Lehigh University Lehigh Preserve

Theses and Dissertations

2014

The Relationship Among Anti-Bisexual Discrimination Experiences and Coping on Bisexual Women and Men's Mental Health

Kristin Nicole Bertsch *Lehigh University*

Follow this and additional works at: https://preserve.lehigh.edu/etd Part of the <u>Counseling Psychology Commons</u>

Recommended Citation

Bertsch, Kristin Nicole, "The Relationship Among Anti-Bisexual Discrimination Experiences and Coping on Bisexual Women and Men's Mental Health" (2014). *Theses and Dissertations*. 1426. https://preserve.lehigh.edu/etd/1426

This Dissertation is brought to you for free and open access by Lehigh Preserve. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Lehigh Preserve. For more information, please contact preserve@lehigh.edu.

The Relationship Among Anti-Bisexual Discrimination Experiences and Coping on

Bisexual Women and Men's Mental Health

by Kristin N. Bertsch

Presented to the Graduate and Research Committee of Lehigh University in Candidacy for the Degree of Doctor of Philosophy in Counseling Psychology

> Lehigh University May 2014

Copyright by Kristin N. Bertsch 2014

Approved and recommended for acceptance as a dissertation in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Date:

Grace I. L. Caskie, Ph.D., Chair Associate Professor of Education

Accepted Date

Committee Members:

Grace I. L. Caskie, Ph.D., Chair Associate Professor of Education

Cirleen DeBlaere, Ph.D., Co-Chair Assistant Professor of Counseling and Psychological Services Georgia State University

Robin L. Hojnoski, Ph.D. Associate Professor of School Psychology

Angela R. Gillem, Ph.D. Professor of Psychology Arcadia University

ACKNOWLEDGEMENTS

"You'll need a lot of support to get through this program – you cannot do this alone." These were the words I heard during my interview day at Lehigh and nothing could have been truer – family, friends, and my Lehigh community helped me get through my 6-year journey to earn this degree. With that in mind, I want to thank all the people that have helped me throughout this process. I want to thank my brother who is no longer with me in body, but I know that he walks by my side every day, encouraging me to keep going. He was always supportive, funny, and made me realize that home is not a place, it is a feeling – every time I was with him – I felt like I was home. I will forever miss that and him in my life. I want to thank my dad who is an endless source of positive support and encouragement. He can always make me laugh and make me feel like I can accomplish anything in this world (he even believes I can be president). I also want to thank my mother, who is always telling me how proud she is of me and how thankful she is to have me as her daughter. She has always been my number one fan and I am so appreciative of all she has done for me. I am thankful beyond words for my best friend Kelly. "Best friend," does not come close to describing one of the few most important relationships in my life. She has been there for me each and every time I have needed her and words will never be able to express how grateful I am that she is in my life. I want to thank Jen, her genuine support and friendship is always something I can count on. I am so lucky to know her. I also want to thank Dan, my Lehigh soul mate. He unconditionally accepts me for who I am and our connection has been a main source of strength through this program and in my life. I am thankful for my Lehigh cohort –

iv

Lyz, Aubrey, Jodi, Terrina – they have pulled and pushed me to grow in glorious ways. A special thank you to Lyz -our friendship means so much to me - I am so grateful to know her and have her in my life. My second cohort – Shalena, Linh, Candice, Karen, – I am so grateful to them for everything- their support, their time, and the laughing - so very needed, so many times. Rob, thank you for always listening and being there for me - you are a great source of support and humor on many difficult days. I am eternally grateful to the Lehigh Counseling Center – they are a great source of personal and professional support that I still miss every day. I want to thank Angela Gillem – she inspired me to pursue this kind of work and I am forever grateful to have her in my life. I am convinced meeting her changed my career path and my life. Cirleen DeBlaere – I am forever grateful for the day she came into my life as my advisor. She completely changed my experience in graduate school and I am honored to have Cirleen as my mentor. She has been there for me personally and professionally in too many meaningful ways to ever fully describe. I am excited to apply all that she taught me to my own professional work. I also want to thank Grace Caskie. Her support and encouragement, especially early on at Lehigh, helped me believe that I could make it in this program and I will never forget that. I also want to thank Robyn Hojnoski for agreeing to be on my committee and giving me such helpful feedback in this process. I would like to say a thank you to my research assistant, David Zelaya. He was enormously helpful with recruitment for this study. Finally, I am thankful for my participants for their honest and open participation. I hope that this research will lead to a greater understanding of the unique experiences of bisexual women and men.

V

TABLE OF CONTENTS

page
ABSTRACT1
CHAPTER
1 INTRODUCTION2
Heterosexism and Psychological Distress.3Internalized Heterosexism and Psychological Distress.5Heterosexism and Self-Esteem.7Internalized Heterosexism and Self-Esteem.8External and Internalized Discrimination and Mental Health.9The Potential Mediating Role of Coping.10Overview of the Present Study.14
CHAPTER
2 LITERATURE REVIEW16
Minority Stress Framework.20Heterosexism and Psychological Distress.21Internalized Heterosexism and Psychological Distress.24Heterosexism and Self-Esteem.26Internalized Heterosexism and Self-Esteem.28External and Internalized Discrimination and Mental Health.30The Potential Mediating Role of Coping.33Overview of the Present Study.37
CHAPTER
3 METHOD
Participants
CHAPTER
4 RESULTS
Exploring Potential Covariates

Descriptive Statistics	52
Statistical Analyses	52
Hypothesis 1	
Hypothesis 2	55
Hypothesis 3	55
Hypothesis 4	
Hypothesis 5	
Hypothesis 6	57
Multi-group SEM Analysis Comparing Bisexual Women and Men	59
Supplemental Model Results	59
Additional Analyses	61

CHAPTER

5 DISCUSS	SION	
Limitations		
Clinical Implicat	ions	
Future Research.		
LIST OF REFER	RENCES	
APPENDICES		

LIST OF TABLES

Table 1:	Descriptives and Bivariate Correlations	65
Table 2:	Item Parcels for the Self-Esteem Measure	.66
Table 3:	Age characteristics of the survey sample	.67

LIST OF FIGURES

Figure 1:	Hypothesized Mediational Model of Active and Avoidant Coping in the Discrimination-Mental Health Links	3
Figure 2:	Standardized Regression Weights forMediational Model of Active and Avoidant Coping in the Discrimination-Mental Health Links with Full Sample	1

Abstract

Accumulating research suggests a link between heterosexist and internalized heterosexism with mental health (e.g., psychological distress and self-esteem) in diverse samples of sexual minority individuals (Swim, Johnson, & Pearson, 2009; Szymanski, 2005; Talley & Bettencourt, 2011). Researchers posit that, similar to their L/G counterparts, discrimination (i.e., biphobia) from both L/G and heterosexual communities make bisexual individuals susceptible to poorer mental health as well (Ochs, 1996). Although these direct links are important, equally significant, are the intervening variables in these links. Coping has been a suggested an important mediator to investigate in the relation between discrimination and mental health. Based on the literature reviewed, the current study investigated a model that tested direct and indirect relations among perceived anti-bisexual experiences, internalized biphobia, active and avoidant coping, psychological distress, and self-esteem. Structural equation modeling indicated that (a) external anti-bisexual discriminatory experiences in heterosexual community were related to greater psychological distress and lower self-esteem; (b) internalized biphobia was related to greater distress and lower self-esteem, (c) active coping partially mediated the links between internalized biphobia and self-esteem, and (d) avoidant coping partially mediated the links between anti-bisexual experiences and mental health and the links between internalized biphobia and mental health. Also, based on preliminary theoretical and empirical literature suggesting potential differences between sexual minority women's and men's experiences (e.g., Szymanski, 2005), gender differences were explored and no statistical differences were found.

Chapter I

Introduction

Mounting evidence suggests a link between perceived discrimination experiences and psychological distress for marginalized groups (e.g., Pittman, 2011; Szymanski & Stewart, 2010). Indeed this relation has been found with racial/ethnic minority samples (Alveraz & Juang, 2010) and predominantly White samples of sexual minority individuals (Syzmanski, 2005; Talley & Bettencourt, 2011). Although experiences of discrimination are hypothesized to be associated with bisexual (B) persons' psychological distress as well (e.g., Brewster & Moradi, 2010; Meyer, 2003), few studies have examined this link directly with bisexual samples.

People who identify as bisexual may define bisexuality differently (Ochs, 2007). Thus, due to variations in individual experiences, selecting appropriate terminology can be challenging. However, for the purposes of this study, bisexuality has been defined as an emotional and/or physical attraction, not necessarily to the same degree or the same time, to same- and other-gendered individuals (Firestein, 2007; Ochs, 2007). Ochs (1996) described the "double discrimination" that bisexual people face from the lesbian (L)/gay (G) and heterosexual communities, and qualitative findings support bisexual persons' perceptions of this double discrimination (e.g., Ross, Dobinson, & Eady, 2010). More specifically, bisexual individuals are often perceived by the L/G community to have a certain amount of privilege, whereas in the heterosexual community, they are perceived to be immoral and promiscuous (Ochs, 1996). These negative attitudes communicated by L/G and heterosexual individuals are a form of external oppression that is rarely recognized (Ochs, 1996). Ochs (1996) and Bradford (2004) termed this type of prejudice as biphobia.

