists on the specific construct of WSIM. The goal of this section is to provide a general overview of this research literature and its link to the model of WSIM posited by Lidderdale et al. (2007).

Sexual Identity Management Strategies

Early discussions of workplace sexual identity management referred to sexual minority persons as an “invisible” minority. As described by Badgett (1996), “because someone’s sexuality is not observed or inferred, the option of hiding it in some or all social contexts is often chosen by lesbian, gay, or bisexual people to avoid the potential for social ostracism, physical violence, or other sanctions imposed by an unaccepting society” (p. 35). The workplace is no exception. Because discrimination in the workplace is a real barrier that affects sexual minority persons on a regular basis, it is important to understand how those who identify as sexual minorities develop effective coping strategies to deal with this discrimination (Chung, Williams, & Dispenza, 2009). Workplace sexual identity management is one category of coping strategy, as identified by Chung (2001).

Recall that the original WSIM strategies were identified theoretically by Griffin (1992) and Woods (1993). There has been some, albeit not much, empirical research examining whether or not these strategies are indeed employed by actual sexual minority persons in the workplace. For example, in a qualitative study that included a sample of nine gay men and eight lesbians, Chung and colleagues (2009) found empirical support for Griffin’s (1992) model of identity management strategies (i.e., passing, covering, implicitly out, and explicitly out; see Chapter I for a thorough description of Griffin’s model). However, Chung et al. added an additional sexual identity management strategy to the four identified by Griffin. This additional WSIM strategy was called *acting*, and refers to “engaging in a heterosexual relationship for the purpose of making one believe that one is heterosexual” (Chung et al., 2009, p. 39). Participants in the study were

required to have current work experience, identify as gay, lesbian, or bisexual, and to “express some concern about their sexual minority status in the workplace” (p. 165). They were interviewed, and the interviews were later transcribed and coded according to the WSIM strategies outlined by Griffin, plus the additional acting strategy. If interviewees reported using multiple identity management strategies, all of them were coded and recorded.

The authors reported that the results of the coding supported the validity of the identity management model in that no additional categories that were not already identified by Griffin (1992) emerged. However, it was noted in the study that none of the participants reported using either the new acting or Griffin’s passing coping strategies. Both of these strategies involve being dishonest in behavior or communication. Three participants used the covering strategy, one was implicitly out, and two participants described themselves as explicitly out. The authors suggested that one reason why no participants in the sample used the passing strategy may have been because those who agreed to participate were relatively affirmative of their own sexual identities. It makes sense that individuals who are comfortable with how they identify sexually may also be more comfortable sharing that identification with others. In fact, this is what is posited in Cass’ (1984) model of sexual identity development. Therefore, the use of a limited, convenience sample was likely a confound in Chung et al.’s (2009) study. Future research on sexual identity management should seek to employ sexual minority persons who are still somewhat private about their sexual identity, or are deliberately faking a heterosexual identity, as well as those who may still be questioning their sexual identity.

This would likely provide better support for Griffin's (1992) theoretical model of WSIM strategies and possibly the additional acting strategy described by Chung et al. (2009).

In a different study, Button (1996, 2001) found support for Woods' (1993) model of identity management behaviors in a sample of gay men and lesbian women (see Chapter I for a thorough review of this model). Consequently, Button extended the applicability of Woods' theory to lesbian women, as they were not included in Woods' original sample. He collected data from 537 lesbian and gay employees across the United States. Workplace sexual identity management behaviors were measured using items constructed by Button (1996), the original doctoral dissertation upon which the 2001 article was based. There were three scales, one for each of Woods' sexual identity management strategies: Counterfeiting, Avoiding, and Integrating. An example item from the Counterfeiting scale reads, "To appear heterosexual, I sometimes talk about fictional dates with members of the opposite sex." An example item from the Avoiding scale is, "I avoid personal questions by never asking others about their personal lives." An example from the integrating scale is, "I let my coworkers know that I'm proud to be lesbian/gay." In the (2001) article, the alpha coefficients for the three scales were .80, .87, and .90, respectively.

Button (2001) conducted multigroup confirmatory factor analyses with these data. He found that a three factor model including counterfeiting, avoiding, and integrating fit the data better than a two factor model of just passing and integrating. This provided support for Woods' (1993) model of identity management. However, this support should be perceived as preliminary, because no other researcher at the time of the 2001 publication had attempted to assess the psychometric properties of the items created by

Button (1996) in a sample of sexual minority participants. However, the scales scored for these items did receive good internal consistency reliability estimates in the lesbian and gay participant sample. It remains to be seen how these same items would hold up in a sample that included other sexual minority individuals.

Button (1996, 2001) conducted additional analyses with many other measured variables. The remainder of his study will be discussed in greater depth in the section on the proximal contextual variable of the workplace climate. Limitations of the study will also be presented in that section.

Other research has examined WSIM strategies more broadly by employing strategies present in both Griffin's (1992) and Woods' (1993) models. One such strategy is passing. As described by Huebner and Davis (2005), those who hide their sexual orientations and 'pass' as heterosexual must inhibit a wide variety of thoughts, behaviors, and emotions to stay closeted. This phenomenon is so widespread that "the closet" in America has come to mean a place where people keep a secret about themselves (McNaught, 1993). For a detailed review of the concept of passing, see DeJordy (2008).

In a noteworthy study on passing from the social work literature, Anderson and Holliday (2004) collected qualitative data from a sample of 40 adult lesbians who were 21 years of age or older. Although the study's focus was not limited to the workplace, discussion of whether or not lesbian participants used the passing strategy in the workplace was part of the data collected. Because the focus of the study was on passing, the researchers did not collect data about the use of additional WSIM strategies.

Anderson and Holliday (2004) conducted semi-structured in-depth interviews with each of the participants. The authors reported that use of a qualitative method

enhanced their ability to “collect individual perspectives and the contexts of behaviors not easily captured on a survey instrument” (p. 30). It can also be noted that at the time this study was published, there were no existing measures on passing or other WSIM behaviors aside from the items evaluated by Button (2001), making a qualitative approach more appropriate. Subsequently, the dialogue of the interviews was transcribed and a content analysis was performed.

All 40 of the participants reported that they had used passing as a strategy at some point in their lives. When asked about times when they chose to pass, 71% of participants mentioned doing so in their jobs or careers. Other contexts included home community (52%), around relatives (39%), and in situations deemed a safety risk (26%). Further, nearly three-quarters (73%) of participants reported that they felt passing to be a perfectly understandable identity management strategy in the face of our heterosexist and homophobic society. Clearly, these results are discrepant with those of Chung et al. (2009), in which no participants reported using the passing strategy. However, Chung and colleagues asked participants what identity management strategies they were currently using, while Anderson and Holliday (2004) asked about any time participants had ever used passing. This difference in interview questions likely influenced the types of responses given by participants.

Anderson and Holliday’s (2004) study had several limitations that can be noted. First, the sample was from a limited geographic and economic area. Although specific data about socioeconomic status were not collected, Anderson and Holliday reported that “all appeared to be middle/upper middle class, educated women” (p. 31). Therefore, it is possible that these women had more at stake in regards to their careers, and chose the

passing strategy accordingly. In addition, the researchers only chose to sample Caucasian women in order to minimize the influences of identity management strategies learned as members of ethnic/racial minority groups. While it is understandable how this could be a potential confound, including only Caucasian participants severely limits the generalizability of these results. In addition, no other types of sexual minority persons besides lesbians were sampled, again limiting generalizability. It should also be noted that 53% of the women in the study reported that they did not view their sexual orientation as central to their identity. They reported other aspects of themselves, such as their career or their sex, to be more salient to them. Many of these participants stated that the importance of their sexual identity had decreased over time (ages of the participants ranged from 24 to 59 years with a mean of 42 years). Because the data were qualitative in nature, no statistical analyses could be run to determine whether or not age predicted salience of participant sexual identity. However, it is possible that because half of the sample did not view their sexual orientation as central to their identity, the participants were more accepting of use of the passing strategy.

On the opposite end of the disclosure decisions continuum from passing is being fully out or open about one's sexual identity. One ideology that is common in the psychological literature is the belief that revealing one's sexual identity is the psychologically superior choice for sexual minority individuals (DeJordy, 2008). This belief was propagated by Cass' (1984) sexual identity development model, in which being open about one's sexual identity was seen as the final stage in the identity development process. However, this belief is problematic. Despite most previous researchers' focus on the benefits of coming out, the reality is that many sexual minority

persons pass in the organizational context, as it is a way to avoid stigma and possible discrimination in an environment where much is at stake (DeJordy, 2008). Even those who may be considered to have a well-developed sexual identity still encounter situations where they choose to pass, whether that is for their own safety or for another reason (Anderson & Holliday, 2004; DeJordy, 2008; King, Reilly, & Hebl, 2008). This is another justification for why a closer examination of the antecedents to sexual identity management strategies, strategy intentions, and behaviors is important. It will be helpful to reveal exactly what types of situations lead to passing in the workplace.

The SCCT-Based Model of Workplace Sexual Identity Management

Social cognitive career theory has been discussed theoretically in a few articles regarding sexual minority issues in vocational psychology. For example, Morrow, Gore, and Campbell (1996) discussed the applicability of SCCT to lesbian and gay individuals. They reported that two overarching aspects of SCCT have particular relevance to the career development of lesbians and gay persons: distal contextual barriers in the development of self-efficacy beliefs and outcome expectations, and contextual barriers proximal to career choice. All of these variables are present in Lidderdale et al.'s (2007) model of WSIM, though career choice is adapted to become workplace sexual identity management choice behaviors. A more in-depth discussion of these variables will be presented shortly.

Bieschke, Eberz, Bard, and Croteau (1998) presented a theoretical discussion of how psychologists might utilize SCCT to create affirmative research training environments for conducting research on lesbian, gay, bisexual, and transgender issues. Their discussion focused heavily on contextual factors, outcome expectations, and self-

efficacy beliefs. Essentially, the researchers posited that many of the barriers psychology students perceive regarding conducting research on sexual minority issues are related to their expectations that engaging in these research activities may negatively affect their careers. Some students may feel that their involvement in this type of research “displays” their sexual identity to the world, or at least allows others to make vast assumptions about their sexual identity (Bieschke et al., 1998, p. 742). Given the discrimination and harassment that sexual minority individuals face on a regular basis, even in an academic training environment (Bieschke et al., 1998; Diamant, 1993; Savin-Williams, 1993), it makes sense that some might shy away from conducting research on sexual minority issues. This can be extrapolated to workplace sexual identity management. If conducting research on sexual minority issues in an academic environment can be construed as a decision-making process that can be modeled by SCCT, so too could sexual identity management decisions in the workplace.

Finally, Croteau and colleagues (2008) provided a thorough discussion of Lidderdale et al.’s (2007) SCCT-based model of WSIM, although they did not test it empirically. The following section draws on information from this discussion, as well as from those by Morrow et al. (1996) and Bieschke et al. (1998).

Essentially, the SCCT-based model of WSIM emphasizes that people will choose varying strategies of workplace sexual identity management, and consider a variety of contextual factors as influences on this decision. For example, workplaces with a high degree of LGB stigmatization and a low degree of LGB support (both contextual variables) are purported to negatively influence the use of more revealing WSIM strategies, but only for those workers who consider integrating, explicitly out, or

implicitly out strategies to be in their acceptable range of WSIM possibilities. Sexual minority employees who only consider concealing or passing strategies to be possibilities for them would be just as likely to conceal in the presence of a sexual minority affirmative environment as in a non-affirming one (Croteau et al, 2008).

Contextual influences are categorized as either distal or proximal. Distal contextual influences are background influences that precede and shape self-cognitions (Bieschke et al., 1998). These could include messages a sexual minority person received about sexual identity in childhood. Proximal contextual influences, on the other hand, are those that “come into play at critical choice junctures” (Bieschke et al., 1998, p. 739). In other words, proximal contextual influences are more immediately relevant to the situation where a decision must be made. Specific workplace climate (such as the presence of sexual minority affirming policies) is an example of a proximal contextual influence. However, Bieschke and colleagues note that the distinction between proximal and distal contextual factors is sometimes arbitrary.

In addition to contextual factors, the SCCT-based model of WSIM focuses on the internal psychological mechanisms by which individuals process the distal and proximal contextual factors at play. The model also recognizes socially learned self-efficacy beliefs and outcome expectations about sexual identity management strategies as “the key cognitive processes by which workers form their sexual identity management preferences, intentions, and behaviors” (Croteau et al., 2008, p. 552).

The inclusion of self-efficacy in the WSIM model draws from Bandura’s (1986) well-known self-efficacy theory. When sexual minority workers evaluate the appropriateness of a particular WSIM strategy, they are posited to consider their self-

efficacy for implementing the strategy. If they believe that they will be efficacious in executing the strategy, they are more likely to choose it. According to Bieschke and colleagues (1998), repeated success at performing a task tends to lead to a higher sense of self-efficacy, whereas failures lower one's self-efficacy for the task. This is how one's previous learning experiences directly influence self-efficacy, as shown in Figures 1 and 3.

In addition, the decision to employ a particular strategy is also posited to be influenced by the individual's outcome expectations. According to Bieschke et al. (1998), outcome expectations can not only involve what individuals hypothesize to be the result of a particular choice, but they can also involve self-evaluations. Examples of such self-evaluations include feeling proud of oneself or regretting the decision made. In an ideal situation, minority individuals would choose a strategy for which they have high self-efficacy and positive outcome expectations (Chung, 2001).

The contributions from SCCT to Lidderdale et al.'s (2007) model mimic the contributions of SCCT to the vocational psychology literature as a whole. These contributions include a focus on the self as a primary agent of movement and change (Blustein & Fouad, 2008). Individuals are viewed as active agents in their lives; moreover, the internal set of beliefs about one's identity must be negotiated with the educational and occupational world. In recent research, this negotiation has generally fallen into the category of self-efficacy beliefs (Blustein & Fouad, 2008). As stated by Morrow and colleagues (1996), "environmental influences are inextricably woven into the fabric of sources of self-efficacy beliefs" (p. 144). Therefore, the inclusion of self-efficacy in Lidderdale et al.'s model is prudent.

A unique feature of Lidderdale et al.'s (2007) model is that it does not propose specific hypotheses regarding the relationships between workplace climate, sexual identity, and specific disclosure decisions. Rather, drawing on SCCT, the model recognizes that these relationships may be completely dependent on the previously mentioned cognitive processes. As stated by Croteau and colleagues (2008), "the strength of the [SCCT] model lies in its ability to conceptualize the individual learning trajectories of LGB workers in regard to sexual identity management and the cognitive processes that govern future actions" (p. 553). This is a beneficial perspective because it does not assume that being out at work is the ideal that has the greatest amount of psychological benefit for all workers. Thus, the criticism of much of the psychological literature on coming out, as mentioned in the previous section, is remedied with the SCCT-based model.

Another strength of Lidderdale et al.'s (2007) model comes from the theory that sexual minority individuals likely use a combination of WSIM strategies, rather than relying on a single one (see Chrobot-Mason, Button, & DiClementi, 2002). For example, sexual minority employees may fake a heterosexual identity in the presence of certain coworkers, and just avoid the topic of sexuality all together among others. In other words, individuals may be open with selected coworkers and adopt other strategies among the rest. Cain (1991) suggested that decisions regarding disclosure and concealment of sexual identity are made based on considerations about both how to manage personal information and the social context. The SCCT-based WSIM model takes into account these factors by including contextual factors such as the workplace climate or characteristics of one's coworkers, as well as cognitive processes of learning experiences,

self-efficacy, and outcome expectations (Lidderdale et al., 2007). Together, these variables influence the SIM strategies the individual chooses to employ, and it is certainly possible that as contextual influences change, so too would the intentions to implement one strategy over another.

The question remains, then: What specific variables have been shown to be related to sexual identity management strategies, strategy intentions, and behaviors? This information is discussed in the following section.

Research Examining Precursors to Sexual Identity Management Strategies, Strategy Intentions, and Behaviors

As noted by Croteau (1996), “few factors related to the degree of openness versus concealment of sexual orientation in the workplace have been investigated across multiple studies” (p. 200). Consequently, the literature reviewed in this section is admittedly fragmented. Again, the goal here is to identify and summarize the research that has been conducted, and discuss links between this previous research and the aims of the current study.

Learning Experiences Regarding WSIM

A small amount of research has examined the link between past experiences with discrimination related to disclosure of sexual minority status and current disclosure decisions. This is analogous to the link between learning experiences and outcome expectations in Lidderdale et al.’s (2007) model.

Ragins, Singh, and Cornwell (2007) took a unique approach to their study in that they used stigma theory to examine the fears associated with disclosure of a sexual minority identity in the workplace. They employed data that had been collected as part of

a larger national study on heterosexism and workplace diversity. They analyzed data from 534 employed respondents who identified as either gay, lesbian, or bisexual, although bisexuals only made up 1.7% of the sample. Participants who were questioning their sexual identity, who were self-employed, or who were employed for an LGB organization were excluded from the analysis. A survey was created for the purpose of this study and was pilot tested on 28 LGB employees from around the United States. Ragins et al. included questions about perceptions of past discrimination, the perceived sexual orientation of one's work group, perceived social support from colleagues and supervisors, degree of disclosure of sexual orientation in the workplace, fear of full disclosure of sexual orientation in the workplace, and several additional variables that are not relevant to the present study.

Perceptions of past discrimination were measured by seven items written by the researchers for the purpose of their study. The response options included *yes*, *unsure*, and *no*. An example item was "In prior positions, have you ever encountered discrimination because others suspected or assumed that you are gay, lesbian, or bisexual?" Degree of sexual orientation disclosure was measured by a single item with four response options: *no one*, *some people*, *most people*, or *everyone*. This would correspond to actual sexual identity disclosure behaviors in Lidderdale et al.'s (2007) model of WSIM. Fear of full disclosure of sexual orientation in the workplace was assessed using a 12-item measure that the authors also developed for the study. It was scored on a 7-point Likert scale ranging from *completely disagree* to *completely agree*. A sample item is "If I disclosed my sexual orientation to everyone at work, I would be excluded from informal

networks.” Fear of full disclosure can be likened to the outcome expectations variable in Lidderdale et al.’s model.

Results indicated that more than one-third of the sample reported that they had experienced previous discrimination due to being a sexual minority. A series of hierarchical regression analyses was used to test the antecedents of fear and sexual identity disclosure in the workplace. Ragins et al. (2007) found that those employees who reported past experiences with discrimination based on their sexual minority status consequently reported higher levels of fear about disclosing their sexual identity in their current job setting. Surprisingly, results also showed that despite the greater amounts of fear regarding disclosure associated with past experiences of discrimination, these participants tended to report higher degrees of actual disclosure in the workplace. Ragins et al. were unable to draw casual conclusions based on these data because the study was cross-sectional in nature. However, their finding suggests that although perceptions of past discrimination do heighten the fear of disclosure or the perceived risk associated with disclosure, they do not necessarily lead to less actual workplace disclosure. The authors hypothesized that LGB employees have a need to obtain a “state of psychological coherence between public and private identities” (p. 1114) in order to develop an authentic sense of self in the workplace. They posited that out of this need arises the apparent resilience in disclosing sexual identity despite fear and perceived risk.

As previously mentioned, one limitation of Ragins et al.’s (2007) study is the research design. Because it was cross-sectional in nature, casual conclusions could not be drawn regarding the relationship between perceptions of past discrimination and current sexual identity disclosure. Another limitation is the way in which the authors measured

degree of sexual orientation disclosure. Employing a single item with only four response options severely limits the conclusions that can be drawn from the data. Croteau (1996) cautioned researchers against using single-item measures of sexual orientation disclosure. He stated that these kinds of items are questionable because they have no established validity and ill-defined reliability. Another potential threat to the validity of these kinds of questions is that they often have words (such as “discrimination,” “disclosure,” or “openness”) that participants may interpret in different ways (Croteau, 1996). A strength of Ragins et al. is that they did employ multiple-item measures for their constructs fear of disclosure of sexual orientation and past experiences with discrimination. However, both of these measures were constructed specifically for their study, and therefore had not demonstrated adequate reliability and validity across multiple independent samples.

In an earlier study, Schneider (1987) looked at a sample of 228 employed lesbian women to examine variables related to workplace disclosure of sexual identity. The data were from a self-report questionnaire that had been used as part of a previous research study examining “the incidence and consequences of the sexualization of the workplace for heterosexual and lesbian women workers” (p. 469). Disclosure of sexual identity in the workplace was measured by a single-item reading “How open are you about your lesbianism at your present job?” Participants indicated degree of openness on a 4-point Likert scale ranging from *not open at all* to *totally open*. Participants were also asked whether or not they had ever lost a job prior to the one at which they were currently employed when their sexual identity was discovered or revealed. Participants simply indicated *yes* or *no* in response to this item.

Overall, 61% of the women sampled reported “less than complete” disclosure of their sexual identity in their place of employment (Schneider, 1987, p. 483). In other words, these women answered anything but “totally open” in response to the degree of disclosure item. Schneider also found that women who had previously lost a job due to discovery of their lesbian status (10% of the respondents) reported less current workplace disclosure. This is in conflict with the results of Ragins et al. (2007), where those who had experienced previous job discrimination due to sexual identity actually reported more workplace disclosure. However, Ragins and colleagues did not limit their measurement of previous discrimination to job loss; rather, they included a multitude of discriminatory experiences. Here is another example where single-item measurement of constructs could potentially lead to an inadequate understanding of the variable. It is also possible that the loss of job due to sexual orientation (as operationalized in Schneider’s study) is a more severe consequence than the other forms of discrimination measured by Ragins et al.

Another potential limitation of Schneider’s (1987) study is that the sample was a highly-educated and feminist-identified group of women, most of whom were white collar professional workers. In addition, the overwhelming majority of the sample was Caucasian, and all of the participants were lesbians. These factors again restrict generalizability of results. In addition, the single-item measurement of both workplace disclosure and experience of job loss due to sexual identity are of questionable validity and fall prey to the other criticisms mentioned by Croteau (1996). Because Schneider did not ask about any other experiences of discrimination possibly less severe than job termination, from this study we do not get the full picture of learning experiences for sexual minority individuals in the workplace. It may be that the degree of overall

discrimination previously experienced affects the future decision to disclose or not disclose sexual identity in the workplace.

It should be noted that both Ragins et al. (2007) and Schneider (1987) used data that had been previously collected as part of a larger study. Therefore, the data collection likely was not tailored specifically to the study of workplace sexual identity management. Collection of data with this purpose in mind at the outset will improve the quality and type of data acquired.

Similarly, research conducted by Croteau and von Destinon (1994) did not specifically examine antecedents of workplace sexual identity disclosure; however, some interesting extrapolations can be made from their findings. Their data revealed that greater frequency of discrimination based on sexual identity was reported by those participants who were more open about their sexual identities as opposed to those who were less open. Here, the participants were self-identified lesbian, gay, and bisexual student affairs personnel. This study replicated and extended the findings of an earlier study employing a sample of lesbian workers in New York City (Levine & Leonard, 1984). In other words, the more “out” a sexual minority person is in the workplace, the more likely s/he is to encounter workplace discrimination. The fear of discrimination or even job loss as a consequence of revealing one’s sexual minority status in the workplace has long been documented in discussions of sexual minority workers (Badgett, 1996; Ellis, 1996; Frable, Platt, & Hoey, 1998; Kirby, 2002; Kitzinger, 1991; Pope, 1996). Taken collectively, the results of these studies indicate that perhaps this widespread fear of discrimination and/or job loss is based in reality. Therefore, it makes sense that the

learning experiences of sexual minority persons would influence outcome expectations for future disclosure actions.

