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Exploring Stereotype Threat in the Workplace with Sexual Minorities

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EXPLORING STEREOTYPE THREAT IN THE WORKPLACE WITH SEXUAL MINORITIES

by

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ABSTRACT

Sexual minorities are the target of numerous negative stereotypes in the United States, and are sometimes perceived as deviant and devalued as compared to heterosexuals. Stereotype threat, the anxiety of confirming a negative stereotype about oneself or one's group, has been linked to perceived stress; and stress has been linked to low job satisfaction. Sexual minorities provide a unique test of stereotype threat theory because they may choose to conceal their minority status at work. Thus, this study also examines whether the visibility of the stigma is a necessary precursor to the experience of stereotype threat. Given the uniqueness of this population, a new and presumably more comprehensive model of stereotype threat (the Multi-Threat Framework) was also examined to ensure that stereotype threat was being adequately measured by examining every possible type of stereotype threat. Job satisfaction has been linked to many organizational outcomes such as poor performance, absenteeism, and turnover intentions; thus, it is important to examine predictors of low job satisfaction. Thus, the current study tested perceived stress as a mediator between stereotype threat and low job satisfaction in a sample of 150 sexual minorities who were employed full time. Internalized homophobia was predicted to moderate the relation between stereotype threat and perceived stress. Results indicated support for the moderated mediation model using only the traditional measure of stereotype threat; that is, stereotype threat predicted low job satisfaction through job stress. Moreover, at high levels of internalized homophobia, individuals reported high job stress, regardless of levels of experienced stereotype threat. However, those with low internalized homophobia reported high job stress only when stereotype threat was high. No differences were found with regards to degree of concealing, suggesting that the deleterious effects of high stereotype threat on job stress occurred regardless of whether participants were concealing. Additionally, the moderated mediation model was not

supported when measured using the new Multi-Threat Framework, suggesting that the measure may not be measuring the same construct as the traditional measure. Finally, results suggest that stereotype threat added significant incremental validity in predicting job dissatisfaction over perceived discrimination. These findings, in total, suggest that stereotype threat is a valuable construct for predicting negative work outcomes for stigmatized individuals. Implications for improving the work lives of sexual minorities were discussed.

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CHAPTER ONE - INTRODUCTION

The purpose of the current study is to examine the relationship between stereotype threat and job satisfaction. Previous research has examined the relationship between perceived discrimination and job satisfaction, however only a handful of studies have examined the relationship between stereotype threat and workplace outcomes outside of selection testing contexts (c.f. Kalokerinos, von Hippel, & Zacher, *in press;* Ployhart, Ziegert, & McFarland, 2003; Sacket, 2003), and even fewer (one, specifically) have examined the impact of stereotype threat with sexual minorities (Bosson, Haymovitz, & Pinel, 2004). Sexual minorities are stigmatized in society and in the workplace for several reasons; most predominately due to a generalized devalued status in society as compared to heterosexuals. The view of heterosexuality in society as the norm, and all other variations as deviant and devalued, has influenced the stereotype that sexual minorities do not fit in with workplace heterosexist cultures. For example, many organizations have implicit gender rules regarding the appropriate ways to act. Females are expected to be more nurturing and promoting group harmony, whereas men are expected to be more assertive and commanding (Blashill & Powlishta, 2009; Udry, 1994). Thus, if sexual minorities are presumed to be gender non-conforming (e.g., feminine men and masculine women), they may not be accepted in the workplace and may face social isolation from coworkers. Furthermore, the general stereotype of sexual minorities as deviant and immoral, due to their lifestyle, may undermine respect and acceptance in the workplace as well. Sexual minorities who fear that they are being stereotyped by their coworkers are likely to feel like they do not belong in the workplace environment and that they are not welcome. These feelings can lead to decreased job satisfaction.

Specifically, the current study will examine the impact of stereotype threat on an important affective organizational variable: job satisfaction. The organizational literature has already demonstrated the impact of lower job satisfaction on valued organizational outcomes such as lower job performance (Judge, Bono, Thoresen, & Patton, 2001), decreased productivity (Halkos, & Bousinakis,2010), etc. Furthermore, the stereotype threat literature has also found support for a stereotype threat-job satisfaction relationship in two previous studies (von Hippel, Issa, Ma, & Stokes, 2011; von Hippel, Kalokerinos, & Henry, 2013). Although a direct relationship has been found in the von Hippel studies (as mediated by other variables), the current study proposed that the relationship between stereotype threat and job satisfaction is mediated by perceived stress. The organizational literature has demonstrated that stereotype threat is related to stress (Gomez & Wright, 2014; Son Hing, 2012) and that stress is related to job satisfaction (Brewer & McMaha-Landers, 2003; Fairbrother, & Warn, 2003; Guinot et al., 2014; Mansoor, Fida, Nasir, & Ahmad, 2011; Shahu & Gole, 2008). Thus, the current study proposed that the relationship between stereotype threat and job satisfaction is mediated by stress.

A relationship between stereotype threat and job satisfaction was examined in the current study for two reasons. First, stereotype threat is arguably experienced by all minority members by virtue of the fact that the knowledge of the stereotypes regarding the group are known by all members of society; thus, stereotype threat is "in the air" and omnipresent in the minds of minority members, even in non-threatening situations (Steele & Aronson, 1995; Steele et al., 2002). Roberson and Kulik also assert that stereotype threat impacts "everyday, routine situations that are a part of all jobs" because customers, coworkers, and supervisors are continuously forming judgments about those with whom they interact (2007, p. 25). Thus, all

individuals, regardless of their minority status, deal with judgments from others in the workplace; however, individuals who are stigmatized may internalize or have additional anxiety regarding the judgments that non-minority individuals do not face (Roberson & Kulik, 2007). Secondly, stereotype threat research suggests that it will influence processes and outcomes that are impactful in the workplace such as decreased working memory capacity, disengagement with the stereotyped domain/career, self-doubt, and self-handicapping, which consequently may affect minority employees' affective reactions, such as job satisfaction (von Hippel et al., 2011). Stereotype threat also impacts other outcomes such as disengagement with the stereotyped domain or career, self-doubt, self-handicapping, and avoidance of non-minority individuals; all of which can affect job satisfaction and job performance (Steele & Aronson, 1995; von Hippel et al., 2011).

Additionally, the current study incorporates a recent model of minority stress theory that has been predominately examined in the clinical psychology literature, but has recently been used to predict job satisfaction and general distress. Specifically, minority stress theory states that the experiences of sexual minorities are unique and different from other minority groups as a result of "external stressors related to negative societal perceptions of non-heterosexual sexual identities" (Hequembourg & Braillier, 2009, p. 292). Although the theory has traditionally operationalized the external stressors referenced in this description as perceived heterosexist discrimination, the description also aptly describes stereotype threat as well. It is also a stressor that is a result of the negative societal beliefs regarding non-heterosexual identities. Thus, the incorporation of stereotype threat into minority stress theory is logical. In a recent test of minority stress theory, stressors related to the heterosexist discrimination were negatively related to job satisfaction, and the relationship between discrimination and job satisfaction was

moderated by factors unique to sexual minorities such as internalized homophobia and the method of concealing utilized by sexual minorities (Velez, Moradi, & Brewster, 2013). Velez et al. (2013) found that in environments where sexual minorities faced low levels of discrimination they experienced more job satisfaction at low internalized homophobia, however at high levels of discrimination, the amount of internalized homophobia had no effect (i.e., it was equally high). Thus, likewise, internalized homophobia may have more of an impact when stereotype threat is low than when it is high, because stereotype threat may function similar perceived discrimination in that both are stressors arising from similar sources (negative stereotypes about the group). The current study also examines internalized homophobia as a moderator of the stereotype threat-stress relationship due to its utility in minority stress theory, and its applicability to the experience of stereotype threat. Specifically, if individuals have a higher level of discomfort or hatred towards their non-heterosexual sexual orientation, then they may be more sensitive to the stereotypes regarding sexual minorities (i.e., fear confirming the stereotype even more), and thus experience more stress in response to stereotype threat.

Thus, based on the research of stereotype threat and job satisfaction (von Hippel et al., 2011; von Hippel et al., 2013), and the research of minority stress theory tested in the workplace (Velez et al., 2013), it was expected that the relationship between stereotype threat and job satisfaction would be mediated by perceived stress, and that the mediated relationship would be moderated by the factors outlined in Velez et al.; specifically, internalized homophobia and concealing of the stigmatized identity.

Thus, I examined the impact of stereotype threat on perceived workplace stress and job satisfaction, in a nationwide sample of gay and lesbian employees (i.e., sexual minorities). This population was selected due to its highly stigmatized status in society, as well to provide a test of

stereotype threat theory, which states that stereotype threat is not likely to be experienced by individuals who are able to conceal their negatively stigmatized identity (Goffman, 1963; Shapiro & Neuberg, 2007). The literature review will more fully explicate the stereotypes regarding sexual minorities in the workplace, drawing comparisons between established research regarding stereotype threat theory and how it applies to sexual minorities in the workplace; as well as describe the limited research regarding workplace outcomes such as job satisfaction. The unique stressors of sexual minorities will be discussed; specifically, the need to conceal one's sexual orientation in the workplace, as well as internalized homophobia, and how these variables may impact the relationships found in the current study. Lastly, the study will draw comparisons to minority stress theory, as well as how stereotype threat is distinct from other diversity constructs typically studied, specifically perceived discrimination, and thus may explain unique variance in job satisfaction beyond perceived discrimination. The discussion section will discuss the implications of the current study for stereotype threat research in organizational contexts for both sexual minorities as well as stereotype threat research in general.

CHAPTER TWO - LITERATURE REVIEW

Sexual minorities are one of the most stigmatized minority groups in the United States today (c.f. Herek, 2009); however, despite their marginalized status, relatively little is known regarding factors that impact their work lives as compared to other (protected) minority groups such as women or ethnic minorities. In fact, as of July 2014, only 22 states have state laws that protect against employment discrimination on the basis of sexual orientation. Thus, as the employment laws continue to change in our country, the research needs to also progress with regards of the experiences of minority groups such as sexual minorities. One construct that has received a great deal of empirical support in studies involving other minority groups is stereotype threat. Stereotype threat is defined as "being at risk of confirming, as self-characteristic, a negative stereotype about one's group" (Steele & Aronson, 1995, p. 797). Given that many negative stereotypes exist about sexual minorities (e.g., immoral, untrustworthy, promiscuous, gender-nonconforming, etc.), and the general stigma associated with being devalued in society, it is logical that sexual minorities fear confirming these negative stereotypes to others or themselves. However, stereotype threat is generally regarded as applicable only to stigmatized identities which are visible to others (Shapiro & Neuberg, 2007). Thus, the current study is one of the few empirical examinations of stereotype threat within this unique population (c.f. Bosson Haymovitz, & Pinel, 2004). Additionally, the current study is interested in how the experience of stereotype threat impacts workplace affective outcomes, such as job satisfaction. The extant stereotype threat literature has demonstrated that stereotype threat can affect behavioral performance outcomes, specifically in academic and testing environments; however, relatively little time has been devoted to affective outcomes in the workplace, such as job satisfaction (c.f. Kalokerinos, von Hippel, & Zacher, *in press*).

Therefore, the current study seeks to fill these voids in the literature by demonstrating a relationship between stereotype threat and job satisfaction with sexual minorities in the workplace, examining the possible mediating effects of stress. The discussion of these relationships will start with a general overview of the relationship between job satisfaction and stereotype threat, followed by elaborating on the relationships between the job stress and job satisfaction, as well as how all three variables fit into a mediation model. Examples of how the model applies to sexual minorities will be used throughout the text, but the second section of the literature review will specifically focus on how the specific stereotypes regarding sexual minorities impact the proposed model in section one, as well how a sexual minority specific moderator variable (i.e., internalized homophobia) impacts the model. Next, the review will discuss how stereotype threat relates to another predictor variable which is commonly examined in diversity research, namely perceived discrimination, and how stereotype threat may explain unique variance in after accounting for the variance explained by perceived discrimination. The literature review will conclude with a discussion of how the examination of stereotype threat in sexual minorities may be benefited by the use of a potentially more comprehensive framework of stereotype threat called the Multi-Threat Framework. The hypotheses will be discussed within their relevant sections.

Job satisfaction

Job satisfaction is one of the most studied topics in industrial and organizational psychology due to the potential impact that it has on many personal and organizational variables (Judge, Bono, Thoresen, & Patton, 2001). Low job satisfaction is defined as negative feelings regarding one's job or aspects of one's job (Judge, Bono, Thoresen, & Patton, 2001; Spector, 1997). Put simply, "job satisfaction is the degree to which people like their jobs" (Spector, 1997,

p. vii). It is an important and well-studied organizational construct for its ability to predict other important outcomes as well as the various individual and organizational factors influencing it. Job satisfaction has been described an indicator of good employee treatment in the workplace, as well as an indicator of the emotional and psychological well-being of employees, and their interactions with coworkers (Spector, 1997). Additionally, low job satisfaction may lead to critical individual and organizational outcomes, such as turnover intentions (Deery, 2008; Vigoda, 2000), lowered productivity (Halkos & Bousinakis, 2010), reduced organizational citizenship behaviors (Vigoda, 2000), and lower job performance (Judge, Bono, Thoresen, & Patton, 2001). In this way, job satisfaction can be considered as an indicator of how well the organization is likely to function (Spector, 1997).

Job satisfaction as an outcome may be influenced by many factors, including (but not limited to) the individual's personality (Judge, Heller, & Mount, 2002), interpersonal relationships with coworkers and supervisors (Krueger & Schkade, 2008; Moynihan & Pandey, 2008; Repetti & Cosmas, 1991), job characteristics (Judge, Bono, & Locke, 2000; Loher, Noe, Moeller, & Fitzgerald, 1985), and most recently, stereotype threat (von Hippel et al., 2011; von Hippel et al., 2013). The current study seeks to further explore stereotype as an antecedent variable of job satisfaction. Given the unique characteristics of stereotype threat, as an internal process which is heavily influenced by external factors such as societal norms and stereotypes, it is possible that stereotype threat may explain unique variance in predicting job satisfaction in future studies.

Stereotype Threat and Job Satisfaction

The empirical literature regarding the theoretical link between stereotype threat and job satisfaction is still in its beginning stages of development (von Hippel et al., 2011; von Hippel et

al., 2013). Stereotype threat has been traditionally examined primarily in either laboratory settings or within academic settings, in the context of achievement or intelligence tests (c.f. Kalokerinos, von Hippel, & Zacher, *in press*; Steele, Spencer, & Aronson, 2002). When stereotype threat has been examined in the workplace, it is typically within the context of selection testing (Kalokerinos et al., *in press*; Ployhart, Ziegert, & McFarland, 2003; Sackett, 2003). Indeed, a majority of the extant literature has addressed the impact of stereotype threat on testing performance and behavioral outcomes (c.f. Steele, Spencer, & Aronson, 2002). For example, stereotype threat has been found to lead to decreased performance in testing environments (Steele & Aronson, 1997), disengagement with the stereotyped domain (Davies et al., 2012), dis-identification with activities traditionally endorsed by the stigmatized group (Steele & Aronson, 1995**),** alterations of career choices/goals (Gupta & Bhawe, 2007; Steele, James, & Barnett, 2002), avoidance of ingroup members (Cohen & Garcia, 2008), increased anxiety (Chung-Herrera, Ehrhart, Ehrhart, Hattrup, & Solamon, 2005), and increased self-handicapping actions such as putting forth less effort on the task (Stone, 2002). However, attitudinal and affective outcomes have been largely ignored, with the exception of some affective outcomes such as increased self-doubt (Steele & Aronson, 1995) and decreased self-esteem (Osborne, 1997) in testing situations as a result of stereotype threat. Research has demonstrated positive relationships between positive attitudes, such as job satisfaction, and organizationally valued outcomes such as job performance (Shahu & Gole, 2008; Spector, 1997). Thus, the current study seeks to add to the literature further examining attitudinal variables, specifically the relationship between stereotype threat and job satisfaction.

Von Hippel, Issa, Ma, and Stokes (2011) conducted one of the first empirical studies establishing a relationship between stereotype threat and job satisfaction, as well as some of the

mediating factors involved. In this study (von Hippel et al., 2011) it was found that women who compared their perceptions of career progression to the perceived career progression of men experienced both an increase in identity separation (i.e., separation of their work identity as a productive employee and their identity as a woman), as well as an increase in stereotype threat. The authors stated that when individuals feel the need to separate their work from their personal identities, this indicates a lack of belonging in the environment (von Hippel et al., 2011). This may be particularly relevant to the current study, given that there are several factors regarding the stereotypes of sexual minorities as well as environmental factors in the workplace that may lead to a decreased sense of belonging. For example, sexual minorities who violate social norms regarding appropriate behavior for men and women may be socially shunned or isolated from their coworkers (Blashill & Powlishta, 2009; Cech & Waidzunas, 2011; Mitchell & Ellis, 2011), thus decreasing their sense of belonging in the workplace. Also, because sexual minorities are likely to feel distinctive and different than their coworkers as a result of their token (or under-represented) status, they may also experience a lack of belonging (Kanter, 1977). Lastly, any stigmatization that engenders a sense of unworthiness, lack of trust, or danger to morals and values may cause heterosexual coworkers to avoid interactions with sexual minorities, which further fosters feelings of lack of belonging, as which will be discussed in greater detail later (Herek, 2009).

Furthermore, von Hippel et al. (2011) found that the relationship between career comparisons to men and identity separation was mediated by stereotype threat, meaning that women who viewed their career potential as being less than men's also experienced greater conflict between their feminine identity and their work identity, and this conflict was related to greater stereotype threat. However, these relationships were not found when women compared

their perceived career progression to the perceived career progression of other women. Von Hippel et al. (2011) further found that comparisons to men also led to a decrease in confidence of achieving career goals, and that this relationship was also mediated by stereotype threat. The findings of this study are particularly relevant for sexual minorities. Sexual minorities historically earn less than their heterosexual counterparts (Gates, 2013), and as such, they may also perceive that they have decreased career prospects. Additionally, identity separation may be even more relevant for sexual minorities given their stigmatized status in society as well as their perceived gender non-conformity; which may pressure sexual minorities to try and project a more gender appropriate image at work or separate their work and personal identities completely). This pressure to conform to societal norms regarding gender appropriate behaviors may also be reflected in sexual minorities' decisions to conceal or not conceal their sexual orientation in the workplace, thus forcing sexual minorities to engage in self-censoring activities as part of their concealing efforts, which may contribute to difficulty in forming close relationships due to the expected levels of mutual trust and sharing inherent in such relationships (Goffman, 1963; Human Rights Campaign, 2009). Thus, the findings of Von Hippel et al. (2011) appear to relate to the potential experiences of sexual minorities, as well as women.

Von Hippel et al. (2011) additionally proposed that because stereotype threat research has established a link between stereotype threat and disengagement (Kahn, 1990; Steele, Spencer, & Aronson, 2002), and disengagement has been found via meta-analysis to be related to job satisfaction (Saks, 2006), thus stereotype threat was expected to be related to job satisfaction. As predicted, von Hippel et al. (2011) discovered that stereotype threat impacted job satisfaction and that this relationship was partially mediated by both a belief in lower job prospects (which von Hippel et al. proposed is related to disengagement) as well as by a decreased sense of belonging

in the workplace (as indicated by a need to separate work and personal identity). Von Hippel and colleagues (2011) proposed that the partially mediated relationship found in their study may be additionally mediated by stress, due to previously established research indicating a relationship between stereotype threat and outcomes of stress.

Von Hippel, Kalokerinos, and Henry (2013) conducted a follow-up study to examine if stereotype threat impacted other organizational outcomes, such as turnover. To accomplish this, they examined stereotype threat in older adults from three online sources: (1) media company employees, (2) law enforcement officers, and (3) both older (over age 50) and younger workers (under age 30) from various industries. Results indicated that stereotype threat was related to several affective workplace outcomes, including job satisfaction. Furthermore, job satisfaction mediated the relationship between stereotype threat and intentions to quit or retire. Interestingly, although younger workers experienced greater levels of stereotype threat than older workers (regarding stereotypes of inexperience), stereotype threat was only related to job satisfaction in older workers (regarding stereotypes of incompetence). Von Hippel and colleagues (2013) suggested that this finding may be explained by how younger workers appraise stereotype threat experiences, and suggested that younger workers may interpret stereotype threat as a challenge to be overcome rather than a threatening experience (Fritzsche, DeRouin, & Salas, 2009).

Thus, both studies (von Hippel et al., 2011; von Hippel et al., 2013) provide support for a relationship between stereotype threat and job satisfaction in two different minority groups, women and older workers. Von Hippel et al. (2011) demonstrated that stereotype threat lowered job satisfaction by increasing disengagement and feelings of lack of belonging in the workplace; both of which are likely for the current population as well. Von Hippel et al. (2013) provided further support for the stereotype threat – decreased job satisfaction link, and also demonstrated

that this relationship resulted in increased turnover intentions as well. Therefore, the foundation for the model tested in the current study also examines this relationship between stereotype threat and job satisfaction.

Hypothesis 1:

Stereotype threat is negatively related to job satisfaction.

Job Stress and Job Satisfaction

There are several established predictors of job satisfaction in the industrial and organizational literature; most notable is perceived stress. Perceived stress is the result of a "mismatch between the demands placed on an individual and his or her abilities to meet those demands" (Guinot, Chiva, & Roca-Puig, 2014, p. 99). The transactional model of stress suggests that it is the interpretation of the stressful experience as self-relevant or harmful that causes an individual to perceive an event as stressful, rather than the characteristics of the event itself (Folkman & Lazarus, 1980). This initial interpretation of the event as stressful is followed by a secondary appraisal of whether the individual possesses the resources or ability to cope with the stressful event.

The organizational literature is replete with studies demonstrating the deleterious effects of perceived stress on job satisfaction (Brewer & McMaha-Landers, 2003; Fairbrother, & Warn, 2003; Guinot et al., 2014; Mansoor, Fida, Nasir, & Ahmad, 2011; Shahu & Gole, 2008). Increased perceived stress has been related to decreased job satisfaction, decreased productivity, and increased turnover intentions (Adebayo & Ogunsina, 2011; Halkos & Bousinakis, 2010). Sources of stress at work include relationship factors, such as lack of supervisory support (Snelgrove, 1998), poor relationships with coworkers or supervisors (Halkos & Bousinakis, 2010), working conditions, such as unpredictable or unstable work conditions (Snelgrove, 1998),

long work hours (Halkos & Bousinakis, 2010), and threats to career success, such as "being undervalued...and unclear promotion prospects (Fairbrother & Warn, 2003, p. 9).

Stereotype Threat's Relationship with Job Stress and Job Satisfaction

Steele and Aronson (1995) coined the term stereotype threat to explain the mechanism by which situational factors, such as the testing environment rather than nurture or nature factors, explain performance differences observed between Caucasian and African American students. To reiterate, stereotype threat is the experience of anxiety or concern that one's actions might confirm a negative stereotype regarding one's group (Steele & Aronson, 1995). Thus, stereotyped individuals experience anxiety when faced with the expectation that opinions formed about themselves are based upon stereotypes about their group, rather than their own merits or actions (Steele, Spencer, & Aronson, 2002). This implies that stereotype threat is likely to be experienced by all minority members because knowledge about stereotypes regarding their group are known by most members of society. Thus, stereotype threat is "in the air" as being omnipresent in the minds of minority members, even in non-threatening situations (Steele & Aronson, 1995; Steele et al., 2002).