Although it is important to examine bisexual individuals apart from L/G persons, it is also important to note the substantial diversity within this group (Lewis, Derlega, Brown, Rose, & Henson, 2009). Differences include race, gender, and the degree to which one is open about her/his sexual orientation. In particular, research suggests that the experiences of bisexual women and men may be very different (Bradford, 2004; Fox, 2003). For instance, Fox (2003) found that bisexual women experienced heterosexual attractions prior to same-sex attraction and behavior, whereas men experienced both types of attraction simultaneously. Moreover, others have asserted that sexism and traditional gender role socialization may contribute to gender differences in experiences of heterosexist discrimination (Szymanski, 2005). For example, with a sample of LGB individuals, Hequembourg and Brallier (2009) found that both women and men reported being perceived as promiscuous. However, men who reported they did not conform to societal expectations of masculinity also reported experiences of harassment and vigilance about physical safety. Despite such findings, researchers have often overlooked differences in the experiences of sexual minority women and men. Thus, it is important that the diversity of women's and men's experiences be investigated in future research with bisexual individuals.

Heterosexism and Psychological Distress

In addition to experiences of oppression, research suggests that compared to heterosexual people, LGB individuals report higher rates of psychological distress, including symptoms of depression, anxiety, and suicidal ideation (Bolton & Sareen,

2011; Conron, Mimiaga, & Landers, 2010; Meyer, 2003; Oswalt & Wyatt, 2011; Williams & Chapman, 2011). Meyer (2003) discusses these elevated mental health concerns in the context of a *minority stress framework*. In particular, minority stress theory argues that discrimination related to one's minority identity(ies) produces a stressful social environment for LGB persons that lead to psychological distress. Furthermore, he argues that external (e.g., objective events) and internalized discrimination (e.g., subjective perceptions) contribute to the psychological distress of sexual minority people.

External experiences of discrimination can take varied forms. For sexual minority individuals, *external discrimination* can include anti-gay language, being targeted for a hate crime (Hequembourg & Brallier, 2009; Smith & Ingram, 2004), damaged property, and/or personal attacks (Volpp, 2010). A growing body of research is supporting a consistent relationship between sexual orientation-related discrimination (i.e., *heterosexist discrimination*) and psychological distress (Diaz, Ayala, & Bein, 2004; Smith & Ingram, 2004; Szymanski, 2009; Talley & Bettencourt, 2011). More specifically, heterosexist discrimination experiences have been found to be positively related to distress with samples of Asian American sexual minority women and men (57% women, 29% bisexual; Szymanski & Sung, 2010), African American L/B women (11% bisexual; Szymanski & Meyer, 2008), and predominantly White samples of LGB persons (40% women; 10% bisexual; Lewis et al., 2009), bisexual (6%) and lesbian women (Szymanski, 2005), and G/B men (13% bisexual; Szymanski, 2009).

Although limited, a few qualitative studies have investigated the external discrimination-distress link with bisexual samples independently. For instance, in their

qualitative study of predominantly White bisexual women (n = 25) and men (n = 30), Ross et al. (2010) found that participants perceived their mental health to be negatively impacted by biphobia (e.g., negative attitudes explicitly or implicitly communicated by L/G and heterosexual individuals) and monosexism (e.g., belief that person must be either gay or straight), beyond heterosexism. More specifically, participants reported greater levels of anxiety (e.g., fear of violence due to sexual orientation), lower levels of self-worth, and greater relationship stress related to their discrimination experiences. This pattern of findings was replicated in the one quantitative study, to this author's knowledge, that investigated the external discrimination-distress link with a sample of bisexual women (59%) and men. Brewster and Moradi (2010) found a positive and significant relationship between anti-bisexual discrimination from L/G and heterosexual individuals and psychological distress. Although qualitative studies suggest a relationship between external discrimination and psychological distress for bisexual women and men, and a previous quantitative study has provided data that substantiates this link for bisexual individuals (e.g., Brewster & Moradi, 2010), additional studies are needed to further corroborate these findings with other samples of bisexual women and men.

Internalized Heterosexism and Psychological Distress

The minority stress theory posits that, over time, experiences of external discrimination based on a minority identity may lead to the internalization of negative messages about one's sexual orientation identity (Meyer, 2003). In other words, a sexual minority individual may accept heterosexist prejudices as their own personal beliefs (Meyer, 2003; Szymanski, Kashubeck-West, & Meyer, 2008). This internalization has

been differentially named throughout the literature. For instance, it has been referred to as "self-stigma", "internalized homophobia, internalized heterosexism, and internalized heteronegativity" (Herek, Gillis, & Cogan, 2009, p. 33); terms that have been used fairly interchangeably. However, researchers have argued that heterosexism and *internalized heterosexism* (IH) are more inclusive of the spectrum of negative attitudes associated with non-heterosexual people (Szymanski et al., 2008). With bisexual individuals in particular, the term *internalized biphobia* is used (Brewster & Moradi, 2010). Given that different authors utilized alternative terms to describe the construct of internalization of external discrimination in their studies, this paper will use the terminology selected by the respective authors in the discussion of their findings.

In light of the "insidious" nature of IH (Meyer, 2003, p. 682), scholars have acknowledged the need to investigate the IH-psychological distress link, and a few studies have found a positive and direct relation with sexual minority samples (Brewster & Moradi, 2010; Herek, et al., 2009; Szymanski & Kashubeck-West, 2008). For instance, IH emerged as a significant and positive predictor of psychological distress with samples of predominantly White B/L women (17% bisexual; Szymanski & Kashubeck-West, 2008) and sexual minority African American women and men (60% women, 26% bisexual; Szymanki & Gupta, 2009) when controlling for other variables (e.g., education, internalized sexism, internalized racism). The positive and significant correlation between IH and distress has also been found with samples of predominantly White bisexual (13%) and gay men (Szymanski & Carr, 2008), predominantly White HIV positive gay-identified men (Johnson, Carrico, Chesney, & Morin, 2008), and predominantly African American bisexual (20%) and gay HIV-Seropositive men (Ross,

Rosser, & Neumaier, 2008). The one study investigating a solely bisexual sample also found a positive relationship between internalized biphobia and distress (Brewster & Moradi, 2010). These results, with combined samples of sexual minority individuals and one bisexual sample, suggest that IH has deleterious implications for the mental health of sexual minority individuals. An important extension of this accumulating body of research is to examine the IH-psychological distress link with additional samples of bisexual women and men.

Heterosexism and Self-Esteem

Although it is important to look at the relation between external discrimination and psychological distress, it is also important to investigate discrimination and wellbeing variables, such as self-esteem, as part of a more comprehensive conceptualization of mental health (Balsam & Mohr, 2007; Major, Kaiser, & McCoy, 2003; Moradi & Hasan, 2004). To date, the findings on the relationship between heterosexist experiences of discrimination and self-esteem are inconsistent (Crocker & Quinn, 2000), with some studies finding a significant and negative link (e.g., Swim, Johnson, & Pearson, 2009) and others reporting no relation (e.g., Brewster & Moradi, 2010). For instance, utilizing daily diary methods, Swim et al. (2009) examined the relationship between heterosexist hassles (e.g. "comments or behaviors that reflect or communicate hostile, denigrating, or stigmatizing attitudes and beliefs about LGB's that are embedded in people's everyday lives"; p. 598) and various forms of self-esteem (e.g., state self-esteem and collective self-esteem) with a sample of 69 sexual minority individuals (51% women, 20% bisexual). Swim et al. (2009) found that heterosexist hassles were not related to social state self-esteem (e.g. how others evaluate oneself), but were related negatively to

collective self-esteem (e.g., perception of public opinion of one's social group, group identification, and feelings of worthiness of one's group). Consistent with Swim et al.'s latter findings, Brewster and Moradi (2010) found that experiencing more discrimination from L/G and heterosexual communities positively correlated with awareness of public devaluation, one facet of self-esteem, with their bisexual sample. The lack of support for a bisexual identity from both the L/G and heterosexual communities, combined with limited spaces affirming of bisexual individuals specifically (e.g., community centers; Ochs, 1996), could account for this positive relation. These findings suggest that the link between discrimination and well-being is complex. It may be the case that the inconsistency in results is because the relationship between discrimination and selfesteem acts through other variables. Thus, it could be important to investigate intervening variables in the relation between external discrimination and self-esteem.

Internalized Heterosexism and Self-Esteem

As with external discrimination, the direct link between internalized heterosexism and self-esteem has been inconsistently supported with prior samples of sexual minority women and men. For instance, IH and self-esteem were negatively related with a sample of predominantly White lesbian women (Peterson & Gerrity, 2006) and with men who reported they were only attracted to men, mostly attracted to men, and attracted to both women and men (4%) (Preston, D'Augelli, Kassab, & Starks, 2007). A negative relationship between IH and self-esteem has also been found in a community sample of predominantly White LGB adults (approximately 52% women, 17% bisexual: Herek, et al., 2009) and a sample of predominantly White sexual minority women and men (50% women, 11% bisexual; Herek, Cogan, Gillis, & Glunt, 1997). Although not the focus of

their study, Herek et al. (2009) noted sexual orientation and gender group differences in levels of IH and found that bisexual men reported more self-stigma than any other group. Conversely, Brewster and Moradi (2010) did not find a significant relation between internalized biphobia and awareness of public devaluation. Similar to other bodies of literature with sexual minority populations, most studies combined bisexual individuals with L/G participants. This may obfuscate the specific experiences of bisexual persons. Thus, more studies examining the IH-self-esteem link with bisexual samples are needed. In addition, potential intervening variables could help explain the mixed findings and should be investigated.