One additional study (Waldo, 1999) included some preliminary, yet indirect, support for the link between WSIM-related learning experiences and outcome expectations. However, the main focus of Waldo's study was on the workplace climate. Therefore, this study is discussed thoroughly later into the next section.

Proximal Contextual Influences: Workplace Climate

One of the most commonly cited proximal contextual influences on workplace sexual identity management decisions is the workplace climate. Sandfort, Bos, and Vet (2006) recommend exploring the role of the context in which sexual minority persons work, as "it is quite likely that experiences of lesbians and gay men are dependent on the environment in which they work" (p. 242). It has been long theorized that fear of public disapproval, ostracism, threats, and harassment, particularly in the workplace, have led sexual minority individuals to be extremely cautious in choosing to reveal their sexual identity (Badgett, 1996; Ellis, 1996; Kitznger, 1991; Schneider, 1987). According to Pope (1996), the environment must be observed and carefully analyzed by the sexual minority employee for actual cues to the general workplace climate. In many studies, such as those critiqued in the preceding section, workplace climate was measured empirically by assessing whether or not there are nondiscrimination policies for sexual minority employees in place. It is assumed that the development of such policies will reduce the amount of workplace discrimination that sexual minority employees face on a regular basis (Tejeda, 2006). Some additional studies have looked at whether or not workplace nondiscrimination policies affect how open sexual minority workers are regarding their

status. This is analogous to the link between proximal contextual influences and disclosure decisions in Lidderdale et al.'s (2007) model.

Non-discrimination Policies

In a study of 123 employed lesbians, Driscoll, Kelley, and Fassinger (1996) examined a path model positing that disclosure of lesbian status and workplace climate would predict occupational stress, coping, and job satisfaction. While it was not the primary focus of their study, Driscoll and colleagues did look at the relationship between disclosure of sexual identity in the workplace and workplace climate. Workplace sexual identity disclosure was measured using a brief, five-item inventory developed for the study. The first question read "Out at work," with responses ranging from *out to all* to *out to nobody at work*. The remaining four items were arranged on a 3-point Likert scale ranging from *always* to *never*. These questions tapped comfort level in the workplace, involvement in LGB activities, and appearance of same-sex partner around coworkers. Workplace climate was measured using an adapted version of the Campus Environment Survey (CES; Blankenship & Leonard, 1985; Cranston & Leonard, 1990), which was originally designed to tap gender-related iniquities on college campuses. An example item from the adapted survey is, "I have found the atmosphere at this workplace to be unfriendly to lesbians."

Results showed that lesbian participants in this study generally perceived their workplace climate to be tolerant of lesbians. However, Driscoll and colleagues (1996) observed that participants, on average, had low sexual identity disclosure scores. However, it should be noted that the standard deviation associated with the mean was 4.46, suggesting a great deal of variability within the responses on this measure. Only

24% of women reported being out to all of their colleagues, and 44% indicated that they were out to their immediate supervisors. When the correlation between workplace climate and sexual identity disclosure was examined, it was found to be significant and positive ($r = .41, p < .0001$), indicating that more positive perceptions of workplace climate were associated with more sexual identity disclosure. These findings lend support to the link between workplace climate and sexual identity management behaviors.

An obvious limitation to this study is that the sample was comprised only of lesbian women. Bisexual women and gay men were not included because the authors wanted to maintain a theoretical focus on lesbian identity and experiences of lesbian women in the workplace. While seemingly a noble endeavor, once again, generalization of results is limited by this choice. One of the other main limitations of this study cited by its authors is in regards to the measurement of workplace disclosure. Similar to Ragins et al. (2007) and Schneider (1987), Driscoll and colleagues (1996) noted that the items written to measure disclosure in their study may not have adequately tapped the complexity of the variable. In addition, the improvised measure yielded a low alpha estimate (.52), suggesting problems with reliability. The authors also noted that the disclosure data demonstrated a “fairly restricted range” in their sample (p. 240), with more participants tending towards lower amounts of disclosure. Finally, Driscoll et al. discussed the possibility that women who tend to exhibit nondisclosure of sexual minority identity (as was the case in their sample) may also pursue careers or specific workplaces that implicitly reinforce the passing identity management strategy. Empirical testing of this notion, however, would prove difficult. Although Driscoll and colleagues admit that their study provided a “simple representation of very complex psychosocial

and sociopolitical phenomena,” (p. 241) it did provide preliminary empirical evidence for the link between workplace climate and sexual identity disclosure

A year later, Burgess (1997) conducted a pilot study of 78 lesbians and three bisexual women that replicated the findings of Driscoll et al. (1996). Burgess found that disclosure of sexual orientation to coworkers was significantly greater among the women who worked in a company with policies supporting sexual minorities when compared to women in organizations without such policies. More recently, in a large sample including lesbians, gays, and bisexuals, Badgett (2001) found a positive correlation between level of workplace sexual identity disclosure and working for an employer with an official non-discrimination policy in place.

Rostosky and Riggle (2002) conducted a broader study on sexual identity disclosure in the workplace. They hypothesized that there would be environmental (e.g., a non-discrimination policy in the workplace), individual (internalized homophobia), and interpersonal (partner’s internalized homophobia and partner’s work environment) influences on decision to disclose sexual minority status in the workplace. They surveyed 261 participants comprised of 118 lesbian or gay couples, where both partners were employed. Participants had to have considered themselves a couple for at least six months.

Presence of a workplace non-discrimination policy was assessed with a single *yes* or *no* question. Internalized homophobia is defined as the internalization of societal prejudice towards sexual minority persons (Moradi, van den Berg, & Epting, 2009) and was measured using the Internalized Homophobia Scale (IHS; Wright, Dye, Jiles, & Marcello, 1999). The IHS uses a 5-point Likert-type scale (1 = *strongly agree*, 5 =

strongly disagree) with higher scores reflecting greater internalized homophobia.

Workplace sexual identity disclosure outcomes were measured with a questionnaire derived from the scaled responses to three questions written specifically for Rostosky and Riggle's (2002) study. The questions tapped the extent to which clients, colleagues, and supervisors were aware of the participant's sexual identity (one question for each party). Response options, rated on a 5-point scale, ranged from *all* to *none*.

The data were analyzed using hierarchical regression analyses and intraclass correlations. Results indicated that having a workplace non-discrimination policy and having a partner whose workplace also has a non-discrimination policy were associated with a greater degree of outness at work. In addition, when both partners in a couple had lower amounts of internalized homophobia, they were more likely to be out at work than partners who had higher amounts of internalized homophobia. According to the authors, the findings "suggest that the decision to come out at work is associated with an individual's assessment of the work environment (e.g., 'Am I safe/protected') and his or her level of internalized homophobia (e.g., 'Am I comfortable with who I am?')"

(Rostosky & Riggle, 2002, p. 415).

This study was unique in that it included the workplace climate for both partners in a gay or lesbian couple. One could see how it may be important to consider both members of a same-sex relationship, as one partner's decision to come out often also affects the outness of the other partner. This study also shows that workplace climate (in particular, the presence of a non-discrimination policy for sexual orientation) can go a long way in influencing same sex couples' decisions to disclose their sexual identities at work. However, this study is not without its limitations. First, because the study only

considered participants who had been coupled for more than six months, single, newly questioning, or closeted individuals were not included in the sample. As noted by the authors, the sample was comprised mainly of white lesbian and gay professionals who were of higher income level than the general population. In addition, these participants were, on average, more open about their sexual identities at work than not. On a 100-point scale (0 = *out to no one*, 100 = *out to all*), men averaged an outness score of 64.1, and women averaged a score of 58.9. Similarly, the participants had very low levels of internalized homophobia, with respective means of 1.6 and 1.7 for men and women on a 5-point scale. Rostosky and Riggle (2002) did not report whether they tested the data for skewness on this variable, or whether they corrected for this limitation in the data analysis. Thus, it is important to note that these results may not be typical of the average lesbian or gay employee. Additionally, as the authors pointed out, they did not assess the degree to which sexual identity disclosure was voluntary or involuntary (e.g., being outed by another person). Future studies need to ask more specific questions in this area, as it could have profound consequences for study results. Finally, this study used a single-item measure of workplace sexual identity disclosure. In order to gather more complete data, multiple-item assessments of disclosure need to be used. However, a benefit of the item used here is that it was not measured dichotomously.

In another study, Tejeda (2006) looked at a sample of 65 gay men who were employed full time and who had worked with the same organization for over two years. An additional inclusion criterion was that participants had to be employed in a geographic region with no legal protection against discrimination based on sexual orientation. Though not per requirement of the researcher, the sample was exclusively

white and educated. Tejeda wished to determine whether differences exist on the variables of perceived workplace hostility, turnover intentions, perceived promotion opportunity, job and supervisor satisfaction, and supervisor-subordinate relationship quality between the reports of men in organizations that have non-discrimination policies and those employed where they do not have such policies.

Presence of a non-discrimination policy was assessed using a single yes or no question. Participants also indicated *yes* or *no* to whether or not they had disclosed their sexual orientation to their current supervisor. Hostile work environment was measured as the sum of scores on six items written specifically for Tejeda's (2006) study, with higher scores indicating greater perceived hostility in the environment. An example item is "I have heard negative comments about being gay in my company." Like the previously mentioned questions, these items were also scored dichotomously (with participants reporting *yes* or *no*). Promotion opportunities were assessed using three Likert-scaled items, with higher scores representing greater perception of promotion opportunities for the participant. An example item is "I feel that I have a very good chance of promotion in my current job." Turnover intentions were measured in a similar fashion with three Likert-scaled items. An example item is "I am considering leaving my job." Job satisfaction was measured using the Satisfaction with Work subscale of the Job Description Index (JDI; Smith, Kendall, & Hulin, 1969). Supervisory relationship satisfaction was assessed using the Leader Member Exchange Measure (LMX; Scandura & Green, 1984) and two subscales from the Minnesota Satisfaction Questionnaire (MSQ; Weiss, Dawis, England, & Lofquist, 1967).

Results of a chi-square analysis revealed that 39% of participants reported disclosing their sexual identity to their supervisor when a non-discrimination policy was present; only 6% reported that they did not disclose when a non-discrimination policy was present. For those participants without a non-discrimination policy, disclosure was evenly split between *yes* and *no*. This suggests that having a non-discrimination policy in place may lead to greater employee disclosure of sexual identity, at least with one's primary supervisor, supporting the posited link between workplace climate (proximal contextual influence) and sexual identity management behaviors in the SCCT-based WSIM model. However, these findings do not suggest causation and should be interpreted with relative caution. Results of univariate ANOVAs revealed that gay men in organizations with non-discrimination policies reported statistically significantly higher levels of work satisfaction and relationship quality with supervisor than did gay men in organizations without non-discrimination policies. No significant differences emerged between the groups on satisfaction with supervision and perceived promotion opportunities.

Some curious findings emerged in terms of participant perception of a hostile work environment. Results indicated that men in organizations *with* a non-discrimination policy reported significantly higher perceived workplace hostility than men in organizations without such a policy. The correlation between these two variables was also statistically significant ($r = -.31, p < .01$). These findings are in opposition to what Tejeda (2006) hypothesized, as well as what many researchers might expect.

In addition, across the sample, gay men who disclosed their sexual identity to a supervisor reported a significantly higher hostile work environment than those who did

not disclose. Again, a significant correlation also emerged between these variables ($r = .31, p < .01$). These findings were opposite of what was predicted by the author. Tejeda (2006) concluded that these findings suggest that “individuals should be particularly judicious about sexual orientation disclosure regardless of how ‘gay friendly’ organizational policies may be” (p. 56). He observed that the sample who disclosed their sexual orientation to their supervisor also reported “significantly more serious threats such as avoidance by colleagues, threats of being fired, and even physical abuse” (p. 56). Gay men who disclosed also reported significantly lower perceived promotion opportunities and significantly higher turnover intentions than those who did not disclose.

A limitation to the measurement in Tejeda’s (2006) study is that many of the items and measures used were created specifically for the study. There was no indication in the article that these items were piloted on a sample of gay men in order to ascertain their validity or reliability. Coefficient alphas found in the study’s sample were marginal (Groth-Marnat, 2003): .68 for the hostile work environment measure and .65 for the established Job Description Index. The marginal reliabilities call into question the appropriateness of these measures for Tejeda’s sample. In addition, the single-item measurements of presence of a non-discrimination policy and disclosure to supervisor are prey to the same criticisms stated by Croteau (1996), e.g., ill-defined validity. Similarly, Tejeda only asked participants about sexual orientation disclosure to their primary supervisor, not colleagues, subordinates, or other superiors. He also did not assess degree of disclosure, WSIM tactics used (e.g., counterfeiting, or being implicitly out), or previous experiences with workplace disclosure (i.e., prior jobs). A final, obvious limitation of this study lies in the sample itself: white, middle class, gay men. One does

not know how generalizable these results are to lesbians, bisexuals, or other sexual minority persons.

What implications do Tejeda's (2006) findings have for the SCCT-based WSIM model? They support the notion that presence of a non-discrimination policy is associated with greater employee disclosure of sexual identity, but, as noted above, these results are limited to disclosure to one's immediate supervisor. Interestingly, these findings also raise some questions about just what workplace climate as a proximal contextual influence could mean. As shown in Tejeda's study, the presence of a non-discrimination policy in the workplace was not associated with a less hostile work environment. This may be evidence that using the presence of a non-discrimination policy alone as a measure of workplace climate is not necessarily valid. Obviously, there are other variables at play in the situation studied by Tejeda. Perhaps a more comprehensive model of WSIM, such as that proposed by Lidderdale et al. (2007), could provide additional pieces of the puzzle.

Other workplace climate variables.

As we have seen, in addition to the presence of non-discrimination policies, there are other variables that influence the workplace climate. Some of these variables are discussed here, along with the limited research that has examined said variables. Unfortunately, the majority of work on other climate-related variables has been theoretical in nature, once again highlighting the dearth of research in this area. The extant studies are described below.

Although this first study (Schneider, 1987) was previously discussed in the learning experiences section, it also included analyses relevant to workplace climate

variables. In addition to the variables mentioned in the preceding section, Schneider divided her sample of 228 employed lesbians by occupation in which participants were employed and made comparisons between groups. Results showed that employment in a human services occupation had a significant, direct, positive effect on workplace disclosure. Having a greater proportion of female coworkers also showed a significant positive effect on disclosure, such that “lesbians in highly female-segregated settings are twice as likely as those in mixed-gender workplaces to reveal their sexual identity” (Schneider, 1987, p. 480). A few variables had the opposite effect on workplace disclosure. For example, working with children and having a relatively high income were both associated with lower likelihood to disclose one’s lesbian identity at work. These results suggest that certain occupations may “create work cultures that uniquely influence workers” (Schneider, 1987, p. 482). For example, human service occupations may be more tolerant and accepting of sexual minority persons, possibly due to the values of these professions. However, jobs that involve close work with children may not be as accepting of sexual minorities due to the negative stereotype of sexual minorities as being deviants or child molesters (Fassinger, 1993; Kitzinger, 1991). It also makes sense that having a higher salary was associated with less workplace disclosure. There is more at stake with a higher salary (Schneider, 1987). Once again, the reader is reminded that these findings are limited to a sample of mostly white, educated lesbian women.

Recall the study by Button (1996, 2001) where support was found for Woods’ (1993) categories of WSIM. Button also examined the association between organizational climate and WSIM strategies in a large, national sample of 537 lesbian and gay employees. Participants were recruited through lesbian and gay-identified members in the

National Gay and Lesbian Task Force (NGLTF). These initial contact members were asked to recruit additional gay and lesbian colleagues working at their place of employment, including those who were newly identified as a sexual minority and those who were mostly closeted. The participants recruited by the initial contact person filled out a “work attitudes” questionnaire containing the survey measures. The initial contact person him/herself filled out a “policy questionnaire” regarding any non-discrimination or LGB-affirmative policies in place at the organization. This information was then matched with the information provided by the other employees recruited by the initial contact.

Individual-level variables were assessed in the work attitudes portion of the survey. These included lesbian and gay male group identity attitudes (measured by an unnamed scale developed by Walters and Simoni, 1993); workplace sexual identity management strategies (as previously described; see p. 9); job satisfaction (measured by the Minnesota Satisfaction Questionnaire; see description on p. 49); and organizational commitment (measured by six items developed by Meyer, Allen, and Smith, 1993).

Organizational-level variables were assessed in both the work attitudes survey and the policy questionnaire. The individual lesbian and gay employees rated their perceptions of their employer’s degree of treatment discrimination toward sexual minorities on a 9-item scale developed by Button (1996). An example item is “The leaders of this organization are committed to the equitable treatment of lesbian and gay employees.” In addition, the initial contacts from the NGLTF completed an organizational policy measure. This measure was developed for Button’s (2001) study and consisted of a 9- item checklist of sexual minority affirmative organizational policies. The contact person indicated whether

or not their organization had each policy in place. An example item is “A written policy prohibiting discrimination on the basis of sexual orientation.”

Results indicated that across organizations, sexual minority affirmative policies explained a substantial portion of the variance in the perceived treatment discrimination faced by sexual minorities in those organizations. In other words, the more prevalent the affirmative policies in an organization, the less discrimination reported by its lesbian and gay employees. In addition, treatment discrimination was found to be negatively associated with job satisfaction and organizational commitment of lesbian and gay employees. In regards to sexual identity management strategies, results of regression analyses showed that the use of the counterfeiting strategy was positively associated with perceived treatment discrimination towards sexual minorities, as was the use of the avoiding strategy. On the other hand, the use of the integrating strategy was negatively associated with treatment discrimination. In other words, the more treatment discrimination towards sexual minorities present in the workplace, the more sexual minority employees used WSIM strategies that involved hiding their sexual identity. However, more affirming work settings were associated with more openness about sexual orientation. These results speak to the importance of the workplace climate as a proximal contextual variable in influencing the decisions sexual minority employees make regarding disclosure of their minority status.

One strength of Button’s (1996, 2001) study is that he made an effort to recruit participants who were newly identified as sexual minorities. In addition, he examined data at both the individual and the organizational level. Thus, he did not rely solely on employee perceptions of workplace climate, as have previous researchers. However, this

study is still subject to some limitations. Button recruited participants through contacts in the NGLTF, who were then asked to distribute surveys to lesbian and gay colleagues. Therefore, lesbian and gay employees must have exhibited at least some degree of outness in order to participate in this study. Completely closeted employees were not able to be sampled. In addition, only lesbian women and gay men were included in the sample, replicating a potential limitation that is present in the majority of studies on WSIM and sexual minority persons as a whole. Only when this limitation is corrected will researchers have a full picture of the experiences of sexual minority employees.

In a study similar to Button's (1996, 2001), Chrobot-Mason, Button, & DiClementi (2002) surveyed lesbian and gay employees ($N = 225$). They hypothesized that workplace climate and stage of sexual identity development would influence lesbian or gay employees' use of the counterfeiting, avoiding, or integrating strategies described by Griffin (1993). Identity management strategy was measured by the same scale developed by Button (1996) and used in the previously mentioned study (Button, 2001). Perceived workplace climate was also measured using the scale developed by Button (1996). Sexual identity development was measured by a modified version of Phinney's Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992), a 7-item self-report measure that utilizes a 5-point Likert-type scale (1 = *strongly disagree*; 5 = *strongly agree*). The modified MEIM was chosen rather than measures based on Cass' (1984) model of sexual identity development because research has shown that data do not support crystallized developmental stages as Cass suggested (Degges-White, Rice, & Myers, 2000; Lark & Croteau, 1998). An example item from the adapted questionnaire is "I have spent time trying to figure out what it means to be lesbian or gay."

Results of multiple regression analyses revealed partial support for Chrobot-Mason et al.'s (2002) hypotheses. Perceived climate and sexual identity development accounted for 7% of the variance in the use of the counterfeiting strategy, and a significant negative relationship was found between sexual identity development and counterfeiting. However, the relationship between perceived climate and the counterfeiting strategy was nonsignificant. Perceived climate and sexual identity development accounted for 16% of the variance in the avoiding strategy. Significant negative relationships were found between avoiding and both sexual identity development and perceived climate. Finally, 20% of the variance in the use of the integrating strategy was accounted for by sexual identity development and perceived workplace climate. Both were significantly positively related to use of the integrating strategy. Again, these data offer some support for the link between workplace climate and sexual identity management intentions and behaviors.

In their discussion, the authors note that “the large proportion of variance still unaccounted for [in WSIM strategy] suggests that additional variables should be explored in the future” (Chrobot-Mason, Button, & DiClementi, 2002, p. 333). It is likely that other, unexplored variables, such as those outlined in the SCCT-based model of WSIM, would account for some additional variance in WSIM strategy. The authors also suggested that future research explore both employee perceptions of climate as well as the existence of organizational practices and policies regarding discrimination based on sexual orientation. This was done by Button (2001), but not in any other studies thus far. Other limitations are present in Chrobot-Mason et al.'s study. It should be noted that the coefficient alpha for the sexual identity development scale modified from Phinney's

(1992) MEIM was .66. This is considered low by conventional standards (Groth-Marnat, 2003). In addition, the coefficient alpha for the counterfeiting subscale of Button's (1996) measure was .76, which is considered only adequate (Groth-Marnat, 2003). A final and obvious limitation is the questionable generalizability of the sample: it only contained lesbians and gay men, most of whom were Caucasian and well-educated.

Recall the study conducted by Ragins, Singh, and Cornwell (2007) that was described in the preceding section on learning experiences in the WSIM model. Although this study provided empirical support for the link between learning experiences and outcome expectations, it also provided support for the link between the workplace climate (conceptualized herein as a proximal contextual influence in the SCCT-based model of WSIM) and actual WSIM decisions. The researchers analyzed data regarding participants' degree of sexual identity disclosure. Results showed that participants seemed to vary in their levels of outness at work. The majority (37%) reported being out to some people, while 24.6% reported being out to most people, and 26.7% said they were out to everyone. The remaining 11.7% indicated that they were not out at all in the workplace. Those employees who had a heterosexual supervisor or perceived themselves to work with a majority of heterosexual colleagues reported higher levels of fear about disclosing their sexual identity at work, as opposed to those who were surrounded by more LGB individuals. As relevant to the current section, actual disclosure behaviors followed this same pattern. Level of perceived social support from colleagues also positively predicted degree of actual disclosure in the workplace, with greater perceived support associated with more sexual identity disclosure. This provides additional support for the link between proximal contextual influences and sexual identity management

behaviors. The more supportive sexual minority individuals perceive workplaces to be, the more they are likely to disclose.