Stereotype threat research has henceforth been applied to a wide range of minority groups, such as women and other ethnic groups, and a wide range of outcomes, such as anxiety, self-doubt, and dis-identification with stereotyped groups and domains (c.f. Steele, Spencer, & Aronson, 2002). Furthermore, because the theory can be applied to various groups and outcomes, the applicability of the theory has widespread implications beyond testing environments (Inzlicht & Schmader, 2011; Steele, Spencer, & Aronson, 2002). Consequently, stereotype threat provides a rather convincing situational explanation for performance differences found between groups, without relying on the nature (i.e., ability or biological differences) or nurture explanations (i.e.,

socialization; Inzlicht & Schmader, 2011). Indeed, because of the many organizational outcomes to which stereotype threat has been shown to be correlated (c.f. Steele, Spencer, & Aronson, 2002), researchers have proposed that stereotype threat has an impact on affective workplace outcomes as well, including job satisfaction (von Hippel, Issa, Ma, & Stokes, 2011; von Hippel, Kalokerinos, & Henry, 2013).

Furthermore, the relationship between stereotype threat and job satisfaction has been shown to be partially mediated by multiple factors, such as confidence in achieving career goals and a sense of belonging in the environment (von Hippel et al., 2011; von Hippel et al., 2013). Von Hippel and colleagues went on to propose that perceived stress may be an additional mediator that should be tested in stereotype threat research. Indeed, the literature already supports the notion that stereotype threat is related to perceived stress. Stereotype threat has been shown to correlate with various physiological indicators of stress such as increased blood pressure (Blascovich et al., 2010) and increased cortisol, which is the body's primary stress hormone (Huebner & Davis, 2005). Thus, an established relationship exists between stereotype threat and perceived stress.

Stereotype threat is generally considered a "source of stress" (Inzlicht & Kang, 2010; p. 468). For instance, when individuals encounter situations where their social identity is threatened (e.g., hearing racist comments in conversations), they experience involuntary stress reactions that impact other processes (e.g., working memory), which in turn impact performance outcomes. Thus, stress is generally described as the consequence resulting from the imbalance experienced when individuals are faced with the worry of confirming a negative stereotype, as well as their perceived ability to either disprove the stereotype or cope with the threat by alternate methods. For example, stress can be the result of facing a stereotype about gender appropriate behaviors

(e.g., “men in the military are stereotypically very masculine and macho”) and their ability to disprove a negative stereotype about their group (e.g., “gay men are stereotyped as effeminate, how can I act less effeminate to fit in?”). If the gay man has a higher pitched voice than the average male, he may fear not being able to disconfirm the feminine stereotype regarding sexual minorities, and thus may experience stress due to this inability to disconfirm the stereotype. As a result, he may disengage from the situation, which may result in decreased job satisfaction. Such methods include distancing themselves from the stigmatized group (Steele & Aronson, 1995), disengaging from the domain or job (von Hippel et al., 2011), or discounting feedback/opinions from individuals who may be prejudiced against the minority group (Roberson & Kulik, 2007). Furthermore, stereotype threat is related to both stress and burnout; specifically, stress has been found to mediate the relationship between stereotype threat and burnout in a sample of first year orthopedic surgical residents who feared confirming negative stereotypes regarding medical residents’ abilities (Gomez & Wright, 2014).

Thus, drawing from the previous studies which have established a relationship between stereotype threat and job satisfaction (c.f. von Hippel et al. 2011; von Hippel et al., 2013), and drawing from the literature which has established relationships between stereotype threat and perceived stress, and between perceived stress and job satisfaction, a mediated relationship is proposed.

Hypothesis 2:

The relationship between stereotype threat and job satisfaction is mediated by stress, such that as stereotype threat leads to increased stress, which leads to decreased job satisfaction.

The relationships proposed in hypothesis 2 may be further complicated by factors which are uniquely related to the population of interest in the current study, namely sexual minorities. Specifically, the concealability of one's sexual orientation may also directly impact the experience of stereotype threat. Additional stressors, such as the internalization of stigmas regarding homosexuality, may influence the strengths of these relationships as well. The specific stereotypes regarding homosexuality in the workplace, and the impacts and interplay of these stereotypes on the experience of stereotype threat, stress, and job satisfaction are explored in the next section.

Sexual Minorities

Stereotypes of Sexual Minorities Applied to the Workplace

Sexual stigma may be particularly insidious, in that it is associated with the negative perceptions surrounding any aspect of non-heterosexuality. Sexual stigma implies the superior status of heterosexuality in society relative to homosexuality, resulting in heterosexism (Herek, 2009). Heterosexism is the ideology that heterosexuality is the norm in society; therefore, any deviations from that norm are unnatural, deviant, and should be devalued (Harper, Jernewall, & Zea, 2004; Herek, 2009). Thus, society's inherent heterosexist biases (resulting in marriage inequality, lack of employment protection for sexual minorities, etc.) signal to sexual minority members their inferiority in the eyes of heterosexual individuals who hold such beliefs, thereby leading to internalized feelings of devaluation and inferiority (Harper, Jernewall, & Zea, 2004; Herek, 2009). As described in Beatty and Kirby (2006), stigmatized identities are more harshly judged when they are considered to threaten the purity and morality of society (e.g., "sexual orientation is deviant and perverse"), and when the stigma is considered be within the individual's control (e.g., "sexual orientation is a choice"), changeable (e.g., "sexual orientation

can be cured", and likely to impact job performance through impairments in social interaction (e.g., "sexual minorities are difficult to get along with"). Thus, the stigma surrounding sexual minorities' social identity may lead them to be more harshly judged and stereotyped by others in the workplace who hold strong heterosexist beliefs.

Heterosexist beliefs influence workplace settings, leading to stereotypes regarding sexual minorities, such as 1) stereotypes regarding the violation of gender norms, 2) purported promiscuity and lack of morals, 3) presumed mental illness, and 4) a general sense of threat to heterosexuals. Ward and Winstanley (2003) suggest that derogatory remarks regarding sexual minorities in the workplace may be more about a general lack of ability of sexual minorities to perform the job solely as a result of their presumed inferiority and their devalued societal standing. Indeed, although certain environments may lead to greater perceptions of stereotype threat due to strong heterosexist or masculine cultures (e.g., military), a majority of the stereotypes that exist regarding sexual minorities in the workplace may due to a general stereotype regarding a sexual minority member's lack of worth, lack of professionalism (due to presumed lifestyles or gendered workplace behaviors), or lack of morals (Ward & Winstanley, 2003).

Gender norms

One stereotype that sexual minorities face, both in society and in the workplace, is due to the presumed violation of gender roles, or the gender scripts that are expected for men and women in society. Sexual minority members, particularly males, who violate gender norms may be regarded with hostility (Blashill & Powlishta, 2009; Cech & Waidzunas, 2011; Mitchell & Ellis, 2011). Societal norms propound that women are feminine, nurturing, good communicators, submissive, and so on; whereas men are assertive, powerful, and masculine (Blashill &

Powlishta, 2009; Udry, 1994). Additionally, feminine expectations are often associated with negative stereotypes, such as lack of assertiveness, competence, or leadership ability. Research with heterosexual females supports the notion that feminine stereotypes are particularly detrimental in male-dominated professions, such as those involving technology and engineering (Blashill & Powlishta, 2009; Burack & Franks, 2006; Cech & Waidzunas, 2011; Cheryan, Davies, Plaut, & Steele, 2009; Mitchell & Ellis, 2011). One of the most prevailing stereotypes regarding sexual minorities is that sexual minorities are gender-nonconforming, implying that all gay men are feminine and all lesbians are masculine (Blashill & Powlishta, 2009). Thus, gay men who possess stereotypically feminine characteristics may face negative stigmatization as a result of both their gender non-conforming mannerisms as well as their devalued feminine characteristics (Streets & Hannah-Hanh, 2014). This devalued status as a non-masculine, feminine male may impact how gay men are perceived by their workgroup, thereby leading to stereotype threat in the workplace, which may further impact experienced stress and hinder the formation of relationships in the workplace. Furthermore, gay men who do not portray feminine characteristics may particularly fear confirming this stereotype, especially in workplaces with strong heterosexist cultures. One study described how gay men often form criticizing judgments of other gay men who portrayed stereotypically feminine characteristics, and as a result often self-monitor their own behavior in order to avoid being classified as similar to that subculture of sexual minorities (Hequembourg & Braillier, 2009). The wide range of stereotypes and subcultures within the gay and lesbian communities has also contributed to a lack of solidarity within sexual minorities as a whole (Hequembourg & Braillier, 2009).

Although lesbians are stereotyped to possess masculine traits, as women, they also face additional stigmatization due to sexism (Abrams, 1989; Hequembourg & Braillier, 2009).

Research has demonstrated that women who behave in stereotypically masculine ways are often perceived as rude, inappropriate, and overstepping their boundaries in the workplace (Abrams, 1989; Embrick, Walther, & Wickens, 2007). Hence, some lesbian women may experience stereotype threat in the workplace based both upon their sexual minority status and because of the added concern to act appropriately by conforming to feminine gender norms. Therefore, both male and female sexual minorities may experience stereotype threat as a result of the pressure to conform to their birth-sex gender roles in addition to their status as sexual minorities, particularly in workplaces with strong masculine or feminine cultures (e.g., military; Streets & Hannah-Hanh, 2014).

Promiscuity and Moral Deviance

Sexual minorities often report being perceived as more hyper-sexual and promiscuous than heterosexual men and women (Hequembourg & Brallier, 2009). However, the moral deviance stereotypes of sexual minorities often differ depending on the sex of the target. Whereas the sexuality of lesbians is sometimes eroticized by heterosexual men, the sexuality of gay men is perceived as deviant and promiscuous (Giuffre, Dellinger, & Williams, 2008; Hequembourg & Brallier, 2009). For women, this stereotype may cause interactions with coworkers particularly difficult due to unwanted sexual advances from men who stereotype lesbians and bisexuals as hyper-sexual and in need of a "real man." Gay men, by contrast, may experience uncomfortable interactions with heterosexual males who fear that sexual minorities are over-sexed and may have a hidden agenda to "convert" them into homosexuals (Hequembourg & Braillier, 2009). Additionally, sexual minorities have reported they fear the stereotypes regarding their sexuality within the workplace are often construed as unprofessional by heterosexual coworkers (Human Rights Campaign, 2009). Furthermore, some heterosexuals

deny the legitimacy of homosexuality, considering it a deviant choice that can be changed by "finding the right person;" as such, some heterosexuals consider homosexuality to be an indicator of lack of character, which may be particularly harmful to sexual minorities in the workplace (Hequembourg & Braillier, 2009). Thus, stereotypes regarding the sexual behaviors of sexual minorities are impactful in workplace settings and may lead to sexual harassment and/or discrimination (Leband & Lentz, 1998), as well as hindering the development of relationships with coworkers, another important component of job satisfaction (Repetti & Cosmas, 1991).

Mental Illness

Sexual minorities may also be perceived as mentally unstable as a result of their sexual orientation (Hequembourg & Braillier, 2009). It has been found that sexual minorities have a higher incidence of mental health issues than their heterosexual counterparts as a result of their stigmatized status in society (Hatzenbuehler, 2009; Lehavot & Simoni, 2011). However, Weinberg (1972) asserted that the impact of aggression towards homosexuals poses an even greater risk to mental well-being than homosexuality itself (as cited in Herek, 2009). The impacts of discrimination and the stigmatization of sexual minorities have been well-researched in the clinical and counseling literature, and include such mental health outcomes as anxiety (Diaz, Ayala, Bein, Henne, & Marin,2001), depression (Diaz et al., 2001), substance abuse (Burgard, Cochran, & Mays, 2005; Eisenberg & Wechsler, 2003; Hatzenbuehler, Corbin, & Fromme, 2009), lowered self-esteem (Crocker & Major,1989), and suicidal thoughts (Eisenberg & Resnick, 2006; Safren & Heimberg, 1999; Wichstrom & Hegna, 2003), among others.

Stereotypes regarding mental illness are particularly damaging to all individuals in the workplace, including sexual minorities. Research in employee selection has demonstrated that individuals are seven times more likely to hire a physically disabled employee than a mentally

disabled employee (Koser, Matsuyama, & Kopelman, 1999). Furthermore, employees have been shown to stigmatize other employees with presumed mental disorders through such actions as limiting promotion opportunities, spreading gossip about the individual, attributing any errors to the presumed mental illness, and socially excluding these individuals (Wheat, Brohan, Henderson, & Thornicroft, 2010). Thus, in addition to the negative stereotypes associated with being a sexual minority member, these individuals may also fear being judged as mentally ill by supervisors or coworkers, and therefore devalued or judged as unfit in the workplace. Such stigmatized individuals may be further isolated and disconnected from their coworkers and job due to the fear of appearing mentally ill, which further decreases job satisfaction.

Sexual Minorities as a Source of Threat to Heterosexuals

Sexual minorities are often perceived by heterosexuals as threatening to their beliefs (e.g., religious) or personal safety (e.g., HIV; Oswald, 2007). The stereotype of sexual minorities as a threat is particularly salient within professions that involve interactions with children, such as childcare workers or teachers, due to the stereotype regarding sexual minorities (particularly gay men) as child predators (Bosson, Haymovitz, & Pinel, 2004). Another threatening stereotype regarding sexual minorities, and gay men in particular, is that sexual minorities spread HIV or AIDS, which has historically contributed to the fear and negativity towards sexual minorities (Herek, 2009). Although the Center for Disease Control (2001) has found that a majority of AIDS cases are reported for men who have sex with men (57%, versus nine percent of non-drug related heterosexual cases), the stereotype that all sexual minorities are HIV-positive or have AIDS is particularly damaging for workplace relationships (Altman et al., 2012). The belief that sexual minorities are threatening due to their presumed HIV-positive status has been found to increase negative affective perceptions of sexual minorities, increase social distance from sexual

minorities, and increase perceptions of sexual minorities as immoral and deviant individuals (Oswald, 2007). Fear of confirming a threatening stereotype, such as being a predator or HIV-positive, may lead sexual minorities to self-monitor their behaviors and how much information they share regarding their personal lives, thus negatively impacting the formation of social relationships in the workplace.

Concealing Sexual Orientation

Stereotype threat has also been shown to influence individuals to avoid stigmatizing situations using preemptive coping and avoidance strategies, such as concealing one's stigmatized identity when possible, or avoiding social situations in which the stigma may become more obvious to others (Herek, 1996; 2009). Given the numerous stereotypes that sexual minorities may encounter in the workplace, it is not surprising that so many choose to conceal their sexual orientation. According to a national survey, 41% of sexual minorities feared being stereotyped if they revealed their sexual orientation at work (Human Rights Campaign, 2009). Sexual minorities who felt the need to conceal within the workplace reported their organizations as less supportive of them as sexual minorities (Ellis & Riggle, 1996). Lack of organizational support have been related to lower job satisfaction (Brewer & McMaha-Landers, 2003). Thus, pressures to conceal may impact both the experience of stereotype threat by potentially avoiding stigmatization, as well as directly decreasing job satisfaction due to the perception of lack of organizational support.

Earlier researchers suggested that individuals with concealable stigmatized identities have an advantage over individuals with non-concealable stigmatized identities because of their ability to “pass as normal” (Goffman, 1963). However, more recent research has revealed that individuals with concealable stigmatized identities face additional unique challenges not

encountered by those having non-concealable stigmatized identities (Ragins, 2008; Shapiro, 2011a; Waldo, 1999). For example, decisions regarding whether or not to disclose a stigmatized identity, as well as the emotional and cognitive stress associated with concealing part of one's identity, are unique for individuals who have the choice whether or not to conceal. As such, individuals concealing stigmatized identities often experience the added anxiety and fear that their secret could be revealed at any moment. In fact, the fear of disclosing one's sexual orientation, rather than actual disclosure outcomes, appears to be strongly related to lower job satisfaction (Ragins & Cornwell, 2007).

Interestingly, both concealing and non-concealing sexual minorities are equally as likely to report avoiding people at work or skipping work, according to the Human Rights Campaign (2009). Furthermore, 54% percent of completely concealing sexual minorities reported having to lie about their personal lives, compared with 21% of sexual minorities who were completely non-concealing in the workplace, indicating that there are similar experiences to stereotype threat regardless of concealing (Human Rights Campaign, 2009). This may be because sexual minorities, regardless of whether they choose to conceal or not, often feel the need to censor what information they reveal in order to avoid portraying themselves or their group in a negative manner. These self-censoring activities may contribute to difficulty in forming close relationships because sexual minorities may feel as if they cannot trust others in the workplace or may feel disingenuous and therefore doubt the sincerity of their relationships with others with whom they feel they interact with (Goffman, 1963; Human Rights Campaign, 2009).

Several theories support the notion that concealing a secret has negative outcomes for the concealing individual, often by making the stigma more salient. According to the preoccupation theory of concealable stigmas, individuals who conceal a stigma may become so preoccupied

with trying to hide their identity that they create a state of mind in which thoughts regarding the stigmatized identity intrude into other aspects of their thinking (Smart & Wegner, 1999). This behavior can result in negative physical, emotional, and psychological well-being (Ragins, 2008; Smart & Wegner, 1999). Additionally, stigmatized individuals may feel they lack privacy due to the real or perceived attention their stigma draws towards themselves (Goffman, 1963).

One of the benefits of revealing sexual orientation is the development of a unified sense of self. According to self-verification theory, individuals have a desire to be seen by others the same way they see themselves (c.f. Swann, 2011), and this desire often motivates individuals to reveal a concealable stigma, despite the risks associated with that decision (Ragins, 2008). Additionally, being open about one's concealable stigma may dispel some misperceptions associated with the stigma by presenting counter-evidence through one's actions or demeanor (Oswald, 2007). Individuals who are open about their sexual orientation have more positive self-identities and relationships with others, which are positively related to job satisfaction (Ragins, 2004; Ragins, 2008; Ragins, Singh, & Cornwell, 2007). Overall, self-verification attempts are instrumental in the creation of a unified sense of self, reducing anxiety, and "eroding social stereotypes" through the presentation of one's true self to others (Swann, 2011, p. 23).

Thus, fears of confirming negative stereotypes, as well as the desire to avoid negative consequences of being stigmatized in the workplace, may contribute to sexual minorities' desire to conceal their sexual orientation in the workplace. Due to the scarcity of research on concealable stigmatized identities, practitioners and researchers have been unable to draw definitive conclusions about the experience of stereotype threat in individuals with concealable stigmatized identities, resulting in a lack of effective interventions for reducing stereotype threats in such individuals. Stereotype threat theory states that individuals would not experience

stereotype threat if they are concealing because then they would not be judged by the stereotypes of a group which they presumably were not part of. However, the literature on sexual minorities has provided many reasons for the greater negative impact of concealing on the psychological wellbeing and stress of sexual minorities. Therefore, there is a need to explore the different experiences of concealed and non-concealed sexual minorities. Therefore, the current study will examine whether there are any differences between concealing and non-concealing sexual minorities, and control for the effects of concealing described in the previously proposed mediation hypothesis (hypothesis 2).

Research Question:

Are there significant differences between concealing and non-concealing sexual minorities on measures of stereotype threat, perceived stress, and job satisfaction**?**

Hypothesis 3:

Controlling for the effects of whether participants are concealing or non-concealing in the workplace, the relationship between stereotype threat and job satisfaction is mediated by perceived stress, such that stereotype threat leads to increased levels of perceived stress, and increased levels of perceived stress lead to decreased levels of job satisfaction.

Sexual Minority Stereotype Threat and Its Impact on Stress and Job Satisfaction

Steele, Spencer, and Aronson (2002) argue that stereotype threat theory applies to any social identity because any social identity can be stigmatized, particularly if it is denigrated by a large portion of society, as sexual minorities are (Herek, 2009). In the previous section, the stereotypes regarding sexual minorities were described in relation to workplace applicability or in relation to factors that impact job satisfaction. Moreover, the consensus of researchers is that stereotype threat is "in the air," meaning that anyone can experience stereotype threat given the

right circumstances (Steele, 1997). Additionally, researchers have demonstrated the importance of situational and environmental factors in determining whether stereotype threat will emerge (c.f., Steele, Spencer, & Aronson, 2002). Such factors include the experiences of tokenism (i.e., being one of only a few minority members in the environment), the development and maintenance of interpersonal relationships with coworkers or supervisors, whether the stereotype is one that is a generally devalued social identity, and the stress resulting from being judged and ruminating about the stigmatization.

Tokenism and Environmental Cues

Stereotype threat literature has repeatedly demonstrated the impact of environmental cues on the elicitation of stereotype threat for minorities such as women and African Americans, even without explicit elicitation of the relevant stereotypes (Burack & Franks, 2006; Cheryan, Davies, Plaut, & Steele, 2009; Inzlicht & Ben-Zeev, 2000; Steele et al., 2002; Streets & Hannah-Hanh, 2014). For example, certain environmental cues can be objects present in the workplace (e.g., sci-fi posters and video games cuing a masculine environment vs. scenic posters and books in a gender neutral environment; Cheryan et al., 2009), or the lack of other minority representation in the workplace (Lord & & Saenz, 1985; Sekaquaptewa & Thompson, 2003). Token status means being a part of a minority group that constitutes less than 15 % of the total demographic of the group (Kanter, 1977). Because sexual minorities are estimated to account for only about 10% of the U.S. population, according to the most recent U.S. Census (Gates, 2013), they are very likely to be token members of their minority group in most workplaces. Indeed, much of the research on stereotype threat and workplace outcomes typically has discussed stereotype threat in the context of being elicited by the minority members' token status (Block, Koch, Liberman; Merriweather; & Roberson, 2011; Roberson, Deitch, Brief, & Block, 2000).

Tokenism has been shown to be an antecedent to stereotype threat because of feelings of distinctiveness and vulnerability. This further decreases job satisfaction due to expectations by minority group members that they will be stereotyped by majority group members (Block et al., 2011; Neimann & Dovidio, 1998; Roberson et al., 2003). Token status signals to the minority member that they are not valued or welcomed in the environment, and that they may not be as capable as majority group members (Block et al., 2011; Burack & Franks, 2006; Steele et al., 2002). Being the token member in a group has been shown to be detrimental to performance by negatively affecting working memory and diverting concentration to other aspects of oneself. This impacts not only psychological well-being, but potentially an organization's productivity levels as a whole (Brown, 2012; Lord & Saenz, 1985; Schmader & Johns, 2003). Other studies of stereotype threat in the workplace have found that solo-status minority members are less likely to seek feedback regarding their performance, and often discount the feedback they receive due to uncertainty whether the feedback was impacted by the stereotypes regarding their group membership (Roberson et al., 2003).

Additionally, the lack of other known sexual minorities in the workforce often places additional pressures on sexual minorities to act as good representatives of their group (Giuffre et al.). The added pressure to be role models of a minority group places greater pressure on individuals to self-censor their behaviors in order to portray the best impression possible, again creating similar feelings to being concealed in the workplace (Giuffre et al.). As such, these findings suggest that being the only sexual minority in the workplace may increase the sexual minorities' self-consciousness regarding the stereotypes of their group, thus leading to stereotype threat, which in turns leads to other negative outcomes (Goffman, 1963; Murphy, Steele, &

Gross, 2007; Niemann & Dovidio, 1998; von Hippel, Issa, Ma, & Stokes, 2011; von Hippel, Walsh, & Zouroudis, 2011; von Hippel, Wiryakusuma, Bowden, & Shocket, 2011).

Relationships with Coworkers and Social Support

Stigma-related experiences, such as stereotype threat, may prevent sexual minorities from fully engaging with coworkers and participating in the social aspects of the workplace (Gates & Mitchell, 2013). Therefore, stereotype threat leads to the social isolation of minority members through the lack of interpersonal relationships with coworkers. This is even more likely for sexual minorities given the stereotypes described earlier regarding hatred and fear. Indeed, sexual minorities have been found very likely to experience social isolation as a result of their sexual orientation (Diaz, Ayala, Bein, Henne, & Marin, 2001; Embrick, Walther, & Wickens, 2007; Oswald, 2007).