External and Internal Discrimination and Mental Health

Given that both external and internalized forms of discrimination are posited to be related to the mental health of sexual minority individuals (Meyer, 2003), some authors have begun to investigate the concurrent relations between both external and internalized forms of discrimination and mental health outcomes with this population (e.g., Szymanki, 2005). For example, Szymanski and Meyer (2008) investigated the links between external and internalized racism and heterosexism with psychological distress with a sample of African American sexual minority women (11% bisexual). They found that racist events, heterosexist events, and internalized heterosexism each correlated positively with psychological distress. However, when examined together in a single regression equation, only racist events and internalized heterosexism accounted for significant variance in psychological distress (Szymanski & Meyer, 2008). Similarly multifarious findings have been reported with other samples of sexual minority women (e.g., Szymanski, 2005). Particularly relevant to the current investigation, Moradi and

Brewster (2010) conducted two analyses regressing psychological distress on stigma consciousness, internalized biphobia, and either biphobia from the heterosexual community or biphobia from the L/G community, controlling for impression management and level of outness. The authors found that, in the case of heterosexual biphobia, all predictors were significantly and positively related to distress. Alternatively, in the equation with L/G biphobia, only stigma consciousness and internalized biphobia were unique and positive predictors of distress.

These studies highlight how external and internalized forms of oppression can have a pervasive negative impact on psychological well-being. In addition, the findings point to the benefits of examining external and internalized forms of discrimination independently and in combination to help inform our understanding of the complexity of the relations of these variables with mental health. Thus, the current study will investigate both externalized and internalized forms of biphobia as predictors of mental health.

Potential Mediating Role of Coping

Although examinations of direct external and internalized discrimination-mental health links continue to be important, scholars have suggested the need to investigate potential intervening variables in these relations as well (e.g., Brewster & Moradi, 2010). Identifying factors that mediate these relationships could be helpful in understanding mechanisms that may ameliorate the harmful effects of external and internalized discrimination experiences on mental health (Szymanski & Carr, 2008). One potentially important intervening variable that has been identified in the literature is coping (Miller & Kaiser, 2001).

Coping can be defined as a way to respond to stressful events emotionally, cognitively, behaviorally, and physiologically (Miller & Kaiser, 2001). There are several different ways in which an individual copes with a perceived discriminatory experience. One proposed way is *active coping* which is the "process of taking active steps to try to remove or circumvent the stress or ameliorate its effects" (Carver, Scheier, & Weintraub, 1989, p. 268). This could involve taking direct action in response to discrimination or actively implementing a plan to address the experience. Another way to cope is via avoidant coping. Avoidant coping is when an individual chooses to ignore or not react to a perceived discriminatory act. This can manifest itself in denial that discrimination occurred or behavioral or mental disengagement (Carver et al., 1989). Active coping, with strategies aimed at addressing the source of the stress, is argued to promote mental health (i.e., less distress and greater well-being) while avoidant coping, with strategies aimed at evading the stressor, is thought to exacerbate psychological distress and hinder well-being (Edwards & Romero, 2008; Sharma & Sharma, 2010; Szymanksi & Owens, 2008). Although no study to date has examined coping as a mediator in the links of both external and internalized discrimination and mental health (distress and well-being), previous studies do support the mediational role of coping in the links of external discrimination and mental health and internalized discrimination and distress separately with diverse samples.

For instance, Alvarez and Juan (2010) examined active and avoidant coping as mediators in the link between external discrimination (i.e., racism) to mental health with a sample of Filipino American individuals (46% women). Relevant to this study's investigation, the author's compared these relations by gender. More specifically, with

their subsample of women, the authors found that avoidance coping mediated the relationship between perceived racial discrimination and psychological distress and selfesteem such that discrimination was positively related to avoidance coping, which predicted greater psychological distress and lower self-esteem. With men, active and avoidance coping were found to mediate the discrimination-distress and discriminationself-esteem links. Discrimination was positively related to distress through avoidance coping and negatively related to distress through active coping. With regard to the discrimination-self-esteem link, discrimination was related to greater self-esteem through active coping and lower self-esteem through avoidance coping.

Coping in response to external discrimination experiences is beginning to be investigated with sexual minority samples as well. In a qualitative study of responses to microaggressions (i.e., daily and commonplace discrimination; Nadal, 2008), 26 LGB participants (58% women, 42% bisexual women, 0% bisexual men) reported five primary content domains (e.g., behavioral reactions, cognitive reactions, emotional reactions; Nadal et al., 2011). Of particular relevance to the current investigation, the behavioral reactions domain highlighted ways in which sexual minority individuals respond to, or cope with, discrimination experiences related to their sexual orientation. Coping styles included passive coping (e.g., not addressing or acknowledging a microaggression), confrontational coping (e.g., challenging those who said derogatory comments based on their sexual orientation) and protective coping (e.g., maintaining awareness of physical safety). This research suggests that LGB persons may use both active and passive/avoidant coping strategies in response to external discrimination experiences. In addition, other emerging qualitative research purports that coping may differ by gender.

With a sample of LGB participants, Hequembourg and Brallier (2009) found that, in response to heterosexism, women reported finding LGB communities helpful (i.e., active coping) while some men reported substance use (i.e., avoidant coping).

A limited number of quantitative studies offer preliminary evidence to support testing a model with coping variables as mediators in the discrimination-mental health link with sexual minority individuals. For instance, Szymanski and Carr (2008) found that IH was positively and directly related to psychological distress and negatively related to self-esteem with their sample of predominantly White gay (86%) and bisexual (13%)men. Using the same coping inventory that will be used for this investigation, Szymanski and Carr also found that IH was positively and directly related to avoidant coping. Furthermore, avoidant coping was positively and directly related to distress and negatively related to self-esteem. In a subsequent study, Szymanski and Owens (2008) investigated active (i.e., problem-solving) and avoidant coping as mediators in the IHpsychological distress link with a sample of sexual minority women (32% bisexual). They found that avoidant coping, but not active coping, partially mediated the relation between IH and distress such that greater IH was related to greater utilization of avoidant coping strategies, which predicted higher levels of distress. An extension of these studies would be to include measures of external discrimination and well-being with a sample of bisexual individuals. It is hypothesized that external discrimination will positively predict active and avoidant coping and internal discrimination will negatively predict active coping and positively predict avoidant coping. In turn, active coping will predict less distress and greater self-esteem and avoidant coping will predict higher distress and less self-esteem. Thus, the current study will examine the potential mediating role of

active and avoidant coping in the relation between external and internalized discrimination and mental health with a sample of bisexual women and men.

The Present Study

Based on the literature reviewed, the current study aims to investigate (a) the direct links between external anti-bisexual discriminatory experiences in the L/G community and heterosexual community and mental health (i.e., psychological distress and self-esteem); (b) the direct links between both internalized biphobia and mental health; and (c) the potential mediating role of active and avoidant coping in these links with a sample of bisexual women and men. Hypothesized indirect effects are shown in Figure 1. Also, based on preliminary literature suggesting potential differences between sexual minority women's and men's experiences (e.g., Szymanski, 2005), gender differences will be also explored. To address these aims, the present study will test the hypothesis *1*: Anti-bisexual experiences from both the L/G and heterosexual community will positively predict psychological distress and negatively predict self-esteem. *Hypothesis 2*: Internalized biphobia will positively predict psychological distress and negatively predict self-esteem.

Hypothesis 3: Perceived anti-bisexual experiences will positively predict active coping styles and avoidant coping.

Hypothesis: 4: Internalized biphobia will negatively predict active coping and positively predict avoidant coping.

Hypothesis 5: Active coping will predict lower levels of psychological distress and higher levels of self-esteem. Avoidant coping will predict higher levels of psychological distress and lower levels of self-esteem.

Hypothesis 6: Active and avoidant coping will partially mediate the links between antibisexual experiences and biphobia to mental health (i.e., psychological distress and selfesteem).

Chapter II

Literature Review

Sexual minority individuals have endured a longstanding history of stigma and oppression. Despite the removal of homosexuality from the *Diagnostic and Statistical Manual* as a psychological disorder almost 40 years ago, individuals with nonheterosexual identities continue to be subjected to discrimination (Herek & Garnets, 2007; Meyer, 2003). In the past 20 years, sexual minority research has increased and accumulating evidence supports a strong link between discriminatory experiences and mental health (Diamond, 2008; Szymanski, 2005; Talley & Bettencourt, 2011). However, many scholars have grouped lesbian (L), gay (G), and bisexual (B) individuals together, despite the differences that exist among these groups (Szymanski & Gupta, 2009; Szymanski & Kashubeck-West, 2008). In particular, limited research addresses the unique experiences of bisexual-identified individuals (Brewster & Moradi, 2010; Ochs, 1996).