Waldo (1999) took a slightly different approach in that he conceptualized heterosexism as a type of minority stress in his noteworthy study. He developed a series of models hypothesizing the following: (1) Organizational climate and policies and resources affirming sexual minority employees would predict the amount of heterosexism present in the workplace, (2) Organizational climate would directly influence employees' degree of outness in the workplace, and (3) degree of outness would directly influence employees' experiences of direct and indirect heterosexism. Waldo tested his models in a sample of 287 lesbian, gay, and bisexual employee participants.

In Waldo's (1999) study, degree of outness (or disclosure of sexual identity) in the workplace was measured by a single item asking participants to rate their degree of openness at work on a 9-point Likert scale. Responses ranged from *1 = Not at all open (almost no one knows)* to *9 = Completely open (virtually everyone knows)*. Heterosexism was measured by the Workplace Heterosexist Experiences Questionnaire (WHEQ), a 22-item self-report measure developed by Waldo for this study. It was designed to assess perceived experiences of sexual orientation-based harassment and discrimination. Participants indicated their responses using a 5-point Likert scale ranging from 0-4 (*0 = never; 4 = most of the time*). An example item is, "During the past 24 months in your workplace, have you ever been in a situation where any of your coworkers or supervisors made you feel it was necessary to 'act straight'?" Workplace climate was measured by the Organizational Tolerance for Heterosexism Inventory, another measure developed specifically for this study. It was designed to assess organizational context surrounding

sexual orientation-based discrimination and harassment. The inventory was based on the Organizational Tolerance for Sexual Harassment Inventory (Hulin, Fitzgerald, & Drasgow, 1996). It presents four vignettes to participants and asks them to use a 5-point scale to rate their perceptions of the outcome of the vignette if it occurred in their own workplace. Each vignette is rated on 3 variables: risk for the person associated with reporting the incident (1 = *no risk*; 5 = *extremely risky*), likelihood the complaint would be taken seriously (1 = *very good chance*; 5 = *almost no chance*), and the likely consequences for the perpetrator (1 = *very serious punishment*; 5 = *probably nothing would be done*).

Structural equation modeling was used to analyze the data, and Waldo (1999) controlled for general job stress, as measured by the Stress in General Scale (Smith, Sademan, & McCrory, 1992). Results showed support for the relationship between outness and direct and indirect heterosexism. The more an employee reported being open about his or her sexual identity, the less indirect heterosexism but the more direct heterosexism s/he reported experiencing in the workplace. The posited relationship between policies and resources and heterosexism was not supported, so Waldo tested an alternative model including organizational climate as a mediator between these two variables. Still, this new model obtained “a somewhat questionable fit” (p. 227) to the data (GFI = .84, CFI = .91). However, results showed that people who believed that their organization was tolerant of heterosexism reported experiencing considerably more heterosexism in the workplace than those who believed that their organization did not tolerate this kind of behavior. Waldo also found that there indeed was a significant path between organizational climate and degree of outness (-.46), showing that the more

heterosexist the organizational climate was perceived to be, the less open about sexual identity employee participants reported being.

The results of Waldo's (1999) study support some important ideas. First, the findings lend additional support to the hypothesized link between workplace climate and workplace sexual identity management behaviors (though in this case WSIM behavior only included degree of disclosure). Second, results show that employees who are open about their sexual identity in the workplace perceive more direct heterosexism in the form of harassment and discrimination. This suggests some preliminary indirect support for the link between learning experiences and outcome expectations regarding decision to disclose sexual identity in the workplace. If participants in Waldo's sample reported this type of experience, it is likely that other sexual minority individuals across different workplaces have had similar negative consequences upon revealing their sexual identity to their colleagues or supervisors.

Self-Efficacy Beliefs and Outcome Expectations

At the time of this writing, there were no published studies specifically addressing relationships between self-efficacy beliefs about WSIM and other variables. However, Lidderdale and colleagues (2007) provided a strong rationale for expanding the original SCCT model in application to workplace sexual identity management. Original research on SCCT supported the positive link between self-efficacy beliefs and outcome expectations (Lent, Brown, & Hackett, 1994; Rottinghaus, Larson, & Borgen, 2003; Swanson & Gore, 2000; Stajkovic & Luthans, 1998). In addition, some researchers have adapted the original SCCT model to the explanation of other constructs, such as subjective well-being (Lent et al., 2005), and academic performance in engineering

students (Lent, Singley, Sheu, Schmidt, & Schmidt, 2007) and general college undergraduate students (Brown, Tramayne, Hoxha, Telander, Fan, & Lent, 2007). In studies of this nature, results have shown support for the posited direct path between self-efficacy beliefs and outcome expectations regarding the construct of interest.

Summary

As noted above, some limited empirical research exists on the variables present in Lidderdale et al.'s (2007) SCCT-based model of WSIM. Past learning experiences have often been operationalized as previous experiences of discrimination based on one's sexual minority status. These learning experiences have been shown to predict outcome expectations about future instances of self-disclosure (Ragins, Singh, & Cornwell, 2007). Some research findings have corroborated this perspective, namely, that participants who reported being more open about their sexual identity also reported experiencing more discrimination (Croteau & von Destinon, 1994; Waldo, 1999). Similarly, participants who had experienced sexual identity-related job discrimination in the past reported being less open about their sexual identity at future jobs (Schneider, 1987).

More research has supported the link between the proximal contextual influence of workplace climate and sexual identity management strategy intentions. Specifically, more accepting work environments (e.g., those with non-discrimination policies and/or perceived less hostile work environments) are associated with greater openness about one's sexual identity (Burgess, 1997; Button, 2001; Chrobot-Mason, Button, & DiClementi, 2002; Driscoll, Kelley, & Fassinger, 1996; Ragins, Singh, & Cornwell, 2007; Rostosky & Riggle, 2002; Tejada, 2006). In addition, some preliminary findings

suggest that work context (such as occupation, type of coworkers, and direct contact with children) also influences WSIM decision-making (Schneider, 1987).

Although no studies addressing relationships between self-efficacy beliefs about WSIM and other variables exist, Lidderdale and colleagues (2007) provided a strong rationale for expanding the original SCCT model in application to workplace sexual identity management. Original research on SCCT has supported the positive link between self-efficacy beliefs and outcome expectations, and additional studies have adapted the SCCT model to apply to other constructs. In studies of this nature, results have shown support for the posited direct path between self-efficacy beliefs and outcome expectations regarding the construct of interest.

Limitations of Previous Literature

As discussed throughout the preceding sections, there are several limitations to the extant literature on workplace sexual identity management. The current study seeks to empirically test segments two and three of Lidderdale et al.'s (2007) SCCT-based model of WSIM. It also seeks to improve upon many of the limitations of previous research in this area.

One of the most commonly cited limitations in the discussion above was in regards to the participant samples employed in the previous studies. The majority of the samples consisted of mostly Caucasian individuals who were well-educated. In addition, nearly all of the samples focused specifically on lesbian and/or gay participants. However, in discussions or follow-up research, sometimes the results were generalized to all sexual minority individuals, or from one sex to the other. This is problematic because some research has shown that lesbians and gay men show significant differences in terms

of how and why they may use particular WSIM strategies (Button, 1996; Chrobot-Mason et al., 2002). The current study seeks to improve upon this issue by including both men and women in the sample, and not limiting participants to those who identify as gay or lesbian.

In past research, those who were bisexual, queer, questioning, or self-identified by some other sexual minority label were often excluded from the analyses. Sometimes, this is done because the number of participants reporting a bisexual or other sexual minority orientation are too small to be considered separately in data analyses. Other times, bisexuals, etc., are excluded because researchers want to focus only on lesbian or gay individuals, and including others would prove to be too complicated or distortive to comparisons between these groups (Rust, 2000). Bisexual, queer, questioning, or other participants are often discarded from analyses as being unwanted “noise” in the dataset (Diamond & Savin-Williams, 2000). In order to remedy this issue, the current study seeks to draw from a larger participant base. The standard method of convenience sampling will not be used here; rather, participants will be able to self-select for participation in this study. This can be done electronically through posts on internet discussion boards, mass emails, and by active recruitment in places not limited to LGB-identified groups. It is hoped that this type of sampling will reach a wider variety of participants.

Another limitation of the extant research is that many demographic questionnaires force participants to enter their sexual orientation as one of few categories: straight, gay, lesbian, bisexual, or transgender. However, for many individuals who have ever experienced same sex attraction at some point in their lives, these labels are too restrictive and binding (Diamond, 2008). For example, consider the woman who

recognizes that she has an emotional attraction to other women, but has never been sexually intimate with a member of the same sex. Or a man who is married to a woman but occasionally has sexual encounters with other men. Or the college undergraduate who has previously identified as heterosexual but in her first women's studies course begins to feel open to the possibility of dating women. Which option, if any, would these individuals choose on such a demographic form? Therefore, I plan on using the broader conceptualization of "sexual minority" and "persons who have experienced same-sex attractions" in participant recruitment materials and on the demographic form. In addition, measuring sexual orientation and sexual identity using the dimensions outlined by Klein (1978, 1993) will give a deeper picture of individual participant identities and attractions.

Another limitation in the previous research on WSIM is that the data collected tend to show that participants sampled were relatively open about their sexual identities in the workplace. This is likely due to the fact that it is easier to recruit participants who are "out" as opposed to those who are closeted. In order to understand the full range of WSIM strategies in the data, it is necessary to sample those who are passing or completely closeted in the workplace. Recruiting participants by posting in LGB organizations and through snowball sampling will not be effective in this way. Therefore, as stated above, in addition to traditional sampling methods, also allowing participants to self-select by sending mass emails and posting information in places outside of traditional LGB-identified groups or workplaces will hopefully remedy this issue.

Other limitations to the previous research present themselves as measurement issues. For example, the use of single-item measures of degree of disclosure in the

workplace is problematic (Croteau, 1996). These do not adequately tap the range of WSIM strategies. They also do not present a full picture of persons to whom the participants have disclosed their sexual identities. Data collected by asking participants if they have disclosed to their primary supervisor cannot be generalized to their degree of disclosure in the entire workplace. Similarly, employing questions with dichotomous response options (such as *yes* or *no*) does not yield data that can be manipulated statistically. Therefore, it will be necessary to use more comprehensive measures with items that offer a range of response options scored on a Likert-scale. Additionally, these measures must have demonstrated adequate internal consistency reliability and construct validity before being employed in the current study. Administering items that have never been subjected to such analyses or a pilot study can be problematic.

As noted by Croteau (1996), researchers must be cautious when using terms such as “disclosure” or “openness” in measures of WSIM. These terms can be ambiguous, and participants could interpret them in different ways. Unfortunately, most of the previous research on WSIM-related variables has used terms similar to those mentioned above. Therefore, it will be important to give participants clear definitions of terminology used in questions and research materials as a whole. This will facilitate a consistent understanding and measurement of the constructs at hand. Similarly, it is important to distinguish between voluntary disclosure decisions and those that are involuntary, such as being outed by another person against the participant’s will.

Finally, many of the aforementioned studies employed data that were initially collected for a prior study. Using data of this type is certainly convenient, as sexual minority persons are difficult to sample to begin with; however, it does not allow

researchers to be as thorough in their hypothesizing or data analysis. Therefore, it will be imperative to collect original data for the current study, so that the data collected can be tailored to this study's purpose and specific research questions and hypotheses.

Consequently, the author will be able to test a conceptual model that captures a wide range of psychological and social cognitive variables instead of being restricted to analyzing relationships between a limited number of variables.

Summary and Purpose of the Current Study

One of the ongoing issues in vocational psychology research with sexual minority individuals, especially regarding the construct of workplace sexual identity management, is that there has not been much of it. The research that does exist has been fragmented and has examined a limited number of variables. A recent group of researchers (Lidderdale et al., 2007) constructed a SCCT-based model of workplace sexual identity management that has yet to be empirically tested. As previously noted, social cognitive career theory is a well-supported and widely known theory of career development. SCCT has been shown to be adaptable to diverse groups, as well as to other topics aside from traditional career development tasks (e.g., interest for research, academic performance, subjective well-being).

Therefore, the purpose of the current study is to respond to the call for an empirically-supported model of workplace sexual identity management by testing a portion of Lidderdale et al.'s (2007) Social Cognitive Career Theory-based model of workplace sexual identity management in a sample of employed sexual minority individuals. A study of this type will improve upon the extant vocational psychological literature by grounding new workplace sexual identity management research in a

supported theoretical framework. In addition, the current study hopes to improve upon the aforementioned research methodology and participant recruitment issues that have created limitations in the previous empirical studies on this topic.

Hypotheses

The main focus of this study involves the applicability of segments two and three of the SCCT-based model proposed by Lidderdale et al. (2007) to explain the workplace sexual identity management choice behaviors of sexual minority employees. Please refer to Figure 3 below for a depiction of these segments of the model. In particular, this study will examine: (1) the role of self-efficacy, outcome expectations, and proximal contextual influences (such as workplace climate) in the prediction of sexual minority employees' decisions to employ specific workplace sexual identity management strategies in the workplace, (2) the mediating role of self-efficacy and outcome expectations in the relation of learning experiences to sexual identity management strategies, strategy intentions, and behaviors, and (3) the influence of workplace climate (as a proximal contextual variable) on the relationship between range of acceptable sexual identity management strategies, strategy intentions, and actual sexual identity management behaviors. The following relevant hypotheses were based on Lidderdale et al.'s model, SCCT, and relevant extant research literature (Burgess, 1997; Button, 2001; Chrobot-Mason et al., 2002; Driscoll et al., 1996; Gainor & Lent, 1998; Kitzinger, 1991; Lent et al., 1994; Lent et al., 2005; Lent et al., 2007; Lent, Brown, Nota, & Soresi, 2003; Lent, Brown, Schmidt, et al., 2003; Mancuso, 2005; Morrow et al., 1996; Navarro, Flores, & Worthington, 2007; Plaufcan, 2011; Ragins et al., 2007; Rottinghaus et al., 2003;

Rostosky & Riggle, 2002; Sadri & Robinson, 1993; Schaub & Tokar, 2005; Schneider, 1987; Stajkovic & Luthans, 1998; Tejada, 2006; Waldo, 1999; Williams & Subich, 2006).

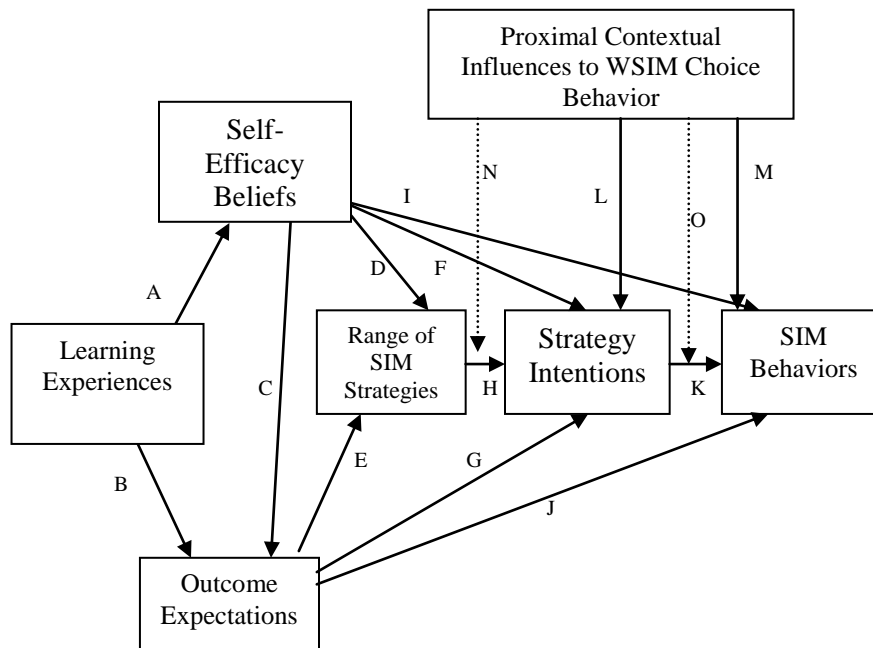


Figure 3. Segments 2 and 3 of Lidderdale et al.'s (2007) model of workplace sexual identity management. Note. From "Building Lesbian, Gay, and Bisexual Vocational Psychology: A Theoretical Model of Workplace Sexual Identity Management." by M.A. Lidderdale, J.M. Croteau, M.Z. Anderson, D. Tovar-Murray, and J.M. Davis, 2007. In K.J. Bieschke, R.M. Perez, & K.A. DeBord (Eds.), *Handbook of Counseling and Psychotherapy with Lesbian, Gay, Bisexual, and Transgender Clients* (pp. 245-270), Washington, DC: American Psychological Association. Note. Dashed lines indicate hypothesized moderated relations.

Tests of Direct Relations

The following hypotheses involve the prediction of direct, positive relationships between variables.

Hypothesis 1: Hypothesized relationship of learning experiences and self-efficacy beliefs (Path A). It is expected that more positive learning experiences regarding sexual identity

will be related to greater self-efficacy for executing a WSIM strategy that involves greater self-disclosure (e.g., implicitly out or explicitly out) in the workplace.

Hypothesis 2: Hypothesized relationship between learning experiences and outcome expectations (Path B).

It is expected that more positive learning experiences regarding sexual identity will be related to more positive outcome expectations for executing a WSIM strategy that involves greater self-disclosure (e.g., implicitly out or explicitly out) in the workplace.

Hypothesis 3: Hypothesized relationship between self-efficacy and outcome expectations (Path C).

It is expected that the more self-efficacy individuals have regarding execution of an implicitly or explicitly out WSIM strategy as opposed to a passing or covering strategy, the more positive their outcome expectations will be for executing said WSIM strategy in the workplace.

Hypothesis 4: Hypothesized relationship between self-efficacy and range of acceptable sexual identity management strategies (Path D).

It is expected that the more self-efficacy participants have had regarding implicitly or explicitly out WSIM strategies, the more likely they will be to consider employing those strategies instead of passing or covering strategies.

Hypothesis 5: Hypothesized relationship between self-efficacy and sexual identity management strategy intentions (Path F).

It is expected that the more self-efficacy participants have had regarding implicitly or explicitly out WSIM strategies, the higher their implementation intentions will be for those strategies.

Hypothesis 6: Hypothesized relationship between self-efficacy and actual sexual identity management behaviors (Path I).

It is expected that the greater the self-efficacy regarding implicitly or explicitly out WSIM strategies, the greater the likelihood of actually implementing those strategies.

Hypothesis 7: Hypothesized relationship between outcome expectations and range of acceptable sexual identity management strategies (Path E).

It is expected that the more positive the outcome expectations for implicitly or explicitly out WSIM strategies, the more likely those strategies will be included in the potential strategies that individuals would consider acceptable for themselves to use.

Hypothesis 8: Hypothesized relationship between outcome expectations and sexual identity management strategy intentions (Path G).

It is expected that the more positive the outcome expectations for implicitly or explicitly out WSIM strategies, the higher the intentions of using those strategies.

Hypothesis 9: Hypothesized relationship between outcome expectations and actual sexual identity management behaviors (Path J).

It is expected that the more positive the outcome expectations for implicitly or explicitly out WSIM strategies, the more likely participants are to use those strategies.

Hypothesis 10: Hypothesized relationship between proximal contextual influences on workplace sexual identity management choice behavior and sexual identity strategy intentions (Path L).

It is hypothesized that the presence of a more sexual minority-affirmative environment will be directly and positively associated with more self-disclosing (e.g., implicitly or explicitly out as opposed to passing/covering) WSIM strategy intentions.

Hypothesis 11: Hypothesized relationship between proximal contextual influences on workplace sexual identity management choice behavior and actual WSIM behaviors (Path M).

It is hypothesized that the presence of a more sexual minority-affirmative environment will be directly positively associated with more self-disclosing (e.g., implicitly or explicitly out) WSIM behaviors.

Hypothesis 12: Hypothesized relationship between personal range of sexual identity management strategies and workplace sexual identity management intentions (Path H).

It is expected that participants who consider more self-disclosing (e.g., implicitly or explicitly out) sexual identity management strategies to be acceptable will also report greater intentions for implementing these types of strategies.

Hypothesis 13: Hypothesized relationship between workplace sexual identity management intentions and actual workplace sexual identity management behaviors (Path K).

It is expected that participants who intend to use more self-disclosing (e.g., implicitly or explicitly out) SIM strategies will report actually being more out in the workplace.

Tests of Intervening Effects

All possible indirect pathways (also termed intervening variables, see Chapter 3) will be considered in calculation of total indirect effects for relationships between two variables also hypothesized to be directly related. In other words, it is hypothesized that part of the total relation between the two variables will be partially mediated through the indirect pathways. These indirect paths (and corresponding hypotheses) are as follows:

Hypothesis 2a: Intervening effect between learning experiences and outcome expectations (Path A x C).

Hypothesis 4a: Intervening effect between self-efficacy and range of acceptable sexual identity management strategies (Path C x E).

Hypothesis 5a: Intervening effect between self-efficacy and sexual identity management strategy intentions (Path C x G; Path D x H; and Path C x E x H)

Hypothesis 6a: Intervening effect between self-efficacy and actual sexual identity management behaviors (Path C x J; Path F x K; Path D x H x K; Path C x G x K; and Path C x E x H x K).

Hypothesis 8a: Intervening effect between outcome expectations and sexual identity management strategy intentions (Path E x H).

Hypothesis 9a: Intervening effect between outcome expectations and actual sexual identity management behaviors (Path E x H x K and Path G x K).

Tests of Moderation

Hypothesis 14: Hypothesized moderated relationship between contextual factors proximal to workplace sexual identity management choice behavior and the link between range of SIM strategies and WSIM strategy intentions (Path N).

It is hypothesized that contextual factors proximal to WSIM will moderate the translation of WSIM strategies the participants' consider acceptable into implementation intentions for those WSIM strategies, such that contextual factors more inclusive of sexual minorities will strengthen the relationship between personal range of SIM strategies and WSIM strategy intentions for more self-disclosing sexual identity management strategies.

Hypothesis 15: Hypothesized moderated relationship between contextual factors proximal to workplace sexual identity management and the link between WSIM strategy intentions and actual WSIM behaviors (Path O).

It is hypothesized that contextual factors proximal to WSIM will moderate the translation of intended WSIM strategies into actual WSIM behaviors, such that contextual factors more inclusive of sexual minorities will strengthen the relationship between WSIM strategy intentions and actual WSIM behaviors for more self-disclosing behaviors.

CHAPTER III

METHODOLOGY

Pilot Study

Four of the measures employed in the current study were written as exploratory measures specifically for the purpose of this study: the Workplace Climate Questionnaire, the Range of Acceptable Workplace Identity Management Strategies Measure, the Workplace Identity Management Strategy Intentions Measure, and the Sexual Identity Management Outcome Expectations Scale. Thus, an initial pilot study was conducted to assess their psychometric properties.

Participants

Participants in this study were sexual minority adults who were employed 15 or more hours per week at a single place of employment. In order to recruit participants with a wider range of sexual identities, such as queer or questioning, as well as individuals employing passing or covering strategies, recruitment efforts were not limited to organizations that define themselves as LGB. (It should be noted that transgendered persons were not included in the targeted participant recruitment population, as transgendered refers to one's gender identity, not one's sexual identity.) In addition to recruiting from LGB-defined organizations, participants were also recruited online through anonymous message boards, chat groups, emails, and social networking sites such as Facebook. Using online recruitment also assisted in obtaining a sample of

participants from a wider geographic region. Participants were also recruited from flyers posted in two large metropolitan areas.