One way stereotype threat might impact social interactions is by influencing minority members to avoid majority group members (Oswald, 2007). Social interactions with coworkers are an important dimension of job satisfaction (Griffith, Steptoe, & Cropley, 1999; Huffman, Watrous-Rodriguez, & King, 2008; Repetti & Cosmas, 1991). Positive coworker and supervisor relationships within the workplace have been related to higher job satisfaction and decreased turnover intentions (Krueger & Schkade, 2008; Moynihan & Pandey, 2008; Repetti & Cosmas, 1991). Research has suggested that having a supportive supervisor may be related more to job satisfaction, whereas coworker relationships were more likely to be related to overall life satisfaction (Huffman, Watrous-Rodriguez, & King, 2008; Repetti & Cosmas, 1991). Thus, the social isolation experienced by sexual minorities would be expected to impact job satisfaction.

Another long-term result of stereotype threat may be that minority individuals are disadvantaged compared to other employees with regard to career progression (Streets &

Hannah-Hanh, 2014). Performance decrements resulting from stereotype threat may accumulate and lead to loss of opportunities on projects or tasks that are important to improving task-related skills, knowledge, and abilities that translate into more opportunities for advancement and growth later on in one's career (Streets & Hannah-Hanh, 2014). Von Hippel et al. (2011) found that perceptions of lower career prospects led to lower job satisfaction. Thus, stereotype threat in sexual minorities may lead to lower job satisfaction to the extent that stereotype threat hinders the development of relationships with coworkers that may facilitate future career growth. Indeed, research has shown that sexual minorities have lower job satisfaction than heterosexuals, specifically with regard to satisfaction with pay, promotion prospects, and supervisor respect (Drydakis, 2012).

Research has also found that workers' interpersonal trust in the workplace decreases perceived stress, which thus increases job satisfaction, suggesting that the relationship between interpersonal trust and job satisfaction is mediated by stress (Guinot, Chiva, & Roca-Puig, 2014). Sexual minorities experiencing stereotype threat may also be less likely to trust others because they may question whether majority members believe the stereotypes about their group, or if their coworkers' judgments are impacted by the knowledge of such stereotypes, or what prejudices the majority members may have towards their group. Thus, as a result of stereotype threat, sexual minorities may experience increased stress due to their inability to trust others.

Thus, overall stereotype threat with sexual minorities is likely to decrease the likelihood of developing or maintaining meaningful interpersonal relationships and decrease interpersonal trust with coworkers; which may lead to career development, social support, or reduced perceived stress.

Non-Specific Devalued Social Identity

Due to widespread societal knowledge of negative stereotypes about minority groups, minority members often experience stereotype threat in the workplace, knowing the stereotypes may be prevalent in their coworkers' minds, even in workplaces with non-discriminatory policies (Roberson & Kluik, 2007). For example, Caucasians may fear being stereotyped as racist (Frantz, Cuddy, Burnett, Ray, & Hart, 2004); overweight workers may fear being stereotyped as lazy (Shapiro, 2011); African Americans may fear being stereotyped as less intelligent (Steele & Aronson, 1995); and sexual minorities may fear being stereotyped as dangerous predators, promiscuous, deviant, or generally inferior in the eyes of heterosexual coworkers (Bosson et al., 2004; Oswald, 2007).

Individuals spend a large proportion of their week in the workplace. As such, individuals often derive a sense of personal identity from their jobs (Van Knippenberg, 2000; Gates, & Mitchell, 2013). Thus, if sexual minorities are stereotyped as being unprofessional, inadequate, or devalued in some way in the workplace, internalizing such a devalued work identity may lead to decreased job satisfaction. (Ellemers & Barreto, 2006; Ragins & Cornwell, 2001). One way the stereotype regarding a general devalued status is conveyed by others is by ignoring the reality of issues regarding sexual minorities in the workplace. The avoidance of open discussions regarding sexual orientation in the workplace has led to what some researchers call a "negative space" (Ward & Winstanley, 2003), implying that the lack of discourse regarding sexual orientation draws more attention to the situation because sexual minorities are keenly aware of the lack of acknowledgement of their personal lives. Similar to arguments that white men in the workforce mistakenly believe organizations are race and gender neutral (rather than biased towards an all-white male standard), many heterosexual workers are purported to also believe

that the workplace is sexually neutral rather than heterosexist (Ward & Winstanley, 2003). Sexual minorities often report that heterosexual coworkers seem reluctant to inquire about the personal lives of sexual minority workers, such as weekend plans, children, dating life, and so on, which is a common form of bonding and interaction among heterosexual employees (Giuffre, Dellinger, & Williams, 2008; Hequembourg & Braillier, 2009). The avoidance of social interaction is demoralizing and demeaning to the relationships that sexual minorities have with their loved ones (Smith, 2013), and may lead to a general sense of feeling stigmatized and devalued in the workplace, which has negative implications for minority members' job satisfaction (Embrick, Walther, & Wickens, 2007; Ward & Winstanley, 2003). Thus, rather than sexual minorities experiencing stereotype threat regarding a particular issue, they may experience stereotype threat as a result of knowledge that their minority group is devalued by those around them. This sense of being devalued may lead to increased stress in the workplace as well as decreased job satisfaction from working in an environment which does not formally acknowledge and embrace their existence (Streets & Hannah-Hanh, 2014).

Fear of Judgments and Ruminating Thoughts

Regardless of the stigmatized individual's personal experiences or beliefs regarding the validity of the stereotypes of their group, stereotyped individuals are aware that they may be judged in a negative light by others (Roberson & Kulik, 2007; Steele et al., 2002). This may be particularly salient in a workplace where supervisors can potentially use stereotypes to make performance judgments (Streets & Hannah-Hanh, 2014).

The stigma associated with homosexuality is said to "get under the skin;" implying that managing a stigmatized identity such as homosexuality is chronically stressful (Hatzenbuehler, 2009, p. 707). This may be because homosexuality is still one of the most stigmatized groups in

the United States, as evidenced by the 2004 U.S. national election poll which indicated that homosexuals are one of the least liked minority groups, out-scoring only illegal immigrants on a feelings-thermometer rating (Herek, 2009). Hatzenbuehler proposed that the stigma that sexual minorities experience results in stress. This stress increases the need for coping mechanisms, such as increased emotional regulation or cognitive reappraisal of the situation; in addition to the presence of interpersonal support systems. Thus, the lack of such coping mechanisms may lead to mental health issues for sexual minorities in the workplace, such as depression and anxiety (Hatzenbuehler, 2009).

Emotional regulation is the use of cognitive strategies, which are employed to manage and express emotional responses, and can be activated either consciously or unconsciously (Gross, 2001). Examples include reappraisal of the situation to minimize the impact on one's emotions, or suppression of the outward expression of emotions. Thus, emotional regulation has been proposed to act as a mediator between stress and negative outcomes, such as depression. Rumination is another emotional regulation response which is characterized by the passive repetitive preoccupation with the stressor (Hatzenbuehler, 2009). It is common for sexual minorities, particularly those who are concealing, to ruminate about the hidden meaning of events and situations, which causes many sexual minorities to engage in self-monitoring in the workplace (Hatzenbuehler, 2009; Pachankis, 2008). This preoccupation with the stigma and stereotypes regarding the group leads individuals to have ruminating thoughts, contributing to what some researchers have called a "private hell" (Smart & Wegner, 1999). These ruminating thoughts contribute to decreased cognitive capabilities, such as decreased working memory capacity, and increased anxiety of being revealed to others, thus incurring costs both to the organization through turnover or lost wages, as well as to the individual's health and

psychological well-being (Brown, 2012; Inzlicht, Tullett, Legault, & Kang, 2011; Lord & Saenz, 1985; Ragins, 2008; Schmader & Johns, 2003). Therefore, stereotype threat may lead sexual minorities to ruminate over possible negative judgments and evaluations from others, which decreases cognitive resources, increases stress, and which in turn negatively impacts job satisfaction.

Minority Stress Theory

Minority stress theory (Meyers, 1995) suggests that sexual minorities face chronic pressures to conform to society's heterosexist standards. Minority stress theory is composed of three related processes (Meyers, 1995; Meyers, 2003). One component is the existence of "external stressors related to negative societal perceptions of non-heterosexual sexual identities" (Hequembourg & Braillier, 2009, p. 292), which is usually operationalized in minority stress research as discrimination. However, this definition could be roughly applied to stereotype threat as well. Stereotype threat is also a stressor related to the derogatory societal perceptions of sexual minorities. The second component is "the internalizations of those stressors by [sexual minorities]"; i.e., internalized homophobia (Hequembourg & Braillier, 2009, p. 292). Internalized homophobia is experienced when sexual minorities harbor feelings of prejudice and disgust regarding their own homosexuality as a result of the internalization of society's negativity regarding non-heterosexual relationships (Herek, 2009). In fact, it has been proposed that the deleterious effects of internalized homophobia never completely subside, even after individuals have fully accepted their non-heterosexual sexual orientation (Cass, 1984**),** suggesting that all sexual minorities, regardless of their reported level of internalized homophobia, are susceptible to stigmatization and stereotype threat. The last component concerns the "expectations of stressors and the vigilance necessary to anticipate them"

(Hequembourg & Braillier, 2009, p. 292). Thus, it seems logical that stereotype threat may play a role in the experiences described in minority stress theory.

Similar to the current study, stress is often conceptualized as a mediator within minority stress theory, mediating the relationship between their stigmatized status in society and psychopathology (e.g., depression and emotional distress; Hatzenbuehler, 2009; Meyers, 2003). Meyers (2003) further delineated distal stressors (such as discrimination based on sexual orientation) from proximal stressors (such as internalized homophobia, fears of rejection, and pressures to conceal). The pressures to conceal are often rooted in a belief that sexual minorities may face discrimination in the workplace such as social isolation, or termination of employment as a result of their sexual orientation. Thus the fear of confirming negative stereotypes about sexual minorities may impact job satisfaction by decreasing sexual minorities' belief that they are accepted and integrated into the workplace.

Minority stress theory has been tested only a few times in regard to work-specific outcomes (e.g., Velez, Moradi, & Brewster, 2013; Waldo, 1999); therefore, researchers in the field are calling for greater use of the theory in workplace settings. While testing the minority stress theory model in the workplace, Waldo (1999) found that concealing sexual orientation was related to the experience of more indirect heterosexism (e.g., exclusion from social events), but that being open in the workplace was related to more experiences of direct heterosexism (e.g., demeaning comments); however, both forms of heterosexism were negatively related to job satisfaction. In a more recent test of this model, expectations of stigmatization (similar to stereotype threat), internalized heterosexism, and workplace heterosexist discrimination were related to lower job satisfaction and greater psychological distress (Velez et al., 2013). The relationship between expectations of stigma and job satisfaction was moderated by method of

concealing (i.e., hiding one's sexual orientation, avoiding discussions regarding one's sexual orientation, or being open regarding one's sexual orientation in the workplace), as well as internalized homophobia. However, Velez et al. (2013) found that in environments where sexual minorities faced low levels of discrimination they experienced more job satisfaction at low internalized homophobia, however at high levels of discrimination, the amount of internalized homophobia had no effect (i.e., it was equally high). Thus, likewise, internalized homophobia may have more of an impact when stereotype threat is low than when it is high, because stereotype threat may function similar perceived discrimination in that both are stressors arising from similar sources (negative stereotypes about the group). Together, the results of Waldo (1999) and Velez et al. (2013) demonstrated that variables that are theoretically related to stereotype threat (i.e., heterosexist discrimination and expectations of stigmatization) are both directly and indirectly related to job satisfaction and distress. The model also highlights the possibility of a moderator variable, internalized homophobia, which may be included in the model proposed in Hypothesis 2. Based on this research and theory, the following is hypothesized.

Hypothesis 4

Controlling for the effects of concealing, the relationship between stereotype threat and job stress is moderated by internalized homophobia such that the relationship between stereotype threat and perceived stress is higher for individuals who have higher internalized homophobia than individuals who have lower internalized homophobia.

Stereotype Threat versus Discrimination

Although stereotype threat in sexual minorities has not been widely examined in the literature (c.f. Bosson, Haymovitz, & Pinel, 2004), discrimination and prejudice towards sexual

minorities has been widely studied (c.f., Human Rights Campaign Foundation, 2009). It is well documented that violence and discrimination against homosexuals occurs in the workplace (Human Rights Campaign Foundation, 2009), and a great deal of research regarding workplace outcomes has examined the impact of perceived workplace discrimination on workplace experiences such as job satisfaction (Ensher, Grant-Vallone, & Donaldson, 2001; Moyes, Williams, & Quigley, 2000; Orpen, 1995; Velez, Moradi, & Brewster, 2013). Additionally, research has also demonstrated that employers tend to form less favorable impressions based on resumes from individuals who appear to be gay, and are less likely to hire a gay applicant, than a straight individual (Hebl et al., 2002). Thus, it is pertinent to address the differences between stereotype threat and discrimination, given that they are likely to be highly correlated; however they are distinct constructs and thus may each explain unique variance in workplace outcomes. In order to understand the differences between stereotype threat and discrimination, it is useful to understand how they relate to the three types of stigma which exist.

Stigmatization is defined as a social stressor which involves "negative evaluations of self or ingroup" and can occur, among other ways, as a result of reminding individuals of their negatively viewed stigmatized identity (Son Hing, 2012, p. 154). Stigmatization and stigmas can be experienced in three general ways: as felt stigma, internalized stigma, or enacted stigma, (Herek, 2009). First, felt stigma is the knowledge that a stigma exists and the expectation of where, when, and how enacted stigma can occur. Regardless of minority status, everyone can experience felt stigma because every society has implicit rules regarding the treatment and emotional reaction towards certain minority groups, particularly groups which violate the perceived values and norms of the majority members (Dovidio & Hebl, 2005). For example, a feminine heterosexual male may fear confirming stereotypes regarding his sexuality (i.e., may be

mistaken for a sexual minority), and thus may experience stereotype threat regardless of the fact that he is not actually part of the stigmatized group. Therefore, felt stigma exists in the experience of stereotype threat (Herek, 2009).

Second, enacted stigma is the physical manifestation of stigma, such as hate crimes, racial slurs, and the exclusion or avoidance of stigmatized individuals. As such, discrimination would be an example of enacted stigma, whereas prejudice and stereotyping are more indicative of felt stigma. Additionally, minorities do not need to personally experience discrimination to know that others within their group have been discriminated against. Thus experienced or perceived discrimination is not a necessary component of stereotype threat. Lastly, internalized stigma is the integration of society's opinion regarding a stigma into their own self-concept and belief system, thereby allowing an individual to justify the existence of felt and enacted stigma (Herek, 2009). Internalized homophobia, also called internalized heterosexism or internalized homonegativity, is a form of self stigma where the sexual minority harbors feelings of prejudice and disgust towards their homosexuality (Herek, 2009; Weinberg, 1972).

Thus, because both stereotype threat and perceived discrimination may cover different construct space, stereotype threat is hypothesized to predict incremental variance over perceived discrimination. Because all members of the minority group are likely to have experienced felt stigma (i.e., stereotype threat), the experiences of stereotype threat may be more generalizable than perceived discrimination (i.e., enacted stigma). As the literature on stigmas have shown, the concepts are related, but not identical, thus they may each explain unique variance in outcomes. Additionally, the relationship with perceived stress will be tested in order to measure the relationship with these two variables, so that both the proximal outcome (perceived stress) and the distal outcome (job satisfaction) of the current study’s models are examined.

Hypothesis 5A

Stereotype threat explains incremental variance in job satisfaction beyond what can be explained by perceived discrimination alone.

Hypothesis 5B

Stereotype threat explains incremental variance in perceived stress beyond what can be explained by perceived discrimination alone.

Multi-Threat Framework

The use of sexual minorities as the target group of investigation for the current study may necessitate the use of alternative stereotype threat measures. The Multi-Threat Framework assesses the existence of multiple stereotype threats (Shapiro & Neuberg, 2007). The Multi-Threat Framework is defined by two dimensions: the target of stereotype threat (i.e., self or group) and the source of judgments regarding the stereotype (i.e., self, outgroup, or ingroup). The interaction of the two dimensions (target and source of judgment) creates six stereotype threats, each with a unique combination of eliciting factors, and which may require different interventions or measurement items to demonstrate the existence of the stereotype threats (Shapiro, 2011a; Shapiro, 2011b, Shapiro, 2012; Shapiro & Neuberg, 2007).

The first dimension is the target of stereotype threat, which refers to whether the stereotyping judgments are targeting the individual or the group. In other words, are the individuals concerned that their performance reflects poorly upon their own abilities or upon their group's abilities? The second dimension, the source of the judgment of stereotype threat, refers to who is judging the stigmatized individual's actions. This can be either A) the stigmatized individuals' judgment of themselves, thus fearing that their actions confirm the stereotype in their own mind; B) the outgroup members who do not possess the stigmatized

identity, thus reflecting to others who may not be familiar with the stigmatized group that the stereotype is valid and applicable to the group; or C) the ingroup members who share the same stigmatized identity, thus showing others who also possess the stigmatized identity that the stereotype may be valid or applicable to their own group. Stereotype threat originating from the ingroup may be especially impactful for individuals who view themselves as mentors or role models to others in their group, and who may be concerned with how their actions are perceived by others with the same stigmatized identity.

Thus, the Multi-Threat Framework may be a more comprehensive measure of stereotype threat than traditional measures because it takes into account multiple sources and multiple targets of stereotype threat. This may be particularly impactful when measuring stereotype threat with a stigmatized identity that may be concealed from others, and consequently concealed individuals may not worry about their behavior reflecting poorly upon the group's reputation or the concealed individual may not fear confirming stereotype threat to anyone else besides himself or herself. Additionally, the current demographic may be particularly suited to test the entire framework. In the only formal test of the measure used in the Multi-Threat Framework literature, Shapiro (2011) did not use the other-as-source threat scales because some of the minority groups used in the study (ethnic and religious minorities) were not expected to make judgments about their own ingroup members. However, with sexual minorities, this may not be the case. The wide range of stereotypes and subcultures within the gay and lesbian communities has also attributed to a lack of solidarity within sexual minorities as a whole (Hequembourg & Braillier, 2009). Recall the previously described study which found that gay men might form judgments and criticize other sexual minorities who embrace different gender roles or behaviors than themselves (Hequembourg & Braillier, 2009). The categorization of sexual minorities is

broad, thus it is possible that some sexual minorities may make stereotyping judgments regarding other sexual minorities. In other words, it is feasible for stereotype threat to originate from other ingroup members (e.g., lesbian women making stereotyping judgments about gay men, or vice versa). Thus, the entire measure (with six stereotype threats) can be used in the current study. The current study examined the unique incremental variance of the Multi-Threat Framework on both job satisfaction and perceived stress as compared to perceived discrimination, as well as directly comparing the unique variance explained in job satisfaction and perceived stress as compared to the traditional measure of stereotype threat.

Hypothesis 6A

The multi-threat framework measure of stereotype threat explains incremental variance in job satisfaction beyond what can be explained by perceived discrimination alone.

Hypothesis 6B

The multi-threat framework measure of stereotype threat explains incremental variance in perceived stress beyond what can be explained by the perceived discrimination alone.

Hypothesis 7A

The multi-threat framework measure of stereotype threat explains incremental variance in job satisfaction beyond what can be explained by the traditional measure of stereotype threat alone.

Hypothesis 7B

The multi-threat framework measure of stereotype threat explains incremental variance in perceived stress beyond what can be explained by the traditional measure of stereotype threat alone.

Additionally, the originally proposed moderated mediation (hypothesis 4) will be tested using the presumably more comprehensive model of stereotype threat, the Multi-Threat Framework.

Hypothesis 8

Controlling for the effects of concealing, the relationship between stereotype threat and job stress is moderated by internalized homophobia such that the relationship between stereotype threat and perceived stress is higher for individuals who have higher internalized homophobia than individuals who have lower internalized homophobia.

CHAPTER THREE: METHOD

Participants

The current study distributed an online survey to participants recruited through Qualtrics, an international survey technology provider specializing in online survey research for both academic and industry purposes. The study participants were invited to participate by way of a Qualtrics Survey Panel, and compensated $10 for their participation. A Qualtrics survey manager monitored the collection of data such that only completed surveys were kept for analysis, and data collection stopped once the quota of 150 participants was completed. To ensure quality control, Qualtrics embedded three questions into the survey to ensure that participants were paying attention to the questions being asked (e.g., "Control Question: Please select At least once a week for this line"). Thus, Qualtrics was able to discard of surveys in which participants indiscriminately selected answers without reading the survey items. Thus, the final sample provided by Qualtrics to the researcher was comprised of 150 full-time employed sexual minorities from various career fields across 36 states in the United States.

Qualtrics also managed the eligibility screening questions. Three screening questions at the beginning of the survey were used to establish eligibility criteria for participation. These three criteria were with regards to sexual orientation, employment status, and sexual orientation disclosure status at work (which was a selection question for the quota of concealing versus non-concealing participants). Failure to meet any of the eligibility or selection requirements resulted in the conclusion of the survey. First, participants reported their sexuality using the 1-item sexual orientation measure (Kinsey Heterosexual-Homosexual Scale). Response choices ranged from 0 (*exclusively heterosexual*) to 6 (*exclusively homosexual*). Participants were permitted to continue with participation in the survey if they selected greater than a score of four (*predominantly*

homosexual but more than incidentally heterosexual) for this item. The answer choices also included a description of what each choice meant (*see* Appendix A). Second, participants were asked to report the number of hours they worked per week in response to "What is your current employment status?" Answer choices included "working- 32+ hours per week", "working- less than 32 hours per week", and various reasons for not working (e.g., retired, disabled, laid off, etc.). Only participants who reported that they were employed more than 32 hours per week were allowed to continue with the survey. Those who did not meet eligibility requirements were thanked for their time and the survey was terminated. Lastly, disclosure at work was measured by a one-item measure (Degree of Disclosure Scale; Ragins et al., 2007), which asked "At work, have you disclosed your sexual orientation to:" followed by a four-point scale. The four choices were having disclosed to 1 (*no one*), 2 (*some people*), 3 (*most people*), or 4 (*everyone*). Similar to the procedure followed by Ragins and colleagues (2007), the variable was dichotomized such that individuals who reported they disclosed to "no one" or to only "some people" at work were categorized as *concealed*, whereas individuals who reported they disclosed to "most people" or to "everyone" were categorized as *not-concealed* (i.e., "out"). Qualtrics ensured that an equal number of concealed and non-concealed participants were included in the final sample by cutting off participation for individuals who were part of the group that reached its sampling quota early. In other words, half of the sample (N = 75) concealed their sexual orientation at work to all or most of their coworkers, and half (N = 75) were out at work regarding their sexual orientation to all or most of their coworkers. The final sample consisted of 90 males and 60 females. Half of the men (N = 45) and women (N = 30) reported concealing their sexual orientation at work, and half (45 men and 30 women) reported being out in the workplace. This equal number of men and

women collected in the sample between the concealing and non-concealing groups was coincidental.

Procedure

The survey was administered entirely online at the discretion of the participants, to accommodate their schedules. The survey began with the eligibility questions described above (i.e., sexual orientation, employment status, and disclosure at work). The demographics questionnaire (see Appendix B) was presented next, which contained questions regarding age, sex, occupation, state of residence, relationship status, etc. A mental imagery task was used next, which has been successfully used in previous studies to induce stereotype threat (e.g., Ackerman, Goldstein, Shapiro, & Bargh, 2009). For this task, participants were given two open ended questions which asked them to write 1) about the stereotypes that may exist about their group and 2) write about a situation in which they feared they might confirm a negative stereotype about sexual minorities in the workplace. This allowed the survey to take a tailored approach for each participant, rather than forcing the elicitation of a specific stereotype that may or may not be applicable to each participant's specific workplace environment. The open ended questions in the mental imagery technique also allowed the current study to collect qualitative responses regarding the types of stereotypes that individuals fear confirming in the workplace as well as descriptions of situations where they personally experienced stereotype threat. The mental imagery questions were followed by two stereotype threat measures (traditional measure followed by the Multi-Threat Framework measure), perceived discrimination measure, job satisfaction measure, perceived stress measure, and the internalized homophobia measure. The survey concluded with a debriefing statement which again linked participants to the principal investigator's email address.