Despite the fact that bisexual behavior has been recorded throughout human history, only recently has bisexuality been recognized as a sexual orientation distinct from the L/G community (Fox, 2003; Herek, 2002). In a society that maintains monosexist beliefs about sexual orientation (e.g., one is either L/G or heterosexual), bisexual persons consistently struggle with the issue of visibility (Firestein, 2007). At the same time, as bisexual women and men gain visibility, the negative attitudes they encounter become increasingly evident (Ochs, 1996). Negative attitudes that are conveyed by L/G and heterosexual individuals are a form of external discrimination that

is rarely acknowledged (Ochs, 1996). This type of discrimination has been termed *biphobia* (Bradford, 2004; Ochs, 1996).

Research suggests that the bisexual community faces "double discrimination" as a consequence of hostile attitudes from both the heterosexual and the lesbian and gay (L/G)communities (Ochs, 1996). Although limited, several studies have developed and/ or utilized measures to assess attitudes specifically toward bisexual individuals. For instance, when measuring attitudes in L/G and heterosexual populations by developing and validating the Attitudes Regarding Bisexuality Scale (ARBS), Mohr and Rochlen (1999) found anti-bisexual attitudes (biphobia) consisted of two essential factors: stability and tolerance. Stability encompasses attitudes regarding the stability and legitimacy of a bisexual orientation, bisexuals' commitment in their relationships, their attractions, and their friendships. Tolerance is the degree that a bisexual orientation is perceived as a "moral and tolerable sexual orientation" (Mohr & Rochlen, 1999, p. 365). These two scale dimensions also reflect findings from other studies. For instance, in a study sampling lesbian women, many participants believed that compared to a lesbian identity, a bisexual identity was more transient, bisexual persons were denying their true sexual orientation, and that bisexual women had a greater capability and wish to pass for heterosexual (Rust, 1993).

Additionally, Mulick and Wright (2002) examined the existence of biphobia in L/G and heterosexual populations using a 30-item instrument they developed titled the Biphobia Scale. The scale measured cognitive, affective, and behavioral dimensions of biphobia. Forty-two percent of the sample scored in the moderate to severe range, indicating almost half of the sample had biphobic attitudes. In this study, the

heterosexual sample scored higher on the scale than the L/G participants. Mulick and Wright concluded that the heterosexual participants may have similar perceptions of L/G individuals and thus may rate items similar to how they would rate items pertaining to L/G individuals. In addition, L/G participants may be more empathetic toward individuals facing discrimination and have contact with more bisexual persons, which would explain lower biphobic attitudes (Mulick & Wright, 2002). Also interesting is that the Homophobia Scale and the Biphobia Scale had a strong positive and significant correlation in the sample of heterosexual persons but not in L/G participants. Although heterosexual individuals perceived bisexual individuals separate from them. Therefore, although bisexual persons seemingly have similarities with L/G and heterosexual individuals, differences may isolate them from both groups (Mulick & Wright, 2002).

Some studies have also suggested that bisexual women and men are perceived as least favorable when compared to other marginalized groups. For example, Eliason (1997) investigated biphobia and homophobia in over 200 heterosexual identified undergraduate students. The participants rated their agreement with stereotypical comments about bisexual persons as well as their attitudes toward L/G persons. As far as acceptability, bisexual women and men were rated as being the least acceptable, with 24% of the participants reporting very negative attitudes towards bisexual men and 20% reporting very negative attitudes towards bisexual men and 20% reporting very negative attitudes towards bisexual women and men and L/G individuals. Eliason (2001) found that bisexual men were rated as the least acceptable, followed by gay men, lesbian women, and lastly bisexual women.

Taken together, these studies propose that bisexual women and men may be perceived as the least favorable among certain minority groups (e.g., racial groups, L/G groups). Thus it is important to examine bisexual discrimination experiences separately from L/G and heterosexual samples.

Although bisexual individuals should be considered a distinct group, there is also a great degree of variability within the group in terms of race, ethnicity, culture, age, socioeconomic status, and gender (Lewis et al., 2009). In particular, scholars have noted several differences between bisexual women and men (e.g., Bradford, 2004). For example, Fox (2003) found that bisexual women and men may experience same-sex attractions, act on those attractions, and come out to friends and family at different time periods. Bisexual women may experience same-sex attractions in their middle-late teens and act on those attractions in their early 20s. Bisexual men, however, may experience same-sex attractions in early to middle teens, and act on those attractions in their late teens (Fox, 2003). Fox also distinguished gender differences in coming out as bisexual. Bisexual women were quicker to adapt a bisexual identity following their first same-sex attractions and behavior even though bisexual men may experience and act on these same-sex attractions earlier in life and for longer periods of time (Fox, 2003). Similarly, Hequembourg and Brallier (2009) found that, although both women and men reported being perceived as promiscuous, men who reported they did not conform to societal expectations of masculinity also described experiences of harassment and vigilance about physical safety. In terms of representation in research, Steinman (2011) reviewed over 260 articles in the *Journal of Bisexuality* and discovered that the most recent research on bisexuality investigated bisexual women and that the research on bisexual men seemed to

be lacking. Thus, more information may be known about bisexual women than men. Consequently, it is important that the diversity of women's and men's experiences be investigated in future research with bisexual individuals.

Minority Stress Framework

The *minority stress framework* provides a valuable conceptualization for understanding the experiences of sexual minority individuals (Meyer, 2003). It proposes that people from socially oppressed groups may have higher rates of mental health concerns then non-socially oppressed groups because of the stigma attached to their minority status. Meyer (2003) states, "The minority person is likely to be subject to such conflicts because dominant culture, social structures, and norms do not typically reflect those of the minority group" (p. 675). These societal norms are embedded within current interpersonal and institutional systems that are beyond an individual's control. Meyer notes that he draws from Lazarus and Folkman's (1984) work and theorizes that specific distal and proximal stressors comprise minority stress experiences; distal stressors are described as objective events (i.e. external discrimination) while proximal stressors represent an individual's subjective perceptions (i.e. internalized discrimination). Specifically Meyer (2003) suggests three processes of minority stress that are specific to LGB individuals:

"From the distal to proximal they are (a) external, objective stressful events and conditions (chronic and acute), (b) expectations of such events and the vigilance this expectation requires, and (c) the internalization of negative societal attitudes" (p. 676). It is these experiences of external and internalized discrimination that exacerbate mental health symptoms and have a negative impact on LGB individuals' psychological wellbeing (Meyer, 2003).

Many studies have supported the minority stress framework with samples of sexual minority individuals that are inclusive of bisexual individuals (Szymanski & Sung, 2010; Szymanski, 2006; Talley & Bettencourt, 2011). Being that bisexual women and men experience a double discrimination, it is likely that those experiences may also produce a stressful social environment which may be internalized (Brewster & Moradi, 2010). To this author's knowledge, only one study thus far has quantitatively examined the harmful effects of anti-bisexual discrimination. Brewster and Moradi (2010) reported tentative support for the minority stress model. However, due to the limited available data about the minority stress frame work with bisexual individuals, they suggest prudent interpretation of their findings. In particular, the authors underscore that anti-bisexual discrimination perpetrated by L/G individuals has not been specifically examined in the context of the minority stress framework (Brewster & Moradi, 2010). Thus, it is important for future research to investigate the links between bisexual discrimination and mental health with other bisexual samples.

Heterosexist Discrimination and Psychological Distress

External discrimination, specifically heterosexist discrimination, is a lifelong struggle that typically manifests itself in the form of derogatory comments (Hemquembourg & Brallier, 2009), unfair treatment in personal and professional settings (Smith & Ingram, 2004), and legal inequality (Rostosky, Riggle, Horne, Denton, & Huellemeier, 2010). Minority stress theory postulates that this external discrimination can lead to psychological distress. Indeed, researchers have found a positive and significant relationship between heterosexist discrimination and psychological distress

with sexual minority samples (Diaz et al., 2004; Smith & Ingram, 2004; Szymanski, 2009; Talley & Bettencourt, 2011).

Many combined samples of racial and ethnic minority LGB individuals have found a relation between heterosexism and distress. For instance, Szymanski and Sung (2010) examined the relationship between heterosexist events, heterosexism in communities of color, and other forms of discrimination (e.g., racist events, racism in sexual minority communities) with psychological distress with a combined sample of Asian American LGB-identified women (57%) and men. Approximately 77% of the sample identified as lesbian or gay, and 29% identified as bisexual. The authors found that, controlling for other variables (e.g., outness to the world), greater prevalence of heterosexism in communities of color was related to higher levels of psychological distress. Relatedly, Diaz, et al., (2004) utilized quantitative and qualitative methods in their sample of Latino gay men, and found that social discrimination, specifically homophobia, racism, and poverty, were all positive predictors of psychological distress. In this sample, men reported that they endured homophobic treatment in their ethnic communities and also discrimination in predominantly White gay communities due to perceptions that they were sexual objects. It was also found that those participants who reported higher levels of social oppression and distress were also more likely to participate in sexual encounters while using drugs and alcohol, utilize sex as a coping mechanism for anxiety and stress, and consent to sex with partners who did not use protection (Diaz et al., 2004). These studies provide evidence for the harmful and lifethreatening impact that homophobic discrimination can have not only on mental health but on physical health as well.