A total of 43 individuals began the survey. No participants were removed due to missing data, though one participant was exited from the survey for not fitting all of the entrance criteria; thus the resulting sample size was 42. The sample was 45.2% male and 54.8% female. The greatest number of participants identified as gay (42.9%) or lesbian (33.3%), with 14.3% identifying as bisexual, 7.1% as queer, and 2.4% as other. The sample was primarily European American/Caucasian (88.1%), with 7.1% of the sample identifying as Asian American, and 2.4% each as African American and Native American. Ages of participants ranged from 21 – 60, with a median of 32. The majority of participants were from the Northeast (47.6%) or the Midwest (35.7%), with 4.8% each being from the Northwest or the Southwest. The remaining participants were either from the Southeast (2.4%) or from outside the United States (2.4%). In regards to relationship status, the majority of participants indicated they were in a same-sex partnership of some kind (73.8%), while 19% reported not currently being in a relationship, and 7.1% reported being in an other-sex relationship. The number of hours participants reported working in an average week ranged from 15 – 60, with a median of 40. Additional demographic data about the participants' employment is presented in Table 1.

Table 1

Pilot Study Participants' Employment Information

| Variable | Categories | Percentage |
|--------------------------------------|---|------------------------|
| Student Status | Not currently student | 69.0% (<i>N</i> = 29) |
| | Undergraduate student | 11.9% (<i>N</i> = 5) |
| | Graduate or professional student | 19.0% (<i>N</i> = 8) |
| Highest Education | High school diploma or equivalent | 16.7% (<i>N</i> = 7) |
| | Associate's degree or trade school | 7.1% (<i>N</i> = 3) |
| | Bachelor's degree | 21.4% (<i>N</i> = 9) |
| | Master's degree | 23.8% (<i>N</i> = 10) |
| | Doctorate degree | 31.0% (<i>N</i> = 13) |
| Employment Sector | Computers/Technology | 7.1% (<i>N</i> = 3) |
| | Customer service/Retail | 7.1% (<i>N</i> = 3) |
| | Education | 28.6% (<i>N</i> = 12) |
| | Food service/Hospitality | 7.1% (<i>N</i> = 3) |
| | Health services/Medicine | 31.0% (<i>N</i> = 13) |
| | Law / Judicial | 2.4% (<i>N</i> = 1) |
| | Mental health | 7.1% (<i>N</i> = 3) |
| | Non-profit | 2.4% (<i>N</i> = 1) |
| | Research/Science | 4.8% (<i>N</i> = 2) |
| | Skilled trades | 2.4% (<i>N</i> = 1) |
| Management Status | Not in management | 73.8% (<i>N</i> = 31) |
| | Shift supervisor | 7.1% (<i>N</i> = 3) |
| | Store or branch manager | 4.8% (<i>N</i> = 2) |
| | Middle manager | 4.8% (<i>N</i> = 2) |
| | Upper manager | 9.5% (<i>N</i> = 4) |
| Length of time with current employer | 6 months or less | 11.9% (<i>N</i> = 5) |
| | 7 months – 1 year | 14.3% (<i>N</i> = 6) |
| | 1 – 5 years | 42.9% (<i>N</i> = 18) |
| | 5 – 10 years | 19.0% (<i>N</i> = 8) |
| | 10 + years | 11.9% (<i>N</i> = 5) |
| Company affiliation | Not affiliated with religion or political stance | 95.2% (<i>N</i> = 40) |
| | Religiously affiliated | 2.4% (<i>N</i> = 1) |
| | Religiously affiliated and politically conservative | 2.4% (<i>N</i> = 1) |
| | | |

Measures

Demographic questionnaire (Appendix A). Participants completed a brief demographic questionnaire. Information regarding sex, gender identity, age, race/ethnicity, sexual identity, relationship status, employment sector, number of hours worked per week, and basic, non-identifying information about participants' workplaces was collected.

Klein Sexual Orientation Grid (KSOG; Klein, Sepekoff, & Wolf, 1985; Appendix B). Sexual orientation as an additional demographic variable was assessed using the Klein Sexual Orientation Grid. The KSOG provides an objective, multi-dimensional measure of one's sexual orientation. Participants indicate their preference for seven different domains on a 7-point scale (ranging from 0, *other sex only* to 6, *same sex only*). This Likert-type scale is based on the Kinsey Scale of sexual orientation (Kinsey et al., 1948, 1953). The seven domains rated include: sexual attraction, sexual behavior, sexual fantasies, emotional preference, social preference, lifestyle preference, and self-identification. Participants provide these preference choices regarding the past (up to 12 months ago), the present (the most recent 12 months), and what they wish for the future, for each of the seven domains. Thus, the KSOG has a total of 21 items. The measure can be scored as a total across all 21 items, or total scores for the Past, Present, and Ideal subscales can be computed by summing scores on items for those scales only. Higher scores indicate greater sexual minority identification, while lower scores indicate greater heterosexuality. For the current study, a total score across all 21 items was used; this score can range from 0 to 126. Consistent with the Kinsey Scale (see Sell, 1997), participants who scored 21 or below (indicating predominately heterosexual/"only

incidentally homosexual”) were considered *non-sexual minority* participants and were dropped from the data analysis.

Research has shown that the KSOG can accurately differentiate between groups of participants who self-identify as lesbian/gay, bisexual, and heterosexual (Klein, Sepekoff, & Wolf, 1985). Additional construct validity for the KSOG was demonstrated by Weinrich and colleagues (1993). They found a consistent single factor structure with oblique rotation for KSOG items across samples of HIV-negative heterosexual, gay/lesbian, and bisexual individuals, and HIV-positive gay and bisexual men. In a sample of 351 sexually diverse participants Klein and colleagues (1985) found that “the reliability estimates of the entire grid were generally excellent” (p. 43), however; no specific data were provided.

Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS; Szymanski, 2006; Appendix C). Learning experiences regarding sexual identity management were measured using the HHRDS. The HHRDS is a 14-item inventory originally developed to measure the frequency with which a lesbian reports having experienced harassment, rejection, and discrimination related to her sexual minority status. The scale contains 3 factors, focusing on specific domains: Harassment and Rejection (7 items), Workplace and School Discrimination (4 items), and Other Discrimination (3 items). Szymanski and Gupta (2009) modified the items on the HHRDS to include gay and bisexual persons. A similarly adapted version of the HHRDS was used in the present study. An example modified item from the scale (with changes presented in italics) is, “In the past year, how many times have you been rejected by family members because you are a *sexual minority person*?” Responses to the items are

rated on a 6-point Likert scale ranging from 1 (*the event has never happened to you*) to 6 (*the event happened almost all the time [more than 70% of the time]*). To score the HHRDS, mean scores are calculated for each participant across all items, with higher scores indicating greater experiences of heterosexist harassment, rejection, and discrimination. Because of the nature of the current study's hypotheses (see H1 below), scores on the HHRDS were reversed, to allow higher scores to indicate less experiences of harassment, rejection, and discrimination. Good internal consistency reliability ($\alpha = .90$) for scores on the HHRDS was demonstrated by Szymanski (2006). According to the author, principal components analysis yielded a three-factor solution accounting for 68% of the variance (Szymanski, 2006). Additionally, good internal consistency reliability for the modified version of the assessment ($\alpha = .95$) was demonstrated by Szymanski and Gupta (2009). It should be noted that although the HHRDS is not by definition a measure of learning experiences as portrayed in the SCCT framework, it is natural to assume that recent previous experiences of discrimination, harassment, or rejection based on one's sexual orientation could be events from which sexual minority persons learn potential consequences of ways of interacting with those in the world around them (Balsam & Mohr, 2007; Herek, 1990; Levitt et al., 2009; Ragins & Cornwell, 2001; Szymanski, 2009). For example, Herek, Gillis, & Cogan (2009) report that "a high degree of felt stigma motivates some individuals to hide their sexual minority identity and attempt to pass as heterosexual" (p. 39).

Coping with Barriers to Out Sexual Identity Management Strategies

(CBOSIMS; Lance, 2006; Lance, Anderson, & Croteau, 2008; Appendix D). Self-efficacy beliefs regarding workplace sexual identity management were measured using

the CBOSIMS. This measure was adapted from the Coping With Barriers (CWB; McWhirter & Luzzo, 1996) scale, a measure of perceived ability to cope with career and educational barriers for high school students. The CBOSIMS consists of 16 items designed to tap workers' "perception of their ability to cope with barriers to using implicitly and explicitly out sexual identity management strategies" (Lance, 2006, p. 79). Participants rate their degree of confidence that they could cope with each of the potential barriers presented using a 5-point Likert scale ranging from 1 (*not at all confident*) to 5 (*highly confident*). Participants' scores on the measure are calculated by averaging their responses to all of the items, with higher scores indicating greater coping self-efficacy. Lance (2006) found internal consistency reliability for the CBOSIMS to be .93 in a sample of employed gay, lesbian, and bisexual adults. Test-retest reliability for the original CWB measure was found to be .49 over a 2-month period. Specific validity evidence for the CBOSIMS was not reported by Lance and colleagues. Because the CBOSIMS was originally developed to be used in a sample of teachers, in the current study a slightly modified version of the measure was used. Wording has been changed to be more inclusive of all sexual minority identities, and to be applicable to any career. An example modified item (with changes in italics) is, "Being treated differently because of being known to be *a sexual minority*."

Workplace Climate Questionnaire (WCQ; Appendix E). The WCQ is a 20-item exploratory measure developed for this study to provide additional assessment of present contextual influences on sexual identity management in the workplace. Participants are asked to consider each item and rate how true it is of their current workplace on a 5-point Likert scale, ranging from 1 (*Very untrue*) to 5 (*Very true*), or mark an item as *not*

applicable. A total score is calculated by averaging responses to all items (not including items marked as *N/A*), with higher scores reflecting a workplace climate that is more accepting of sexual minority persons. Construct validity, content validity, and internal consistency reliability for this measure were assessed in a pilot sample, as described.

Workplace Sexual Identity Management Measure—Revised (WSIMM-R; Lance, Anderson, & Croteau, 2010; Appendix F). WSIM behaviors were measured by the WSIMM-R. The WSIMM-R is an empirically supported measure of frequency of respondents' use of behaviors representing the four sexual identity management strategies described by Griffin (1992): Passing, Covering, Implicitly out, and Explicitly out. It contains 31 items (Eight items for the Passing, Covering, and Explicitly Out scales; seven items for the Implicitly Out scale). Participants rate their responses to the items on a 6-point Likert scale ranging from 1 (*never*) to 6 (*always*).

A slightly adapted version of the WSIMM-R was used in the current study. First, item wording was changed to be more inclusive of all sexual minority identities (e.g., replacing the words “lesbian/gay/bisexual” with the term “sexual minority”). Example items (one from each subscale, respectively) include, “Make up stories about romantic partners of the opposite sex,” “Do not correct others when they make comments that imply I am heterosexual,” “Talk about activities that include a same-sex partner or date, but do not identify the kind of relationship I have with that person. That way people can assume whatever they want,” and “Am explicit that I am referring to someone of the **same** sex when I talk about romantic relationships and dating at work.” In addition, a seventh response option, *Does not apply*, was added. Finally, two additional items were written for this measure (see Appendix F), particularly designed to be inclusive of the

experiences of sexual minority persons in relationships with other-sex partners.

Participants are provided with instructions to answer these questions if they identify as such; otherwise, to mark “Does not apply.” The supplemental items were not used in the current study.

Lance and colleagues (2010) demonstrated good internal consistency reliabilities for the Covering, Implicitly Out, and Explicitly Out subscales ($\alpha = .79$, $.75$, and $.95$, respectively) in a sample of sexual minority K-12 teachers. Marginal internal consistency reliability emerged for the Passing subscale ($\alpha = .59$); however, the authors stated this was likely due to the small number of participants reporting use of that strategy ($n = 14$; 5% of the total sample). Evidence of convergent validity was also provided by Lance et al., showing positive correlations between WSIMM-R subscales and similar subscales on the Identity Management Strategies-Revised (Button, 1996, 2001), another measure of WSIM strategies. In addition, statistically significant differences in WSIMM-R scale scores across groups self-identifying at distinct places on the identity management continuum were found by Lance and colleagues, providing evidence of discriminant validity among the four scales.

Traditionally, researchers using the measure have analyzed data at the subscale level, computing separate mean scores for each of the four subscales (Anderson, Croteau, Chung, & DiStefano, 2001; Chrobot-Mason, Button, & DiClementi, 2001; Lance, Anderson, & Croteau, 2010). In a similar vein, Mock, Sedlovskaya, and Purdie-Vaughns (2009) grouped total scores into two separate categories: Passing/Covering (containing the items from these two subscales), and “Out at Work” (containing items from subscales Implicitly Out and Explicitly Out). These categories were derived based on results of an

exploratory factor analysis, and demonstrated adequate to good internal consistency reliability ($\alpha = .82$, $\alpha = .73$, respectively). Because of the need for an overall total disclosure score in the current study, the WSIMM-R was scored using a modified procedure based on the method outlined by Mock and colleagues (2009). This is such that items on the Passing and Covering subscales were considered to represent non-disclosure of sexual identity in the workplace, and items on these subscales were reverse-scored. Items on the Implicitly Out and Explicitly Out subscales were considered to represent “Out at Work,” and were scored in the traditional direction. Thus, participants can receive a total “outness” score on the WSIMM-R by summing their scores on all the items.

Range of Acceptable Workplace Identity Management Strategies Measure

(AWIMS; Appendix G). The AWIMS is a 16-item measure designed for use in the current study as an exploratory method to assess those workplace sexual identity management strategies that participants consider acceptable for their own use. It contains four subscales, one for each of the sexual identity management strategies identified by Griffin (1992): Passing, Covering, Implicitly Out, and Explicitly Out. Participants are presented with statements describing behaviors and asked to rate how much they would consider the behavior to be acceptable for themselves in their current workplace. The ratings are given on a 5-point Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*), or the participant can choose *Does not apply*. Two additional items (for a total of 18) are presented at the end of this measure (see Appendix G), particularly designed to be inclusive of the experiences of sexual minority persons in relationships with other-sex partners. Participants are provided with instructions to answer these

questions if they identify as such; otherwise, to mark “Does not apply.” The supplemental items were not used in the current study.

Similar to the modified scoring procedure used for the WSIMM-R, items on the Passing and Covering subscales are reverse coded, and item scores are summed to provide a total score. This is with higher scores indicating greater acceptance of “out” sexual identity management strategies. An example item from this measure is, “In my current workplace, I would consider dressing or behaving in ways that are consistent with traditional gender roles so that others will assume I am heterosexual.” Construct validity, content validity, and internal consistency reliability for this measure were assessed in a pilot sample, as described.

Workplace Identity Management Strategy Intentions Measure (WIMSI; Appendix H). The WIMSI is a 16-item measure designed for use in the current study as an exploratory method to assess participants’ intentions to use particular workplace sexual identity management strategies. It contains four subscales, one for each of the sexual identity management strategies identified by Griffin (1992): Passing, Covering, Implicitly Out, and Explicitly Out. Participants are presented with statements describing behaviors and asked to rate how much they intend to engage in each behavior in their current workplace. The ratings are given on a 5-point Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*), or the participant can choose *Does not apply*. Two additional items (for a total of 18) are presented at the end of this measure (see Appendix G), particularly designed to be inclusive of the experiences of sexual minority persons in relationships with other-sex partners. Participants are provided with

instructions to answer these questions if they identify as such; otherwise, to mark “Does not apply.” The supplemental items were not used in the current study.

Similar to the modified scoring procedure used for the WSIMM-R, items on the Passing and Covering subscales are reverse coded, and item scores are summed to provide a total score. This is with higher scores indicating greater acceptance of “out” sexual identity management strategies. An example item from this measure is, “In the future at my current workplace, I intend to invite my partner or date to an event or function with my colleagues outside of work.” Construct validity, content validity, and internal consistency reliability for this measure were assessed in a pilot sample, as described.

Sexual Identity Management Outcome Expectations Scale (SIMOES;

Appendix I). The SIMOES is an 18-item measure designed for use in the current study as an exploratory method to assess participants’ outcome expectations for disclosing their sexual identity in the workplace. It was designed to tap the three categories of outcome expectations as identified by Bandura (1997): physical outcomes, social reactions, and self-evaluations. Participants are presented with a question stem reading, “Revealing my sexual orientation in the workplace will...”, followed by various potential consequences. Participants are asked to rate their level of agreement with each statement on a 5-point Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Scores are calculated by adding up the total for all 18 items, with higher scores indicating more positive outcome expectations. An example item from this measure is, “Revealing my sexual orientation in the workplace will improve my image in the workplace.” Construct

validity, content validity, and internal consistency reliability for this measure were assessed in a pilot sample, as described.

Procedure

This study was approved by the University of Akron Institutional Review Board prior to data collection. Feedback for initial content validity evidence of the items was gathered from three experts in the field of psychology. Wording of some of the items was revised for clarity according to the feedback, and these revised versions of the measures were used in the pilot study data collection. The data collection was both online and via paper and pencil questionnaires. The online data collection used Qualtrics, a commercially available survey website. Participants were recruited online through anonymous message boards, chat groups, emails, and social networking sites such as Facebook. Participants were also recruited from two large metropolitan areas through flyers and word of mouth. Recruitment materials containing a link to the online survey were posted in the aforementioned media, and participants were able to access the survey at their leisure by clicking on the link. Participants who accessed the survey were first presented with a webpage containing the informed consent document. Participants indicated their consent by clicking on a box labeled “I agree to participate.” From there, they were taken to the survey materials. Participants who decide not to participate after reading the informed consent were able to click on a box labeled “I do NOT wish to participate at this time,” and were exited from the survey.

Participants who accessed the survey were presented with the aforementioned measures in the order listed above. Prior to the demographic information page, participants were required to indicate whether or not they are employed as a screening

tool. Participants who indicated that they are not employed were exited from the survey and thanked for their participation. Upon completion of the survey, participants had the option of providing their email address (stored separately from their survey responses to ensure confidentiality) to be entered in a raffle for two \$25 Amazon gift cards. Finally, participants were presented with debriefing materials and were able to exit the survey by closing their web browser.

Participant recruitment for the paper and pencil version of the survey took place in person at sexual minority-identified campus and community organizations, during regularly scheduled meeting times. Members present in the meeting were asked if they would like to participate in the research study. Those who expressed interest were given an informed consent document to sign and return to the researcher, who then provided them with paper and pencil versions of the measures employed in the online survey. Upon completion of these measures, participants were given a debriefing form and offered a chance to enroll in the gift card raffle, or to receive psychology course extra credit if they were so eligible.

Data Cleaning and Analysis

The data for the pilot study were analyzed using PASW Statistics version 18 (SPSS Inc., 2009). Initial inspection of the data revealed that there was a small number of missing values (<5), which appeared to be missing at random. Although not standard practice for larger amounts of missing data, because the proportion of missing data was small (Tabachnick & Fidell, 2007), mean substitution was used for these data points, and consequently no participant cases were dropped due to missing data. Internal consistency reliability estimates were calculated for each measure. Means, standard deviations,

minimum and maximum values, and internal consistency reliabilities for each measure are presented in Table 2. Internal consistencies for the measures fell in the acceptable to excellent range (Streiner, 2003). Comparison of the total scale means for the AWIMS and the WIMSI revealed that participants reported slightly less *consideration* of open identity management strategies as acceptable, but reported higher *intentions* to employ out strategies.

Table 2

Means, SDs, Minimum and Maximum Values, and Alphas for Pilot Study Measures

| Measure | Mean | SD | Min. | Max. | Initial α | Final α |
|---------------------------|-------|------|------|------|------------------|----------------|
| WCQ | 3.89 | 0.78 | 1.57 | 4.95 | .89 | .92 |
| SIMOES | 70.68 | 15.7 | 27 | 90 | .96 | .96 |
| AWIMS | | | | | | |
| Total Openness Scale | 3.97 | 0.59 | 2.56 | 4.75 | .80 | .82 |
| Passing/Covering | 4.20 | 0.72 | 2.63 | 5.00 | -- | -- |
| Implicitly/Explicitly Out | 3.74 | 0.65 | 1.63 | 4.88 | -- | -- |
| WIMSI | | | | | | |
| Total Openness Scale | 4.07 | 0.59 | 2.50 | 4.75 | .81 | .84 |
| Passing/Covering | 4.37 | 0.61 | 2.88 | 5.00 | -- | -- |
| Implicitly/Explicitly Out | 3.78 | 0.72 | 1.38 | 4.63 | -- | -- |

Note. Ns ranged from 41 – 42. WCQ = Workplace Climate Questionnaire. SIMOES = Sexual Identity Management Outcome Expectations Scale. AWIMS = Range of Acceptable Workplace Identity Management Strategies Measure. WIMSI = Workplace Identity Management Strategy Intentions Measure. Final α refers to the internal consistency after the removal of poor items, as described below.

Next, exploratory factor analyses (using Principal Axis Factoring [PAF]) was conducted to support each measurement's construct validity (Lu, 2006). The Workplace Climate Questionnaire was subjected to PAF with an oblimin rotation. Three factors accounting for 58.02% of the variance emerged, all of which had eigenvalues greater than one. These factors were labeled: Presence of Allies (7 items), Support of Same-Sex

Partners and Families (6 items), and Inclusive Workplace Policy (5 items). Two items were removed from the measure for failing to load on any of the factors: “My company has donated money to anti-LGBQ causes,” and “People at my company make anti-LGBQ slurs or jokes.” The removal of these items also increased the total scale alpha to .92.

Final factor loadings are presented in Table 3.

Table 3

Factor Loadings for Workplace Climate Questionnaire (WCQ)

| Item | Factor 1 Loading | Factor 2 Loading | Factor 3 Loading |
|--|---------------------|---------------------|---------------------|
| There are employees at my company who are known to have children who are sexual minorities | .80 | .35 | .34 |
| There are employees at my company who are known to have same-sex parents | .79 | .56 | .27 |
| There are other employees in my company who are “out” as a sexual minority | .77 | .14 | .02 |
| There are “out” heterosexual allies in management at my company | .72 | .41 | .41 |
| There are other employees in my company who openly identify as heterosexual allies | .72 | .27 | .26 |
| There are “out” sexual minorities in management at my company | .68 | .57 | .07 |
| My company has donated money to support equality for sexual minorities | .45 | .33 | .15 |
| Same-sex romantic partners are invited to company social outings | .20 | .91 | .41 |

Table 3

Factor Loadings for Workplace Climate Questionnaire (WCQ) (continued)

| | | | |
|---|-----|------------|------------|
| My workplace seems supportive of same-sex couples parenting children, whether they have them by adoption, insemination, or other means | .40 | .84 | .39 |
| Sexual minority employees at my company receive promotions the same as other employees | .22 | .82 | .30 |
| There are employees at my company who are known to have a sexual minority family member who is not a parent or child | .40 | .71 | .03 |
| Although sexual minority employees are not openly discriminated against, there seems to be a negative attitude towards them in my company | .28 | .63 | .50 |
| My workplace has the option of allowing same-sex partners of employees to receive healthcare benefits | .27 | .50 | .14 |
| My organization is known to have a “conservative” political stance | .34 | .36 | .71 |
| I know of employees at my company who have been fired due to their sexual identity | .09 | .18 | .62 |
| Sexual minority employees at my company have been told to leave their personal lives at home | .09 | .21 | .60 |
| My company is affiliated with a specific religious organization | .48 | .12 | .56 |
| My workplace has a non-discrimination policy that includes sexual minority employees | .48 | .41 | .53 |

Note. Loadings for the assigned factors for each item are shown in bold. Factor 1 = Presence of Allies. Factor 2 = Support of Same-Sex Partners and Families. Factor 3 = Inclusive Workplace Policy.