Measures

Sexual Orientation

Sexual orientation was measured in the current study using the Kinsey Heterosexual-Homosexual Scale (*see* Appendix A), ranging from 0 (*exclusively heterosexual*) to 6 (*exclusively homosexual*). The question "Please rate how you would describe your current sexuality" was followed by seven response choices. Scale anchors were 0 ("*Exclusively heterosexual-Individuals who make no physical contacts which result in erotic arousal or orgasm, and make no mental responses to individuals of their own sex.")* and 6 ("*Exclusively homosexual-Individuals who are exclusively homosexual, both in regard to their overt experience and in regard to their mental reactions*").

Demographic measures

Demographic variables were collected regarding age, sex, gender, ethnicity, job, career field, state of residence, and whether each participant resided in an urban or rural location (*see* Appendix B).

Degree of Disclosure (Concealing Measure)

Participant's disclosure of sexual orientation in the workplace was assessed using two methods: directly asking about disclosure and asking about perceived success in concealing. First, actual disclosure in the workplace was assessed using Ragins' et al.'s (2007) one-item Degree of Disclosure measure: "At work, have you disclosed your sexual orientation to: (Please check one option): 1 (*no one*), 2 (*some people*), 3 (*most people*), 4 (*everyone*)" (*p*. 1110). Secondly, the current study adapted Ragin et al.'s (2007) one-item Degree of Disclosure measure to reflect each individual's belief about having successfully concealed his/her sexual orientation rather than actual disclosure: "If you are concealed at work to most people or everyone, how

successfully do you believe you are concealing your sexual orientation at work? (Please check one option): 1 (*no one suspects*; i.e., I believe am completely concealed at work), 2 (*some people may suspect*), 3 (*I suspect that everyone knows*), 4 (*am "out" at work/ everyone knows*)." This self-reported disclosure method is similar to other measures of disclosure used in other studies, which have used them successfully (e.g., Croteau & Lark, 1995; Driscoll et al., 1996; Levine & Leonard, 1984; Ragins et al., 2007; Rostosky & Riggle, 2002; Schneider, 2004).

Stereotype Threat Measure

Stereotype threat was measured using Spencer's (1993) eight-item Stereotype Vulnerability Scale, originally developed as part of a dissertation for a student under the supervision of Claude Steele (*see* Appendix C). This measure is the most widely used stereotype threat measure used in the literature, although it is most often cited from Steele and Aronson (1999), and is often modified to reflect the population or domain under investigation (e.g., Steele & Aronson, 1999, von Hippel et al., 2011; von Hippel et al., 2013). Furthermore, this measure has served as the template for several other stereotype threat measures used in research today (for a review of stereotype threat measures, see Xavier, Fritzsche, Sanz, & Smith, *in press*). Therefore, the measure in the results section will simply be referred to as stereotype threat, as it is traditionally referred to in publications using the same measure. The original scale was designed to measure stereotype threat in African Americans in academic testing situations (α = .67). Therefore, the items were modified to fit both the population (i.e., sexual minorities) and the environment (i.e., workplace) of the current study. For example, the item that read: "In math classes people of my gender often face biased evaluations from others," was changed to: "In my line of work, people of my sexual orientation often face biased evaluations from others." The scales for this measure ranged from 1 (*never*) to 5 (*very often*).

Stereotype Threats (Multi-Threat Framework)

Due to the unique population of the current study, an additional (and presumably more comprehensive) measure of stereotype threat was included. The Multi-Threat Framework measures six qualitatively distinct stereotype threats, created by distinguishing between three stereotype threat judgment sources (i.e., originating from one's self, outgroup others, and ingroup others) and two targets of stereotype threat (i.e., one's own reputation and the group's reputation). Participant's stereotype threats were assessed using Shapiro's (2011) Multi-Threat Framework measure (*see* Appendix D). Three items were used to measure each of the four types of stereotype threat measured in Shapiro (2011): self-concept threat ($\alpha = .92$), group-concept threat ($\alpha = .85$), own-reputation threat ($\alpha = .88$), group-reputation threat ($\alpha = .79$); and two items were used to measure the two Ingroup-as-source items, which were not reported in Shapiro (2011a). The items were provided by Shapiro by email correspondence (see Appendix E); however no internal consistency values were available for these scales. All items were rated using a six-point scale ranging from 1 (*very concerned*) to 6 (*not at all concerned*).

The measure started with the following prompt which referred back to the mental imagery task they completed immediately prior to taking the stereotype threat measure. The question stated "Please think about your actions in the types of situations you described in the [mental imagery] task above. When you are in these types of situations to what extent are you concerned that your actions…" (Shapiro, 2011, p. 470). Because the original publication with this measure examined four different stigmatized populations, the items in the original measure were open ended to fill with the target population. For example, self-concept threat was ". . . to what extent are you concerned that your actions will lead you to see yourself as actually possessing the negative stereotype that others have about people who are/have [__]?" (Shapiro,

2011, p. 470). Thus, the items were all adapted to fit the current population by inserting sexual minorities into the item. A sample item for a self-concept threat is as follows: "…will lead you to see yourself as actually possessing the negative stereotype that others have about people who are sexual minorities?"; and a sample item for group-reputation threat is as follows: "…might confirm the negative stereotypes in the minds of others (non-sexual minority) about people who are sexual minorities?"

Perceived Discrimination

Each participant's perceived experience with discrimination as a result of sexual orientation was assessed using Ragins and colleagues (2007) seven-item measure of Perceptions of Past Workplace Discrimination (*see* Appendix E). This measure was designed to specifically address discrimination based on sexual orientation, and thus no alternations to the original measure were needed for the current study. A sample item from the Perceptions of Past Workplace Discrimination measure is as follows: "In prior positions, have you ever resigned from a job in part or because of discrimination based on sexual orientation?" Responses choices are as follows: 2 (*yes*), 1 (*unsure*), or 0 (*no*). The sum of the seven items yields a score ranging from 0 to 14, with higher values indicating greater perceived discrimination as a result of sexual orientation.

Job Satisfaction

Each participant's job satisfaction was assessed using Spector's (1994) 36-item Job Satisfaction Survey (JSS; *see* Appendix F). This job satisfaction measure has nine-subscales. A sample item from the four-item satisfaction regarding pay subscale ($\alpha = .75$) is as follows: "I feel I am being paid a fair amount for the work I do." A sample item from the four-item promotion subscale ($\alpha = .73$) is as follows: "Those who do well on the job stand a fair chance of being

promoted." A sample item from the four-item supervision subscale (α = .82) is as follows: "My supervisor is unfair to me." A sample item from the four-item fringe benefits subscale (α = .73) is as follows: "I am not satisfied with the benefits I receive." A sample item from the four-item contingent rewards subscale (α = .76) is as follows: "There are few rewards for those who work here." A sample item from the four-item operating procedures subscale (α = .62) is as follows: "Many of our rules and procedures make doing a good job difficult." A sample item from the four-item coworkers subscale (α = .60) is as follows: "I find I have to work harder at my job because of the incompetence of people I work with." A sample item from the four-item nature of work subscale (α = .78) is as follows: "I sometimes feel my job is meaningless." Lastly, a sample item from the four-item communication subscale (α = .71) is as follows: "Communications seem good within this organization." Score values range from 1 (*strongly disagree*) to 6 (*strongly agree*), with about half the items reverse scored. Higher overall mean scores indicate greater job satisfaction.

Perceived Stress

Each participant's stress was assessed using Cohen, Kamarck, and Mermelstein's (1983) four-item Perceived Stress Scale (*see* Appendix G). This measure originally consisted of ten items; however, the developers (Cohen et al., 1983) found that a four-item version of the measure still had adequate internal consistency, which has been supported by recent studies as well (α = .83; Balsam, Lehavot, Beadnell, & Circo, 2010). Additionally, the measure was adapted to the current study's work context by adding the phrase "at work" where appropriate. An example item for this measure was "In the last month, how often have you felt difficulties at work were piling up so high that you could not overcome them?" Score values range from 1

(*never*) to 5 (*very often*), with higher mean scores indicating higher levels of perceived stress in the workplace.

Internalized Homophobia

Each participant's internalized homophobia was measures using Herek, Cogan, Gillis, and Glunt's (1997) measure of Internalized Homophobia Scale (*see* Appendix H). This measure had 9 items, which were worded specifically for female or male participants (i.e., women received a version which used the terms "women" and "lesbian", whereas men received a version which used the terms "gay" or "men" in the item). Internal consistency values were reported to be acceptable (Female $\alpha = .71$, Male $\alpha = .83$; Herek et al., 2007). A sample item is "I wish I weren't lesbian". Score values ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), and the items were totaled to produce a mean score with higher values reflecting higher levels of internalized homophobia.

CHAPTER FOUR: RESULTS

General Findings

Means and standard deviations for all study variables are listed in Table 1, as well as *t*-test results indicating whether there were significant differences in the means between concealing and non-concealing sexual minorities in the workplace, thus addressing the research question of whether there were significant differences between concealed and non-concealed sexual minorities. Thus, results indicated that there were no significant differences on any of the study variables (Table 1). The means for the total current sample were similar to other studies using the same measures. For example, the mean of job satisfaction in current study is 4.16 out of a possible score of 6, whereas the mean (according to Spector, who has collected over nearly 150 samples from other studies which have used his measure) is 3.85 out of 6 (Spector, 2011). However one notable difference was with regards to the Perceived Stress Scale (Cohen et al., 1983). The participants in the current study reported more perceived stress (2.52 out of a possible score of 5) than the perceived stress scores of other minority groups such as African Americans reported in previous research (mean = 1.47 out of a possible score of 5; Cohen & Williamson, 1988).

Table 1: Means and Standard Deviation for All Study Variables

	Total Sample		Out		Concealed		
	Mean	SD	Mean	SD	Mean	SD	*t*
Perceived Discrimination	3.47	3.96	3.83	4.21	3.12	3.70	1.09
Stereotype Threat	2.50	.66	2.41	.66	2.59	.64	-1.32
Multi-Threat Framework	2.50	1.25	2.38	1.23	2.65	1.25	-1.69
Internalized Homophobia	1.68	.75	1.57	.76	1.79	.74	-1.76
Job Satisfaction	4.16	.95	4.20	.96	4.11	.94	.55
Perceived Stress	2.52	.80	2.48	.78	2.56	.82	-.61

Note. *t*-test of difference between out and concealed, $df = 148$. $^{*} = p < .05$; $^{**} = p < .01$.

The correlations and intercorrelations of the study variables, along with the coefficient alpha values (in the diagonal), are displayed in Table 2 for the total sample. All of the variables had acceptable internal consistency values (above $\alpha = .70$; Nunnally & Berstein, 1994), with the exception of two measures. Firstly, one of the subscales of job satisfaction (operating procedures), had lower than acceptable levels of internal consistency ($\alpha = .54$), however one item was removed to increase the internal consistency of the subscale to $\alpha = .70$. The operating procedures item that was removed was "My efforts to do a good job are seldom blocked by red tape." Secondly, the Stereotype Vulnerability Scale had a low internal consistency ($\alpha = .63$), however this value was similar to the original measure's reported internal consistency ($\alpha = .67$).

Zero-order correlations revealed that both perceived discrimination and stereotype threat measures were significantly correlated with all of the negative experiences at work (see Table 2) and in the expected directions. The correlations in Table 2 show that both perceived discrimination (r = -.30), stereotype threat (r = -.38), and the Multi-Threat Framework (r = -.27) are significantly and negatively related to job satisfaction, such that the greater the amount of perceived discrimination or stereotype threat that individuals experience, the more likely they will experience reduced job satisfaction. Perceived discrimination, stereotype threat, and the Multi-Threat Framework are also positively and significantly related to stress, such that the more perceived discrimination or stereotype threat is experienced, the more likely such individuals will experience greater perceived stress.

Additionally, the correlation between the traditional stereotype threat measure and the Multi-Threat Framework was (r = .47, $p < .001$). The Multi-Threat Framework measure is presumed to be a more inclusive and comprehensive measure of stereotype threat because it measures stereotype threats that originate from three different sources (i.e., the self, outgroup others, and ingroup others) as well as the targets of the threat (i.e., self-targeting or group-targeting threats); thus, the Multi-Threat Framework should theoretically be measuring both the construct of the traditional measure in addition to stereotype threats that are not measured by the traditional measure (c.f. Shapiro & Neuberg, 2007). The measures do indeed appear to be measuring a similar construct due to the significant correlation between the two measures; however, the correlation is lower than would be expected if they were measuring the exact same construct space. Thus, the Multi-Threat Measure may indeed be capturing more of the construct of stereotype threat in its measure, or may be capturing a different construct than stereotype threat.

Table 2: Correlation of All Model Variables for Total Sample

	1	2	3	4	5	6	7
1. Perceived Discrimination	.81						
2. Stereotype Threat	.37**	.63					
3. MTF Total	.41**	.47**	.97				
4. Internalized Homophobia	.04	.24**	.43**	.89			
5. Actual Concealing	-.09	.14	.11	.14	-		
6. Job Satisfaction	-.30**	-.38**	-.27**	-.11	-.05	.95	
7. Perceived Stress	.23**	.41**	.31**	.23**	.05	-.64**	.74

NOTE: $N = 150$ * $p < .05$, ** $p < .01$; Values on diagonal represent the internal consistency values found in the current study. Actual concealing and belief in concealing were one item measures, and thus do not have internal consistency values.

Hypothesis 1

A Pearson's correlation was used to examine the relationship between stereotype threat and job satisfaction (Table 2). The results suggest that there is indeed a significant negative correlation between stereotype threat and job satisfaction $r = -.38$, $p < .001$.

Hypothesis 2

Hypothesis 2 examined the relationship for stereotype threat and job satisfaction as mediated by stress. A simple mediation analysis was performed using ordinary least squares analysis using the Process extension software for SPSS (version 2.11, released 15 February 2014) developed by Dr. Andrew F. Hayes (Hayes, 2013). The results indicated that stereotype threat indirectly influenced job satisfaction through its effect on perceived stress in the workplace (Table 3). The overall model was found to be significant, F (2, 147) = 54.73, $p < .001$. Participants who experienced greater stereotype threat also experienced greater perceived stress ($b = .50$, $p < .001$, 95% $CI = .32$ to .68), and greater perceived stress was negatively related to job satisfaction ($b = -.69$, $p < .001$, 95% $CI = -.85$ to -.53). A bias-corrected bootstrap 95% confidence interval for the indirect effect ($b = -.34$, $SE = .09$) using 1,000 bootstrap samples was -.53 to -.19, which indicated that there was a significant indirect effect of stereotype threat on job satisfaction through perceived stress in addition to the significant direct effect of stereotype threat on job satisfaction. A direct effect between stereotype threat and job satisfaction was also found. A bias-corrected bootstrap 95% confidence interval for the indirect effect ($b = -.21$, $SE = .10$) using 1,000 bootstrap samples was -.41 to -.02, which indicated that there was a significant direct effect of stereotype threat on job satisfaction through perceived stress in addition to the significant direct effect of stereotype threat on job satisfaction.

Table 3: Relationship between Stereotype Threat (Operationalized Using the Stereotype Vulnerability Scale) and Job Satisfaction, Mediated by Perceived Stress.

	Perceived Stress			Job Satisfaction		
	b	*SE*	*t*	*b*	*SE*	*t*
Constant	1.28	.23	5.44**	6.42	.25	25.24**
Stereotype Threat	.50	.09	5.48**	-.21	.10	-2.13*
Perceived Stress				-.69	.08	-8.46**
	R^2 = .17			R^2 = .43		
	F (1, 148) = 30.04, p < .001			F (2, 147) = 54.73, p < .001		

Note. *b* = unstandardized regression coefficients. N = 150, * p < .05, ** p < .01

Hypothesis 3

Hypothesis 3 examined the relationship for stereotype threat and job satisfaction as mediated by stress, and controlling for concealing. A simple mediation analysis was performed using ordinary least squares analysis using the Process extension software for SPSS. The results indicated that stereotype threat indirectly influenced job satisfaction through its effect on perceived stress in the workplace (Table 4). Participants who experienced greater stereotype threat also experienced greater perceived stress (b = .50, p < .001, 95% *CI* = .32 to .68), and greater perceived stress was negatively related to job satisfaction (b = -.69, p < .001, 95% *CI* = -.85 to -.53). The overall model was found to be significant, F (3, 146) = 36.24, p < .001. A bias-corrected bootstrap 95% confidence interval for the indirect effect (b = -.34, *SE* = .09) using 1,000 bootstrap samples was -.54 to -.21, which indicated that there was a significant indirect effect of stereotype threat on job satisfaction through perceived stress in addition to the significant direct effect of stereotype threat on job satisfaction. A direct effect between stereotype threat and job satisfaction was also found. A bias-corrected bootstrap 95% confidence

interval for the indirect effect (b = -.21, SE = .10) using 1,000 bootstrap samples was -.41 to -.01, which indicated that there was a significant direct effect of stereotype threat on job satisfaction through perceived stress in addition to the significant direct effect of stereotype threat on job satisfaction.

Table 4: Relationship between Stereotype Threat (Operationalized Using the Stereotype Vulnerability Scale) and Job Satisfaction, Mediated by Perceived Stress and Controlling for Concealing

	Perceived Stress			Job Satisfaction		
	b	*SE*	*t*	*b*	*SE*	*t*
Constant	1.28	.24	5.40**	6.41	.26	24.98**
Stereotype Threat	.50	.09	5.42**	-.21	.10	-2.12*
Concealing	-.01	.12	-.08	.007	.12	.06
Perceived Stress				-.69	.08	-8.43**
	R^2 = .17			R^2 = .43		
	F (2, 147) = 14.92**			F (3, 146) = 36.24**		

Note. b = unstandardized regression coefficients. N = 150, * p < .05, ** p < .01

Moderated mediation

A first stage moderation model (a type of moderated meditation) analysis was performed to analyze Hypothesis 3 according to the theoretical processes outlined in Edwards and Lambert (2007), and using the Process software (version 2.11, released 15 February 2014) developed by Dr. Andrew F. Hayes (Hayes, 2013). The Process software, which is an extension of SPSS, allows users to run various complex models involving multiple moderators and mediators within the same analysis; thus allowing for a full test of the model rather than a piecemeal approach of analyzing the individual parts of the model and making inferences regarding the entire model (c.f. Hayes, in press; Hayes, 2013; Preacher, Rucker, & Hayes, 2007). The test of the moderated mediation hypothesis resulted in two regressions. The first regression (i.e., the mediator model) represents the mediator variable (M) regressed upon the predictor variable (X), the moderator variable (W), and their interactions (X x W). The second regression (i.e., the dependent variable model) represents the outcome variable (Y) regressed upon the mediator variable (M) while controlling for the effect of the predictor variable (X). Results in the current study are presented in the format used by other researchers in the field examining moderated mediation (i.e., Hayes, in press), the unstandardized beta weights, standard deviations (in parentheses), *p*-values, and the R^2 and *F*-statistics for each of the regressions in the model.

According to Hayes (2013; in press) and other researchers (e.g., Fairchild & MacKinnon, 2009), the indirect effect of a predictor (X) on an outcome (Y) can be moderated even if moderation is not found through one of the components of the indirect effect; nor does the presence of a significant moderation effect in one of the components of the indirect effect provide evidence that there is indeed moderation in the indirect effect of X to Y. Thus, there is a need to formally test the overall model for the presence of a moderation effect. The Process

software produces an index of moderated mediation, which is a formal test of moderated mediation. Whereas current methodology used in statistical research provides a dichotomous yes/no conclusion as to whether an effect exists based on significance testing, the method proposed by Preacher et al. (2007) is based on normal-theory significance tests which recommends that bootstrapped confidence intervals be examined with 1,000 resamples and a 95% confidence interval (Preacher et al., 2007) in order to provide a more robust test of moderated mediation (i.e., we can be 95% confident that the true score lies within the confidence interval range). The bootstrapped confidence interval estimate of the index of moderated mediation reflects the magnitude of the relationship between the moderator and the indirect effect. Thus, moderated mediation is inferred in the model if the confidence interval of the index of moderated mediation does not contain zero (Hayes, 2013; in press).

Hypothesis 4

Hypothesis 4 examined the moderated mediated model of a relationship between stereotype threat and job satisfaction (controlling for concealing), which was expected to be mediated by perceived stress. The relationship between stereotype threat and stress was expected to be moderated by internalized homophobia. Stereotype threat was measured using the traditional stereotype threat measure (Stereotype Vulnerability Scale; Spencer, 1993; Steele & Aronson, 1999). There are two multiple regression models in Table 5. The first displays the path coefficients for the mediator model (with perceived stress as the dependent variable), and the second displays the path coefficients for the dependent variable model (with job satisfaction as the dependent variable). To test whether the relationship between stereotype threat and perceived stress was moderated by internalized homophobia, multiple regression analyses were calculated in which perceived stress was regressed upon stereotype threat, internalized homophobia, the

interaction between stereotype threat and internalized homophobia, and concealing. As can be seen from the mediator model, the overall model was significant F (4, 145) = 11.36, $p < .001$ R^2 = .24. Furthermore, the interaction term (stereotype threat x internalized homophobia) was significantly associated with the mediator (perceived stress), (b = -.41, t = -3.40, $p < .001$). The second regression (i.e., the dependent variable model) represents job satisfaction regressed upon the perceived stress while controlling for the effects of stereotype threat and concealing. As can be seen in the dependent variable model, the overall model was significant F (3, 146) = 36.24, p = .001, R^2 = .43, and the mediator (perceived stress) was significantly associated with the dependent variable (job satisfaction; b = -.69, t = -8.43, $p < .001$). Furthermore, the effect between stereotype threat and job satisfaction was only partially mediated by stress. A significant direct effect of stereotype threat on job satisfaction was found (b = -.21, p = .04). Additionally, support for moderated mediation was found for this model (b = .31, SE = .12), as demonstrated by the bootstrapped 95% confidence interval of the index of moderated mediation not containing zero (.10, .60), and the significant interaction term in step 1 (b = -.45, $p < .001$). The conditional indirect effects of stereotype threat on the mediator (perceived stress) at various levels of the moderator (internalized homophobia) are listed in Table 6, which includes confidence intervals for each level of the moderator. Results show that at low and average levels of internalized homophobia, the confidence intervals do not include zero, thus displaying a significant difference in perceived stress among the different levels of stereotype threat; however, at high levels of internalized homophobia, there is no significant difference in the amount of perceived stress experienced (b = .02, 95% CI = -.32, .35). Examination of the plots (Figure 1) showed that individuals with high internalized homophobia experienced the greatest amount of stress regardless of the level of stereotype threat experienced. Individuals with low levels of

internalized homophobia experience the least amount of perceived stress. As the amount of stereotype threat increases, the amount of perceived stress also increases. At high levels of stereotype threat, all participants (regardless of amount of internalized homophobia) experienced the same amount of stress. Thus, hypothesis 4 was supported.