Similar results have been found with predominantly White samples of sexual minority individuals as well. For example, Szymanski (2009) investigated the relation between heterosexist events and psychological distress with a sample of predominantly White gay (86%) and bisexual (13%) men. In accordance with other research, Szymanski found a positive and significant relationship between experiencing heterosexist events in the past year and psychological distress. This finding was consistent with another study, which reported that heterosexist events were positively and significantly correlated with distress in a sample of predominantly White lesbians (Szymanski, 2006). These findings add to the existing literature on the harmful effects that heterosexist discrimination has on mental health.

Bisexual women and men may experience discrimination similarly to L/G individuals, but due to being combined with L/G samples or being excluded altogether, limited published papers exist solely on bisexual samples (Herek, 2002). In addition, many of the studies that examine sexual minority discrimination and its relation to psychological distress have utilized measures originally intended for lesbian and/or gay individuals that were modified to be inclusive of bisexual participants (e.g., HHRDS; Szymanski 2006, 2009). These studies usually have a disproportionate number of lesbian and/or gay participants, making it difficult to assess group differences. Thus, it is critical that we explore the discrimination-distress link with a sample of bisexual women and men alone, utilizing measures designed for bisexual individuals. Obtaining this information would increase our understanding of the impact of heterosexist discrimination on bisexual individuals.

In the only study to investigate the relation between external discrimination and psychological distress with a bisexual sample, using a scale specifically designed to assess perceived discrimination in the bisexual community, Brewster and Moradi (2010) sought to develop the first instrument to assess perceived experiences of anti-bisexual discrimination, the Anti-Bisexual Experiences Scale (ABES). Not only did they develop a psychometrically sound instrument, but also found that perceived anti-bisexual discrimination from L/G and heterosexual persons were significantly and positively correlated with psychological distress. This finding supports a discrimination-distress link similar to that found with combined samples of LGB participants or samples of L/G participants (Meyer, 2003).

Internalized Heterosexism and Psychological Distress

Research has demonstrated that a link exists between heterosexist discrimination and psychological distress with diverse samples of sexual minority individuals (Diaz et al., 2004; Szymanski, 2009; Talley & Bettencourt, 2011). Due to the discrimination, negative attitudes, and stigma that sexual minority people face, it is likely that they will internalize some of these experiences and attitudes in the form of *internalized heterosexism* (Sophie, 1987). Many researchers have asserted that internalized heterosexism encompasses the large range of negative emotions and attitudes some people have toward sexual minority individuals (Herek, 2004; Szymanski at el., 2008). Other terms that have been used to describe the internalization of external experiences of discrimination are *internalized homophobia* and *internalized homonegativity* (Mayfieled, 2001). Because the current study focuses on bisexual women and men only, the construct measured will be termed *internalized biphobia* (Ochs, 1996), defined as internalization of negative attitudes regarding bisexuality. However, due to the limited studies on internalized biphobia, much of the literature reviewed will focus on internalized heterosexism.

Given the stigma that minorities often endure, it is likely that members of underrepresented groups will struggle with having some degree of internal heterosexism (Meyer, 2003). This can range from mild self-doubt to extreme self-harm and hatred (Gonsiorek & Rudolph, 1991). Thus, many scholars have begun to investigate the relation between internalized heterosexism and distress. Similar to external discrimination, very few studies have investigated bisexual samples alone. Szymanski and Kashubeck-West (2008) investigated the relationship between IH and internalized sexism and psychological distress in a sample of predominantly White L/G women (17% bisexual). The authors found that IH positively predicted psychological distress when controlling for internalized sexism. In other words, regardless of L/B women's internalized negative sexist beliefs, IH still negatively predicted psychological distress. Similarly, Szymanski and Gupta (2009) investigated multiple internal oppressions (i.e., IH and internalized racism) and psychological distress with a sample of sexual minority African American women and men (60% women, 26% bisexual). Results revealed that only IH was a unique positive predictor of psychological distress. This finding indicates that IH may be the primary oppression for this particular sample. Furthermore, these results are consistent with another study that found IH, and not internalized racism, to be a positive and significant predictor of psychological distress with a sample of African American sexual minority women (Szymanski & Meyer, 2008). It may be the case that for some samples of sexual minority people of color, IH is uniquely harmful.

IH has also positively predicted psychological distress with samples of predominantly White bisexual (13%) and gay men (Szymanski & Carr, 2008), predominately White HIV-positive gay men (Johnson et al., 2008), predominantly White sexual minority women (32% bisexual; Szymanski & Owens, 2008), Asian American women (48%) and men, (21%, bisexual; Szymanski & Gupta, 2009), and predominately African American bisexual (20%) and gay HIV-Seropositive men (Ross et al., 2008). The one study investigating a solely bisexual sample also found a positive relationship between internalized biphobia and distress (Brewster & Moradi, 2010). Taken together, it is evident that the "insidious" nature of IH (Meyer, 2003, p. 682) is found with diverse sexual minority groups and, thus, should be investigated with additional samples of bisexual women and men.

Heterosexist Discrimination and Self-Esteem

Although it is important to look at the relation between external discrimination and psychological distress, it is also important to investigate discrimination and wellbeing variables, such as self-esteem, as part of a more comprehensive conceptualization of mental health (Balsam & Mohr, 2007; Major et al., 2003; Moradi & Hasan, 2006). According to Crocker and Quinn's (2000) review of the literature on social stigma and self-esteem, personal self-esteem is important to individuals from Western cultures as it is positively related to increased life satisfaction, positive emotions, less hopelessness, and less depression. To date, research investigating the relationship between discrimination and well-being has been mixed, with some studies reporting a negative relation and others finding no relation. Allport (1954) argued that although everyone reacts differently to stigmatization and discrimination, lowered levels of self-esteem are a shared consequence: "Group oppression may destroy the integrity of the ego entirely, and reverse its normal pride, and create a groveling self-image" (p. 152). Schmitt and Branscombe (2001) similarly proposed that, since one's group is important to one's identity, experiences of discrimination related to that group identity can have deleterious implications for mental health. Accumulating research with some racial and ethnic minority samples and women seem to support this conceptualization in the links of racism and sexism to self-esteem (e.g., Moradi & Risco, 2003; Schmitt, Branscombe, Kobrynowicz, & Owen, 2002). However, few studies have examined the heterosexism-self-esteem relation with sexual minority samples.

In an exception, Swim et al., (2009) examined the relationship between heterosexist hassles (e.g. "comments or behaviors that reflect or communicate hostile, denigrating, or stigmatizing attitudes and beliefs about LGB persons that are embedded in people's everyday lives"; p. 598) and various forms of self-esteem (e.g. state self-esteem and collective self-esteem) with a sample of 69 sexual minority individuals (51% women, 20% bisexual) using daily diary methods. Swim et al. (2009) found that heterosexist hassles were related negatively to collective self-esteem (e.g., perception of public opinion of one's social group, group identification, and feelings of worthiness of one's group). Relatedly, Brewster and Moradi (2010) found that experiencing more discrimination from L/G and heterosexual communities positively correlated with awareness of public devaluation, one facet of self-esteem, with their bisexual sample. The lack of support for a bisexual identity from both the L/G and heterosexual

communities, combined with limited spaces affirming of bisexual individuals specifically (e.g., community centers; Ochs, 1996), could account for this positive relation.

Conversely, other studies have found no relation between discrimination experiences and self-esteem (e.g., Moradi & Subich, 2004). In the previously discussed daily diary study, in addition to the significant relations between heterosexism and collective self-esteem, the authors reported no relation between heterosexist hassles and social state self-esteem (Swim et al., 2009). A potential explanation for these seemingly counterintuitive findings was offered by Crocker and Major (1989) who argued that the harmful psychological consequences of discrimination may be less present for individuals who are able to identify a negative act or behavior as such. Alternatively, it may be the case that the inconsistency in results is due to the fact that the relationship between discrimination and self-esteem acts through other variables. Thus, it could be important to investigate intervening variables in the relationship between external discrimination and self-esteem.

Internalized Heterosexism and Self-Esteem

Although many scholars have theorized and/or investigated the links between external discrimination and self-esteem (Crock & Major, 1989; Major et al., 2003), fewer studies have investigated the links between internalized discrimination and self-esteem. Internalized discrimination is an important variable to investigate because researchers propose that for some, external experiences of discrimination will inevitably lead to the internalization of these messages and may be harmful to one's mental health (Meyer, 2003). Some studies have begun to investigate this relation with samples of LGB persons (e.g., Herek, et al., 1997). In addition, this link has been compared with subsamples of

bisexual and L/G participants (e.g., Balsam & Mohr, 2007) and a single study with bisexual individuals alone (Brewster & Moradi, 2010).