The Sexual Identity Management Outcome Expectations Scale was subjected to PAF with an oblimin rotation. Two factors accounting for 68.80% of the variance emerged, both of which had eigenvalues greater than one. These factors were labeled: Psychological Outcomes (12 items), and Social Outcomes (5 items). One item was deleted from the measure for failing to load on either factor and instead loading on a separate third factor: “Revealing my sexual orientation in the workplace will detract from my physical safety.” Deletion of this item maintained the total scale alpha as .96. Final factor loadings are presented in Table 4.

Table 4

Factor Loadings for Sexual Identity Management Outcome Expectations Scale (SIMOES)

| Item | Factor 1 Loading | Factor 2 Loading |
|--|------------------|------------------|
| Help me feel more self-assured | .92 | .02 |
| Allow me to have more peace of mind at work | .91 | -.14 |
| Allow me to feel more comfortable in my work environment | .90 | .06 |
| Allow me to feel proud to be a sexual minority person | .88 | -.24 |
| Help me enjoy my workplace more | .81 | .25 |
| Allow me to feel more honest about who I am | .65 | .30 |
| Gain me respect from my supervisors and/or peers | .55 | .36 |
| Improve my image in the workplace | .55 | .37 |

Table 4

Factor Loadings for Sexual Identity Management Outcome Expectations Scale (SIMOES)
(continued)

| | | |
|---|------------|------------|
| Make me feel ashamed or embarrassed | .51 | .38 |
| Make me feel nervous and on edge around my coworkers | .48 | .43 |
| Allow me to feel more connected to my colleagues | .47 | .36 |
| Make me feel more self-conscious at work | .46 | .15 |
| Create conflict between me and other colleagues | .02 | .86 |
| Cause me to lose my job | -.02 | .86 |
| Detract from advancement opportunities for me in this workplace | -.06 | .79 |
| Cause other colleagues to distance themselves from me | .13 | .78 |
| Make me feel like I am “less than” other employees | .08 | .66 |

Note. Loadings for the assigned factors for each item are shown in bold. Factor 1 = Psychological Outcomes. Factor 2 = Social Outcomes.

The Workplace Identity Management Strategy Intentions Measure was subjected to PAF with no rotation. The results (e.g., scree plot, percentage of variance accounted for) indicated that a 1-factor solution best modeled the interrelations among the WIMSI items.

This factor accounted for 43.08% of the variance, and was supported by examination of the scree plot and eigenvalues. However, it was found that three items did not load on this factor, (“Bring a person of the other sex to an event or function with my

colleagues outside of work and have him/her pretend to be my partner. OR, if I am in an other-sex relationship, telling my colleagues I am heterosexual”; “Engage in conversations about the attractiveness of members of the other sex [such as movie stars], even when I do not find them attractive”; and “Openly associate with other sexual minority colleagues or community members without explicitly identifying myself as a sexual minority, thus allowing my coworkers to assume what they will”), and they were thus deleted. Deletion of these items increased the scale alpha to .84. Further, it was found that item number two (“Introduce a same sex date, partner, or romantic interest to my colleagues as “a friend,” regardless of what they may think of my sexual orientation”) loaded negatively on the factor, thus indicating that it should be reverse-scored. Final factor loadings are presented in Table 5.

Table 5

Factor Loadings for Workplace Identity Management Strategy Intentions Measure (WIMSI)

| Item | Factor 1 Loading |
|--|------------------|
| Invite my same-sex partner or date to an event or function with my colleagues outside of work | .92 |
| Show a picture of my same-sex partner, recent date, or romantic interest to my colleagues | .90 |
| Correct a coworker if s/he uses the wrong pronoun (ex: he, she) to refer to my same-sex partner, date, or romantic interest | .89 |
| Directly tell the majority of my colleagues that I am a sexual minority person. | .84 |
| Avoid bringing my same-sex partner or date to an event or function with my colleagues outside of work. Instead, I may just come alone. | .74 |

Table 5

Factor Loadings for Workplace Identity Management Strategy Intentions Measure (WIMSI) (continued)

| | |
|---|--------------|
| Introduce a same sex date, partner, or romantic interest to my colleagues as “a friend,” regardless of what they may think of my sexual orientation | -.69* |
| Make sure I do not display items or symbols associated with sexual minority culture (e.g., rainbows, etc.) so that my coworkers do not necessarily know I am a sexual minority | .67 |
| Use neutral pronouns or avoiding reference to a specific sex when describing my romantic partner, date, or interest. OR, if I am currently in an other-sex relationship, making sure my colleagues know that my partner is of the other sex, but not saying I am straight | .66 |
| Dress or behave in ways that are consistent with traditional heterosexual norms so that others will assume I am heterosexual | .62 |
| Not associate too closely with other “out” sexual minorities, lest my colleagues think I am also a sexual minority | .60 |
| Speak up when a colleague makes an anti-gay or heterosexist joke or comment (ex: “That’s an insensitive remark,” or “That joke is offensive to the sexual minority community”) | .56 |
| Refer to my partner or date by the incorrect pronoun (ex: he, she) so that my colleagues will believe I am in a heterosexual relationship | .35 |
| Display items or symbols associated with sexual minority culture (e.g., pink triangles, rainbows), and let others assume what they wish to about my sexual orientation | .34 |

Note. Loadings for the assigned factors for each item are shown in bold. Factor 1 = Openness Intentions.

* Item is reverse-scored

Finally, the Range of Acceptable Workplace Identity Management Strategies Measure was subjected to PAF without rotation. The results (e.g., scree plot, percentage of variance accounted for) indicated that a 1-factor solution best modeled the

interrelations among the WIMSI items. This factor accounted for 43.68% of the variance, and was supported by examination of the scree plot and eigenvalues. Similar to the WIMSI, it was found that three items (the same items that were removed from the WIMSI) did not load on this factor, and these items were deleted. Deletion of these items increased the scale alpha to .82. Further, it was found that item number two (“Introduce a same sex date, partner, or romantic interest to my colleagues as “a friend,” regardless of what they may think of my sexual orientation”) loaded negatively on the factor, thus indicating that it should be reverse-scored. Final factor loadings are presented in Table 6.

Table 6

Factor Loadings for Range of Acceptable Workplace Identity Management Strategies

Measure (AWIMS)

| Item | Factor 1 Loading |
|--|------------------|
| Show a picture of my same-sex partner, recent date, or romantic interest to my colleagues | .87 |
| Introduce a same sex date, partner, or romantic interest to my colleagues as “a friend,” regardless of what they may think of my sexual orientation | -.83* |
| Correct a coworker if s/he uses the wrong pronoun (ex: he, she) to refer to my same-sex partner, date, or romantic interest | .79 |
| Dress or behave in ways that are consistent with traditional heterosexual norms so that others will assume I am heterosexual | .79 |
| Invite my same-sex partner or date to an event or function with my colleagues outside of work | .78 |
| Directly tell the majority of my colleagues that I am a sexual minority person. (If you are already “out,” please select <i>strongly agree</i>) | .76 |
| Make sure I do not display items or symbols associated with sexual minority culture (e.g., rainbows, etc.) so that my coworkers do not necessarily know I am a sexual minority | .72 |

Table 6

Factor Loadings for Range of Acceptable Workplace Identity Management Strategies Measure (AWIMS) (continued)

| | |
|---|------------|
| Not associate too closely with other “out” sexual minorities, lest my colleagues think I am also a sexual minority | .67 |
| Avoid bringing my same-sex partner or date to an event or function with my colleagues outside of work. Instead, I may just come alone | .65 |
| Refer to my partner or date by the incorrect pronoun (ex: he, she) so that my colleagues will believe I am in a heterosexual relationship | .58 |
| Use neutral pronouns or avoiding reference to a specific sex when describing my romantic partner, date, or interest. OR, if I am currently in an other-sex relationship, making sure my colleagues know that my partner is of the other sex, but not saying I am straight | .54 |
| Display items or symbols associated with sexual minority culture (e.g., pink triangles, rainbows), and let others assume what they wish to about my sexual orientation | .50 |
| Speak up when a colleague makes an anti-gay or heterosexist joke or comment (ex: “That’s an insensitive remark,” or “That joke is offensive to the sexual minority community”) | .47 |

Note. Loadings for the assigned factors for each item are shown in bold. Factor 1 = Range of Openness.

* Item is reverse-scored

In sum, two items were deleted from the WCQ, one item was deleted from the SIMOES, and three items were deleted from both the WIMSI and the AWIMS. Because reliability and validity have been established, the revised versions of AWIMS, the WCQ, and the SIMOES, as well as the original WIMSI, were then used in the main data collection for this research project.

Main Research Project

Participants

Participants in this study were sexual minority adults who were employed 15 or more hours per week, recruited from two large metropolitan areas. Results of a power analysis estimated that at least 150 participants were needed (Kline, 1991). A total of 257 participants began the study. However, one participant did not consent to continue the study, 70 cases were deleted due to incomplete data (e.g., having more than 20% of the data missing), and 23 cases were removed for not meeting the study inclusion criteria. Thus, the total useable sample size was 163 participants.

The sample was 31.9% male, 67.5% female, and 0.6% ($N = 1$) intersex. In regards to gender identity, 31.9% of participants reported identifying as male, 62.0% as female, and 6.1% as gender queer, gender fluid, agender, or other. In regards to sexual identity, the greatest number of participants identified as bisexual (36.2%), with 20.2% identifying as gay men, 17.2% as lesbian, 7.4% as queer, 3.7% as heterosexual, 2.5% as asexual, and 2.5% as questioning their sexual identity. Further, 4.3% stated that they preferred not to label their sexual identity, 3.7% identified as pansexual, with the remaining 2.4% identifying as other. Total scores on the Klein Sexual Orientation Grid were used to examine participant sexual orientation. Nine participants had a total score of 21 or under (“predominately heterosexual/only incidentally homosexual”) and thus were not included in further analyses. These same participants also reported their sexual identity as heterosexual on the demographic questionnaire. The mean total score on the KSOG across all participants was 70.68 ($SD = 23.83$), which fell between “Attracted to both sexes equally” and “Attracted to same sex somewhat more.” The minimum score was 22, while the maximum score was 126.

The sample was primarily European American/Caucasian (82.2%), with 4.9% of the sample identifying as African American/Black, 4.9% as Asian American, 4.3% as Hispanic/Latino/a, 2.4% as being of mixed racial/ethnic background, and 1.3% as other. Ages of participants ranged from 18 – 66, with a mean of 31.62 ($SD = 11.68$). The majority of participants were from the Northeast (34.6%) or the Midwest (29.6%), with 11.1% being from the Northwest, 9.9% from the Southeast, 8.6% from the Southwest, and 6.2% from outside the United States. In regards to relationship status, the greatest number of participants indicated they were in a relationship with a same-sex partner (34.6%), or not currently in a relationship (32.1%). Further, 28.4% reported being in a relationship with an other-sex partner, and 1.2% of the sample reported being in a relationship with an intersex or transgendered partner. Finally, 3.7% of participants identified other types of relationships, such as being with multiple partners or being widowed. The number of hours participants reported working in an average week ranged from 15 – 60, with a mean of 33.35 ($SD = 13.74$). Additional demographic data about the participants' employment is presented in Table 7.

Table 7

Main Study Participants' Employment Information

| Variable | Categories | Percentage |
|--------------------------------------|---|------------|
| Student Status | Not currently student | 58.4% |
| | Working on GED | 0.6% |
| | Trade school or apprenticeship | 0.6% |
| | Undergraduate student | 30.4% |
| | Graduate or professional student | 9.9% |
| Highest Education | High school diploma or equivalent | 35.4% |
| | Associate's degree or trade school | 7.5% |
| | Bachelor's degree | 25.5% |
| | Master's degree | 19.3% |
| | Doctorate degree | 12.4% |
| Employment Sector | Arts and Entertainment | 6.7% |
| | Business/Finance | 6.3% |
| | Computers/Technology | 4.9% |
| | Customer service/Retail | 11.0% |
| | Education | 18.4% |
| | Food service/Hospitality | 11.7% |
| | Government | 3.7% |
| | Health services/Medicine | 11.0% |
| | Legal / Judicial / Law enforcement | 1.8% |
| | Mental health | 9.2% |
| | Non-profit | 5.5% |
| | Research/Science | 6.7% |
| | Skilled trades/Labor | 3.1% |
| Management Status | Not in management | 79.1% |
| | Shift supervisor | 4.3% |
| | Store or branch manager | 1.8% |
| | Middle manager | 9.8% |
| | Upper manager | 1.8% |
| | CEO, president, or company owner | 3.1% |
| Length of time with current employer | 6 months or less | 22.7% |
| | 7 months – 1 year | 17.8% |
| | 1 – 5 years | 36.2% |
| | 5 – 10 years | 11.7% |
| | 10 + years | 11.7% |
| Company affiliation | Not affiliated with religion or political stance | 94.5% |
| | Religiously affiliated | 1.8% |
| | Politically conservative | 1.8% |
| | Religiously affiliated and politically conservative | 1.2% |
| | Politically liberal | 0.6% |

Measures

Demographic questionnaire. The same demographic questionnaire used in the pilot study was also used in the main research project.

Klein Sexual Orientation Grid. The KSOG (Klein, Sepekoff, & Wolf, 1985), as used in the pilot study, was also used in the main research project.

Heterosexist Harassment, Rejection, and Discrimination Scale. The HHRDS (Szymanski, 2006), as used in the pilot study, was also used in the main research project. In the small pilot sample, internal consistency reliability was .89.

Coping with Barriers to Out Sexual Identity Management Strategies. The CBOSIMS (Lance, Anderson, & Croteau, 2008), as used in the pilot study, was also used in the main research project. In the small pilot sample, internal consistency reliability was .95.

Workplace Climate Questionnaire. The revised version of the WCQ, as resulted from the pilot study, was used in the main research project. This version is an 18-item measure designed to assess contextual factors related to workplace acceptance of sexual minority employees. It has three factors: Presence of Allies (7 items), Support of Same-Sex Partners and Families (6 items), and Inclusive Workplace Policy (5 items). In the small pilot sample, internal consistency reliability for the revised version was .92.

Workplace Sexual Identity Management Measure – Revised. The WSIMM-R (Lance, Anderson, & Croteau, 2010), as used in the pilot study, was also used in the main research project. As in the pilot study, the two supplementary items that had been added by the author were retained to better assess participants who identified as being in

relationships with other-sex partners; however, these items were not used in the current study. In the small pilot sample, internal consistency reliability was .91.

Range of Acceptable Identity Management Strategies Measure. The revised version of the AWIMS, as resulted from the pilot study, was used in the main research project. This version is a 13-item measure (plus two supplementary items not used in the current study) designed to assess the range of sexual identity management strategies that sexual minority employees would consider acceptable for their own use. In the small pilot sample, internal consistency reliability was .82.

Workplace Identity Management Strategy Intentions Measure. The revised version of the WIMSI, as resulted from the pilot study, was used in the main research project. This version is a 13-item measure (plus two supplementary items not used in the current study) designed to assess the sexual identity management strategies that sexual minority employees intend to employ. In the pilot sample, internal consistency reliability for the total scale was .84.

Sexual Identity Management Outcome Expectations Scale. The revised version of the SIMOES, as resulted from the pilot study, was used in the main research project. This version is a 17-item measure designed to assess outcome expectations of revealing one's sexual minority identity in the workplace. It has two factors: Psychological Outcomes (12 items), and Social Outcomes (5 items). In the pilot sample, internal consistency reliability for the total scale was .96.

Procedure

The revised versions of the measures were approved by the University of Akron Institutional Review Board prior to data collection. The participant recruitment for the

main research project was conducted in the same manner as that of the pilot study, using the same metropolitan areas, recruitment methods, participant inclusion criteria, and online survey program. Upon completion of the survey, participants had the option to choose one of two incentives: to be entered in a raffle for two \$25 Amazon gift cards, or to receive psychology course credit at a local University. In accordance with APA standards, participant data from the pilot study was not included in the dataset for the main research project.

CHAPTER IV

RESULTS

Data Cleaning and Preliminary Analyses

In the main study, 77.8% of participants who began the survey completed it. As previously stated, participants who had 20% or more of their data missing ($N = 70$) were removed from the dataset (Peng et al., 2006; Schlomer, Bauman, & Card, 2010). A total of 31.8% of the completing participants had at least one missing data point. Further, 64.6% of the variables (at the scale level) had at least one missing data point. Missing data ranged from a low of 0.13% (for Learning Experiences, as measured by the HHRDS) to a high of 12.27% (for Strategy Intentions, as measured by the WIMSI). At the item level, missing data ranged from a low of 0.6% to a high of 8.3%. Following the recommendations of Schlomer and colleagues (2010), Little's (1988) test was conducted to determine whether or not the data were missing completely at random (MCAR). Results indicated that the data was MCAR for Learning Experiences ($\chi^2 = 17.54, p = .18$), Self-Efficacy ($\chi^2 = 44.78, p = .44$), Outcome Expectations ($\chi^2 = 10.31, p = 1.00$), Contextual Influences ($\chi^2 = 90.92, p = .57$), Actual WSIM Behaviors ($\chi^2 = 383.44, p = .79$), and WSIM Strategy Intentions ($\chi^2 = 54.06, p = .12$). This suggests that the amount and pattern of missingness were not problematic. However, the data was not missing at random (NMAR) for Range of Acceptable WSIM Strategies ($\chi^2 = 167.98, p = .003$).

However, the results of a Missing Values Pattern Analysis did not reveal any remarkable patterns in these data.

Consistent with recommendations made by Parent (2013), available item analysis (AIA) was used to handle missing data. AIA is also known as pairwise deletion or pairwise inclusion, and it “functions equivalently” to participant mean substitution and the more recently recommended multiple imputation methods of dealing with item-level missingness (Parent, 2013, p. 570). Further, AIA has been recommended for use with scales that contain “not applicable” response options, such as those in the current study (Parent, 2013). Two additional advantages of AIA are that it is much simpler than multiple imputations, and can be conducted on most widespread statistical analysis software packages, such as SPSS. In studies where data is analyzed at the scale level, as is true of the current study, AIA functions by generating mean scores for scales using the data that is present without substituting or imputing values (Parent, 2013).

Means, standard deviations, minimum and maximum values, and the percentage of missing data for each measure are provided in Table 8. Intercorrelations between variables are provided in Table 9.

Table 8

Means, SDs, Minimum and Maximum Values, and Missing Data Percentages

| Measure | Mean | SD | Min. | Max. | α | Percentage of Missing Data |
|---------|------|------|------|------|----------|----------------------------|
| HHRDS | 5.07 | 0.71 | 2.43 | 6.00 | .90 | 0.13% |
| CBOSIMS | 3.25 | 0.96 | 1.00 | 5.00 | .94 | 0.83% |
| WCQ | 3.61 | 0.72 | 1.83 | 5.00 | .87 | 0.18% |
| SIMOES | 3.53 | 0.77 | 1.41 | 5.00 | .93 | 10.91% |
| WSIMM-R | 4.37 | 0.73 | 2.38 | 6.00 | .88 | 1.12% |
| AWIMS | 3.72 | 0.69 | 1.88 | 4.85 | .89 | 6.90% |
| WIMSI | 3.83 | 0.72 | 1.00 | 4.92 | .88 | 12.27% |

Note. Ns ranged from 134 – 151. HHRDS = Heterosexist Harassment, Rejection, and Discrimination Scale. CBOSIMS = Coping With Barriers to Out Sexual Identity Management Strategies. WCQ = Workplace Climate Questionnaire. SIMOES = Sexual Identity Management Outcome Expectations Scale. WSIMM-R = Workplace Sexual Identity Management Measure – Revised. AWIMS = Range of Acceptable Workplace Identity Management Strategies Measure. WIMSI = Workplace Identity Management Strategy Intentions Measure.

Table 9

Intercorrelations Among Variables

| Measure | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--|------|------|-------|-------|-------|-------|-------|--------|
| 1. Learning Experiences | 1.00 | .07 | .04 | -.01 | -.02 | -.09 | -.02 | -.35** |
| 2. Self-Efficacy | | 1.00 | .35** | .40** | .42** | .35** | .34** | .18 |
| 3. Proximal Contextual Influences | | | 1.00 | .59** | .49** | .34** | .46** | .18 |
| 4. Outcome Expectations | | | | 1.00 | .55** | .52** | .62** | .36** |
| 5. Range of Acceptable WSIM Strategies | | | | | 1.00 | .81** | .78** | .32** |
| 6. WSIM Strategy Intentions | | | | | | 1.00 | .73** | .37** |
| 7. Actual WSIM Behaviors | | | | | | | 1.00 | .41** |
| | | | | | | | | 1.00 |

**. Significant at the .01 level

Note. WSIM = Workplace Sexual Identity Management. KSOG = Klein Sexual Orientation Grid

Data Analysis

The hypotheses of this study are based on the model depicted in Figure 3.

Observed variable (also known as measured variable) path analysis, a type of structural equation modeling, was used to test these hypotheses. This is appropriate because path analysis has the ability to examine the relations among a set of predictors that are also assumed to relate to specific dependent variables (Kline, 1991; Sheu, Lent, Brown, Miller, Hennessy, & Duffy, 2010). It can also provide estimates of model-data fit. Accordingly, the data were analyzed using *M Plus* software version 7.11 (Muthén & Muthén, 1998-2012).

Model Evaluation

The model was estimated with maximum likelihood estimation and tested with the Satorra-Bentler scaled chi square (Satorra & Bentler, 1988). The comparative fit index (CFI; Bentler, 1990), the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993), and the standardized root mean square residual (SRMR; Hu & Bentler, 1999) were be used as indicators of model-data fit. The CFI ranges from 0 to 1, with values greater than .95 indicating good-fitting models (Hu & Bentler, 1999). The RMSEA estimates the lack of fit in a model compared to a perfect model, such that a RMSEA of 0 would indicate a perfect-fitting model (Tabachnick & Fidell, 2007). Values of .06 or less indicate a good-fitting model (Hu & Bentler, 1999), and values larger than .10 are indicative of poor-fitting models (Browne & Cudeck, 1993). SRMR values less than or equal to .08 indicate acceptable fit (Hu & Bentler, 1999).

Tests of the hypothesized model (see Figure 3) initially revealed poor model-data fit [$\chi^2 (7, N = 162) = 128.71, p < .001$; CFI = .80; RMSEA = .33; SRMR = .21].