Table 5: Hypothesis 4 Stereotype Threat using Stereotype Vulnerability Scale (X), Perceived stress, Job Satisfaction where Internalized Homophobia Moderates the Relationship between Stereotype Threat and Perceived Stress

	Perceived Stress (M)			Job Satisfaction (Y)		
	b	*SE*	*t*	*b*	*SE*	*t*
Constant	-.62	.62	-1.00	6.41	.26	24.98**
Concealing	-.06	.12	-.52	.007	.12	.06
Stereotype Threat	1.11	.23	4.82**	-.21	.10	-2.12*
Perceived Stress				-.69	.08	-8.43**
Internalized Homophobia	1.39	.41	3.40**			
Internalized Homophobia x Stereotype Threat	-.45	.45	-3.07**			
	R^2 = .24			R^2 = .43		
	F (4, 145) = 11.36**			F (3, 146) = 36.24**		

Note. *b* = unstandardized regression coefficients, with standard error in parentheses below. *N* = 150, * $p < .05$, ** $p < .01$

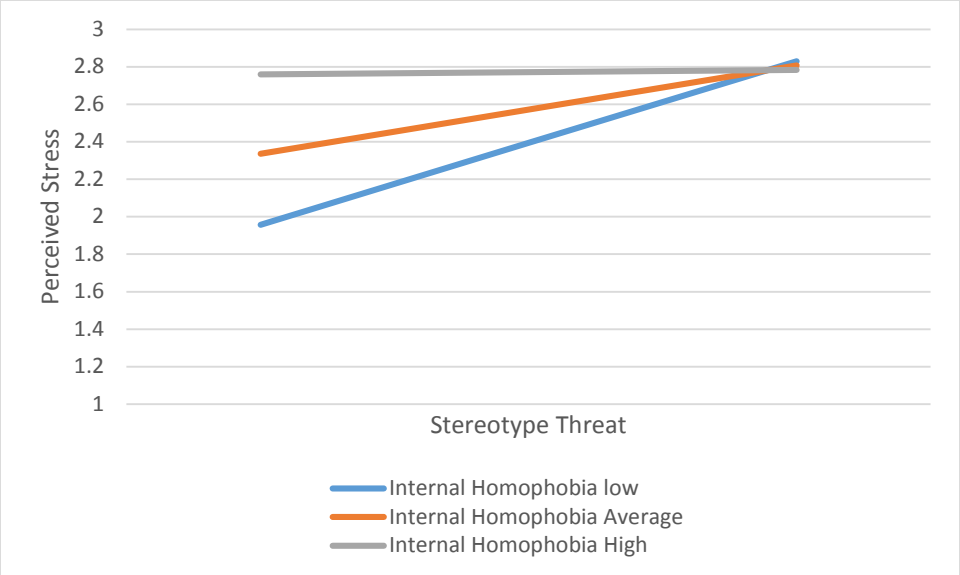


Figure 1: Moderated Mediation of Job Satisfaction with Stereotype Threat, Perceived Stress (Mediator), and Internalized Homophobia (Moderator).

Table 6: Conditional Indirect Effects of the Independent Variable [a] on the Mediator Variable [b] at Various Levels of the Moderator Variable [c]

Mediator	Internalized Homophobia	*Effect*	*SE*	*t*	95% CI	
					LL	UL
Perceived Stress	-1 *SD* (1.00)	.66	.11	5.89**	.44	.89
	M (1.68)	.36	.10	3.70**	.17	.55
	+1 *SD* (2.43)	.02	.17	.11	-.32	.35

Note. N= 150. Bootstrap sample size = 1,000. *CI* = bias corrected bootstrap 95% confidence interval; LL = lower limit; UL = upper limit. *a* Stereotype Threat; *b* Perceived Stress; *c* Internalized Homophobia. * $p < .05$, ** $p < .01$

Hypothesis 5A

A hierarchical linear regression was performed to examine if stereotype threat explains incremental variance in job satisfaction beyond what can be explained by perceived discrimination alone (Table 7). Job Satisfaction was regressed on to perceived discrimination in step 1, and onto stereotype threat in step 2. Results suggest that stereotype threat (R^2 = .18)

predicted unique variance in job satisfaction as compared to perceived discrimination (R^2 = .09), F (1, 147) = 15.51, p < .001. Thus, Hypothesis 5A was supported.

Hypothesis 5B

A hierarchical linear regression was performed to examine if stereotype threat explains incremental variance in perceived stress beyond what can be explained by perceived discrimination alone (Table 7). Perceived stress was regressed on to perceived discrimination in step 1, and onto stereotype threat in step 2. Results suggest that stereotype threat (R^2 = .18) predicted unique variance in perceived stress as compared to perceived discrimination (R^2 = .05), F (1, 147) = 21.98, p < .001. Thus, Hypothesis 5B was supported. Furthermore, when stereotype threat was entered into the regression, perceived discrimination was no longer a significant predictor of job satisfaction, t (147) = 1.15, p = .25; thus suggesting that stereotype threat may mediate the relationship between perceived discrimination and perceived stress.

Hypothesis 6A

A hierarchical linear regression was performed to examine if the Multi-Threat Framework explains incremental variance in job satisfaction beyond what can be explained by perceived discrimination alone (Table 7). Job Satisfaction was regressed on to perceived discrimination in step 1, and onto the Multi-Threat Framework in step 2. Results suggest that stereotype threat (R^2 = .18) predicted unique variance in job satisfaction as compared to perceived discrimination (R^2 = .09), F (1, 147) = 15.51, p < .001. Thus, Hypothesis 6A was supported.

Hypothesis 6B

A hierarchical linear regression was performed to examine if the Multi-Threat Framework explains incremental variance in perceived stress beyond what can be explained by perceived discrimination alone (Table 7). Perceived stress was regressed on to perceived discrimination in step 1, and onto the Multi-Threat Framework in step 2. Results suggest that stereotype threat (R^2 = .18) predicted unique variance in perceived stress as compared to perceived discrimination (R^2 = .05), F (1, 147) = 21.98, p < .001. Thus, Hypothesis 6B was supported. Furthermore, when the Multi-Threat Framework was entered into the regression, perceived discrimination was no longer a significant predictor of perceived stress, t (147) = 1.44, p = .15; thus suggesting that the Multi-Threat Framework may mediate the relationship between perceived discrimination and perceived stress.

Table 7: Hypotheses 5A and 5B Comparing Stereotype Threat and Perceived Discrimination in Explaining Variance in Job Satisfaction and Stress

	R^2	ΔR^2	*B*	*SE B*	β	*t*	ΔF
DV = Job Satisfaction							
Step 1	.09						F (1, 148) = 14.72**
Perceived Discrimination			-23.01	6.35	-.29	-3.84**	
Step 2	.18	.09					F (1, 147) = 15.51**
Perceived Discrimination			-13.30	6.52	-.16	-2.30*	
Stereotype Threat			-16.23	4.08	-.32	-.32**	
DV = Stress	.05						
Step 1			.05	.02	.23	2.88**	F (1, 148) = 8.27**
Perceived Discrimination	.18	.12					
Step 2							F (1, 147) = 21.98**
Perceived Discrimination			.02	.02	.09	1.15	
Stereotype Threat			.46	.10	.38	4.69**	

Note. N = 150, * p < .05, ** p < .01

Table 8: Hypotheses 6A and 6B Comparing the Multi-Threat Framework and Perceived Discrimination in Explaining Variance in Job Satisfaction and Stress

	R^2	ΔR^2	*B*	*SE B*	β	*t*	ΔF
DV = Job Satisfaction							
Step 1	.09						F (1, 148) = 14.72**
Perceived Discrimination			-.07	.02	-.30	-3.84**	
Step 2	.12	.02					F (1, 147) = 4.02*
Perceived Discrimination			-.06	.02	-.23	-2.70**	
Multi-Threat Framework			-.13	.07	-.17	-2.00	
DV = Stress	.05						
Step 1			.05	.02	.23	2.88**	F (1, 148) = 8.27**
Perceived Discrimination	.11	.06					
Step 2							F (1, 147) = 9.10**
Perceived Discrimination			.03	.02	.12	1.44	
Multi-Threat Framework			.17	.06	.26	3.02**	

Note. N = 150, * p < .05, ** p < .01

Hypothesis 7A

A hierarchical linear regression was performed to examine if the Multi-Threat Framework explains incremental variance in job satisfaction beyond what can be explained by perceived the traditional measure of stereotype threat (Table 8). Job Satisfaction was regressed on to perceived the traditional measure of stereotype threat in step 1, and onto the Multi-Threat Framework in step 2. Results suggest that the Multi-Threat Framework (R^2 = .16) did not predict unique variance in job satisfaction as compared the traditional measure of stereotype threat (R^2 = .15), F (1, 147) = 1.62, p =.21. Thus, Hypothesis 7A was not supported.

Hypothesis 7B

A hierarchical linear regression was performed to examine if the Multi-Threat Framework explains incremental variance in perceived stress beyond what can be explained by the traditional measure of stereotype threat (Table 8). Perceived stress was regressed on to the traditional measure of stereotype threat in step 1, and onto the Multi-Threat Framework in step 2. Results suggest that the Multi-Threat Framework did not predict unique variance (R^2 = .19) in perceived stress as compared to the traditional measure of stereotype threat (R^2 = .17), F (1, 147) = 3.11, p > .05. Thus, Hypothesis 7B was not supported.

Table 9: Hypotheses 7A and 7B Comparing the Multi-Threat Framework and Perceived Discrimination in Explaining Variance in Job Satisfaction and Stress

	R^2	ΔR^2	*B*	*SE B*	β	*t*	ΔF
DV = Job Satisfaction							
Step 1	.15						F (1, 148) = 25.62**
Stereotype Threat			-.55	.11	-.38	-.506**	
Step 2	.16	.01					F (1, 147) = 1.62
Stereotype Threat			-.48	.12	-.33	-3.88**	
Multi-Threat Framework			-.08	.07	-.11	-1.27	
DV = Stress							
Step 1	.17		.50	.09	.41	5.48**	F (1, 148) = 30.04**
Stereotype Threat							
Step 2	.19	.02					F (1, 147) = 3.11
Stereotype Threat			.41	.10	.34	4.04**	
Multi-Threat Framework			.10	.05	.15	1.76	

Note. N = 150, * p < .05, ** p < .01

Hypothesis 8

Hypothesis 8 examined the moderated mediated model of a relationship between the Multi-Threat Framework and job satisfaction (controlling for concealing), which was expected to be mediated by perceived stress. The relationship between stereotype threat and stress was expected to be moderated by internalized homophobia. The Multi-Threat Framework is proposed to be a more inclusive test of stereotype threat because it measures six types of stereotype threat, (Shapiro & Neuberg, 2007). There are two multiple regression models in Table 9. The first displays the path coefficients for the mediator model (with perceived stress as the dependent variable), and the second displays the path coefficients for the dependent variable model (with job satisfaction as the dependent variable). To test whether the relationship between the Multi-Threat Framework and perceived stress was moderated by internalized homophobia, multiple regression analyses were calculated in which perceived stress was regressed upon the Multi-Threat Framework, internalized homophobia, and their interactions. As can be seen from the mediator model, the overall model was significant F (4, 145) = 5.03, $p < .001$ $R^2 = .12$. The interaction term (the Multi-Threat Framework x internalized homophobia) was not significantly associated with the mediator (perceived stress), ($b = -.11$, $p = .13$). The second regression (i.e., the dependent variable model) represents job satisfaction regressed upon the perceived stress while controlling for the effect of the Multi-Threat Framework and concealing. As can be seen in the dependent variable model, the overall model was significant F (3, 146) = 34.42, $p < .001$, $R^2 = .42$, and the mediator (perceived stress) was significantly associated with the dependent variable (job satisfaction; $b = -.73$, $p < .001$). Furthermore, the effect between the Multi-Threat Framework and job satisfaction was completely mediated by stress, as indicated by the lack of a significant direct effect of the Multi-Threat Framework on job satisfaction ($b = -.06$, $p = .26$).

Additionally, support for moderated mediation was not supported for this model (b = .08, SE = .05), as demonstrated by the bootstrapped 95% confidence interval of the index of moderated mediation containing zero (-.02, .16), and the lack of a significant interaction term in step 1 (b = -.12, p = .13). The conditional indirect effects of the Multi-Threat Framework on perceived stress at various levels of the moderator (internalized homophobia) are listed in Table 11, which also includes confidence intervals for each level of the moderator. Results show that at low and average levels of internalized homophobia, the confidence intervals do not include zero, thus displaying a significant difference in perceived stress among different amounts of Multi-Threat Framework stereotype threat; however, at high levels of internalized homophobia, there is no significant difference in the amount of perceived stress experienced (b = .08, 95% CI = -.07, .23). Examination of the plots (Figure 2) showed a similar trend as in Hypothesis 4, however the interaction was not was statistically significant. Thus, hypothesis 8 was not supported.

Table 10: Hypothesis 8 Stereotype Threat using the Multi-Threat Framework, Perceived stress, Job Satisfaction where Internalized Homophobia Moderates the Relationship between Multi-Threat Framework and Perceived Stress

	Perceived Stress (M)			Job Satisfaction (Y)		
	b	*SE*	*t*	*b*	*SE*	*t*
Constant	1.40	.37	3.79**	6.15	.21	28.76**
Concealing	-.03	.13	-.25	-.01	.12	-.10
Multi-Threat Framework	.34	.13	2.63**	-.06	.05	-1.12
Perceived Stress				-.73	.08	-9.25**
Internalized Homophobia	.46	.24	1.94*			
Internalized Homophobia x Multi-Threat Framework	-.12	.13	-.25			
	R^2 = .12			R^2 = .41		
	F (4, 145) = 5.03**			F (3, 146) = 34.42**		

Note. b = unstandardized regression coefficients, with standard error in parentheses below. N = 150, * p < .05, ** p < .01

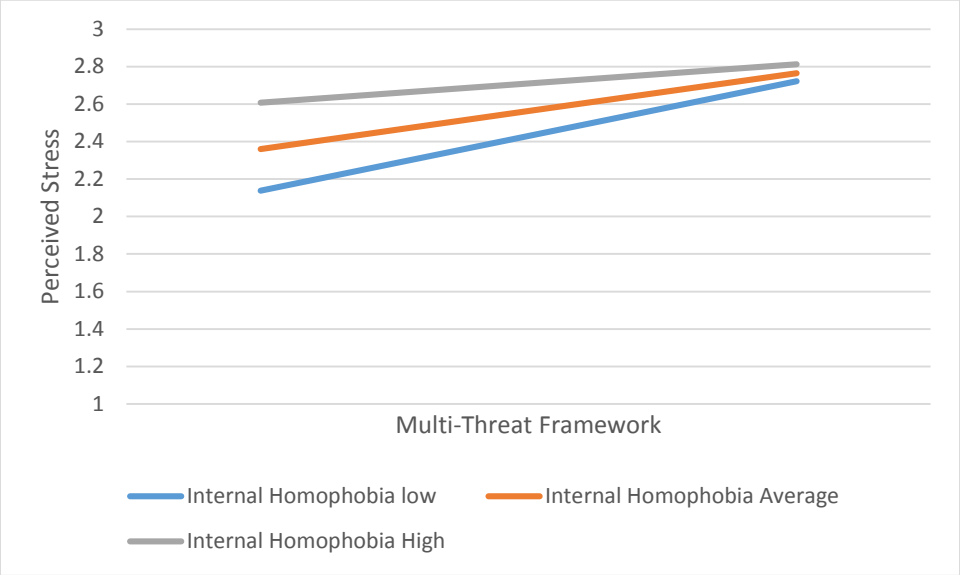


Figure 2: Moderated Mediation of Job Satisfaction with Multi-Threat Framework, Perceived Stress (Mediator), and Internalized Homophobia (Moderator).

Table 11: Conditional Indirect Effects of the Independent Variable [a] on the Mediator Variable [b] at Various Levels of the Moderator Variable [c]

Mediator	Internalized Homophobia	*Effect*	*SE*	*t*	95% CI	
					LL	UL
Perceived Stress	-1 *SD* (1.00)	.23	.07	3.24**	.09	.38
	M (1.68)	.16	.06	2.94**	.05	.27
	+1 *SD* (2.43)	.08	.08	1.07	-.07	.23

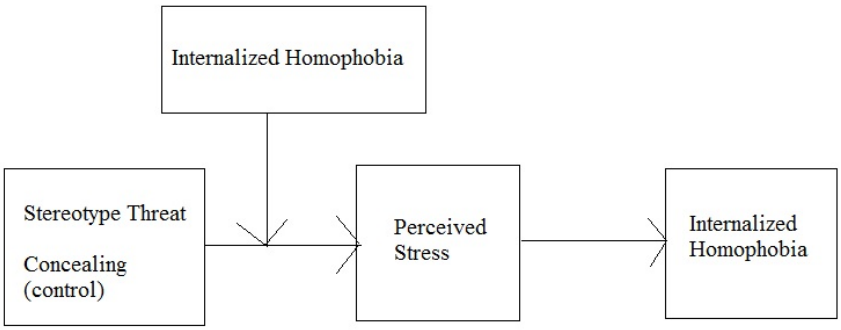
Note. N= 150. Bootstrap sample size = 1,000. *CI* = bias corrected bootstrap 95% confidence interval; LL = lower limit; UL = upper limit. *a* Multi-Threat Framework; *b* Perceived Stress; *c* Internalized Homophobia. * $p < .05$, ** $p < .01$

CHAPTER FIVE: DISCUSSION

Stereotype threat has been shown to be a powerful influence on students in academic and testing situations; however, its utility in organizational settings has not been clearly demonstrated. This has led to industrial and organizational psychologists questioning the usefulness of the construct in workplace settings (Kalokerinos, von Hippel, & Zacher, *in press*). When examining the predictors of negative outcomes, such as job satisfaction, diversity researchers usually study the influence of discrimination in the workplace (Ensher et al., 2001; Moyes et al., 2000; Orpen, 1995; Velez et al., 2013). However, results from the current study suggest that exploring stereotype threat and stereotype threat in the workplace might also be worthwhile.

Overall, the model proposed was supported for several hypotheses. First, hypothesis 1 demonstrated a significant relationship between stereotype threat and job satisfaction. Second, hypothesis 2 demonstrated that the relationship between stereotype threat and job satisfaction is mediated by stress; and hypothesis 3 demonstrated that the mediated relationship found in hypothesis 3 was still significant even after controlling for concealing.

Figure 3: Moderated Mediation



Third, hypothesis 4 (Figure 3) demonstrated that the relationship between stereotype threat and perceived stress (in the mediated relationship of hypothesis 4, controlling for concealing) was moderated by internalized homophobia such that as internalized homophobia increased, the amount of stereotype threat also increased. Additionally, at high levels of stereotype threat, everyone experienced high levels of perceived stress regardless of the amount of internalized homophobia they experienced. Additionally, the relationship between stereotype threat and job satisfaction was partially mediated by perceived stress. This supports previous research by von Hippel et al. (2011) which found that the relationship between stereotype threat and job satisfaction was partially mediated by decreased confidence in their career prospects, as well as separation from their group identity. The authors posited that the partial mediation found in their study indicated that another variable may also partially mediate the relationship between stereotype threat and job satisfaction; namely perceived stress. The current study provides some support for this notion. However, this moderated mediation relationship was not supported for hypothesis 4, which used the Multi-Threat Framework as the operationalization of stereotype threat. This is particularly interesting because the Multi-Threat Framework is proposed to be a more inclusive measure of stereotype threat, yet the correlation between the traditional measure and the Multi-Threat measure was moderate (r = .47), and the Multi-Threat Framework did not fit in the proposed model as well as the traditional measure of stereotype threat. Additionally, hypothesis 7A and 7B showed that the Multi-Threat Framework did not predict any unique variance in job satisfaction or perceived stress beyond what was explained by the traditional measure; thus hypothesis 7A and 7B were not supported.

The findings of hypotheses 7A and 7B implies that the Multi-Threat Framework may not be measuring a different construct than the traditional measure of stereotype threat. Although conceptually, the Multi-Threat Framework should measure unique variance beyond what is

explained by the traditional measure, because the Multi-Threat Framework purportedly measures more types of stereotype threat than traditional measures, the measurement items themselves may have been too similar to each other (as indicated by the internal consistency of α of .97). Participants may have just reported the same value for all items in the measure because of the number of items as well. The Multi-Threat Framework items were much more lengthy and numerous than the traditional measure of stereotype threat used in other studies (i.e., the Stereotype Vulnerability measure). As previously mentioned, the traditional measure was developed by one of Claude Steele's students (Spencer, 1997) and has been used in Steele's work ever since, and modified by other researchers for use in other populations and testing domains (e.g., Steele & Aronson, 1999, von Hippel et al., 2011; von Hippel et al., 2013). For a review of stereotype threat measures, see Xavier, Fritzsche, Sanz, and Smith (*in press*). The Multi-Threat Framework measure has only been used in one other study to date (Shapiro, 2011). The current study suggests that the measure of the Multi-Threat Framework needs more refining before it is used in future research; however, conceptually the framework has potential for future research as a measure of threats that originate from different sources and targets either the self or group reputation.

Fourth, hypotheses 5A, 5B, 6A, and 6B were supported, and demonstrated that the stereotype threat measures explained unique variance in both job satisfaction and perceived stress above and beyond what was explained by perceived discrimination. Perceived discrimination is often measured in organizational contexts as a measure of organizational climate, however, the results of the current study suggest that stereotype threat may be an additional construct of interest in predicting either job satisfaction or perceived stress of minorities.

As described earlier, support was found for a moderated mediation model using the traditional model of stereotype threat and using internalized homophobia as a moderator, similar to what was described in the minority stress theory. Minority stress theory examines predictors related to stigmatized identities and experiences (i.e., "external stressors related to negative societal perceptions of non-heterosexual sexual identities"; Hequembourg & Braillier, 2009, p. 292). Thus, stereotype threat may be a useful predictor in the model due to the similarities in the description of the model for predictors. The study results further explicates current minority stress theory by providing evidence for a mediated relationship between stereotype threat and job satisfaction; meaning that perceived stress was the mechanism whereby those minorities experiencing stereotype threat perceived greater stress, which in turn was associated with decreased job satisfaction. Furthermore, the level of internalized homophobia moderated the relationship between stereotype threat and perceived stress. That is, those individuals having higher internalized homophobia experienced the greatest amount of stress, and this level of stress was not related to the amount of stereotype threat they experienced. Individuals with low levels of internalized homophobia experienced the least amount of perceived stress, but as the amount of stereotype threat increased, so did the amount of perceived stress. In fact, at high levels of stereotype threat, all participants, regardless of their level of internalized homophobia, experienced the same amount /level of (high) stress. This finding demonstrates that stereotype threat, by itself, is a useful in explaining workplace stress for sexual minorities. At high levels of stereotype threat, individuals experience high levels of stress, regardless of their personal feelings of acceptance regarding their sexual orientation. Therefore, organizations that actively foster inclusive environments may help reduce the stereotype threat experienced by their sexual minority workers, which can impact both stress and job satisfaction, leading to other positive

outcomes in the workplace that have been shown to increase as well (e.g., lower turnover, less absenteeism, and so on).

The results of this study showed that stereotype threat (as operationalized using the Stereotype Vulnerability Scale) was significantly and more strongly related to job satisfaction than perceived discrimination experiences were, as demonstrated by the additional 9% unique variance explained in job satisfaction after perceived discrimination was entered into the model, and more strongly related to perceived stress than perceived discrimination, as demonstrated by the additional 12% unique variance explained in perceived stress. In contrast, the Multi-Threat Framework only explained an additional 2% variance in job satisfaction beyond what perceived discrimination explained; and an additional 6% unique variance in perceived stress, beyond what perceived discrimination explained. Thus, the traditional measure appears to be a more useful measure of stereotype threat than the Multi-Threat Framework, despite what the theoretical benefits are of the framework. This notion is further supported by the lack of unique variance explained when using the Multi-Threat Framework to explain either job satisfaction or stress, beyond what is explained using the traditional measure (i.e., Hypothesis 7A and 7B).

Perhaps stereotype threat predicted job satisfaction better due to the chronic, and pervasive nature of stereotype threat; because by its nature, it is experienced by all minority members, potentially at all times, including those who have not experienced discrimination personally. Thus, because the participants in the current sample did not report having experienced much past discrimination (as demonstrated by a mean score of 3.47 out of a possible score of 14), the stereotype threat measure may have been more predictive of outcomes. Researchers have proposed that the widespread knowledge that their group is negatively perceived and discriminated against is sufficient in and of itself to increase minority members'

vulnerability to experiencing stereotype threat (Steele et al., 2002). As such, this finding study lends support for the utility of examining this construct in the workplace.