For instance, Preston et al. (2007) examined a sample of men who have sex with men (MSM) in rural areas. The terms bisexual and gay were not utilized in this study, rather the breakdown of participants was that "the majority (78%) stated they were only sexually attracted to men, whereas 18% said they were mostly attracted to men and only 4% were attracted to both men and women" (Preston et al., 2007, p. 220). The authors found that internalized homophobia was negatively related to self-esteem. A negative relationship between IH and self-esteem has also been found in a community sample of predominantly White LGB adults (approximately 52% women, 17% bisexual: Herek, et al., 2009) and a sample of predominantly White sexual minority women and men (50% women, 11% bisexual; Herek, et al., 1997). Although not the focus of their study, Herek et al. (2009) noted sexual orientation and gender group differences in levels of IH; bisexual men reported more self-stigma than any other group.

In another study that explicitly compared bisexual individuals to L/G persons, Balsam and Mohr (2007) investigated the differences between bisexual (25%) and L/G adults (64% women) in the relationship between internalized homonegativity and wellbeing. Well-being was operationalized with a variable comprised of items from measures of individual self-esteem, life satisfaction, and psychological distress. The authors found a negative and significant correlation between internalized homonegativity and wellbeing for the sample as a whole. The authors then investigated whether sexual orientation (bisexual and L/G) moderated this relation and found no significant difference by sexual orientation group. Thus, it seems that the impact of internalized

homonegativity on well-being was comparably negative for L/G and bisexual participants.

In the only study that examined the internalized discrimination-self-esteem link with a sample of bisexual persons, Brewster and Moradi (2010) reported no significant relationship between internalized biphobia and awareness of public devaluation with their sample of bisexual women and men. One possible explanation for these varied results may be in the way self-esteem was operationalized. For example, when *individual* selfesteem was assessed, a negative and significant correlation with IH has been consistently found (e.g., Balsam & Mohr, 2007). However, IH, specifically internalized biphobia was unrelated to a more *collective* conceptualization of self-esteem. To further clarify these mixed findings, additional studies examining the relationship between IH and self-esteem with bisexual samples are needed. In addition, potential intervening variables could also help explain the mixed findings and should be investigated.

External and Internalized Discrimination and Mental Health

External and internalized forms of discrimination are posited to be related to mental health for members of stigmatized groups (Meyer, 2003). For instance, Szymanski and Stewart (2010) investigated external and internal sexism and racism with their sample of predominantly heterosexual African American women. They found that perceived sexist and racist events were significantly and positively correlated to psychological distress. However, inconsistent with their expectations and prior research supporting a link between internalized discrimination and distress (e.g., Brewster & Moradi, 2010; Szymanski & Owens, 2008), Szymanski and Stewart did not find a significant correlation between internalized forms of discrimination (i.e., sexism and

racism) and psychological distress. When externalized and internalized sexism and racism were examined concurrently in a single regression, only perceived sexism emerged as a unique positive predictor of psychological distress. However, in a subsequent study with African American women and men, Szymanski and Obiri (2011) investigated the link of external and internalized racism to psychological distress and found that both were significantly and positively correlated with psychological distress. Furthermore, when examined concurrently in a single regression, external and internalized racism each accounted for significant positive variance in psychological distress.

In addition to studies of external and internalized racism and sexism, some authors have begun to investigate the concurrent relations between both external and internalized forms of heterosexism and mental health with sexual minority samples (Szymanski, 2005; Szymanski & Meyer, 2008). For instance, Szymanski (2005) examined external and internal forms of heterosexism and sexism with a sample of predominately White sexual minority women (6% bisexual). She found that heterosexism, internalized heterosexism, and sexism, but not internalized sexism, were significantly and positively correlated with psychological distress. Also, when examined together in a regression, controlling for other variables (e.g., education and income), heterosexism, internalized heterosexism, and sexist events each were significant predictors of psychological distress. In a later study, Szymanski and Meyer (2008) examined the links between external and internalized heterosexism and racism with psychological distress in a sample of African American sexual minority women (11% bisexual). They found that racist events, heterosexist events, and internalized

heterosexism each correlated positively with psychological distress. However, when examined together, only racist events and internalized heterosexism accounted for significant variance in psychological distress (Szymanski & Meyer, 2008). Similarly, with their bisexual sample, Brewster and Moradi (2010) conducted two analyses regressing psychological distress on stigma consciousness, internalized biphobia, and either biphobia from the heterosexual community or biphobia from the L/G community, controlling for impression management and level of outness. The authors found that, in the case of biphobia from the heterosexual community, all three predictors were significantly and positively related to distress. On the other hand, in the equation with L/G biphobia, only stigma consciousness and internalized biphobia were unique predictors of distress.

Taken together, these studies suggest that external and internalized forms of discrimination have important implications for the psychological distress of marginalized groups. However, these patterns vary by group and type of discrimination examined. Interestingly, with sexual minority women of different racial and ethnic groups, internalized heterosexism consistently emerged as a predictor of distress when considered with external forms of discrimination. Thus, it would useful to examine this relation with samples of sexual minority men (e.g., bisexual men) as well. It is also important to note that studies examining external and internalized forms of discrimination concomitantly have only done so in relation to psychological distress. Investigating the independent and simultaneous relations between both external and internalized discrimination with well-being could contribute to a more comprehensive understanding of the impact of these forms of discrimination and mental health. Finally, the dearth of research on these

relations with bisexual individuals is evident. Consequently, the current study will investigate the links of both external and internalized forms of biphobia to psychological distress and self-esteem with a sample of bisexual women and men.

Potential Mediating Role of Coping

Although examinations of direct external and internalized discrimination-mental health links continue to be important, scholars have called for investigations of potential intervening variables in these relations as well (e.g., Szymanski & Owens, 2008; Brewster & Moradi, 2010). Coping has been identified as an intervening mechanism that may play an important role in the relationships between external and internal experiences of discrimination and psychological well-being (Miller & Kaiser, 2001). Coping has been defined as a way to respond to stressful events emotionally, cognitively, behaviorally, and physiologically (Miller & Kaiser, 2001). There are several different ways in which an individual may cope with a perceived discriminatory experience. One proposed way is *active coping* which is the "process of taking active steps to try to remove or circumvent the stress or ameliorate its effects" (Carver, et al., 1989, p. 268). This could involve taking direct action in response to discrimination or actively implementing a plan to deal with the experiences. Another way to cope is via *avoidant coping.* Avoidant coping is when an individual chooses to ignore or not react to perceived discrimination. This can manifest as denial that discrimination occurred or behavioral or mental disengagement (Carver et al., 1989). Active coping, with strategies aimed at addressing the source of the stress, is argued to promote mental health (i.e., less distress and greater well-being) while avoidant coping, with strategies aimed at evading the stressor, is thought to exacerbate psychological distress and hinder well-being

(Edwards & Romero, 2008; Sharma & Sharma, 2010; Szymanksi & Owens, 2008). Although no study to date has examined coping as a mediator in the links of both external and internalized discrimination and mental health (distress and well-being), previous studies do support the mediational role of coping in the links of external discrimination and mental health and internalized discrimination and distress separately.

For instance, with a sample of African American women (sexual orientation not reported), Thomas, Speight, and Witherspoon (2008) found that avoidant coping partially mediated the relationship between gendered racism (e.g. external discrimination based on race and gender) and psychological distress, such that greater discrimination predicted higher levels of avoidant coping, which predicted greater distress. In another study that investigated the mediating role of coping in the links of racism to both distress and selfesteem by gender, Alvarez and Juan (2010) obtained a complex set of findings with their sample of Filipino American individuals (46% women). More specifically, with their subsample of women, the authors found that avoidance coping mediated the relationship between perceived racial discrimination and psychological distress and self-esteem such that discrimination was positively related to avoidance coping, which predicted greater psychological distress and lower self-esteem. With men, active and avoidance coping were both found to mediate the discrimination-distress and discrimination-self-esteem links. Discrimination was positively related to distress through avoidance coping and negatively related to distress through active coping. With regard to the discriminationself-esteem link, discrimination was related to greater self-esteem through active coping and lower self-esteem through avoidance coping. In a set of contradictory findings, Liang, Alvarez, Juan, and Liang (2009) reported that discrimination was positively

related to greater racism-related stress, through active coping. It is important to underscore, however, that although racism-related stress is a form of distress, it represents a narrowly defined construct of stress, rather than a general indicator of mental health. It may be that the mediating role of active and avoidance coping vary, not only by gender, but by the ways in which distress is operationalized. Overall, these studies support the aforementioned conceptualization that active coping tends to diminish distress and promote well-being, while avoidant coping increases distress and hinders well-being. However, it is important to determine whether these links are consistent with samples of sexual minority samples, specifically bisexual individuals.

Indeed, coping in response to external discrimination experiences is beginning to be investigated with sexual minority samples. For instance, in a qualitative study of responses to microaggressions, defined as "brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative slights and insults toward members of oppressed groups" (Nadal, 2008, p. 23), 26 LGB participants (58% women, 42% bisexual women, 0% bisexual men) reported five primary content domains (Nadal et al., 2011). They included behavioral reactions, cognitive reactions, emotional reactions, mental health, and systems and groups who enact microaggressions. Of particular relevance to the current investigation, the behavioral reactions domain highlighted ways in which sexual minority individuals respond to, or cope with, discrimination experiences related to their sexual orientation. Coping styles included passive coping (e.g., not addressing or acknowledging a microaggression), confrontational coping (e.g., actively speaking up and challenging those who said derogatory comments based on their sexual orientation)

and protective coping (e.g., maintaining awareness of physical safety). This research suggests that, similar to studies with racial and ethnic minority groups, LGB persons may use both active and passive/avoidant coping strategies in response to external discrimination experiences. Accordingly, it could be appropriate to likewise investigate coping as a mediator in the discrimination-distress link with this group.