Examination of the model modification indices revealed several proposed adjustments to the model, and three modifications were made. First, a direct path from proximal contextual influences to self-efficacy was freed up. Next, a direct path from proximal contextual influences to outcome expectations was freed up. Finally, a direct path from range of acceptable WSIM strategies to actual WSIM behaviors was freed. This modified model was then estimated with maximum likelihood estimation. Results indicated an acceptable model-data fit [$\chi^2(4, N = 162) = 14.23, p < .01$; CFI = .98; RMSEA = .13; SRMR = .05] with no additional modifications suggested. Further, results of a chi-square difference test indicated a significant improvement in model-data fit with the modified model [$\Delta \chi^2(4, N = 162) = 114.48, p < .05$]. Refer to Figure 4 for depiction of this model, with corresponding parameter estimates. Results of specific hypothesis tests are discussed below.

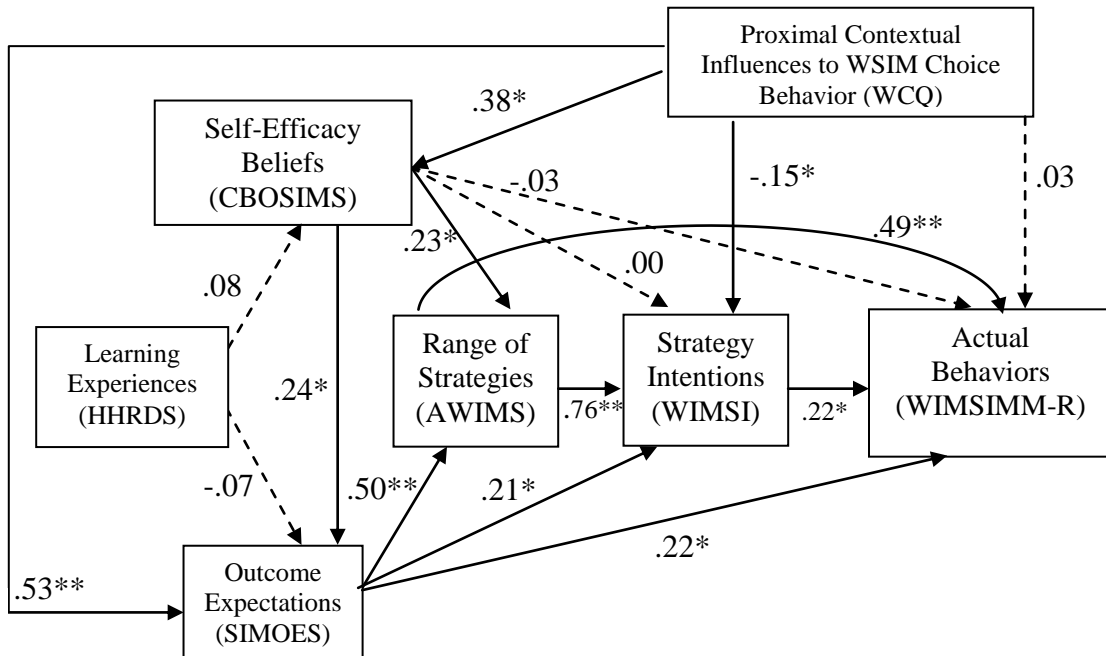


Figure 4. Modified path model of direct and indirect relations among variables of interest. Values reflect standardized coefficients. Dashed lines indicate nonsignificant paths.

* Significant at $p < .01$

** Significant at $p < .001$

Tests of Hypothesized Direct Effects

Most, but not all, of the standardized path coefficients were in the expected directions, and approximately half were significant. Refer to Table 10 for a summary of hypothesis test results for direct effects.

Table 10

Tests of Hypothesized Direct Effects in Modified Model

| Hypothesis | Path | Standardized Path Coefficient | Result |
|------------|------|-------------------------------|---------------|
| H1 | A | .08 | Not supported |
| H2 | B | -.07 | Not supported |
| H3 | C | .24* | Supported |
| H4 | D | .23* | Supported |
| H5 | F | .00 | Not supported |
| H6 | I | -.03 | Not supported |
| H7 | E | .50** | Supported |
| H8 | G | .21* | Supported |
| H9 | J | .22* | Supported |
| H10 | L | -.15* | Not supported |
| H11 | M | .03 | Not supported |
| H12 | H | .76** | Supported |
| H13 | K | .22* | Supported |

* Significant at $p < .01$

** Significant at $p < .001$

Tests of Hypothesized Intervening Effects: Partial Mediation

In the current psychological literature, different authors have used a variety of terms to describe the same phenomenon: indirect effects, intervening variables, mediators, intermediate endpoint, conditional indirect effects, etc. (Mathieu & Taylor, 2006; Preacher, Rucker, & Hayes, 2007). However, Mathieu and Taylor (2006) make a distinction between *indirect effects* and *mediation*. According to these authors, with

indirect effects, the variables in question are not directly related (e.g., are uncorrelated), but they are indirectly related through significant relationships with a third variable which serves as a linking mechanism. In contrast, mediation “refers to instances where the significant total relationship that exists between an antecedent and a criterion is accounted for in part (*partial mediation*) or completely (*full mediation*) by a mediator variable” (Mathieu & Taylor, 2006, p. 1039). In the current study, the definitions provided by Mathieu and Taylor were used; therefore, the tested hypotheses involve tests of partial mediation, a type of intervening effect.

The size and significance of the intervening effects were assessed using a bootstrapping procedure. Bootstrapping is a nonparametric approach to effect-size estimation and hypothesis testing (Preacher & Hayes, 2004). In brief, the bootstrapping procedure is accomplished by taking a large number of samples (with replacement) from the original data set (called “bootstrap samples”), and computing the intervening effect (e.g., $a \times b$) for each sample. The mean, standard error, and standard deviation of these intervening effects are computed by the computer program, and a 95% confidence interval is derived (Preacher & Hayes, 2004; Shrout & Bolger, 2002). Using the confidence interval, the researcher can then determine whether or not the intervening effects are significantly different from zero (Shrout & Bolger, 2002). If zero is not included in the confidence interval, one can be 95% confident that the intervening effect differs from zero at the $p < .05$ level.

The bootstrapping procedure has several benefits over the commonly used Sobel test. First, bootstrapping makes no assumptions about the shape of a distribution; in other words, it can be used with skewed or asymmetric distributions, where the Sobel test

cannot (Preacher & Hayes, 2004). Bootstrapping is also effective with small samples, as it is not based on large-sample theory. Originally time-consuming, bootstrapping can now be done quickly by most commercially available statistical analysis software (Tabachnick & Fidell, 2007). The modified model was run using 1,000 bootstrap samples. Results of specific hypothesis tests are presented in Table 11. Five of the six hypotheses regarding indirect effects were at least partially supported, with four of the six receiving complete support.

Table 11

Bootstrap Analysis of Magnitude and Significance of Indirect Effects for Modified Model

| Hypothesis | Path(s) | Standardized Indirect Effect | | 95% Confidence Interval | |
|------------|---------------|------------------------------|-----|-------------------------|-------------|
| | | β | SE | Lower Bound | Upper Bound |
| H2a | A x C | .02 | .02 | -.02 | .06 |
| H4a | C x E* | .12 | .04 | .04 | .20 |
| H5a | C x G* | .05 | .02 | .01 | .10 |
| | D x H* | .18 | .05 | .08 | .28 |
| | C x E x H* | .09 | .03 | .03 | .15 |
| H6a | C x J* | .05 | .02 | .01 | .09 |
| | D x H x K* | .04 | .02 | .001 | .09 |
| | F x K | .00 | .02 | -.03 | .03 |
| | C x G x K | .01 | .01 | -.002 | .03 |
| | C x E x H x K | .02 | .01 | -.001 | .04 |
| H8a | E x H* | .38 | .05 | .27 | .49 |
| H9a | E x H x K* | .09 | .03 | .02 | .15 |
| | G x K* | .05 | .02 | .000 | .10 |

*Hypothesis supported.

Final Trimmed Model

Due to the presence of non-significant paths in the modified model, in order to achieve a more parsimonious model (Kline, 2011), a third version of the model was

constructed in which these paths were trimmed. The trimmed model achieved excellent fit to the data [$\chi^2(4, N = 162) = 5.86, p = .21$; CFI = .997; RMSEA = .05; SRMR = .03], and all direct paths were significant. This model accounted for 70.9% of the variance in actual WSIM behaviors, 72.0% of the variance in WSIM strategy intentions, 43.0% of the variance in outcome expectations, 40.2% of the variance in range of acceptable WSIM strategies, and 14.6% of the variance in self-efficacy. Refer to Figure 5 for depiction of this final model with corresponding parameter estimates and significance levels. One curious finding in this model is the inverse relationship between contextual influences and WSIM strategy intentions, such that more accepting workplace environments predict lower intent to use implicitly or explicitly out WSIM strategies. This is the opposite of what was hypothesized.

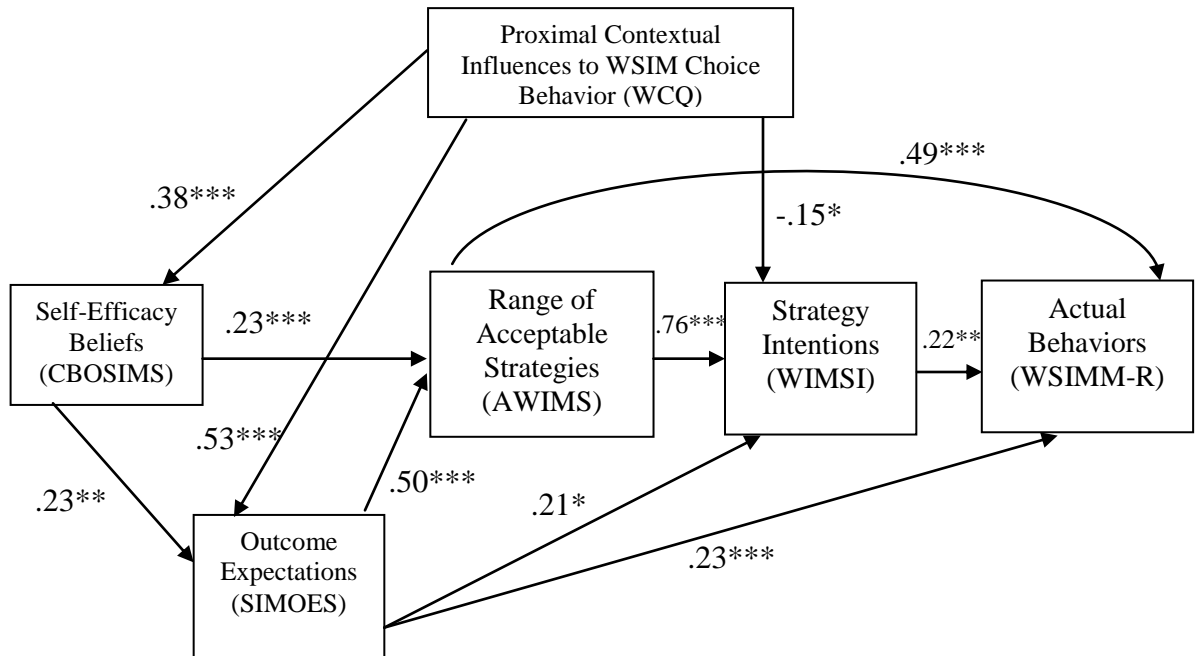


Figure 5. Final, trimmed path model of direct and indirect relations among variables of interest. Values reflect standardized coefficients.

*Significant at $p < .05$

** Significant at $p < .01$ *** Significant at $p < .001$

Tests of Hypothesized Moderators

By definition, moderation occurs when the strength of the relationship between two variables is dependent on a third variable (Baron & Kenny, 1986; Preacher, Rucker, & Hayes, 2007). In this case, it was hypothesized that contextual influences proximal to WSIM would moderate both the translation of acceptable WSIM strategies into implementation intentions (H14), and the translation of implementation intentions into actual WSIM behaviors (H15).

Moderation analyses were conducted in PASW Statistics version 18 (SPSS Inc., 2009) using hierarchical multiple regression, following the method outlined by Frazier, Tix, and Barron (2004) and Aiken and West (1991). First, both predictor and moderator variables were centered (standardized into *z*-scores by subtracting their sample means to produce revised sample means of zero). Centering reduces problems with multicollinearity and makes it simpler to interpret the results. Next, product terms were created that represent the interaction between the predictor (IV) and the moderator. This is accomplished by multiplying predictor and moderator variables together using the centered versions of these variables. Next, the data were entered into a hierarchical regression equation. The first step in each analysis included the centered versions of the predictor and moderator variables. The second step in each analysis included the product term created to represent the interaction between the predictor and moderator.

H14: Contextual factors proximal to WSIM will moderate the translation of WSIM strategies the participants' consider acceptable into implementation intentions for those WSIM strategies (depicted visually as Path N). Prior to beginning the analysis, it was

confirmed that Range of Acceptable WSIM Strategies was significantly positively correlated with Implementation Intentions for those WSIM strategies ($r = .81, p < .001$). To test for moderation, WSIM Implementation Intentions was regressed on centered versions of variables Range of Acceptable WSIM Strategies and Contextual Factors in the first step, and WSIM Implementation Intentions was regressed on the interaction term (Range of Acceptable WSIM Strategies x Contextual Factors) in the second step. Results of the analysis indicated that contextual factors did not moderate the translation of Range of Acceptable Strategies into Implementation Intentions (see Table 12); thus, Hypothesis 14 was not supported.

Table 12

Analysis of the Role of Contextual Factors as a Moderator of the Relationship Between Range of Acceptable WSIM Strategies and WSIM Implementation Intentions using Hierarchical Multiple Regression

| Step, Variable | <i>B</i> | <i>SE B</i> | β | R^2 | ΔR^2 | <i>F</i> | α |
|--------------------------------|----------|-------------|---------|-------|--------------|----------|----------|
| <i>Step 1</i> | | | | | | | |
| Range of Acceptable Strategies | .85 | .06 | .84 | .66 | | 139.97 | .00 |
| Contextual Factors | -.05 | .06 | -.04 | | | | .43 |
| <i>Step 2</i> | | | | | | | |
| Range x Contextual Factors | -.001 | .06 | -.001 | .66 | .00 | 92.66 | .99 |

Note. $N = 145$.

H15: Contextual factors proximal to WSIM will moderate the translation of intended WSIM strategies into actual WSIM behaviors (depicted visually as Path O). Prior to beginning the analysis, it was confirmed that WSIM Implementation Intentions was significantly positively correlated with Actual WSIM Behaviors ($r = .75, p < .001$). To test for moderation, Actual WSIM Behaviors was regressed on the centered versions of

variables WSIM Implementation Intentions and Contextual Factors in the first step, and Actual WSIM Behaviors was regressed on the interaction term (WSIM Implementation Intentions x Contextual Factors) in the second step. Results of the analysis indicated that contextual factors did emerge as a significant moderator of the relationship between Implementation Intentions and Actual WSIM Behaviors (see Table 13). Thus, Hypothesis 15 was supported.

Table 13

Analysis of the Role of Contextual Factors as a Moderator of the Relationship Between WSIM Implementation Intentions and Actual WSIM Behaviors using Hierarchical Multiple Regression

| Step, Variable | <i>B</i> | <i>SE B</i> | β | R^2 | ΔR^2 | <i>F</i> | α |
|---------------------------------|----------|-------------|---------|-------|--------------|----------|----------|
| <i>Step 1</i> | | | | | | | |
| Implementation Intentions | .68 | .06 | .66 | .60 | | 106.69 | .000 |
| Contextual Factors | .24 | .06 | .22 | | | | |
| <i>Step 2</i> | | | | | | | |
| Intentions x Contextual Factors | .25 | .07 | .19 | .63 | .03 | 81.00 | .000 |

Note. $N = 145$.

It was expected that the moderation would be such that the translation of intended WSIM strategies into actual WSIM behaviors would more likely when a supportive environment exists. These findings were confirmed; refer to Figure 6 for a visual depiction of the interaction.

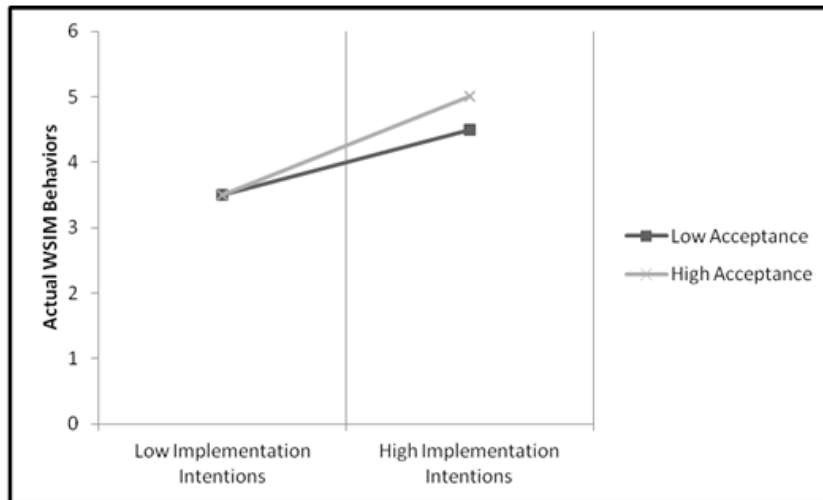


Figure 6. Interaction effect of WSIM implementation intentions and actual WSIM behaviors at high and low levels of workplace acceptance. Implementation Intentions = WSIM Implementation Intentions, as measured by the WIMSI. Acceptance = Workplace Climate, as measured by the WCQ. Actual WSIM Behaviors were measured by the WIMSIMM-R.

CHAPTER V

DISCUSSION

The current study sought to empirically test the ability of segments two and three of the SCCT-based model proposed by Lidderdale et al. (2007) to explain the workplace sexual identity management choice behaviors of sexual minority employees. In conjunction with testing said model, this study also sought to improve upon methodological and sampling issues present in previous studies of sexual minority participants (Croteau, 1996).

Discussion of Results

Results of a path analysis showed that the originally hypothesized model (Figure 3) achieved poor model-data fit. However, modification indices suggested several alterations to the model in order to achieve better fit. Direct paths from contextual influences to self-efficacy and to outcome expectations were freed up, as was a direct path from range of acceptable WSIM strategies to actual WSIM behaviors. The addition of these three pathways allowed the model to achieve acceptable fit with no further modifications suggested. However, there were still a number of non-significant pathways present in the model: Learning experiences to self-efficacy, learning experiences to outcome expectations, self-efficacy to WSIM strategy intentions, self-efficacy to actual WSIM behaviors, and contextual influences to actual WSIM behaviors. These pathways were subsequently trimmed, resulting in a final version of the model that achieved

excellent fit to the data. The present study's findings continue to advance the limited literature in this area by validating a trimmed version of the SCCT-based model, thus opening new pathways for empirical research. Given the large number of parameters in the original model, it seems somewhat appropriate that a trimmed version of the model was indicated by the analysis results.

Regarding tests of direct effects, outcome expectations successfully predicted range of acceptable strategies, strategy intentions, and actual WSIM behaviors. Similarly, self-efficacy significantly and positively predicted outcome expectations and range of strategies. These findings involving the sociocognitive mechanisms that are central to SCCT lend support to Lidderdale et al.'s (2007) SCCT-based framework for understanding WSIM strategies.

The finding that learning experiences did not predict self-efficacy beliefs or outcome expectations is curious, as this is also one of the central tenets of social cognitive career theory. These results are also in contrast to the findings of some previous literature (Schneider, 1987). However, research conducted by Ragins and colleagues (2007) may shed additional light on the lack of support for this hypothesis. Recall Ragins et al.'s finding that previous experiences of harassment and discrimination were associated with greater *fears* of workplace sexual identity disclosure; however, in terms of actual behaviors, previous experiences of discrimination were associated with *greater* workplace disclosure. Thus, perhaps for some individuals, previous experiences with discrimination lead to greater resilience and determination, while for others, such experiences lead to more cautious decision-making. Additionally, there may be other variables that influence the relationship between learning experiences and both self-

efficacy and outcome expectations. For example, Ragins (2004) posited that how central a sexual minority person's identity is to his or her sense of self may play a role, and that was not examined in this study.

The aforementioned results may also be question of measurement validity (Messick, 1995), in that perhaps the adapted Heterosexist, Harassment, and Discrimination Scale did not adequately tap learning experiences regarding sexual identity management. According to Bieschke et al. (1998), repeated success at performing a task tends to lead to higher self-efficacy, while failures lower one's self-efficacy. These successes or failures can combine to form one's learning experiences. If this definition is used, then a measure of previous experiences of discrimination, where the participant is a passive recipient of others' actions rather than an active agent in his or her own experience, may prove inadequate. Future research should re-evaluate the psychometric properties of the HHRDS in a more diverse sample, and/or investigate alternative measures of learning experiences regarding WSIM. A final contributing factor to the lack of significant findings involving learning experiences may be related to an issue of statistical power (Cohen, 1988; Kline, 1991), in that perhaps the sample size was not large enough to yield significance.

Another notable finding is that paths from proximal contextual influences (workplace climate) to both self-efficacy beliefs and outcome expectations were suggested by the model modification indices and consequently freed. Although there is no prior research on outcome expectations and self-efficacy beliefs in terms of WSIM, theoretically, these paths make sense. It is reasonable to expect that a workplace climate more accepting of sexual minority persons might predict more positive self-efficacy

beliefs about coping with disclosure for employees in said workplace, as well as more positive outcome expectations for identity disclosure. As Morrow et al. (1996) have postulated, “environmental influences are inextricably woven into the fabric of sources of self-efficacy beliefs” (p. 144).

As predicted, paths from range of acceptable WSIM strategies to strategy intentions, and from strategy intentions to actual behaviors were significant and positive, lending further support to the SCCT-based model of WSIM. However, model modification indices suggested an additional pathway from range of acceptable strategies to actual WSIM behaviors. This could also be a measurement issue, related to the strong correlations between range of acceptable strategies and actual WSIM behaviors (as presented in Table 9). Correlations of this magnitude call into question the discriminant validity of the AWIMS and the WIMSI (Hoyt, Warbasse, & Chu, 2006). Future revisions to these measures, as discussed later, may help to remedy this issue.

It is also curious that contextual influences were found to directly relate to strategy intentions, but not to actual WSIM behaviors, as hypothesized. Rather, it appears that contextual influences have a significant indirect relationship with actual WSIM behaviors, through outcome expectations, range of acceptable strategies, and strategy intentions. Further, the direct relationship of contextual influences with WSIM strategy intentions is negative, contrary to what was hypothesized. This relationship is such that more accepting workplace climates are associated with *less* intent to use implicitly or explicitly out sexual identity management strategies. This finding is curious and difficult to explain, and it is in contrast to the findings of much previous research (Badgett, 2001; Burgess, 1997; Button, 1996, 2001; Driscoll et al., 1996; Ragins et al., 2007; Rostosky &

Riggle, 2002; Waldo, 1999). However, other research has produced similarly curious findings. For example, Tejeda (2006) found that gay men who had disclosed their sexual identity to an immediate supervisor reported a significantly more hostile work environment than those who had not. Another explanation is that an additional variable may be influencing the relationship. Chrobot-Mason et al. (2002) found that perceived climate *and* sexual identity development accounted for 7 – 20% of the variance in the three WSIM strategies identified by Woods (1993). It is evident that further research examining the relationship between workplace climate and actual disclosure decisions is warranted, as well as potential intervening effects such as sexual identity development.