The current study expands stereotype threat theory by examining stereotype threat in an employee (non-student) sample, using a stigmatized identity that is not traditionally expected to experience stereotype threat according to the theory tenants, which state that stereotype threat may only be experienced by individuals which are identified as part of a stigmatized group (Steele et al., 2002; Shapiro & Neuberg, 2007). Interestingly, sexual minorities (both concealed and non-concealed) reported experiencing similar levels of stereotype threat, thus demonstrating that all individuals can experience stereotype threat, regardless of their ability to be identified as part of a stigmatized group. This is because the stigmatized individual knows that they are part of the group, and the experience of stereotype threat is a subjective perception of threat which may not be based upon the judgments of others. Indeed, this is one reason which the Multi-Threat Framework was expected to be a better measure of stereotype threat than traditional measures; because it can incorporate threats originating from the stigmatized individual themselves as well as from outgroup others. However, the current study did not find support that the Multi-Threat Framework was a better predictor of job satisfaction than the traditional stereotype threat measure. This may be due to measurement issues with the Multi-Threat Framework, given that the measure used in the current study is relatively new and only previously tested in one prior study (Shapiro, 2011), and the fact that the items are more lengthy and wordy than traditional measures, such as the traditional stereotype threat measured in the current study. Thus further research with the Multi-Threat Framework may be useful in the further examination of populations with unique characteristics from the traditionally studied populations in stereotype threat research (e.g., ethnic minorities); however more research and refinement of the measurement are needed.

As just mentioned, this finding provides evidence that sexual minorities gain no benefit from concealing in the workplace in terms of stereotype threat, job satisfaction, or stress. However, it was interesting to note that the current sample, as compared to a normed sample, was more stressed than other minority groups, including African Americans (Cohen & Williamson, 1988). In fact, the qualitative data obtained from the open-ended mental imagery task revealed that both concealing and non-concealing sexual minorities reported anxiety regarding the impressions that others had of them as a result of their sexual orientation. Some examples of reported stereotypic thoughts from the current study were "I sometimes worry my vocal delivery at conferences will undercut the impression I make," "[others] might feel as if I'm attracted to them just because I am gay," "That they party all the time, don't take work seriously and generally slack off," "I have had times when I was really under a tremendous amount of stress and feel like I let my guard down and show some gay tendencies", and "Being that my job is a classroom teacher, working with young children, my biggest worry about my lifestyle was and still is that I will have a parent who doesn't want me to work around their child." Thus, the current study demonstrates that both concealing and non-concealing sexual minorities experience stereotype threat. Consequently, further research and advocacy efforts are essential for the protection of sexual minorities in employment settings, and therefore in society at large.

Strengths, Limitations, and Future Directions

Unlike previous research in this domain, which has mainly been conducted in academic and test environments, the current study obtained its sample exclusively from full-time, working sexual minorities from across the country, hence increasing its generalizability to a workplace sample. Although there may have been an unknown number of individuals who were so completely concealed in both their private and work lives that they would refuse to participate in an online survey, regardless of anonymity and confidentiality, this sample is likely much more

representative of employed sexual minorities than previous samples obtained from student populations. The findings of the current study indicate that stereotype threat does exist in real workplace settings, which meaningful both for research with sexual minorities and for employees in general.

The current study also contributes to the larger literature of stereotype threat theory by examining on-the-job workplace outcomes (versus testing and academic outcomes) which are not typically measured in the stereotype literature, such as job satisfaction. Job satisfaction is an important construct for organizations to consider in the workplace, as it is associated with turnover intentions, which translates to loss of diversity, talent, and the increased recruitment costs for the organization. The current study adds to the limited research demonstrating a relationship between stereotype threat and work-related outcomes such as job satisfaction and burnout (e.g., von Hippel et al.; Gomez & Wright, 2014). Greater focus on workplace outcomes may provide the impetus for researchers to further refine the measurement of stereotype threat, which several researchers have suggested is necessary in order for stereotype threat to be more widely accepted and considered in organizational contexts (Kalokerinos et al.; Xavier, Fritzsche, Sanz, & Smith, *in press*).

Finally, the current study also highlights some issues regarding the measurement and assessment of stereotype threat. The measure used in the current study (i.e., Stereotype Vulnerability Scale) is one of the most widely used measures in stereotype threat research. One of the potential problems with this tool, however, is that the construct assessed may conceptually be more closely related to stigma consciousness (Aronson & Inzlicht, 2004; Pinel, 1999) than to stereotype threat. In actuality, researchers have questioned whether stereotype threat and stereotype vulnerability are truly distinct constructs, given the interchanging terminology and scale items used to measure each of these in the literature (Barnard et al., 2008; Good et al.,

2003; Steele & Aronson, 1995; Steele et al., 2002). Other researchers have suggested that the two constructs are indeed independent (Xavier, Fritzsche, Sanz, & Smith, *in press*). Theoretically, stereotype threat is caused by situational factors, whereas stigma consciousness and stereotype vulnerability are not; however most stereotype threat measures fail to account for the situational component of stereotype threat (Xavier et al., *in press*). Thus, further refinement of measures used both within the laboratory and in field research is warranted.

To address these concerns, the current study examined a new measure of stereotype threat (i.e., the Multi-Threat Framework measure), which has only been used in one previous study (Shapiro, 2011); however, the results did not show much improvement in the measurement of stereotype threat. The Multi-Threat Framework measure does appear to be measuring the same construct as the Stereotype Vulnerability Scale (Spencer, 1993; Steele & Aronson, 1999), as demonstrated by the similar relationships (i.e., correlations) between the two measures of stereotype threat and the various outcome measures. Nevertheless, this measure was not found to be a better predictor of job satisfaction than the shorter Stereotype Vulnerability Scale, which is traditionally used to measure stereotype threat. As previously discussed, the correlations between stereotype threat and the Multi-Threat Framework measure were not excessively high, indicating that the two measures may be measuring different aspects of the stereotype threat construct, but this must be left to future researchers at this time. Additionally, the length of the Multi-Threat Framework measure may limit its applicability in field settings. Perhaps upon further refinement of the tool, however, the Multi-Threat Framework itself may still prove to be useful in future studies. In fact, measurement issues regarding all stereotype threat measures should be addressed in order to obtain useful data field settings (Kalokerinos et al., *in press*; Xavier, Fritzsche, Sanz, & Smith, *in press*).

Limitations

As with any research study and perhaps, more so with field research, there were several limitations to be addressed in future research, and because of which, caution is advised in not over-interpreting the study results. As with any cross-sectional research design, one of the main limitation of the current study involves the inability to infer causality. Future studies can build upon the relationships found here and build longitudinal studies that can make causal inferences.

There are sampling issues to be considered as well. The sample for the current study was obtained from a Qualtrics panel which accessed sexual minorities on behalf of the researcher. The sexual minorities therefore must have volunteered to be a part of these research panels. Thus, the generalizability of the current study may be limited to only sexual minorities who felt comfortable disclosing their sexual orientation to a panel. Furthermore, such individual are also likely to be more active in promoting the rights of sexual minorities, given the fact that they had already volunteered to take part in such research efforts.

Additionally, the results of the current study may have been impacted by common method bias inherent in any study that exclusively uses self-report data, including the specific biases involved, such as recall bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, the constructs that were examined in the current study (i.e., stereotype threat, job satisfaction, perceived stress, and internalized homophobia) were subjective experiences, and therefore the use of all self-reported data is appropriate to measure experiences which only the individuals themselves experience. Although some research with stereotype threat has found support for objective measures which imply the presence of stereotype threat (e.g., elevated stress hormones or behavioral coding of nervous behavior), the use of such intrusive measures in the current study were not possible given the population which was examined (i.e., concealed sexual minorities; Bosson et al.; Huebner & Davis, 2005). Thus, the findings of the current study should

be considered in light of potential inflating factors such as the reliance on only the target individual's ratings. Future research is best served, in all cases, when researchers can make use of multiple sources of data (e.g., friends/family/co-worker ratings) in order to avoid common source biases. A longitudinal study design is also advised for future research, in order to examine causal relationships pertaining to how individuals experience stereotype threat in the workplace, as well as the specific mechanisms involved. However, given that the pattern of results of the current study aligns with the findings of other studies (e.g., Human Rights Campaign, 2013; von Hippel et al. *in press*; Gomez & Wright, 2014), this lends some level of confidence that the results found are not statistical artifacts.

Additionally, the measures used in the current study may have impacted the findings. For example, the perceived stress measure used in the current study measured perceived stress that was related to the working environment. The findings may have been different if a general life stress measure was used. The same could be said for any of the measures used in the current study. The two measures of stereotype threat that were used appear to be measuring different constructs. Thus, the measures used to examine the constructs of interest may have impacted the results found in the current study. The findings of the current study should be replicated with alternative measures of the constructs.

Despite the aforementioned study limitations, this study represents an important first step in this domain, and contributes to the literature in a meaningful way. By demonstrating several interesting and significant relationships among the study variables, future researchers can now be more targeted in their approach. Given that this was a first look at the inter-relationships between these specific variables, examining a concealable stigmatized identity, as well as being the first study to make use of the Multi-Threat Framework, the associations observed between the study variables in this context are meaningful and useful in leading future research endeavors.

Future Research

The current study was also the first to incorporate stereotype threat into minority stress theory in the workplace. Previous research has primarily examined the minority stress theory with clinical outcomes (e.g., depression among sexual minorities); however, applied researchers in I/O psychology are beginning to appreciate the applicability of this theory in the workplace, which is useful in both clinical/counseling and in I/O research. Future research using the minority stress framework would also do well to incorporate stereotype threat into future models, given the results of this study. Essentially, stereotype threat may be a more robust predictor of outcomes than perceived discrimination, especially given its more pervasive presence in everyday situations, and has demonstrated its strength in predicting job satisfaction in the current study.

Future research should also consider the use of other mediators in the model. For example, the impact of performance can be examined as an alternative outcome of the model. Careful attention would be needed to ensure that the measure of performance was not tainted by the stereotypes regarding the group (e.g., supervisor subjective ratings of performance). Also, it is possible that job satisfaction mediates the relationship between stereotype threat and performance, or that performance mediates the relationship between stereotype threat and job satisfaction (i.e., individuals who experience stereotype threat perform more poorly on the job, which decreases their likelihood for career advancement and thus decreases job satisfaction). Some of the mediators of von Hippel et al. (2011) would be interesting to incorporate into future research, particularly given the similarities between the experiences of women in the workplace and sexual minorities (i.e., may experience less perceived career advancement possibilities or a lack of belonging). Internalized homophobia may moderate the relationship between stereotype threat and perceived belonging in the workplace. Also, the impact of diversity training in the

workplace may moderate the relationship between stereotype threat with sexual minorities and perceptions of belonging or perceived stress. Future research should examine ways that stereotype threat for sexual minorities can be reduced.

Conclusion

As this study suggests, investigating stereotype threat is an important contribution to diversity research when examining workplace experiences. Stereotype threat was found to be related to several negative outcomes such as perceived stress, job satisfaction, etc. In fact, the relationship between stereotype threat and perceived stress was significantly stronger than the relationship between perceived discrimination and perceived stress. The current study does not minimize the detrimental effects of discrimination on outcomes, but rather it adds to the support that stereotype threat is a valuable construct to examine in addition to perceived discrimination; particularly for individuals who may not have personally experienced discrimination in the past.

Stereotype threat was also found to have both a direct and indirect (through perceived stress) relationship with job satisfaction. Thus, further supporting research regarding stereotype threat in the workplace. Additionally, the relationship between stereotype threat and job satisfaction was mediated by perceived stress, providing some explanation as to how stereotype threat relates to job satisfaction. Furthermore, internalized homophobia moderated the relationship between stereotype threat and perceived stress, such that at high levels of internalized homophobia or stereotype threat all individuals experienced the same amount of (high) perceived stress. In other words, individuals experiencing high levels of stereotype threat experienced high levels of stress, regardless of the amount of internalized homophobia they experienced. Likewise, individuals with high levels of internalized homophobia experienced high levels of perceived stress, regardless of their level of stereotype threat. This is important because it highlights the importance of stereotype threat in the experience of perceived stress in the

workplace. This assertion was further supported by the current study's findings that stereotype threat explained incremental variance in job satisfaction above what could be explained by perceived discrimination alone; thus implying that it may be a more powerful predictor of job satisfaction and thus a useful construct to examine in future job attitude studies.

Finally, concealing one's sexual orientation in the workplace did not lead to different outcomes or experiences than not concealing one's sexual orientation. This finding is noteworthy because stereotype threat theory implies that the negative consequences associated with stereotype threat may be lessened or avoided completely for individuals who are able to pass as non-stigmatized (Goffman, 1963; Shapiro & Neuberg, 2007). The current study provides support that this is not the case. Both concealing and non-concealing sexual minorities experienced the same level of negative outcomes (e.g., perceived stress, job satisfaction, etc.). Thus, the current research implies that there are fewer benefits to concealing one's sexual orientation than may be originally thought. This is beneficial because the consequences of concealing are often detrimental to the psychological and physical well-being of sexual minorities, as previously discussed, and if sexual minorities experience the same outcomes regardless of concealment then it may not be beneficial to continue to needlessly live in fear and anxiety.

APPENDIX A: THE KINSEY HETEROSEXUAL-HOMOSEXUAL SCALE (KHHS)

Please rate how you would describe your current sexuality.

0 Exclusively heterosexual- Individuals who make no physical contacts which result in erotic arousal or orgasm, and make no mental responses to individuals of their own sex.

1 Predominantly heterosexual / only incidentally homosexual- Individuals who have only incidental homosexual contacts which have involved physical or mental response, or incidental psychic response without physical contact.

2 Predominantly heterosexual but more than incidentally homosexual- Individuals who have more than incidental homosexual experience, and / or if they respond rather definitively to homosexual stimuli.

3 Equally heterosexual and homosexual- Individuals who are about equally homosexual and heterosexual in their overt experience and / or their mental reactions.

4 Predominantly homosexual but more than incidentally heterosexual- Individuals who have more overt activity and / or mental reactions in the homosexual, while still maintaining a fair amount of heterosexual activity and / or responding rather definitively to heterosexual contact.

5 Predominantly homosexual / only incidentally heterosexual- Individuals who are almost entirely homosexual in their overt activities and / or reactions.

6 Exclusively homosexual- Individuals who are exclusively homosexual, both in regard to their overt experience and in regard to their mental reactions.

APPENDIX B: DEMOGRAPHICS

The following demographic questions is useful in comparing your responses to other participants in this study. Please answer as many as you can, however if you do not feel comfortable responding to a particular question, please write NR ("No Response") or skip the question.

1. What is your age? _____
2. Which ethnicity do you primarily identify as?
   - o African-American
   - o Hispanic or Latino
   - o Asian
   - o Middle Eastern
   - o Caucasian (non-Hispanic)
   - o Native American
   - o Other

   2b. If "other", please describe: _____
3. What is your job? _____
4. What is your biological sex? _____
5. What is your gender? _____
6. What career field do you work in?
7. In general, do you feel your career field is accepting of sexual minorities?
   - o Not accepting of sexual minorities
   - o Slightly not accepting of sexual minorities
   - o Slightly accepting of sexual minorities
   - o Very accepting of sexual minorities
8. To compare your responses to others in your part of the country, please indicate what state you live in.
9. Do you live in an Urban, Suburban, or Rural area?
   - o Urban (i.e., city)
   - o Suburban (i.e., suburb, residential community)
   - o Rural (i.e., countryside)

APPENDIX C: STEREOTYPE VULNERABILITY SCALE

The following questions are about your feelings regarding the degree to which your sexual orientation affects other people's evaluations of your ability in the workplace (i.e., your competence, your ability to interact with clients and coworkers, or whatever stereotype applies). Think your job and rate from 1(*never*) to 5 (*almost always*) how often you feel that because of your sexual orientation:

1) Coworkers or supervisors expect me to do perform poorly because of my sexual orientation.
2) Working in my line of work may be easier for people of my sexual orientation.
3) I doubt that others would think that I have less ability to perform well at work because of my sexual orientation.
4) Some people feel I have less ability to perform well at work because of my sexual orientation.
5) People of my sexual orientation rarely face unfair evaluations in my workplace.
6) In my line of work, people of my sexual orientation often face biased evaluations from others.
7) My sexual orientation does not affect people's perception of my ability to perform well.
8) At my job, I often feel that others look down on me because of my sexual orientation.

APPENDIX D: MULTI-THREAT FRAMEWORK

"Please think about your actions in the types of situations you described above. When you are in these types of situations, to what extent are you concerned that your actions. . . ."

[Self-Concept Threat]
1. . . . will lead you to see yourself as actually possessing the negative stereotype that others have about sexual minorities?
2. . . . could imply negative things about your abilities in your own mind?
3. . . . could confirm, in your own mind, that the negative stereotypes others have about sexual minorities are true of you?

[Group-Concept Threat]
1. . . . will confirm, in your own mind, that the negative stereotypes about sexual minorities are true?
2. . . . will prove to yourself that the stereotypes are true about people who are sexual minorities?
3. . . . will lead you to believe that the stereotypes about people who are sexual minorities are true?

[Outgroup-Own-Reputation Threat]
1. . . . that because you are a sexual minority, your actions could influence the way other people interact with you?
2. . . . could lead you to be judged negatively by others because you are a sexual minority?
3. . . . could lead others to judge you based on the stereotypes about people who are sexual minority?

[Outgroup-Group-Reputation Threat]
1. . . . will reinforce the negative stereotypes, to others (non-sexual minorities), about people who are sexual minorities?
2. . . . might poorly represent people who are sexual minorities to non-sexual minorities?
3. . . . might confirm the negative stereotypes in the minds of others (non-sexual minorities) about people who are sexual minorities?

[Ingroup-Own-Reputation Threat]
1. … that other people who are sexual minorities will treat you poorly if they saw you do something consistent with the stereotypes about people who are sexual minorities?
2. … that confirming this stereotype could have negative implications for the way other people who are sexual minorities treat you?

[Ingroup Group-Reputation Threat]
1…. about reinforcing the negative stereotypes about people who are sexual minorities in the minds of others who are sexual minorities?
2…..afraid that your actions will confirm the stereotypes about people who are sexual minorities in the minds of other people who are sexual minorities?

APPENDIX E: PERCEPTIONS OF PERCEIVED WORKPLACE EXPERIENCES

1. In prior positions, have you ever faced discrimination because of your sexual orientation?

2. In prior positions, have you ever encountered discrimination because others suspected or assumed that you are gay, lesbian or bisexual?

3. In prior positions, have you ever been physically harassed (touched or threatened) because of your sexual orientation?

4. In prior positions, have you ever been verbally harassed because of your sexual orientation?

5. Have you ever resigned from a job in part or because of discrimination based on sexual orientation?

6. Have you ever been fired from a job in part or because of your sexual orientation?

7. Did you leave your last job in part or because of discrimination based on sexual orientation?

APPENDIX F: JOB SATISFACTION SURVEY

1 I feel I am being paid a fair amount for the work I do.
2 There is really too little chance for promotion on my job.
3 My supervisor is quite competent in doing his/her job.
4 I am not satisfied with the benefits I receive.
5 When I do a good job, I receive the recognition for it that I should receive.
6 Many of our rules and procedures make doing a good job difficult.
7 I like the people I work with.
8 I sometimes feel my job is meaningless.
9 Communications seem good within this organization.
10 Raises are too few and far between.
11 Those who do well on the job stand a fair chance of being promoted.
12 My supervisor is unfair to me.
13 The benefits we receive are as good as most other organizations offer.
14 I do not feel that the work I do is appreciated.
15 My efforts to do a good job are seldom blocked by red tape.
16 I find I have to work harder at my job because of the incompetence of people I work with.
17 I like doing the things I do at work.
18 The goals of this organization are not clear to me.
19 I feel unappreciated by the organization when I think about what they pay me
20 People get ahead as fast here as they do in other places.
21 My supervisor shows too little interest in the feelings of subordinates.
22 The benefit package we have is equitable.
23 There are few rewards for those who work here.
24 I have too much to do at work.
25 I enjoy my coworkers.
26 I often feel that I do not know what is going on with the organization.
27 I feel a sense of pride in doing my job.
28 I feel satisfied with my chances for salary increases.
29 There are benefits we do not have which we should have.
30 I like my supervisor.
31 I have too much paperwork.
32 I don't feel my efforts are rewarded the way they should be.
33 I am satisfied with my chances for promotion.
34 There is too much bickering and fighting at work.
35 My job is enjoyable.
36 Work assignments are not fully explained.

APPENDIX G: PERCEIVED STRESS SCALE

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

1. In the last month, how often have you felt that you were unable to control the important things in your work life?
2. In the last month, how often have you felt confident about your ability to handle your personal problems at work?
3. In the last month, how often have you felt that things were going your way at work?
4. In the last month, how often have you felt difficulties at work were piling up so high that you could not overcome them?

APPENDIX H: INTERNALIZED HOMOPHOBIA

1. I often feel it is best to avoid personal or social involvement with other lesbian/bisexual women.
2. I have tried to stop being attracted to women in general.
3. If someone offered me the chance to be completely heterosexual, I would accept the chance.
4. I wish I weren't lesbian/bisexual.
5. I feel alienated from myself because of being lesbian/bisexual.
6. I wish that I could develop more erotic feelings about men.
7. I feel that being lesbian/bisexual is a personal shortcoming for me.
8. I would like to get professional help in order to change my sexual orientation from lesbian/bisexual to straight.
9. I have tried to become more sexually attracted to men.

Items are worded for female respondents. For male respondents the terms lesbian and female would be changed to gay and men, respectively

APPENDIX I: IRB APPROVAL

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To: **Elizabeth J. Sanz**

Date: **March 14, 2014**

Dear Researcher:

On 3/14/2014, the IRB approved the following minor modification to human participant research that is exempt from regulation:

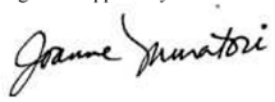
Type of Review:	Exempt Determination
Modification Type:	The advertisement/ recruitment flyer has been simplified and two revised versions have been uploaded in iRIS.
Project Title:	Examining stereotype threat in sexual minorities
Investigator:	Elizabeth J Sanz
IRB Number:	SBE-14-10095
Funding Agency:	
Grant Title:	
Research ID:	N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 03/14/2014 04:01:21 PM EST



IRB Coordinator

APPENDIX J: DEFENSE ANNOUNCEMENT

Announcing the Final Examination of Elizabeth Sanz for the Doctor of Philosophy Degree in Industrial and Organizational Psychology

Date: July 8, 2014
Time: 2:30pm
Location: 203D

Dissertation title: Exploring Stereotype Threat in the Workplace with Sexual Minorities

Explanation:
Job dissatisfaction has been linked to many organizational outcomes such as poor performance, absenteeism, and turnover intentions; thus, it is important to examine predictors of job dissatisfaction. Stereotype threat, the anxiety of confirming a negative stereotype about oneself or one's group, has been linked to perceived stress and burnout; and stress has been linked to job dissatisfaction. Thus, the current study tested perceived stress as a mediator between stereotype threat and job dissatisfaction in a sample of 150 sexual minorities who were employed full time. Sexual minorities provide a unique test of stereotype threat theory because they may choose to conceal their minority status at work. Thus, this study also examines whether the visibility of the stigma is a necessary precursor to the experience of stereotype threat. Two variables, degree of concealing and internalized homophobia, were predicted to moderate the relation between stereotype threat and perceived stress. Results indicated support for the moderated mediation model; that is, stereotype threat predicted job dissatisfaction through job stress. Moreover, at high levels of internalized homophobia, individuals reported high job stress, regardless of levels of experienced stereotype threat. However, those with low internalized homophobia reported high job stress only when stereotype threat was high. Moderation was not found for degree of concealing, suggesting that the deleterious effects of high stereotype threat on job stress occurred regardless of whether participants were concealing. Finally, results suggest that stereotype threat added significant incremental validity in predicting job dissatisfaction over perceived discrimination. These findings, in total, suggest that stereotype threat is a valuable construct for predicting negative work outcomes for stigmatized individuals. Implications for improving the work lives of sexual minorities were discussed.