Although the mediating role of coping has not been explicitly tested in the link between external discrimination (i.e., heterosexism) and mental health with sexual minority samples, some studies offer preliminary evidence to support testing a model with coping variables as mediators in the relationship between internalized discrimination and mental health with sexual minority individuals. For instance, Szymanski and Carr (2008) found that IH was positively and directly related to psychological distress and negatively related to self-esteem with their sample of predominantly White gay (86%) and bisexual (13%) men. The authors also found that IH was positively and directly related to avoidant coping. Furthermore, avoidant coping was positively and directly related to distress and negatively related to self-esteem.

In an extension of this work, Szymanski and Owens (2008) investigated the mediating role of coping in the IH-psychological distress link with a sample of sexual minority women (32% bisexual). Moreover, utilizing the same two coping inventories as the current study, the authors examined *both* active (i.e., problem-solving) and avoidant coping as mediators in this relation. Similar to the previous investigation, IH was positively related to distress and avoidant coping. However, IH was found to be negatively related to active coping. With regard to mediation, avoidant coping, but not active coping, partially mediated the relation between IH and distress such that greater IH

was related to greater utilization of avoidant coping strategies, which predicted higher levels of distress.

In sum, the positive relation between external discrimination and active and avoidant coping have been found to be consistent across multiple diverse samples (i.e., there are positive relations between external discrimination and active and avoidant coping). However, research suggests that although there is a positive relation between internalized discrimination and avoidant coping, there is a negative relationship between internal discrimination and active coping. A possible explanation for this could be that those who report high levels of internalized discrimination may perceive acts of discrimination as normal or deserved. Therefore, they may be more likely to avoid the problem or pretend no problem exists and not participate in active coping strategies to the same degree. The current investigation will extend these prior studies by examining coping as a mediator in the links of external and internalized biphobia to mental health (i.e., distress and self-esteem) with a bisexual sample. It is hypothesized that external discrimination will positively predict active and avoidant coping and internal discrimination will negatively predict active coping and positively predict avoidant coping. In turn, active coping will predict less distress and greater self-esteem and avoidant coping will predict higher distress and less self-esteem. To this author's knowledge, this study is the first to empirically investigate the mediational role of coping in the discrimination-mental health link with a bisexual sample.

The Present Study

Based on the literature reviewed, the current study aims to investigate (a) the direct links between external anti-bisexual discriminatory experiences in the L/G

community and heterosexual community and mental health (i.e., psychological distress and self-esteem); (b) the direct links between both internalized biphobia and mental health; and (c) the potential mediating role of active and avoidant coping in these links with a sample of bisexual women and men. Hypothesized indirect effects are shown in Figure 1. Also, based on preliminary theoretical and empirical literature suggesting potential differences between sexual minority women's and men's experiences (e.g., Hequembourg & Brallier, 2009; Szymanski, 2005), gender differences will be explored. To address these aims, the present study will first test the following hypotheses on the total sample. Next, all hypotheses will be tested by gender.

Hypothesis 1: Anti-bisexual experiences from both the L/G and heterosexual community will positively predict psychological distress and negatively predict self-esteem.*Hypothesis 2*: Internalized biphobia will positively predict psychological distress and negatively predict self-esteem.

Hypothesis 3: Perceived anti-bisexual experiences will positively predict active coping styles and avoidant coping.

Hypothesis: 4: Internalized biphobia will negatively predict active coping and positively predict avoidant coping.

Hypothesis 5: Active coping will predict lower levels of psychological distress and higher levels of self-esteem. Avoidant coping will predict higher levels of psychological distress and lower levels of self-esteem.

Hypothesis 6: Active and avoidant coping will partially mediate the links between antibisexual experiences and biphobia to mental health (i.e., psychological distress and selfesteem).

Chapter III

Method

Participants

Data from a sample of 673 bisexual individuals were analyzed in the present study. Participants ranged from 18 to 72 years (M = 29.73, SD = 11.60, Skewness = 1.189: See Table 3) with approximately 80% identifying as Caucasian/White, 8% as Multiracial, 4% as Hispanic/Latina/o, 4% as African American/Black, 3% as Asian/Asian American/Pacific Islander, 1% identifying as American Indian/ Native American, and 1% did not respond. The majority of the sample identified as women (71%), 20% as men, 3% as transmen, 1% as transwomen, and 6% as other genders (e.g., androgynous, gender queer) and less than 1% did not respond. Two hundred and eighty participants reported they were partnered with a man and about 83% of these participants identified as a women, 11% identified as men, 3% indicated other, 2% identified as transmen, and less than 1% reported being transwomen. Of the 198 participants who reported they were partnered with a woman, approximately 54% of these participants were women, 34% were men, 5% were transman, and 7% indicated other. Of the 20 participants who reported being partnered with a transman, 80% identified as women, 10% as men, 5% as transmen, and 5% as other. Nineteen participants reported being partnered with a transwoman and about 58% of these participants were women, 21% were men, 16% were other, and 5% were transmen. Approximately 23% of the sample did not indicate the gender(s) of their partner(s). The majority of the sample identified as bisexual (70%), 10% as mostly lesbian/gay, 10% as mostly heterosexual, 9% as other (e.g., pansexual, queer), and 1% did not answer. Thirty-six percent of the sample was

single,22% in long term dating relationships, 22% in legal partnerships, 12% in non-legal committed partnerships , and 9% in casual dating relationships. Approximately 30% percent had some college/technical school, 25% a professional/graduate degree, 25% a college degree, 12% a high school diploma, and 9% had some professional/graduate school. Thirty-nine pecent are employed full time, 33% are employed part-time, and 29% are unemployed. Approximately 45% reported they are slightly involved with political activism related to bisexual issues, 27% are somewhat involved, 23% are not at all involved, and 5% are extremely involved and less than 1% did not answer. Almost half the sample identified as middle class (47%), 28% as working class, 17% as upper middle class, 6% as lower class, and 1% as upper class. Reported residence of participants suggested good regional (32% northeast, 22% midwest, 17% southeast, 16% southwest, 13% northwest) diversity.

Procedures

Data collected for this study were obtained via online survey. Riggle, Rostosky, and Reedy (2005) suggest that collecting data via internet survey increases access to populations that tend to be less visible, such as bisexual persons. In addition, online data collection is a cost effective approach to obtaining participant data and has also been shown to obtain results comparable to surveys sent out by mail (Gosling, Vazire, Srivastava, & John, 2004). Participants were recruited through listservs, discussion groups, and virtual communities geared toward bisexual women and men. Participants were informed that the study's purpose was about the life experiences and well-being of bisexual women and men. Participants were also informed that they must identify as being emotionally and/or physically attracted (not necessarily to the same degree or the

same time) to the same or other genders, currently reside in the United States, and be 18 years of age or older. A survey link was presented in recruitment emails (Appendix A) and upon clicking the link, participants were presented with the informed consent (Appendix B), demographic questionnaire (Appendix C), survey (Appendices D, E, F, G, H, and I), and debriefing form (Appendix J).

Several questions were placed at the beginning of the demographic survey to determine the proportion of these participants who returned to complete the survey at a later time. Specifically, the first question on the demographic survey is, "Have you ever opened this research study before?" If the participant responded "no" then the participant was directed to take the rest of the survey. If the participant responded "yes" then the participant was directed to the question, "Have you completed this survey in its entirety before?" If the participant again responded "yes" then the participant was directed to a message that told them, "Thank you for taking our survey. We only ask that you fill this out once." If the participant responded "no" then the participant was asked how much of the survey they have completed. If they responded "76% or more" then the participant was directed to the end of the survey. Approximately 99% reported that they had never opened this survey before and 1% reported that they had previously opened this survey. Of the 1% (n = 5) of participants who reported they opened the survey previously, 4 reported that they had completed 0%-25% of the survey and 1 participant reported that had completed 20%-50% of the survey.

Four validity questions were also strategically placed throughout the survey to ensure participants were not responding at random (e.g., Please mark "strongly agree"). Although 1,335 individuals accessed the survey, 194 were removed because they

responded to more than one validity item incorrectly or left these items blank and 193 were removed because they only filled out demographic data and left the rest of the survey blank. Seventy-three participants were excluded because they left the entire survey blank (including demographic variables). Fifty-three were removed because they were missing more than 25% of survey data (excluding demographic questions). Forty-one participants were removed because they did not meet inclusion criteria. Among the remaining participants, those missing more than 20% of items on an instrument, were removed from analyses that involved scores on that instrument (37 participants were removed); for the remaining cases those missing 20% or less of items on an instrument, ipsative (or valid) mean substitution (Dodeen, 2003) was utilized to replace missing data points on a given measure with the participant's mean of non-missing data points on that measure. Seventy-six participants were later removed because they were missing data needed for consideration of the covariates.