Regarding indirect effects, four of the six hypotheses (H4a, H5a, H8a, H9a) were completely supported, and H6a received partial support. These findings highlight the importance of an empirically-tested path model in understanding the predictors of WSIM behaviors, as opposed to testing relations among isolated variables. However, it should be noted that in the final, trimmed model, learning experiences is not included as a predictor, as its relationships with self-efficacy beliefs and outcome expectations were both nonsignificant. This explains the lack of support for Hypothesis 2a.

Although contextual factors (workplace climate) did not moderate the translation of range of acceptable WSIM strategies into WSIM implementation intentions, contextual factors (workplace climate) did moderate the translation of WSIM implementation intentions into actual WSIM behaviors. This relationship was such that the use of implicitly or explicitly out sexual identity management strategies were low when implementation intentions were low, regardless of workplace climate. However, when implementation intentions were high, there was greater use of explicitly or

implicitly out sexual identity management strategies when the workplace climate was more accepting of sexual minorities. This finding is consistent with what was predicted here, as well as the findings of previous literature (Burgess, 1997; Button, 2001; Chrobot-Mason, Button, & DiClementi, 2002; Driscoll, Kelley, & Fassinger, 1996; Ragins, Singh, & Cornwell, 2007; Rostosky & Riggle, 2002; Tejada, 2006).

Taken collectively, the results of this study offer empirical support for an SCCT-based model of WSIM, as findings indicated significant direct and indirect effects involving many of the central tenets of SCCT. By eliminating nonsignificant paths and freeing three new paths, the final, modified and trimmed model provides a significant improvement over Lidderdale et al.'s (2007) theorized model.

General Discussion

One of the major strengths of this study is the successful recruitment of participants with a wide range of sexual identities. This is an improvement on past research with sexual minority populations, whose samples have tended to be restricted to lesbians and gay men (Diamond, 2008; Diamond & Savin-Williams, 2000). In fact, the largest percentage of participants in the current study identified as bisexual. It is interesting to note that while participants identifying as bisexual were still the most prevalent category across all age groups, there were more participants in the young adult to middle adult age range (e.g., ages 18 – 40) identifying as bisexual than those in the middle to late adult age range. Additionally, the majority of participants identifying as bisexual were female. These findings may be due to greater sexual fluidity across the lifespan among women (Diamond, 2008), or an artifact of younger participants being in the earlier stages of their sexual identity development (Cass, 1984).

Another strength of this research is the broader range of education levels and areas of employment among the participants; this represents an improvement on past studies that have sampled from limited occupations (such as education) or mainly middle to upper middle class socioeconomic statuses (e.g., Chrobot-Mason, Button, & DiClementi, 2002; Croteau & von Destinon, 1994; Schneider, 1987; Tejada, 2006). One may attribute this to deliberate, grassroots efforts in participant recruitment, such as the hanging of flyers in metropolitan areas, the distribution of recruitment materials at various agencies, snowball sampling, and word-of-mouth.

It should also be noted that four of the measures employed in this study were created and tested during the pilot study of the current research project. Two of these measures, the Workplace Climate Questionnaire (WCQ) and the Sexual Identity Management Outcome Expectations Scale (SIMOES), exhibited excellent internal consistency reliability and content validity. Therefore, they seem to be sound measures of the constructs in question. However, further validation of these measures in diverse participant samples (such as ethnic minority individuals) is warranted should they be used in future research. Further, additional research supporting the discriminant and concurrent validity, test-retest reliability, and generalizability of the SIMOES and the WCQ are needed. While the measures of workplace sexual identity management variables (the AWIMS and the WIMSI) demonstrated adequate internal consistency reliability and construct validity, there were a number of issues apparent with the use of these measures. These will be discussed further in the subsequent section.

Limitations

The current study is limited by a number of factors. First, although a broad range of sexual identities, occupations, and geographic locales were represented in the participant sample, the sample was predominately Caucasian/European American. Although special efforts were made to recruit participants of color (e.g., postings on social media groups for sexual minorities of color, word-of-mouth recruitment), racial and ethnic minority populations were still underrepresented in this sample. There could be many possible reasons for this. One potential explanation is that some sexual minority people of color, particularly African Americans, may feel forced to “choose” between the sexual minority and the African American communities (Greene & Boyd-Franklin, 1996). For others, such as Asian and Native American cultures, contributing factors may be that the concepts of heterosexual, lesbian, gay, and bisexual are Western in origin, and may not fit for non-European cultures (Chan, 1995; Ochs & Rowley, 2009; Sterk & Elifson, 2006). Suggestions for more thorough sampling of ethnic minority populations, in particular African Americans, include: the use of snowball sampling, establishing the trust and credibility of the researcher in the population, and specifically targeting regions where the population of ethnic minority persons is greater (Hughes, Fenton, Hine, Pilgrim, & Tibbs, 1995; Kalsbeek, 2003; Knight, Roosa, & Umaña-Taylor, 2009).

Similarly, there was limited participant variability in management status (with most participants not being involved in management), and company religious and political affiliation (with most companies having no explicit affiliation). Further, while there was some variability in employment sector, there appeared to be a significant deficit in participants from the skilled trades, labor, and law enforcement industries. This may be

due to the fact that there are less sexual minority persons represented in these fields, because sexual minorities in these areas tend to experience more discrimination and harassment (Holcomb & Wohlforth, 2001), or it could be due to failure to adequately sample these employment sectors.

Difficulties in Participant Recruitment

Although the participant sample was successfully diverse in terms of sexual identities, occupations, and geographic region, there were a number of notable difficulties in participant recruitment. It is hypothesized that these difficulties were due to the nature of the study as advertised (“sexual identity in the workplace”; see Appendix L), and may have implications for future research in this area. First, a number of establishments refused to post a recruitment flyer for this particular study, while simultaneously posting recruitment flyers for other research studies on different topics. Second, some of the flyers posted in public metropolitan areas (such as bus shelters and community bulletin boards) were removed within one day of being posted, while flyers not relating to this study remained for many weeks. Third, several employees known to this author were asked if they would voluntarily circulate a recruitment flyer in their place of employment, and they reported that their workplace climate was such that they may be reprimanded for displaying materials “on this topic.” One employee stated that her workplace is particularly hostile to sexual minorities, and cited the example of an openly gay male who had recently resigned. Fourth, some of the requests for re-posting on departmental listservs in institutions of higher education were met with tacit resistance. As one chair responded: “I’m sorry, but this is not something I am able to send through our listservs.

We must be very careful in sending out certain requests, and requests for collecting data is one of those things that undergo much scrutiny.”

The difficulties encountered when recruiting participants for this study are indicative of the importance of continuing to engage in research of this type. Despite national civil rights movements in favor of sexual minorities (Reilly & Siddiqui, 2013), it is clear that many individuals and organizations still harbor attitudes that are hostile towards sexual minority persons. Currently, there is no federal law that prohibits discrimination based on sexual orientation, and even workplaces who have such policies in place often do not enforce them (Cathcart, 2005). Thus, unfortunately, it is understandable why many employees would not want to risk their professional reputations or even their jobs to support research on sexual minority populations. This also is an unfortunate barrier to the recruitment of participants who work in environments that may be overtly or covertly hostile to sexual minority persons. The results of this study have supported the notion that employees in hostile workplace environments are less likely to be open about their sexual identity at work. Future researchers may also find interest in examining the openness of heterosexual allies about their identity as allies in similar workplaces.

Measures of Workplace Sexual Identity Management

Another potential limitation of this study is the type of measures employed to assess workplace sexual identity management. Although tested successfully in the pilot study, six participants from the main study emailed the author and provided their input regarding the WSIMM-R, the WIMSI, and the AWIMS. A few participants indicated that there were some questions they found difficult to answer, as they did not believe the

scenario described applied to them appropriately. For example, one participant referenced the item reading “Dressing or behaving in ways that are consistent with traditional heterosexual norms so that others will assume I am heterosexual,” on the AWIMS and WIMSI, and stated that this question was “kinda [sic] hard to answer,” because “one can dress like that without trying to emulate a heterosexual.” Three other participants, one identifying as asexual, one as bisexual, and one as a gay male (with his sex identified as transsexual FTM, or female-to-male), provided feedback that they felt the questions were not inclusive of their particular sexual or gender minority group. This raises questions of content relevance and representativeness (Messick, 1995). While the addition of the “Not Applicable” answer choice attempted to remedy this issue, it appears that some participants still struggled with whether or not to mark N/A as their response. This may be related to what Schwarz (1999, p. 94) presented as the “maxim of quality,” where participants may be reluctant to endorse information they believe to be false or lack adequate evidence for. This may also be a contributing factor to the high correlations between these measures.

Future researchers examining workplace sexual identity management (or other types of sexual identity management) may consider employing items or measures that do not use particular behaviors (e.g., “It is important to me that my colleagues know my sexual identity”) to operationalize openness. In addition to the fact that this may make the questions more generally applicable, it also could eliminate some of the difficulty involved with “the recall of relevant information from memory, the computation of a judgment, and the formatting of these judgments in line with the response alternatives provided by the researcher” (Schwarz, 1999, p. 97). Rather, it may be more helpful to

create a measure that asks participants multiple direct questions regarding their sexual identity management strategies. Unfortunately, at the current time such a measure does not exist. Despite the limitations, it does appear that the WSIMM-R, the WIMSI, and the AWIMS were still employable measures of workplace sexual identity management, and did indeed offer an improvement over the single-item method of assessing this variable (Croteau, 1996). However, at the current time, it is not recommended that these measures be used in further studies without being adequately revised.

Implications

Directions for Future Research

As the current study is the first to date which empirically tests a theory-driven model of workplace sexual identity management, it offers many avenues for future research in this area. This study offers support for part of the SCCT-based model of WSIM, yet also has shown which areas of the model need to be modified to better fit the data. Further research confirming this structure in data from other participant samples will add additional validity to the revised model. It should also be noted that this study tested only segments two and three of Lidderdale et al.'s (2007) model of WSIM; thus, future research testing segments one and four is called for.

Researchers may also consider revising segments one and four of Lidderdale et al.'s model such that it may better correspond to the final, trimmed model receiving empirical support here. For example, in the original SCCT-based WSIM model (see Figure 1), several variables predict learning experiences, a variable that has been entirely removed in the trimmed model. These variables include person inputs, sexual and other social group identities, and the behavioral outcomes of actual WSIM behaviors. It may

prove useful to examine preliminary associations between learning experiences and these constructs.

In segment one, a number of demographic variables present themselves to be tested as part of the model, both person inputs (e.g., sex, race/ethnicity, socioeconomic status) and sexual and other social group identities (e.g., gender identity, religious affiliation). The nature of the demographic questionnaire employed in this study was structured so as to tap many of these demographic variables to get a preliminary view of the participant diversity likely in a national sample using online recruitment and survey methods. Examination of these demographic data has shown that while there tended to be a wide range of socioeconomic statuses, lengths of time with current employer, relationship statuses, and sexual orientations and identities among participants, other demographic variables were much more limited in range, as previously mentioned. Additionally, participants were not asked about their religious affiliation, another relevant social group identity.

One set of identity-related findings that was apparent from the variable intercorrelations (see Table 9) are the statistically significant relationships between participant scores on the KSOG and many of the predictor variables. For example, greater amounts of same-sex attraction (as measured by the KSOG) were associated with greater experiences of discrimination, harassment, and heterosexism (as measured by the HHRDS). However, greater amounts of same-sex attraction were also associated with more positive outcome expectations regarding workplace disclosure of identity, and greater use of out sexual identity management strategies. This lends support to the hypothesis that sexual minority persons who feel their same-sex attraction more strongly

also feel more motivated to disclose this identity to others, despite previous negative experiences.

As segment one of Lidderdale et al.'s (2007) model was not tested in the current study, paths between demographic variables and other variables of interest were not examined. Future research should directly examine the effect of demographic variables on learning experiences and contextual influences, as well as the indirect effects on self-efficacy and outcome expectations. As seen from the current study, one predictor variable of particular interest is participant sexual identity and relationship status. Those participants who identify as members of sexual minority groups other than lesbian or gay (bisexual, queer, questioning, pansexual, non-labeled), who are in relationships with other-sex partners, as well as those who identify as asexual, may employ very different identity management strategies than participants who identify as lesbian or gay and are in a relationship with a same-sex partner. It may also be useful to look at participant age as an additional factor.

One participant suggested collecting additional information regarding working conditions, "such as if you are a permanent employee, a temp, an intern, a contractor, etc.," citing that "stability in employment really affects how out you are willing to be and how much support you will get from the organization." While there does not appear to be empirical research that has examined these factors, they may be useful additions as other proximal contextual influences on WSIM choice behavior. This same participant also suggested including questions regarding social media use and disclosure of sexual identity via social media, as it is becoming "increasingly important in this regard." This

may indeed prove to be relevant, as many employees are connected to their colleagues through social networking websites such as Facebook, Twitter, and LinkedIn.

Regarding measurement issues, as previously mentioned, it would also be helpful to further revise the WSIMM-R, the WIMSI, and the AWIMS to be more inclusive of these diverse sexual orientations. One way to achieve this, as previously mentioned, is by asking participants multiple direct questions regarding their sexual identity management strategies. Another suggestion made by one of this study's participants was to apply skip logic to the beginning of the online questionnaires, such that participants could select their sexual identity and/or relationship type (e.g., same sex partner, other sex partner, transgendered partner, multiple partners) from a list and thus be re-directed to measures worded appropriately for their specific relationship status and orientation. However, this may require additional validation studies for the differing versions of the WSIM measures; further, it may create difficulty for generalization of results. As stated by Schwarz (1999), even "minor changes in question wording, question format, or question context can result in major changes in the obtained results" (1999, p. 93). It may be useful to compare internal consistency reliability estimates and factor structures of these measures across samples of gay men, lesbian women, bisexual, queer, and questioning individuals in same-sex relationships, and bisexual, queer, and questioning individuals in other-sex relationships. Unfortunately, research on sexual minority identifications other than gay, lesbian, and bisexual is still quite limited (Meghani, 2011). Even though unique studies of bisexual individuals are increasing in number, they are still relatively uncommon (Diamond, 2008). Further, bisexual individuals continue to be stigmatized in both the heterosexual and lesbian/gay communities (Diamond, 2003, 2008; Ochs &

Rowley, 2009), which may lead them to make disclosure decisions differently from other minorities. This is consistent with what one participant reported in a feedback email to this author.

Implications for Professional Work

The results of this study provide a number of useful implications for professional work in the field of psychology. First, these results support the hypothesized variables that contribute to greater disclosure of one's sexual identity in the workplace. Employers and/or their consulting industrial-organizational psychologists wishing to make their workspaces more accepting and affirming of sexual minorities now have empirical evidence supporting the value of this endeavor. Similarly, as they become more aware of the importance of this research, administrators, managers, and other persons of leadership may be more equipped to advocate for sexual minority employee's rights. Second, these findings allow therapists working with clients who may be contemplating the decision to disclose their sexual identity in the workplace to be more aware of constructs that could contribute to this choice. This could help the therapist assist the client in the decision-making process by asking informed questions. Third, professors and other educators may be more aware of the multiple decisions sexual minority persons make on a daily basis regarding the disclosure of their sexual identity. These educators may in turn assist students in understanding the dynamic interplay of variables involved in WSIM decisions. Fourth, these results can be used to further support social justice and advocacy efforts regarding the civil rights of sexual minority persons. Indeed, the aforementioned difficulties with participant recruitment have shown that there is still much more growth needed in this area. Finally, the avenues available for future research on this topic are

vast, and extend to many of the discipline areas within the field of psychology:

Industrial/Organizational, Counseling, Developmental, and Social psychology, as well as multicultural/diversity, and career-related studies.

Conclusion

In examining multiple predictors of workplace sexual identity management behaviors, this study is the first of its kind. While social cognitive career theory is an excellent theoretical basis for an empirically-tested model of workplace sexual identity management, the results of this study show that several adjustments and improvements to the model may more adequately capture the relations among variables of interest. Further, this study introduces two new psychometrically sound measures of outcome expectations and workplace climate variables. Despite its limitations, this research provides important insight to professionals in various psychological disciplines. It has also generated numerous avenues for future research. The participants who provided feedback to the author unanimously expressed enthusiasm for and appreciation of the importance of this research area, and a proactive desire to offer their feedback to improve research on the topic of sexual identity management. While recent civil rights movements have created a trend towards greater acceptance of diverse sexual identities, it is clear that there is still much work to be done.

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APPENDICES

APPENDIX A

INITIAL SCREENING QUESTIONS AND DEMOGRAPHIC QUESTIONNAIRE

Initial Screening Questions

(Participants will be presented with these questions following the informed consent. If they do not answer both questions as “yes,” they will be presented with the statement below. If they answer both questions as yes, they will be taken to the beginning of the survey).

- 1.) Are you currently employed? (Does *not* include being a full-time student or volunteer).
 - a. Yes
 - b. No
- 2.) Do you work 15 or more hours per week at your place of employment?
 - a. Yes
 - b. No

If No to both questions:

Thank you for your interest in this study. Unfortunately, you are not eligible to participate at this time. You may close your web browser now. If you have any questions, please contact the principal investigator, Christina Rummell, at cmh35@zips.uakron.edu.

Demographic Questionnaire

1.) Sex:

- a. Male
- b. Female
- c. Intersex

2.) Gender identity:

- a. Male
- b. Female
- c. Transgender/Transsexual
- d. Other (please specify)

3.) Sexual identity:

- a. Lesbian
- b. Gay
- c. Bisexual
- d. Questioning
- e. Queer
- f. Asexual
- g. Heterosexual
- h. Prefer not to label my identity
- i. Other (please specify)

4.) Racial/ethnic identity (choose all that apply):

- a. African American/Black
- b. Asian American
- c. European American/Caucasian/White
- d. Hispanic/Latino/a
- e. Native American
- f. Middle Eastern
- g. Other (please specify)

5.) Geographic region:

- a. Northeast
- b. Northwest
- c. Midwest
- d. Southeast
- e. Southwest
- f. Outside United States

6.) Relationship status:

- a. Not currently in a relationship
- b. In a relationship with a same-sex partner
- c. In a relationship with an other-sex partner
- d. In a relationship with an intersex or transgendered partner
- e. Other (please specify)

7.) Student status (Are you CURRENTLY):

- a. Not currently a student
- b. Working on GED
- c. Trade school or apprenticeship
- d. Undergraduate student
- e. Graduate or professional student

8.) Highest level of education achieved:

- a. Did not complete high school
- b. High school diploma or equivalent
- c. Associate's degree or trade school
- d. Bachelor's degree
- e. Master's degree
- f. Doctorate degree

9.) Employment sector:

- a. Arts and Entertainment
- b. Business
- c. Computers/Technology
- d. Construction
- e. Customer service/Retail
- f. Education
- g. Food service/Hospitality
- h. Government
- i. Health services/Medicine
- j. Law enforcement
- k. Nonprofit
- l. Research/Science
- m. Skilled trades
- n. Social sciences
- o. Self-Employed
- p. Other (please specify)

10.) Are you involved in management?

- a. No
- b. Yes, I am a shift supervisor
- c. Yes, I am a store or branch manager
- d. Yes, I am a middle manager
- e. Yes, I am an upper manager
- f. Yes, I am a CEO, president, or company owner

11.) Average number of hours worked per week: _____

12.) How long have you worked for your current employer?

- a. 6 months or less
- b. 7 months to 1 year
- c. 1-5 years
- d. 5-10 years
- e. 10 years or more

13.) To your knowledge, is your company associated with an explicit religious or political affiliation?

- a. No
- b. Yes, my company is religiously affiliated
- c. Yes, my company is politically conservative
- d. Yes, my company is religiously affiliated AND politically conservative
- e. Yes, my company is politically liberal
- f. Yes, my company is religiously affiliated AND politically liberal

APPENDIX B

KLEIN SEXUAL ORIENTATION GRID (KSOG)

Here you will be choosing three numbers, one for each of three aspects of your life: your past, your present, and your ideal. For each section, beginning with your past, ask yourself where you fit on this scale and select the number that best describes you. Next, ask yourself where you fit on this scale and select the number that best describes yourself at the present time, defined as one year ago until today. Finally, ask yourself which number you would choose in an ideal version of your life. There are no right or wrong answers.

A. Sexual Attraction – To whom are you attracted?

| | | | | | | |
|----------------|------------------|-------------------------|--------------------|------------------------|-----------------|---------------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Other sex only | Other sex mostly | Other sex somewhat more | Both sexes equally | Same sex somewhat more | Same sex mostly | Same sex only |

Circle one number for each row:

| | | | | | | | |
|----------|---|---|---|---|---|---|---|
| Past: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Present: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Ideal: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

B. Sexual Behavior – With whom do you have sex, or with whom are you intimate?

| | | | | | | |
|----------------|------------------|-------------------------|--------------------|------------------------|-----------------|---------------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Other sex only | Other sex mostly | Other sex somewhat more | Both sexes equally | Same sex somewhat more | Same sex mostly | Same sex only |

Circle one number for each row:

| | | | | | | | |
|----------|---|---|---|---|---|---|---|
| Past: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Present: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Ideal: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

C. Sexual Fantasies – About whom do you fantasize, whether it occurs during masturbation, while daydreaming, or as part of your imagination?

0 1 2 3 4 5 6
 Other sex Other sex Other sex Both Same sex Same sex Same sex
 only mostly somewhat sexes somewhat mostly only

Circle one number for each row:

| | | | | | | | |
|----------|---|---|---|---|---|---|---|
| Past: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Present: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Ideal: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

D. Emotional Preference—With whom are you emotionally close?

0 1 2 3 4 5 6
 Other sex Other sex Other sex Both Same sex Same sex Same sex
 only mostly somewhat sexes somewhat mostly only

Circle one number for each row:

| | | | | | | | |
|----------|---|---|---|---|---|---|---|
| Past: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Present: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Ideal: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

E. Social Preference – With whom do you socialize and/or prefer to socialize?

0 1 2 3 4 5 6
 Other sex Other sex Other sex Both Same sex Same sex Same sex
 only mostly somewhat sexes somewhat mostly only

Circle one number for each row:

| | | | | | | | |
|----------|---|---|---|---|---|---|---|
| Past: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Present: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Ideal: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

F. Self-Identification – How do you identify your sexual attraction?

0 1 2 3 4 5 6
 Hetero Hetero Hetero Hetero/ Gay Gay Gay
 only mostly somewhat Gay somewhat mostly only

Circle one number for each row:

| | | | | | | | |
|----------|---|---|---|---|---|---|---|
| Past: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Present: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Ideal: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

G. Lifestyle – Which “world” do you prefer to live in? Sexual minority culture, or heterosexual culture?

| | | | | | | |
|----------------|------------------|--------------------|----------------|-----------------|---------------|-------------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Hetero only | Hetero mostly | Hetero somewhat | Hetero/ Gay | Gay somewhat | Gay mostly | Gay only |

Circle one number for each row:

| | | | | | | | |
|----------|---|---|---|---|---|---|---|
| Past: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Present: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| Ideal: | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

APPENDIX C

HETEROSEXIST HARASSMENT, REJECTION, AND DISCRIMINATION SCALE (HHRDS)

Note to participants:

Throughout these questions, you will see the term “sexual minority.” Please consider this term to include any sexual orientation other than heterosexual. This can include, but is not limited to: lesbian, gay, bisexual, queer, questioning, two-spirit, MSM, pansexual, asexual, etc. Please think of your own self-identification when presented with this term.