Outline of Studies
Major: Psychology – Industrial and Organizational, PhD
Educational Career: B.S. Psychology, University of North Florida 2005
M.A. General Psychology, University of North Florida 2007

Committee in Charge
Committee Chair: Dr. Barbara A. Fritzsche
Department Committee Member: Dr. Dana Joseph
Department Committee Member: Dr. Charles Negy
Outside Committee Member: Dr. Kizzy Parks
Other Committee Member:
Approved for distribution by Dr. Barbara A. Fritzsche, Committee Chair, on July 7, 2014.

The public is welcome to attend.

LIST OF REFERENCES

Abrams, K. (1989). Gender discrimination and the transformation of workplace norms. *Vanderbilt Law Review, 42,* 1183-1248. Retrieved July 14, 2014 from http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=1981&context=facpubs&sei-redir=1&referer=http%3A%2F%2Fscholar.google.com%2Fscholar%3Fhl%3Den%26q%3DGender%2Bdiscrimination%2Band%2Bthe%2Btransformation%2Bof%2Bworkplace%2Bnorms%26btnG%3D%26as_sdt%3D1%252C10%26as_sdtp%3D#search=%22Gender%20discrimination%20transformation%20workplace%20norms%22

Ackerman, J. M., Goldstein, N. J., Shapiro, J. R., & Bargh, J. A. (2009). You wear me out: The vicarious depletion of self-control. Psychological science, 20(3), 326-332. doi: 10.1111/j.1467-9280.2009.02290.x

Adebayo, S. O., & Ogunsina, S. O. (2011). Influence of supervisory behaviour and job stress on job satisfaction and turnover intention of police personnel in Ekiti State. *Journal of Management and Strategy*, *2*(3), 13- 20. Retrieved July 14, 2014 from http://sciedu.ca/journal/index.php/jms/article/viewFile/396/185

Altman, D., Aggleton, P., Williams, M., Kong, T., Reddy, V., Harrad, D., ... & Parker, R. (2012). Men who have sex with men: stigma and discrimination. The Lancet, 380(9839), 439-445. Retrieved July 11, 2014 from http://211.144.68.84:9998/91keshi/Public/File/36/380-9839/pdf/1-s2.0-S0140673612609209-main.pdf

Altschul, I., Oyserman, D., & Bybee, D. (2006). Racial-Ethnic Identity in Mid-Adolescence: Content and Change as Predictors of Academic Achievement. Child development, 77(5), 1155-1169. doi: 10.1111/j.1467-8624.2006.00926.x

Ansell, E. B., Gu, P., Tuit, K., & Sinha, R. (2012). Effects of cumulative stress and impulsivity on smoking status. Human Psychopharmacology: Clinical and Experimental, 27(2), 200-208. doi: 10.1002/hup.1269.

Antecol, H., Jong, A., & Steinberger, M. (2007). Sexual Orientation Wage Gap: The Role of Occupational Sorting and Human Capital, The. Indus. & Lab. Rel. Rev., 61, 518-543. doi: 0019-7939/00/6104

Aronson, J., Fried, C. B., & Good, C. (2002). Reducing the effects of stereotype threat on s African American college students by shaping theories of intelligence. Journal of Experimental Social Psychology, 38(2), 113-125. doi: 10.1006/jesp.2001.1491

Aronson, J., Lustina, M. J., Good, C., Keough, K., Steele, C. M., & Brown, J. (1999). When white men can'*t* do math: Necessary and sufficient factors in stereotype threat. Journal of experimental social psychology, 35(1), 29-46. doi: 10.1006/jesp.1998.1371

Bach, M. (2010, November). Michal Bach talks about the business case for LGBT inclusion. Presentation presented at HSBC Diversity and Inclusiveness Champions Conference in Vancouver, B.C., Canada. Retrieved from www.youtube.com/watch?v=7LK3ODSaEmg.

Badgett, M. L. (1995). The wage effects of sexual orientation discrimination. *Industrial and labor relations review*, 726-739. doi: http://dx.doi.org/10.2307/2524353

Badgett, M. V., Lau., H., Sears, B., & Ho., D. (2007). Bias in the workplace: Consistent evidence of sexual orientation and gender identity discrimination. The Williams Institute. Retrieved May 14, 2014 from https://escholarship.org/uc/item/5h3731xr

Balsam, K. *F*., Lehavot, K., Beadnell, B., & Circo, E. (2010). Childhood abuse and mental health indicators among ethnically diverse lesbian, gay, and bisexual adults. Journal of Consulting and Clinical Psychology, 78(4), *p*. 459-468. doi: 10.1037/a0018661.

Beatty, J. E., & Kirby, S. L. (2006). Beyond the legal environment: How stigma influences invisible identity groups in the workplace. *Employee Responsibilities and Rights Journal, 18(*1), 29-44. doi: http://dx.doi.org/10.1007/s10672-005-9003-6

Beehr, T. A., & McGrath, J. E. (1992). Social support, occupational stress and anxiety. Anxiety, stress, and coping, 5(1), 7-19. doi: 10.1080/10615809208250484

Beilock, Rydell, & McConnell, 2007 Beilock, S. L., Rydell, R. J., & McConnell, A. R. (2007). Stereotype threat and working memory: mechanisms, alleviation, and spillover. Journal of Experimental Psychology: General, 136(2), 256-276. doi: 10.1037/0096-3445.136.2.256

Bem, S. L. (1985, January). Androgyny and gender schema theory: A conceptual and empirical integration. In *Nebraska symposium on motivation, 32,* pp. 179-226.

Blandford, J. M. (2003). The nexus of sexual orientation and gender in the determination of earnings. *Industrial and labor relations review, 56*(4), 622-642. doi: http://dx.doi.org/10.2307/3590960

Blashill, A. J., & Powlishta, K. K. (2009). Gay stereotypes: The use of sexual orientation as a cue for gender-related attributes. *Sex Roles, 61*(11-12), 783-793. doi: http://dx.doi.org/10.1007/s11199-009-9684-7

Blashill, A.J., & Powlishta, K.K. (2009). The impact of sexual orientation and gender role on the evaluations of men. Psychology of men & masculinity, 10(2), 160-173. doi: 10.1037/a0014583

Bosson, J.K., Haymovitz, E.L., & Pinel, E.C. (2004). When saying and doing diverge: The effects of stereotype threat on self-reported versus non-verbal anxiety. Journal of Experimental Social Psychology 40, 247–255. doi: 10.1016/S0022-1031(03)00099-4

Bradham, K. M. (2008). Empathy and burnout in nurses. (Doctoral dissertation). Retrieved from ProQuest, UMI Dissertations Publishing, 2008. 3334413.

Brewer, E., & McMaha-Landers, J. (2003). The relationship between job stress and job satisfaction of industrial and technical teacher educators, 20(1), 37- 50. Retrieved July 6, 2014 from http://scholar.lib.vt.edu/ejournals/JCTE/v20n1/pdf/brewer.pdf

Brown, J. (2012, September). Finding your voice in the workplace: Jennifer Brown at TEDxPresidio [video file]. Retrieved from www.youtube.com/watch?v=b03DrOYWC_w.

Burack, C., & Franks, S. (2004). Telling stories about engineering: Group dynamics and resistance to diversity. NWSA Journal, 16(1), 79-95. doi: 10.2979/NWS.2004.16.1.79

Burgard, S. A., Cochran, S. D., & Mays, V. M. (2005). Alcohol and tobacco use patterns among heterosexually and homosexually experienced women in California. *Drug and Alcohol Dependence*, *77*, 61–70. doi: http://dx.doi.org/10.1016/j.drugalcdep.2004.07.007

Case, M. C. (1995). Disaggregating gender from sex and sexual orientation: The effeminate man in the law and feminist jurisprudence. The Yale Law Journal, 105(1), 1-105. doi: 10.2307/797140

Cech, E. A., & Waidzunas, T. J. (2011). Navigating the heteronormativity of engineering: The experiences of lesbian, gay, and bisexual students. Engineering Studies, 3(1), 1-24. doi: 10.1080/19378629.2010.545065

Centers for Disease Control and Prevention. (2001) HIV/AIDS Surveillance Report, 13(2), 1-44. Retrieved July 11, 2011 from http://www.cdc.gov/hiv/pdf/statistics_2001_HIV_Surveillance_Report_vol_13_no2.pdf

Chasteen, A. L., Kang, S. K., & Remedios, J. D. (2011). Aging and stereotype threat: Development, process, and interventions. In M. Inzlicht & T. Schmader (Eds.),

Stereotype threat: Theory, process, and application (pp. 202-216). New York, NY: Oxford University Press.

Cheryan, S., Davies, P. G., Plaut, V. C., & Steele, C. M. (2009). Ambient Belonging: How Stereotypical Cues Impact Gender Participation in Computer Science. Journal of Personality & Social Psychology, 97(6), 1045-1060. doi: 10.1037/a0016239

Chou, R. J. A., & Choi, N. G. (2011). Prevalence and correlates of perceived workplace discrimination among older workers in the United States of America. Ageing and Society, 31(06), 1051-1070. doi: http://dx.doi.org/10.1017/S0144686X10001297

Chung-Herrera, B. G., Ehrhart, M. G., Ehrhart, K. H., Hattrup, K., & Solamon, J. (2005, August). A new vision of stereotype threat: testing its effects in a field setting. *Academy of Management Proceedings, 1*, I1-I6. doi: http://dx.doi.org/10.5465/AMBPP.2005.18778670

Cohen, G. L., & Garcia, J. (2008). Identity, belonging, and achievement: A model, interventions, implications. Current Directions in Psychological Science, 17(6), 365 - 369. doi: 10.1111/j.1467-8721.2008.00607.x

Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 386-396. doi: 10.2307/2136404

Cole, S.W., Kemeny, M.E., Taylor S.E., & Visscher, B.R. (1996). Elevated physical health risk among gay men who conceal their homosexual identity. Health Psychology,15, 243–251. doi: 10.1037/0278-6133.15.4.243

Cole, S.W., Kemeny, M.E., Taylor, S.E., Visscher B.R., & Fahey, J.L. (1996). Accelerated course of human immunodeficiency virus infection in gay men who conceal their homosexual identity. Psychosomatic Medicine, 58, 219–231. doi: 0033-3174/96/5803-0219$03.00/0

Conley, T. D., Devine, P. G., Rabow, J., & Evett, S. R. (2003). Gay men and lesbians' experiences in and expectations for interactions with heterosexuals. Journal of Homosexuality, 44(1), 83-109. doi: 10.1300/J082v44n01_05

Cordes, C. L., & Dougherty, T. W. (1993). A review and integration of research on job burnout. Academy of Management Re- view, 18, 621-656. doi: 10.2307/258593

Croizet, J.-C., Despres, G., Gauzins, M.-E., Huguet, P. Leyens, J.-P., & Meot, A. (2004). Stereotype threat undermines intellectual performance by triggering a disruptive mental load. *Personality and Social Psychology Bulletin, 30*, 721-731. doi: 10.1177/0146167204263961

Croteau, J. M., & Lark, J. S. (1995). On Being Lesbian, Gay, or Bisexual in Student Affairs: A National Survey of Experiences on the Job. NASPA journal, 32(3), 189-97. doi: 10.2202/1949-6605.5016

Davies, P. G., Spencer, S. J., & Steele, C. M. (2005). Clearing the air: identity safety moderates the effects of stereotype threat on women's leadership aspirations. Journal of personality and social psychology, 88(2), 276-287.doi: 10.1037/0022-3514.88.2.276

Davies, P. G., Spencer, S. J., Quinn, D. M., & Gerhardstein, R. (2002). Consuming images: How television commercials that elicit stereotype threat can restrain women academically and professionally. Personality and Social Psychology Bulletin, 28(12), 1615-1628. doi: 10.1177/014616702237644

Deery, M. (2008). Talent management, work-life balance and retention strategies. *International Journal of Contemporary Hospitality Management, 20*(7), 792-806. doi: http://dx.doi.org/10.1108/09596110810897619

Diaz, R. M., Ayala, G., Bein, E., Henne, J., & Marin, B. V. (2001). The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 U.S. cities. *American Journal of Public Health, 91*, 927–932

Driscoll, J. M., Kelley, *F*. A., & Fassinger, R. E. (1996). Lesbian identity and disclosure in the workplace: Relation to occupational stress and satisfaction. Journal of Vocational Behavior, 48(2), 229-242. doi: 10.1006/jvbe.1996.0020

Drydakis, N. (2012). Men's sexual orientation and job satisfaction. *International Journal of Manpower, 33*(8), 901-917. doi: http://dx.doi.org/10.1108/01437721211280371

EEOC (2009). Discrimination based on sexual orientation, status as a parent, marital status and political affiliation. Retrieved February 13, 2012 from http://www.eeoc.gov/federal/upload/otherprotections.pdf

Ellemers, N., & Barreto, M. (2006). Categorization in everyday life: the effects of positive and negative categorizations on emotions and self-views. E*uropean Journal of Social Psychology, 36*(6), 931-942

Ellemers, N., & Barreto, M. (2006). Social identity and self-presentation at work: how attempts to hide a stigmatised identity affect emotional well-being, social inclusion and performance. *Netherlands Journal of Psychology, 62*(1), 51-57. doi: http://dx.doi.org/10.1007/BF03061051

Ellis, A. L., & Riggle, E. D. (1996). The Relation of Job Satisfaction and Degree of Openness About One's Sexual Orientation for Lesbians and Gay Men. Journal of Homosexuality, 30(2), 75-85. doi: 10.1300/J082v30n02_04

Ellis, S. J., Kitzinger, C., & Wilkinson, S. (2003). Attitudes towards lesbians and gay men and support for lesbian and gay human rights among psychology students. Journal of homosexuality, 44(1), 121-138. doi: 10.1300/J082v44n01_07

Embrick, D. G., Walther, C. S, & Wickens, C. M. (2007). Working class masculinity: Keeping gay men and lesbians out of the workplace. *Sex Roles, 56*(11-12), 757-766. doi: http://dx.doi.org/10.1007/s11199-007-9234-0

Ensher, E. A., Grant-Vallone, E. J., & Donaldson, S. I. (2001). Effects of perceived discrimination on job satisfaction, organizational commitment, organizational citizenship behavior, and grievances. *Human Resource Development Quarterly, 12*(1), 2001, 53-72. doi: 10.1002/1532-1096(200101/02)12:1<53::AID-HRDQ5>3.0.CO;2-G

Fairbrother, K., & Warn, J. (2003). Workplace dimensions, stress and job satisfaction. Journal of managerial psychology, 18(1), 8-21. doi: 10.1108/02683940310459565

Fairbrother, K., & Warn, J. (2003). Workplace dimensions, stress and job satisfaction. *Journal of Managerial Psychology, 18*(1), 8-21. doi: http://dx.doi.org/10.1108/02683940310459565

Falchi V, Baron H, & Burnett, F. (2009) Community mental health team staff – burnout and satisfaction before and after the introduction of 'New Ways of Working for Psychiatrists'. Mental Health Nursing, 29(6), 12-15.

FindLaw. (2012). Sexual orientation discrimination in the workplace. Retrieved February 13, 2012 from http://employment.findlaw.com/employment-discrimination/sexual-orientation-discrimination-in-the-workplace.html

Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. American psychologist, 48(6), 621-628. doi: 10.1037//0003-066X.48.6.621

Frable, D. (1993). Dimensions of marginality: Distinctions among those who are different. Personality and Social Psychology Bulletin, 19, 370–380. doi: 10.1177/0146167293194002

Frable, D. E., Blackstone, T., & Scherbaum, C. (1990). Marginal and mindful: deviants in social interactions. Journal of personality and social psychology,59(1), 140-149. doi: 10.1037//0022-3514.59.1.140

Frable, D. E., Platt, L., & Hoey, S. (1998). Concealable stigmas and positive self-perceptions: Feeling better around similar others. Journal of Personality and Social Psychology, 74(4), 909 - 922. doi: 10.1037/0022-3514.74.4.909

Fritzsche, B. A., DeRouin, R. E., & Salas, E. (2009). The Effects of Stereotype Threat and Pacing on Older Adults' Learning Outcomes. Journal of Applied Social Psychology, 39(11), 2737-2755. doi: 10.1111/j.1559-1816.2009.00546.x

Gates, G. J. (February, 2013). Same-sex and different-sex couples in the American community Survey: 2005-2011. The Williams Institute. Retrieved April 4, 2013 from http://williamsinstitute.law.ucla.edu/research/census-lgbt-demographics-studies/ss-and-ds-couples-in-acs-2005-2011/

Gates, T. G., & Mitchell, C. G. (2013). Workplace Stigma-Related Experiences Among Lesbian, Gay, and Bisexual Workers: Implications for Social Policy and Practice. *Journal of Workplace Behavioral Health, 28*(3), 159-171. doi: http://dx.doi.org/10.1080/15555240.2013.808066

Geller, P. A., & Hobfoll, S. E. (1994). Gender differences in job stress, tedium and social support in the workplace. *Journal of Social and Personal relationships, 11*(4), 555-572. doi: 10.1177/0265407594114004

Gillespie, J. Z., Converse, P. D., & Kriska, S. D. (2010). Applying recommendations from the literature on stereotype threat: Two field studies. Journal of Business Psychology, 25, 493-504. doi: 10.1007/s10869-010-9178-1

Goffman, E. (1963). Stigma: Notes on the management of spoiled identity. New York: Simon and Schuster.

Gomez, E., & Wright, J. G. (2014). A simple strategy to reduce stereotype threat for orthopedic residents. Canadian journal of surgery, 57(2), E19-24. Retrieved July 11, 2014 from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3968209/

Good, C., Aronson, J., & Harder, J. A. (2008). Problems in the pipeline: Stereotype threat and women's achievement in high-level math courses. Journal of Applied Developmental Psychology, 19, 17–28. doi:10.1016/j.appdev.2007.10.004.

Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents' standardized test performance: An intervention to reduce the effects of stereotype threat. *Applied Developmental Psychology, 24*, 645-662. doi: 10.1016/j.appdev.2003.09.002

Good, J. J., Woodzicka, J. A., & Wingfield, L. C. (2010). The effects of gender stereotypic and counter-stereotypic textbook images on science performance. *The Journal of Social Psychology, 150*, 132-147. doi: 10.1080/00224540903366552

Grant, P. (2011). The trouble with heteronormativity. Retrieved March, 25, 2013 from http://www.gayexplained.com/trouble-heteronormativity/

Griffith, J., Steptoe, A., & Cropley, M. (1999). An investigation of coping strategies associated with job stress in teachers. Britis*h Journal of Educational Psychology, 69*(4), 517-531. DOI: 10.1348/000709999157879

Griffith, K. H., & Hebl, M. R. (2002). The disclosure dilemma for gay men and lesbians:" coming out" at work. *Journal of Applied Psychology, 87*(6), 1191. doi: http://dx.doi.org/10.1037/0021-9010.87.6.1191

Grunfeld, E., Whelan, T. J., Zitzelsberger, L., Willan, A. R., Montesanto, B., & Evans, W. K. (2000). Cancer care workers in Ontario: prevalence of burnout, job stress and job satisfaction. Canadian Medical Association Journal, 163(2), 166-169.

Guinot, J., Chiva, R., & Roca-Puig, V. (2014). Interpersonal trust, stress and satisfaction at work: an empirical study. *Personnel Review, 43*(1), 96-115. doi: 10.1108/PR-02-2012-0043

Halkos, G., & Bousinakis, D. (2010). The effect of stress and satisfaction on productivity. *International Journal of Productivity and Performance Management, 59*(5), 415-431. doi: http://dx.doi.org/10.1108/17410401011052869

Harper, G. W., Jernewall, N., & Zea, M. C. (2004). Giving voice to emerging science and theory for lesbian, gay, and bisexual people of color. Cultural Diversity and Ethnic Minority Psychology, 10(3), 187-199. doi: 10.1037/1099-9809.10.3.187

Hastings, R. R. (2011). Acceptance of homosexuality increasing. Retrieved July 11, 2013 from http://www.shrm.org/hrdisciplines/Diversity/Articles/Pages/AcceptanceofHomosexuality.aspx

Hatzenbuehler, M. L. (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin, 135*(5), 707-730. doi: 10.1037/a0016441

Hebl, M., Foster, J. M., Mannix, L. M., & Dovidio, J. *F*. (2002). Formal and interpersonal discrimination: A field study bias toward homosexual applicants. Personality and Social Psychology Bulletin, 28, 815–825. doi: 10.1177/0146167202289010

Henry, K. B., Arrow, H., & Carini, B. (1999). A tripartite model of group identification theory and measurement. Small Group Research, 30(5), 558-581. doi: 10.1177/104649649903000504

Hequembourg, A. L., & Brallier, S. A. (2009). An exploration of sexual minority stress across the lines of gender and sexual identity. *Journal of Homosexuality, 56*(3), 273-298. doi: http://dx.doi.org/10.1080/00918360902728517

Herek, G. M. (2000). The psychology of sexual prejudice. Current Directions in Psychological Science, 9, 19–22. doi: 10.1111/1467-8721.00051

Herek, G. M. (2002). Gender gaps in public opinion about lesbians and gay men. *Public Opinion Quarterly, 66*(1), 40-66.

Herek, G. M. (2002). Heterosexuals' attitudes toward bisexual men and women in the United States. *Journal of Sex Research, 39*, 264-274. doi: 10.1080/00224490209552150

Herek, G. M. (2009). Understanding sexual stigma and sexual prejudice in the United States: A conceptual framework. In D. Hope (Ed.), Contemporary perspectives on lesbian, gay and bisexual identities: The 54th Nebraska Symposium on Motivation, 54, *p*. 65-111. New York: Springer. DOI: 10.1007/978-0-387-09556-1

Hoel, H., Sparks, K., & Cooper, C. L. (2001). The cost of violence/stress at work and the benefits of a violence/stress-free working environment. Geneva: International Labour Organization. Retrieved July 9, 2014 from http://www.adapttech.it/old/files/document/19785costofviolence.pdf

Hoerger, M. (2013). ZH: An updated version of Steiger's Z and web-based calculator for testing the statistical significance of the difference between dependent correlations. Retrieved from http://www.psychmike.com/dependent_correlations.php

Huebner, D.M., & Davis, M.C. (2005). Gay and Bisexual Men Who Disclose Their Sexual Orientations in the Workplace Have Higher Workday Levels of Salivary Cortisol and Negative Affect, 30(3), 260-267. doi: 10.1207/s15324796abm3003_10

Huffman, A. H., Watrous-Rodriguez, K. M., & King, E. B. (2008). Supporting a diverse workforce: What type of support is most meaningful for lesbian and gay employees? *Human Resource Management, 47*(2), 237-253. doi: 10.1002/hrm.20210

Human Rights Campaign (2013). Corporate Equality Index. Retrieved May 14, 2013 from http://www.hrc.org/corporate-equality-index#.USzJ2us6URg.

Human Rights Campaign Foundation (2009). Degrees of equality: A national study examining workplace climate for LGBT employees. Retrieved January 19, 2013 from http://www.hrc.org/resources/entry/degrees-of-equality.

Inzlicht, M., & Schmader, T. (2011). Introduction. In M. Inzlicht & T. Schmader (Eds.), *Stereotype threat: Theory, process, and application* (pp. 3-14). New York, NY: Oxford University Press.

Inzlicht, M., McKay, L., & Aronson, J. (2006). Stigma as Ego Depletion How Being the Target of Prejudice Affects Self-Control. Psychological Science, 17(3), 262-269. doi: 10.1111/j.1467-9280.2006.01695.x

Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of management journal, 47*(3), 368-384. doi: http://dx.doi.org/10.2307/20159587

Johns, M., Schmader, T., & Martens, A. (2005). Knowing Is Half the Battle Teaching Stereotype Threat as a Means of Improving Women's Math Performance. Psychological Science, 16(3), 175-179. doi: 10.1016/j.appdev.2003.09.002

Judge, T. A., Heller, D., & Mount, M. K. (2002). Five-factor model of personality and job satisfaction: a meta-analysis. *Journal of Applied Psychology, 87*(3), 530-541. doi: 10.1037/0021-9010.87.3.530

Julian, T., & Kominski, R. (2011). United States Census Bureau. Education and Synthetic Work-Life Earnings Estimates: American Community Survey Reports. http://www. census. gov/prod/2011pubs/acs-14. pdf.

Kalokerinos, E. K., von Hippel, C., & Zacher, H. (*in press*). Is Stereotype Threat a Useful Construct for Organizational Psychology Research and Practice? Industrial and Organizational Psychology: Perspectives on Science and Practice, 7(3), Retrieved on January 9, 2014 from http://www.siop.org/journal/siopjournal.aspx

Kark, R., & Eagly, A. H. (2010). Gender and leadership: Negotiating the labyrinth. In Handbook of gender research in psychology (pp. 443-468). Springer New York.

Katz, I., & Greenbaum, C. (1963). Effects of anxiety, threat, and racial environment on task performance of Negro college students. The Journal of Abnormal and Social Psychology, 66(6), 562-657. doi: 10.1037/h0047829

Katz, I., Roberts, S. O., & Robinson, J. M. (1965). Effects of task difficulty, race of administrator, and instructions on digit-symbol performance of Negroes. Journal of Personality and Social Psychology, 2(1), 53-59. doi: 10.1037/h0022080

Keller, J., & Dauenheimer, D. (2003). Stereotype threat in the classroom: Dejection mediates the disrupting threat effect on women's performance. Personality and Social Psychology Bulletin, 29, 371–381. doi:10.1177/0146167202250218.Keller, 2002

Kite, M. E., & Deaux, K. (1987). Gender belief systems: Homosexuality and the implicit inversion theory. Psychology of Women Quarterly, 11(1), 83-96. doi: 10.1111/j.1471-6402.1987.tb00776.x

Koser, D. A., Matsuyama, M., & Kopelman, R. E. (1999). Comparison of a physical and a mental disability in employee selection: An experimental examination of direct and moderated effects. *North American Journal of Psychology, 1*, 213-222.

Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. Journal of Personality and Social Psychology, 80, 942–958. doi:10.1037/0022-3514.80.6.942.

Kray, L., & Shirako, A. (2011). Stereotype Threat in Organizations. In *Stereotype threat: Theory, process, and application*, 173 – 187.

Krueger, A. B., & Schkade, D. (2008). Sorting in the labor market do gregarious workers flock to interactive jobs? *Journal of Human Resources, 43*(4), 859-883.

Laband, D. N., & Lentz, B. F. (1998). The effects of sexual harassment on job satisfaction, earnings, and turnover among female lawyers. *Industrial and Labor Relations Review*, 594-607.

Lee, I. A., & Preacher, K. J. (2013, September). Calculation for the test of the difference between two dependent correlations with one correlation in common [Computer software]. Available from http://quantpsy.org

Lehavot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. *Journal of Consulting and Clinical Psychology*, *79*(2), 159. doi: http://dx.doi.org/10.1037/a0022839

Lennox, R. D., & Wolfe, R. N. (1984). Revision of the self-monitoring scale. Journal of Personality and Social Psychology, 46(6), 1349-1364. doi: 10.1037//0022-3514.46.6.1349

Levine, M. P., & Leonard, R. (1984). Discrimination against lesbians in the work force. Signs, 9(4), 700-710. doi: 10.1086/494094

Löckenhoff, C. E., De Fruyt, *F*., Terracciano, A., McCrae, R. R., De Bolle, M., Costa Jr., P. T., … Yik, M. (2009). Perceptions of aging across 26 cultures and their culture-level associates. Psychology and Aging, 24(4), 941-954. doi: 10.1037/a0016901

Loher, B.T., Noe, R. A., Moeller, N.L., & Fitzgerald, M.P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology, 70*(2), 280-289. doi: 10.1037/0021-9010.70.2.280

Lord, C. G., & Saenz, D. S. (1985). Memory deficits and memory surfeits: differential cognitive consequences of tokenism for tokens and observers. Journal of personality and social psychology, 49(4), 918-926. doi: 10.1037//0022-3514.49.4.918

Mansoor, M., Fida, S., Nasir, S., & Ahmad, Z. (2011). The Impact of Job Stress on Employee Job Satisfaction A Study on Telecommunication Sector of Pakistan. *Journal of Business Studies Quarterly, 2*(3), 50-56.

Martens, A., Johns, M., Greenberg, J., & Schimel, J. (2006). Combating stereotype threat: The effect of self-affirmation on women's intellectual performance. Journal of Experimental Social Psychology, 42(2), 236-243. doi: 10.1016/j.jesp.2005.04.010

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). Maslach Burnout Inventory. (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

McCann, R. M., & Keaton, S. A. (2013). A Cross Cultural Investigation of Age Stereotypes and Communication Perceptions of Older and Younger Workers in the USA and Thailand. Educational Gerontology, 39(5), 326-341. doi: 10.1080/03601277.2012.700822

McGlone, M. S., & Aronson, J. (2006). Stereotype threat, identity salience, and spatial reasoning. Journal of Applied Developmental Psychology, 27, 486–493. doi:10.1016/j.appdev.2006.06.003.

McGlone, M. S., Aronson, J., & Kobrynowicz, D. (2006). Stereotype threat and the gender gap in political knowledge. Psychology of Women Quarterly, 30, 392–398. doi:10.1111/j.1471-6402.2006.00314.x.

McIntyre, R. B., Paulson, R. N., & Lord, C. G. (2003). Alleviating women's mathematics stereotype threat through salience of group achievements. Journal of Experimental Social Psychology, 39, 83–90. doi:10.1016/S0022-1031(02)00513-9.

MindGarden (2013). Maslach Burnout Inventory (MBI). Retrieved on December 22, 2013 from http://www.mindgarden.com/products/mbi.htm

Mitchell, R.W., & Ellis, A.L. (2011). In the eye of the beholder: Knowledge that a man is gay promotes American college students' attributions of cross-gender characteristic. Sexuality & Culture, 15, 80-99. doi: 10.1007/s12119-010-9083-9

Morris, J. *F*., Waldo, C. R., & Rothblum, E. D. (2001). A model of predictors and outcomes of outness among lesbian and bisexual women. American Journal of Orthopsychiatry, 71(1), 61-71. doi: 10.1037/0002-9432.71.1.61

Moyes, G. D., Williams, P. A., & Quigley, B. Z. (2000). The relation between perceived treatment discrimination and job satisfaction among African-American accounting professionals. Accounting Horizons, 14(1), 21-48.

Moynihan, D. P., & Pandey, S. K. (2008). The ties that bind: Social networks, person-organization value fit, and turnover intention. *Journal of Public Administration Research and Theory, 18*(2), 205-227.

Murphy, M. C., Steele, C. M., & Gross, J. J. (2007). Signaling threat: How situational cues affect women in math, science, and engineering settings. Psychological Science, 18, 879-885.

National Center for Public Policy and Higher Education. (November, 2005). Policy Alert. Retrieved June 12, 2014 from http://www.highereducation.org/reports/pa_decline/decline-f1.shtml

Negy, C., & Eisenman, R. (2005). A comparison of African American and White college students' affective and attitudinal reactions to lesbian, gay, and bisexual individuals: An

exploratory study. Journal of Sex Research, 42(4), 291-298. doi: 10.1080/00224490509552284

Neuville, E., & Croizet, J.-C. (2007). Can salience of gender identity impair math performance among 7–8 years old girls? The moderating role of task difficulty. European Journal of Psychology of Education, 22, 307–316. doi:10.1007/BF03173428.

Nguyen, H. H. D., & Ryan, A. M. (2008). Does stereotype threat affect test performance of minorities and women? A meta-analysis of experimental evidence. Journal of Applied Psychology; Journal of Applied Psychology, 93(6), 1314 -1334. doi: 10.1037/a0012702.

Nussbaum, A. D., & Steele, C. M. (2007). Situational disengagement and persistence in the face of adversity. Journal of Experimental Social Psychology, 43(1), 127-134. doi: 10.1016/j.jesp.2005.12.007

O'Brien, L. T., & Crandall, C. S. (2003). Stereotype threat and arousal: Effects on women's math performance. Personality and Social Psychology Bulletin,29(6), 782-789. doi: 10.1177/0146167203029006010

Orpen, C. (1995). The effects of perceived age discrimination on employee job satisfaction, organizational commitment and job involvement. *Psychology: A Journal of Human Behavior*, *32*(3-4), 1995, 55-56.

Oswald, D. L. (2007). "“Don't ask, don't tell”: The influence of stigma concealing and perceived threat on perceivers' reactions to a gay target. *Journal of Applied Social Psychology, 37*(5), 928-947. DOI: 10.1111/j.1559-1816.2007.00193.x

Oswald, D. L. (2007). "Don'*t* ask, don'*t* tell": The influence of stigma concealing and perceived threat on perceivers' reactions to a gay target. Journal of Applied Social Psychology, 37(5), 928-947. doi: 10.1111/j.1559-1816.2007.00193.x

Out&Equal Workplace Advocates (2012). State of lesbian, gay, bisexual, and transgender employee resource groups. Retrieved March 13, 2013

Oyserman, D., Harrison, K., & Bybee, D. (2001). Can racial identity be promotive of academic efficacy? International Journal of Behavioral Development, 25(4), 379-385.

Pachankis, J. E. (2007). The psychological implications of concealing a stigma: a cognitive-affective-behavioral model. Psychological bulletin, 133(2), 328-345. doi: 10.1037/0033-2909.133.2.328

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: a meta-analytic review. Psychological bulletin, 135(4), 531-554. doi: 10.1037/a0016059

Pew Research Center (2011). Most say homosexuality should be accepted by society. Retrieved July 11, 2013 from http://www.shrm.org/hrdisciplines/Diversity/Articles/Pages/AcceptanceofHomosexuality.aspx

Pinel, E C. (1999). Stigma consciousness: the psychological legacy of social stereotypes. Journal of personality and social psychology, 76(1), 114-28. Retrieved November 4, 2012 from http://www.ncbi.nlm.nih.gov/pubmed/9972557

Purdie-Vaughns, V., Steele, C. M., Davies, P. G., Ditlmann, R., & Crosby, J. R. (2008). Social identity contingencies: How diversity cues signal threat or safety for African Americans in mainstream institutions. Journal of Personality and Social Psychology, 94, 615–630. doi: 10.1037/0022-3514.94.4.615

Quinn, D. M., & Chaudoir, S. R. (2009). Living with a concealable stigmatized identity: the impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. Journal of personality and social psychology, 97(4), 634-651. doi: 10.1037/a0015815

Quinn, D. M., Kahng, S. K., & Crocker, J. (2004). Discreditable: Stigma effects of revealing a mental illness history on test performance. Personality and Social Psychology Bulletin, 30, 803–815. doi:10.1177/0146167204264088.

Ragins, B. R. (2004). Sexual orientation in the workplace: The unique work and career experiences of gay, lesbian and bisexual workers. Research in personnel and human resources management, 23, 35-120.

Ragins, B. R. (2008). Disclosure disconnects: antecedents and consequences of disclosing invisible stigmas across life domains. Academy of Management Review, 33(1), 194–215. doi: 10.5465/AMR.2008.27752724

Ragins, B. R., & Cornwell, J. M. (2001). Pink triangles: antecedents and consequences of perceived workplace discrimination against gay and lesbian employees. *Journal of Applied Psychology, 86*(6), 1244.

Ragins, B. R., Singh, R., & Cornwell, J. M. (2007). Making the invisible visible: fear and disclosure of sexual orientation at work. Journal of Applied Psychology, 92(4), 1103-1118. doi: 10.1037/0021-9010.92.4.1103

Ragins, B. R., Singh, R., & Cornwell, J. M. (2007). Making the invisible visible: fear and disclosure of sexual orientation at work. *Journal of Applied Psychology, 92*(4), 1103.

Ragins, B.R., & Cornwell, J.M. (2001). Pink triangles: Antecedents and consequences of perceived workplace discrimination against gay and lesbian employees. Journal of Applied Psychology, 86(6), 1244-11261. doi: 10.1037/0021-9010.86.6.1244

Repetti, R. L., & Cosmas, K. A. (1991). The Quality of the Social Environment at Work and Job Satisfaction. *Journal of Applied Social Psychology, 21*(10), 840-854. doi: 10.1111/j.1559-1816.1991.tb00446.x

Riggle, E. D., Rostosky, S. S., & Reedy, C. S. (2005). Online surveys for BGLT research: Issues and techniques. Journal of Homosexuality, 49(2), 1-21. doi: 10.1300/J082v49n02_01

Roberson, L., & Kulik, C. T. (2007). Stereotype threat at work. *The Academy of Management Perspectives*, *21*(2), 24-40.

Rostosky, S. S., & Riggle, E. D. (2002). "Out" at work: The relation of actor and partner workplace policy and internalized homophobia to disclosure status. Journal of Counseling Psychology, 49(4), 411-219. doi: 10.1037//0022-0167.49.4.411

Rumens, N. (2010). Firm friends: exploring the supportive components in gay men's workplace friendships. The Sociological Review, 58(1), 135-155. doi: 10.1111/j.1467-954X.2009.01879.x

Sackett, P. R., Hardison, C. M., & Cullen, M. J. (2004). On interpreting stereotype threat as accounting for African American-White differences on cognitive tests. American Psychologist, 59(1), 7-13. doi: 10.1037/0003-066X.59.1.7

Sargent, M. C., Sotile, W., Sotile, M. O., Rubash, H., & Barrack, R. L. (2004). Stress and coping among orthopaedic surgery residents and faculty. The Journal of Bone & Joint Surgery, 86(7), 1579-1586.

Schmader, T. & Beilock, S. (2011). An integration of processes that underlie stereotype threat. In M. Inzlicht & T. Schmader (Eds.), *Stereotype threat: Theory, process, and application* (pp. 34-50). New York, NY: Oxford University Press.

Schmader, T. (2002). Gender identification moderates stereotype threat effects on women's math performance. Journal of Experimental Social Psychology,38(2), 194-201. doi: 10.1006/jesp.2001.1500

Schmader, T., & Johns, M. (2003). Converging evidence that stereotype threat reduces working memory capacity. Journal of Personality and Social Psychology, 85, 440–452. doi:10.1037/0022-3514.85.3.440.

Schneider, D. J. (2005). The psychology of stereotyping. Guilford Press.

Sekaquaptewa, D., & Thompson, M. (2003). Solo status, stereotype threat, and performance expectancies: Their effects on women's performance. *Journal of Experimental Social Psychology, 39*(1), 68-74. doi: 10.1016/S0022-1031(02)00508-5

Shahu, R., & Gole, S. V. (2008). Effect of job stress and job satisfaction on performance: An empirical study. AIMS International Journal of Management, 2(3), 237-246.

Shapiro, J. R. (2011a). Different groups, different threats: a multi-threat approach to the experience of stereotype threats. Personality and Social Psychology Bulletin, 37(4), 464–480. doi: 10.1177/0146167211398140

Shapiro, (2011b). Types of threats: From stereotype threat to stereotype threats. In M. Inzlicht & T. Schmader (Eds.). (2011). *Stereotype threat: Theory, process, and application* (pp. 71-88). Oxford University Press. doi: 10.1093/acprof:oso/9780199732449.003.0005

Shapiro, J. R. (2013). Are all interventions created equal? A multi-threat approach to tailoring stereotype threat interventions. Journal of Personality and Social Psychology, 104(2), 277-288. doi: 10.1037/a0030461

Shapiro, J. R., & Williams, A. M. (2012). The Role of Stereotype Threats in Undermining Girls' and Women's Performance and Interest in STEM Fields. *Sex Roles, 66*(3-4), 175-183. doi: 10.1007/s11199-011-0051-0

Shapiro, J.R., & Neuberg, S.L. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators, mediators, consequences, and

interventions. Personality and Social Psychology Review, 11(2), 107-130. doi: 10.1177/1088868306294790

Shih, M., Pittinsky, T. L., & Trahan, A. (2006). Domain-specific effects of stereotypes on performance. Self & Identity, 5(1), 1-14. doi: 10.1080/15298860500338534

Shore, L.M., Chung-Herrera, B.G., Dean, M.A., Ehrhart, K.H., Jung, D.I., Randel, A.E., and Singh, G. (2009). Diversity in organizations: Where are we now and where are we going?" Human Resource Management Review, (19)2, 117–133. doi: 10.1016/j.hrmr.2008.10.004

Smart, L., & Wegner, D. M. (1999). Covering up what can't be seen: concealable stigma and mental control. Journal of personality and social psychology, 77(3), 474-486. doi: 10.1037/0022-3514.77.3.474

Smith, A. (2012). Defense of Marriage Act ruling has employment implications. Retrieved July 11, 2013 from www.shrm.org/legalissues/federalresources/pages/doma-employment-implications.aspx

Smith, A. (2013a). Now what? Employer benefits obligations post-DOMA. Retrieved July 5, 2013 from http://www.shrm.org/LegalIssues/FederalResources/Pages/DOMA.aspx?type=6&utm_campaign=Membership_Ret_2013&utm_medium=email&utm_source=ExpressRequest0701ThinkSupreme

Smith, B. (2013b). Persecution of sexual minorities in Russia. House of Commons Library. Retrieved May 15, 2014 from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0CEIQFjAC&url=http%3A%2F%2Fwww.parliament.uk%2Fbriefing-papers%2FSN06712.pdf&ei=MUd0U9K0B8LlsASIkIC4Bw&usg=AFQjCNF5ia7d6FVd

02SYXBAHkaUZvUBJ8w&sig2=bPdKtVA8iJZG48iwqapcmQ&bvm=bv.66917471,d.cWc

Snelgrove, S. R. (1998). Occupational stress and job satisfaction: a comparative study of health visitors, district nurses and community psychiatric nurses. Journal of nursing management, 6(2), 97-104. DOI: 10.1046/j.1365-2834.1998.00055.x

Snyder, S. H. (2013). Women in Leadership: Performance and Interpersonal Consequences of Stereotype Threat (2013). UNF Theses and Dissertations. Paper 464. Retrieved on July 11, 2014 from http://digitalcommons.unf.edu/etd/464

Son Hing, L. S. (2012). Responses to stigmatization. *Du Bois Review: Social Science Research on Race*, *9*(1), 149-168.

Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. American Journal of Community Psychology, 13, 693-713. doi: 10.1007/BF00929796

Spector, P. E. (1997). Job satisfaction: Application, assessment, causes, and consequences (Vol. 3). Sage.

Spector, P. E. (2011). Job Satisfaction Survey norms. Retrieved July 13, 2014 from http://shell.cas.usf.edu/~pspector/scales/jssnorms.html

Steele, C. M. (1997). A threat in the air: how stereotypes shape intellectual identity and performance. American psychologist, 52(6), 613-629. doi: 10.1037/0003-066X.52.6.613

Steele, C. M. (1999). Thin ice:" Stereotype threat" and black college students.ATLANTIC-BOSTON-, 284, 44-54. http://www.goalconsulting.org/page8/files/36%20Article%202.pdf

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. Journal of Personality and Social Psychology, 69(5), 797-811. doi: 10.1037/0022-3514.69.5.797

Steele, C. M., Spencer, S. J., & Aronson, J. A. (2002). Contending with group image: The psychology of stereotype threat and social identity threat. Advances in Experimental Social Psychology, 34, 379-440. doi: 10.1016/S0065-2601(02)80009-0

Steele, J., James, J. B., & Barnett, R. C. (2002). Learning in a man's world: examining the perceptions of undergraduate women in male-dominated academic areas. Psychology of Women Quarterly, 26, 46–50.

Stone, J. (2002). Battling doubt by avoiding practice: The effects of stereotype threat on self-handicapping in white athletes. Personality and Social Psychology Bulletin, 28(12), 1667-1678. doi: 10.1177/014616702237648

Stone, J., Lynch, C. I., Sjomeling, M., & Darley, J. M. (1999). Stereotype threat effects on Black and White athletic performance. Journal of personality and social psychology, 77(6), 1213-1227. doi:10.1037/0022-3514.77.6.1213

Streets, V. N., & Hannah-Hanh, D. (2014). Chapter 12: Stereotype threat impacts on women in the workforce. In *Gender in Organizations: Are Men Allies or Adversaries to Women's Career Advancement?, pp.* 270 – 290.

Stricker, L. J., & Ward, W. C. (2004). Stereotype Threat, Inquiring About Test Takers' Ethnicity and Gender, and Standardized Test Performance1. Journal of Applied Social Psychology, 34(4), 665-693. doi: 10.1111/j.1559-1816.2004.tb02564.x

Swann Jr, W. B. (2011). Self-verification theory. *Handbook of theories of social psychology, 2,* 23-42. Retrieved July 22, 2013 from

http://homepage.psy.utexas.edu/HomePage/Faculty/Swann/docu/svt%20lange%20et%20al.PDF

Tajfel, H. (1982). Social psychology of intergroup relations. Annual review of psychology, 33(1), 1-39. doi: 10.1017/CBO9780511759154.009

Udry, J. R. (1994). The nature of gender. *Demography, 31*(4), 561-573.

Van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Journal of Applied Psychology, 49*(3), 357-371. doi: 10.1146/annurev.clinpsy.4.022007.141207

Velez, B. L., Moradi, B., & Brewster, M. E. (2013). Testing the Tenets of Minority Stress Theory in Workplace Contexts. Journal of counseling psychology, 60(4), 532-542.von Hippel, C., Issa, M., Ma, R., & Stokes, A. (2011). Stereotype threat: Antecedents and consequences for working women. European Journal of Social Psychology, 41(2), 151-161. doi: 10.1002/ejsp.749

Vigoda, E. (2000). Organizational politics, job attitudes, and work outcomes: Exploration and implications for the public sector. *Journal of vocational Behavior, 57*(3), 326-347.

von Hippel, C., Kalokerinos, E. K., & Henry, J. D. (2013). Stereotype threat among older employees: Relationship with job attitudes and turnover intentions. Psychology and Aging, 28(1), 17-27. doi: 10.1037/a0029825

von Hippel, C., Walsh, A. M., & Zouroudis, A. (2011). Identity separation in response to stereotype threat. Social Psychological and Personality Science, 2(3), 317-324. doi: 10.1177/1948550610390391

von Hippel, C., Wiryakusuma, C., Bowden, J., & Shochet, M. (2011). Stereotype threat and female communication styles. Personality and Social Psychology Bulletin, 37(10), 1312-1324. doi: 10.1177/0146167211410439

Waldo, C. R. (1999). Working in a majority context: a structural model of heterosexism as minority stress in the workplace. Journal of Counseling Psychology, 46, 218−232. doi: 10.1037/0022-0167.46.2.218

Whaley, A. L. (1998). Issues of validity in empirical tests of stereotype threat theory. American Psychologist, 53, 679 - 680. doi: 10.1037/0003-066X.53.6.679

Wheat, K., Brohan, E., Henderson, C., & Thornicroft, G. (2010). Mental illness and the workplace: conceal or reveal? *Journal of the Royal Society of Medicine,103*(3), 83-86. doi: 10.1258/jrsm.2009.090317 8