Heterosexist Harassment, Rejection, and Discrimination Scale

Please think carefully about your life as you answer the questions below. Read each question and then choose the number that best describes events you have experienced previously, using these rules. Choose **NEVER** if the event has **NEVER** happened to you. Choose **ONCE IN A WHILE** if the event happened less than 10% of the time. Choose **SOMETIMES** if the event happened 10-25% of the time. Choose **A LOT** if the event happened 26 - 49% of the time. Choose **MOST OF THE TIME** if the event happened 50 - 70% of the time. Choose **ALMOST ALL OF THE TIME** if the event happened more than 70% of the time.

1.) How many times have you been treated unfairly by teachers or professors because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

2.) How many times have you been treated unfairly by your employer, boss, or supervisors because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

3.) How many times have you been treated unfairly by your co-workers, fellow students, or colleagues because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

4.) How many times have you been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, bank tellers, mechanics, and others) because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

5.) How many times have you been treated unfairly by strangers because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

6.) How many times have you been treated unfairly by people in helping jobs (by doctors, nurses, psychiatrists, caseworkers, dentists, school counselors, therapists, pediatricians, school principals, gynecologists, and others) because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

7.) How many times were you denied a raise, a promotion, tenure, a good assignment, a job, or other such thing at work that you deserved because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

8.) How many times have you been treated unfairly by your family because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

9.) How many times have you been called a heterosexist name like dyke, fag, or other names?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

10.) How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

11.) How many times have you been rejected by family members because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

12.) How many times have you been rejected by friends because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

13.) How many times have you heard anti-lesbian/gay/bisexual remarks from family members?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

14.) How many times have you been verbally insulted because you are a sexual minority?

Never Once in a while Sometimes A lot Most of the time Almost all of the time

APPENDIX D

COPING WITH BARRIERS TO OUT SEXUAL IDENTITY MANAGEMENT STRATEGIES (CBOSIMS), ADAPTED VERSION

As you read the following list of situations related to your work experiences, please rate your degree of confidence that you could overcome each potential barrier to disclosing your sexual identity at work. Please use the five point scale listed below, ranging from *not at all confident* to *highly confident*.

Being treated differently because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Being aware of negative comments about my sexual orientation (such as insults or rude jokes).

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Losing my job because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Receiving a negative review by my supervisor or administrator because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Receiving negative evaluations from subordinates, clients, or customers because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Losing credibility with my colleagues because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Losing credibility with my supervisor or administration because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Losing credibility with clients, customers, or community members because of being known to be a sexual minority person.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Having difficulty fitting in with colleagues because of being known to be a sexual minority person.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Lacking support from administration or supervisors because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Lacking support from colleagues because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Lacking role models or mentors in my field who are sexual minority persons.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Being perceived as trying to recruit subordinates, clients, or customers because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Being perceived as a sexual predator because of being known to be a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Living two separate lives, one in my job and one as a sexual minority person.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Lacking support from my significant other related to others knowing that I am a sexual minority.

Not at all confident Somewhat unconfident Uncertain Somewhat Confident Highly Confident

Adaptations made to the original CBOSIMS for this study:

- The phrase “lesbian/gay/bisexual” was replaced with “sexual minority” or “sexual minority person.” A definition of sexual minority will be provided at the beginning of the survey (see page 1).
- Because this measure was originally written for teachers only, a few of the words have been changed:
 - “Students” became “clients, customers, or subordinates”
 - “Parents/community members” became “clients, customers, or community members”
 - “Administrator” became “Administrator or supervisor”
 - “Teacher evaluations” became “evaluations”
 - “Teacher” became “my job”

APPENDIX E

WORKPLACE CLIMATE QUESTIONNAIRE (WCQ)

The following statements refer to situations or characteristics that may or may not be true in your current workplace. For each statement, rate how true it is for your current workplace at the present time, using the scale indicated below. It ranges from *Very untrue* to *Very true*. If an item is not applicable to your workplace or the answer is unknown, choose “N/A”.

My workplace has a non-discrimination policy that includes sexual minority employees.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

My workplace has the option of allowing same-sex partners of employees to receive healthcare benefits.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

There are “out” sexual minority persons in management at my company.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

There are “out” heterosexual allies in management at my company.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

My company is affiliated with a specific religious orientation.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

My company has donated money to support equality for sexual minorities.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

There are other employees in my company who are “out” as a sexual minority.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

There are other employees in my company who openly identify as heterosexual allies.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

There are employees at my company who are known to have children who are sexual minorities.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

There are employees at my company who are known to have same-sex parents.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

There are employees at my company who are known to have a sexual minority family member who is not a parent or a child.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

My organization is known to have a “conservative” political stance.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

Sexual minority employees at my company have been told to leave their personal lives at home.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

Sexual minority employees at my company receive promotions the same as any other employee.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

Although sexual minority employees are not openly discriminated against, there seems to be a negative attitude towards them in my company.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

I know of employees at my company who have been fired due to their sexual identity.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

Same-sex romantic partners of employees are invited to company social outings.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

My workplace seems supportive of same-sex couples parenting children, whether they have them by adoption, insemination, or other means.

Very untrue Somewhat untrue Not sure Somewhat true Very true Not Applicable

APPENDIX F

WORKPLACE SEXUAL IDENTITY MANAGEMENT MEASURE – REVISED (WSIMM-R)

Following are a variety of strategies a sexual minority person might use in the workplace to manage his or her sexual identity. Please rate how often you use these strategies in your current workplace by circling the appropriate response for each item. If you are in a romantic relationship with an other-sex partner currently or have been most recently, some of the items may not apply to you. Please answer them to the best of your ability, or choose “Does not apply.”

1. Use the appropriate gender pronoun or names to refer to my same-sex partner, date, or romantic interest without labeling them as such. That way, if others are savvy, they can figure out that I am a sexual minority.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

2. Omit names or pronouns when talking about a same-sex person I am dating, living with, or interested in so that my sexual orientation is unclear.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

3. Talk about activities that include a same-sex partner or date (using appropriate gender pronouns), but do not identify the kind of relationship I have with that person. That way, people can assume whatever they want.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

4. Bring someone of the same sex to a work-related social function and introduce that person as my date or partner.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

5. Tell co-workers when I'm going to an LGBTQ-identified location or event because I am open about my sexual orientation.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

6. Say negative things about gay and lesbian content in movies and television shows if I think that such comments will help convince coworkers that I am heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

7. Make up stories about romantic partners of the opposite sex.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

8. Speak out against anti- LGBTQ discrimination by saying that all people should be treated equally, allowing others to assume whatever they want regarding my sexual orientation.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

9. Avoid contact with people known by others to be sexual minorities in order to prevent suspicions that I am a sexual minority.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

10. Wear or display commonly known sexual minority symbols (e.g., buttons, jewelry, T-shirts, bumper stickers) that reveal my sexual orientation to coworkers.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

11. Raise objections to gay jokes or homophobic slurs by pointing out that I consider such comments to be offensive, allowing others to conclude that I am a sexual minority if they want to.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

12. Bring someone of the **other** sex to a work-related social function and introduce that person as my date or partner.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

13. Avoid local LGBTQ- identified social events or places so I do not risk revealing my sexual orientation to anyone at work.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

14. Am explicit that I am referring to someone of the **same** sex when I talk about romantic relationships and dating at work.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

15. Use names or pronouns of the other sex to refer to the same-sex person with whom I am dating or living.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

16. Dress or behave in ways that are gender traditional so that others will think I am heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

17. Tell most or all of my coworkers that I am a sexual minority.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

18. Attend work-related social events without a date or partner so that I do not reveal my sexual orientation. OR, if I am in a relationship with someone of the other sex, I allow others to assume I am heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

19. Raise objections to gay jokes or homophobic slurs by telling others that I am a sexual minority and find that offensive.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

20. Wear or display buttons or symbols known only to those familiar with sexual minority culture.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

21. Talk about activities that include a partner or date, labeling that person only as a friend so that I don't appear to be a sexual minority.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

22. Correct others when they make comments that imply I am heterosexual (e.g., they ask if I have been in a relationship with someone of the other sex) by explaining that I am a sexual minority.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

23. Wear or display materials with a heterosexual content (e.g., T-shirts, pictures, posters) in order to make me appear heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

24. Do not correct others when they make comments that imply I am heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

25. Openly associate with coworkers known to be sexual minorities, and let others think that I am a sexual minority too, if they want to.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

26. Join others in telling demeaning gay jokes or saying negative things about sexual minority individuals so that people will think I am heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

27. Avoid socializing with coworkers in order to conceal my sexual orientation.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

28. Am active in trying to obtain access and treatment for me at my workplace (e.g., asking for insurance coverage for my same-sex partner, trying to get an antidiscrimination statement that is inclusive of sexual orientation, etc.).

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

29. Join in discussion with members of my own sex about being attracted to members of the **other** sex when I don't feel such heterosexual attractions.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

30. React in positive ways when discussing television shows or movies with lesbian or gay themes (e.g., "Will and Grace", "The L Word", "Kissing Jessica Stein"), and let others think that I am a sexual minority too, if they want to.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

31. Avoid associating myself with issues pertaining to sexual orientation in order to prevent suspicions that I am a sexual minority.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

Please answer the following 2 items if you are in a romantic relationship with an other-sex partner, or if you have most recently been in a relationship with an other-sex partner. If you are in a same-sex relationship or have most recently been in a same-sex relationship, please select "Does not apply".

32. Talk openly about my other-sex partner, date, or romantic interest, with the intention of concealing my same-sex attractions and appearing more heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

33. Bring my other-sex partner or date to work outings, and purposely do not correct others who assume I am heterosexual.

Never Seldom Sometimes Frequently Almost Always Always

Does not apply

APPENDIX G

RANGE OF ACCEPTABLE SEXUAL IDENTITY MANAGEMENT STRATEGIES MEASURE (AWIMS)

Below are a variety of behaviors a sexual minority person might use in the workplace to manage the disclosure of his or her sexual identity. For each statement, please rate how much you would **consider** engaging in that behavior **in your current workplace circumstances**. In other words, how acceptable is the behavior to you? Please think only of what you would **consider acceptable behavior for yourself**, even if you have not done it already. Your answer should be independent of what you are currently doing or have done in the past. There are no right or wrong answers. Please use the rating scale below. It ranges from strongly disagree to strongly agree.

If you are in a romantic relationship with an other-sex partner currently or have been most recently, some of the items may not apply to you. Please answer them to the best of your ability, or choose “Does not apply.”

In my current workplace, I would consider:

Referring to my partner or date by the incorrect pronoun (ex: he, she) so that my colleagues will believe I am in a heterosexual relationship.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Introducing a same sex date, partner, or romantic interest to my colleagues as “a friend,” regardless of what they may think of my sexual orientation.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Making sure I do not display items or symbols associated with sexual minority culture (e.g., rainbows) so that my coworkers do not necessarily know I am a sexual minority.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Showing a picture of my same-sex partner, recent date, or romantic interest to my colleagues.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Directly telling the majority of my colleagues that I am a sexual minority person.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Speaking up when a colleague makes an anti-gay or heterosexist joke or comment (ex: “That’s an insensitive remark,” or “That joke is offensive to the sexual minority community”).

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Not associating too closely with other “out” sexual minorities, lest my colleagues think I am also a sexual minority.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Inviting my same-sex partner or date to an event or function with my colleagues outside of work.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Dressing or behaving in ways that are consistent with traditional heterosexual norms so that others will assume I am heterosexual.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Using neutral pronouns or avoiding reference to a specific sex when describing my same-sex romantic partner or date. OR, if I am currently in an other-sex relationship, making sure my colleagues know that my partner is of the other sex, but not saying I am straight.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Displaying items or symbols associated with sexual minority culture (e.g., rainbows, pink triangle), and letting others assume what they wish to about my sexual orientation.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Correcting a coworker if s/he uses the wrong pronoun (ex: he, she) to refer to my same-sex partner, date, or romantic interest.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Avoiding bringing my same-sex partner or date to an event or function with my colleagues outside of work. Instead, I may just come alone.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Please answer the following 2 items if you are in a romantic relationship with an other-sex partner, or if you have most recently been in a relationship with an other-sex partner. If you are in a same-sex relationship or have most recently been in a same-sex relationship, please select “Does not apply”.

In my current workplace I would consider:

Talking openly about my other-sex partner, date, or romantic interest, with the intention of concealing my same-sex attractions and appearing more heterosexual.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Bringing my other-sex partner or date to work outings, and purposely do not correct others who assume I am heterosexual.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

APPENDIX H

WORKPLACE IDENTITY MANAGEMENT STRATEGIES MEASURE (WIMSI)

Below are a variety of behaviors a sexual minority person might use in the workplace to manage the disclosure of his or her sexual identity. For each statement, please rate how much you **intend** to engage in that behavior **in your current workplace circumstances**. Please think only of what you **intend** to do, not what you are currently doing or have done in the past. There are no right or wrong answers. Please use the rating scale below. It ranges from strongly disagree to strongly agree.

If you are in a romantic relationship with an other-sex partner currently or have been most recently, some of the items may not apply to you. Please answer them to the best of your ability, or choose “Does not apply.”

In the future at my current workplace, I intend to...

Refer to my partner or date by the incorrect pronoun (ex: he, she) so that my colleagues will believe I am in a heterosexual relationship.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Introduce a same sex date, partner, or romantic interest to my colleagues as “a friend,” regardless of what they may think of my sexual orientation.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Make sure I do not display items or symbols associated with sexual minority culture (e.g., rainbows, etc.) so that my coworkers do not necessarily know I am a sexual minority.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Show a picture of my same-sex partner, recent date, or romantic interest to my colleagues.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Directly tell the majority of my colleagues that I am a sexual minority person. (If you are already “out,” please select *strongly agree*).

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Speak up when a colleague makes an anti-gay or heterosexist joke or comment (ex: “That’s an insensitive remark,” or “That joke is offensive to the sexual minority community”).

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Not associate too closely with other “out” sexual minorities, lest my colleagues think I am also a sexual minority

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Invite my same-sex partner or date to an event or function with my colleagues outside of work.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Dress or behave in ways that are consistent with traditional heterosexual norms so that others will assume I am heterosexual.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Does not apply

Use neutral pronouns or avoiding reference to a specific sex when describing my romantic partner, date, or romantic interest. OR, if I am currently in an other-sex

relationship, making sure my colleagues know that my partner is of the other sex, but not saying I am straight.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Display items or symbols associated with sexual minority culture (e.g. pink triangles, rainbows), and let others assume what they wish to about my sexual orientation.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Correct a coworker if s/he uses the wrong pronoun (ex: he, she) to refer to my same-sex partner, date, or romantic interest.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Avoid bringing my same-sex partner or date to an event or function with my colleagues outside of work. Instead, I may just come alone.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Please answer the following 2 items if you are in a romantic relationship with an other-sex partner, or if you have most recently been in a relationship with an other-sex partner. If you are in a same-sex relationship or have most recently been in a same-sex relationship, please select “Does not apply”.

In the future at my current workplace I intend to:

Talk openly about my other-sex partner, date, or romantic interest, with the intention of concealing my same-sex attractions and appearing more heterosexual.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Does not apply

Bring my other-sex partner or date to work outings, and purposely do not correct others who assume I am heterosexual.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

APPENDIX I

SEXUAL IDENTITY MANAGEMENT OUTCOME EXPECTATIONS SCALE (SIMOES)

Sexual Identity Management Outcome Expectations Scale

Below are some statements about possible consequences of sharing your sexual orientation with your coworkers **in your current workplace**. Please read each item carefully and decide to what extent it represents your view. Select the response that most represents your level of agreement with the statement. There are no right or wrong answers. Please use the rating scale below. It ranges from strongly disagree to strongly agree.

Revealing my sexual orientation in the workplace will...

Help me feel more self-assured.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Make me feel nervous and on edge around my coworkers.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Detract from advancement opportunities for me in this workplace.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Make me feel ashamed or embarrassed.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Allow me to feel more comfortable in my work environment.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Allow me to feel more connected to my colleagues.

Strongly Disagree Disagree Undecided Agree Strongly Agree

Cause me to lose my job.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Allow me to have more peace of mind at work.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Cause other colleagues to distance themselves from me.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Allow me to feel proud to be a sexual minority person.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Allow me to feel more honest about who I am.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Gain me respect from my superiors and/or peers.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Make me feel like I am “less than” other employees.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Help me enjoy my workplace more.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Improve my image in the workplace.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Make me feel more self-conscious at work.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

Create conflict between me and other colleagues.

Strongly Disagree *Disagree* *Undecided* *Agree* *Strongly Agree*

APPENDIX J

LIST OF ITEMS DELETED FROM PILOT STUDY MEASURES

List of Items Deleted from Pilot Study Measures

Items Deleted from the Workplace Climate Questionnaire (WCQ):

My company has donated money to anti-LGBQ causes.

People at my company make anti-LGBQ jokes or slurs.

Items Deleted from the Range of Acceptable Identity Management Strategies Measure (AWIMS):

Openly associating with other sexual minority colleagues or community members without explicitly identifying myself as a sexual minority, thus allowing my coworkers to assume what they will.

Bringing a person of the **other** sex to an event or function with my colleagues outside of work and have him/her pretend to be my partner. OR, if I am in an other-sex relationship, telling my colleagues I am heterosexual.

Engaging in conversations about the attractiveness of members of the **other** sex (such as movie stars), even when I do not find them attractive.

Items Deleted from the Workplace Identity Management Strategy Intentions Measure (WIMSI):

Openly associate with other sexual minority colleagues or community members without explicitly identifying myself as a sexual minority, thus allowing my coworkers to assume what they will.

Bring a person of the **other** sex to an event or function with my colleagues outside of work and have him/her pretend to be my partner. OR, if I am in an other-sex relationship, tell my colleagues I am heterosexual.

Engage in conversations about the attractiveness of members of the **other** sex (such as movie stars), even when I do not find them attractive.

Items Deleted from the Sexual Identity Management Outcome Expectations Scale (SIMOES):

Detract from my physical safety.

APPENDIX K

INSTITUTIONAL REVIEW BOARD APPROVAL LETTERS



Office of Research Services and Sponsored Programs

Akron, OH 44325-2102
(330) 972-7666 Office

NOTICE OF APPROVAL

February 12, 2013

Christina Rummell
5540 Covode St.
Apt. 302
Pittsburgh, PA 15217

From: Sharon McWhorter, IRB Administrator

Re: IRB Number 20130210 "Testing an Empirical Model of Workplace Sexual Identity Management"

Thank you for submitting an IRB Application for Review of Research Involving Human Subjects for the referenced project. Your protocol represents minimal risk to subjects and has been approved under Expedited Category #7.

| | |
|-------------------------------|-------------------|
| Approval Date: | February 11, 2013 |
| Expiration Date: | February 11, 2014 |
| Continuation Application Due: | January 28, 2014 |

In addition, the following is/are approved:

- ☐ Waiver of documentation of consent
- ☐ Waiver or alteration of consent
- ☐ Research involving children
- ☐ Research involving prisoners

Please adhere to the following IRB policies:

- IRB approval is given for not more than 12 months. If your project will be active for longer than one year, it is your responsibility to submit a continuation application prior to the expiration date. We request submission two weeks prior to expiration to insure sufficient time for review.
- A copy of the approved consent form must be submitted with any continuation application.
- If you plan to make any changes to the approved protocol you must submit a continuation application for change and it must be approved by the IRB before being implemented.
- Any adverse reactions/incidents must be reported immediately to the IRB.
- If this research is being conducted for a master's thesis or doctoral dissertation, you must file a copy of this letter with the thesis or dissertation.
- When your project terminates you must submit a Final Report Form in order to close your IRB file.

Additional information and all IRB forms can be accessed on the IRB web site at:
<http://www.uakron.edu/research/orssp/compliance/IRBHome.php>

Cc: David Tokar- Advisor
Cc: Valerie Callanan - IRB Chair

☒ Approved consent form/s enclosed



Office of Research Services and Sponsored Programs

Akron, OH 44325-2102
(330) 972-7666 Office

NOTICE OF APPROVAL

March 7, 2013

Christine Rummell
5540 Covode Street Apt. 302
Pittsburgh, PA 15217

From: Sharon McWhorter, IRB Administrator

Re: IRB Number 20130210-2 "Testing an Empirical Model of Workplace Sexual Identity Management"

Thank you for submitting your Application for Continuing Review of Research Involving Human Subjects for the referenced project. Your protocol has received expedited approval under Section 46.110(b)(2) - minor changes in previously approved research.

Approval Date: March 7, 2013
Expiration Date: February 11, 2014
Continuation Application Due: January 28, 2014

In addition, the following is/are approved:

- ☐ Waiver of documentation of consent
- ☐ Waiver or alteration of consent
- ☐ Research involving children
- ☐ Research involving prisoners

Please adhere to the following IRB policies:

- IRB approval is given for not more than 12 months. If your project will be active for longer than one year, it is your responsibility to submit a continuation application prior to the expiration date. We request submission two weeks prior to expiration to insure sufficient time for review.
- A copy of the approved consent form must be submitted with any continuation application.
- If you plan to make any changes to the approved protocol you must submit a continuation application for change and it must be approved by the IRB before being implemented.
- Any adverse reactions/incidents must be reported immediately to the IRB.
- If this research is being conducted for a master's thesis or doctoral dissertation, you must file a copy of this letter with the thesis or dissertation.
- When your project terminates you must submit a Final Report Form in order to close your IRB file.

Additional information and all IRB forms can be accessed on the IRB web site at:
<http://www.uakron.edu/research/orssp/compliance/IRBHome.php>

☐ Approved consent form/s enclosed

Cc: David Tokar - Advisor
Cc: Valerie Callanan - IRB Chair

APPENDIX L

PARTICIPANT RECRUITMENT FLYER

Seeking survey research participants who are:

- **Sexual minority individuals (non-hetero)**
- **18+ years of age**
- **Employed 15+ hours per week**

If you identify as any type of sexual minority person (including but not limited to lesbian, gay, bisexual, queer, questioning, asexual, two-spirit, pansexual, demisexual, etc.), please consider participating in this confidential online survey! We are interested in the ways that sexual minority persons feel about and behave in the workplace.

For participating, you have the opportunity to win 1 of several \$25 Amazon.com gift cards!

**If you are not eligible to participate, please consider sharing this information with others who may be eligible.
Thank you for your support!**

<http://tinyurl.com/WSIMsurvey>