Instruments

Demographic Questionnaire. Demographics were collected to obtain participant characteristics (See Appendix C). Specifically, the questionnaire inquired about participants' age, gender, race/ethnicity, relationship status, gender(s) of partner(s), highest level of education completed, sexual orientation, political involvement, employment status, social class, and region of residence.

Anti-Bisexual Experiences. External experiences of bisexual discrimination in the L/G as well as heterosexual communities were assessed with the Anti-Bisexual Experiences Scale (ABES; Brewster & Moradi, 2010). The ABES (Appendix E) consists of 17 items that asked participants to indicate the frequency of each experience presented.

Participants responded to each item twice: once for anti-bisexual experiences from L/G persons (ABES-LG) and once for anti-bisexual experiences from heterosexual people (ABES-H). A sample item is, "When I have disclosed my sexual orientation to others, they have continued to assume that I am really heterosexual or gay/lesbian." Items are rated on a Likert-type scale (1 = *never* to 6 = *almost all of the time*). Reponses are averaged with higher scores indicating higher frequency of anti-bisexual experiences. The measures have evidenced good internal consistency reliability with a prior sample of bisexual individuals (Brewster & Moradi, 2010). Cronbach's alpha values for the ABES-LG and ABES-H scales were .94 and .93, respectively. With regard to validity, non-significant correlations with impression management and medium to large correlations with awareness of stigmatization indicators support discriminant and convergent validity for the ABES-LG and ABES-H full scale scores (Brewster & Moradi, 2010). The Cronbach's alpha values were .96 for the ABES-LG and .95 for the ABES-H for the current sample.

Internalized Biphobia. Internalized biphobia was measured utilizing the fiveitem Internalized Homonegativity subscale of the Lesbian, Gay, and Bisexual Identity Scale (LGBIS). The LGBIS (Appendix F) is a revised version of the Lesbian and Gay Identity Scale (Mohr & Fassinger, 2000) modified for use with bisexuals (Brewster & Moradi, 2010). For instance, "I'm glad to be a lesbian/ gay person" was modified to "I'm glad to be a bisexual person." This scale is intended to assess participants' negative perceptions of themselves as bisexual. Items are rated on a Likert-type scale (1 = *disagree strongly* to 7 = *agree strongly*). Responses are averaged with higher total scores indicating higher levels of internalized biphobia. The bisexual version of this scale

evidenced good reliability with Sheets and Mohr (2009) reporting a Cronbach's alpha of .77 with their sample of bisexual of women and men and Brewster and Moradi (2010) obtaining an alpha of .85 with their sample of bisexual women and men. In terms of validity, internalized homonegativity scores correlated negatively with self-esteem in a sample of lesbian and gay individuals (Mohr & Fassinger, 2000) and correlated negatively with life satisfaction in a sample of bisexual people (Sheets & Mohr, 2009). The Cronbach's alpha was .83 with the current sample.

Coping. As suggested by previous scholars (e.g., Szymanski & Carr, 2008; Szymanksi & Owens, 2008), active coping and avoidant coping were assessed with Problem Solving and Avoidant Coping measures, respectively (Appendix G), derived from the COPE Inventory (Carver et al., 1989). The active measure consists of 12 items representing 3 COPE subscales (i.e., Active Coping, Planning, and Suppression of Competing Activities) (Szymanski & Owens, 2008). An example of an active coping item is, "I try to come up with a strategy of what to do." The avoidant measure consists of 12 items representing another 3 COPE subscales (i.e., Denial, Behavioral Disengagement, and Mental Disengagement) (Szymanski, 2009; Szymanski & Carr, 2008). An example of an avoidant item is, "I pretend that it hasn't really happened." Participants responded to all items on a Likert-type scale (1 = I usually don't do this at allto 4 = *I* usually do this a lot). Items are summed with higher scores indicative of greater active and avoidant coping. With a sample of sexual minority women, Szymanski and Owens (2008) obtained alpha's of .89 for the problem solving measure and .82 for the avoidant measure. Validity has been demonstrated by significant relationships between the COPE subscales and measures of hardiness, optimism, self-esteem, anxiety, and Type

A personality disorder (Carver et al., 1989) with a sample of women and men (sexual orientation not reported). For the current sample, the Cronbach's alpha was .88 for the Active scale and .79 for the Avoidant scale.

Psychological distress. Psychological distress was assessed with the Hopkins Symptom Checklist-21 (HSCL-21; Green, Walkey, McCormick, & Taylor, 1988). The HSCL-21 (Appendix H) is an abbreviated version of the 58-item Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth & Covi, 1974). The measure is comprised of three, 7-item, subscales representing general feelings of distress (GFD), somatic distress (SD), and performance difficulty (PD). A GFD subscale sample item is, "Blaming yourself for things," a SD subscale sample item is, "Pains in the lower part of your back," and a PD subscale sample item is, "Trouble remembering things." HSCL-21 items are rated on a 4-point Likert scale (1 = not at all and 4 = extremely). Item ratings are averaged, with higher scores indicating greater psychological distress. With a prior sample of predominantly White sexual minority women, the HSCL-21 yielded excellent reliability (i.e., $\alpha = .91$; Szymanski & Owens, 2009). Additionally, with predominantly White college samples of women and men (sexual orientation not reported; Moller, Fouladi, McCarthy, & Hatch, 2003), the HSCL yielded alpha's of .92 for the total distress score, 88 for general feelings of distress, .84 for somatic distress and .83 for performance difficulty. In terms of validity, HSCL-21 scores correlated as expected with other measures of psychological distress (e.g., anxiety) and total HSCL-21 distress scores differentiated between a nonclinical and clinical population (sexual orientation not reported) sample and was sensitive to changes in distress over the course of therapy (Deane, Leathem, & Spicer, 1992). In the current study, subscale scores were utilized as

indicators of a factor of psychological distress in the structural equation model. The Cronbach alpha was .92 for the total scale, 90 for general feelings of distress, .85 for somatic distress, and .85 for performance difficulty.

Self-Esteem. Self-esteem was assessed using the 10-item Rosenberg (1965) Self-Esteem Scale (Appendix I). An example item includes, "I feel that I have a number of good qualities." Respondents will rate each statement on a Likert scale (1 = *strongly disagree* to 4 = *strongly agree*). With some items reverse scored, all items are averaged, with higher scores indicating higher self-esteem. This scale is a well-validated measure of global personal self-esteem. A Cronbach's alpha coefficient of .90 was reported with a sample of predominantly bisexual and gay men (Szymanski & Carr, 2008) and .92 with a sample of predominantly White lesbians (Beals & Peplau, 2005). Construct validity was demonstrated via negative and significant correlations with self-reports and peer ratings of psychological indicators of anxiety and depression with a sample of adolescents (sexual orientation not reported) (Rosenberg, 1965). In this study the Self-Esteem measure was parceled using item-to-construct balance procedures (Little, Cunningham, & Shahar, 2002). Cronbach's alpha coefficients were .92 for the total scale, .78 for parcel 1, .81 for parcel 2, and .78 for parcel 3.

Chapter IV

Results

Exploring Potential Covariates

The relation between demographic variables and the criterion variables (i.e., active coping, avoidant coping, psychological distress, and self-esteem) were explored to determine whether any covariates should be included in the main analyses. First, for each of the categorical demographic variables (i.e., race/ethnicity: African American/ Black, Asian/ Asian American/ Pacific Islander/ Hispanic/Latina/o, American Indian/ Native American, Caucasian/White, Multiracial, other; relationship status: single, dating casually, dating long term, committed partnership (non-legal), civil union, domestic partnership (legal), married; employment status: employed full time, employed part time, not employed; region: Northeast, Southeast, Northwest, Southwest, Midwest), an analysis of variance (ANOVA) was conducted to identify potential group differences on the criterion variables. With regard to relationship status, only two participants reported that they were in civil unions and 11 participants reported they were in legal domestic partnerships. Because adequate sample sizes for each cell are necessary to ensure sufficient power to conduct the ANOVAs (Tabachnick & Fidell, 2007), the civil union and domestic partnership participants were combined with participants who reported they were married to form a group of "legal partnerships" in the subsequent analysis.

Active coping significantly varied by relationship status (F [4, 742] = 5.34, p < .001) and employment status (F [2, 745] = 10.47, p < .001). Specifically, participants who were in legal partnerships reported significantly higher levels of active coping (M =

2.75, SD = .53) than those who were single (M = 2.53, SD = .60). There were no significant differences found between participants who were single and dating causally, dating long term, or in non-legal committed partnerships. There were no significant differences between legal partnerships and dating casually, dating long term, and non-legal committed partnerships. Additionally, there were no significant differences among participants that reported they were dating casually, dating long term, or in non-legal committed partnerships. With regard to employment status, those who were employed full time reported significantly higher levels of active coping (M = 2.72, SD = .51) than those that were unemployed (M = 2.50, SD = .60). No significant differences were found between participants who were employed full time and part time or participants that were employed full time and part time or participants that were employed.

Avoidant coping significantly varied by relationship status (F [4, 742] = 10.07, p < .001) and employment status (F [2, 745] = 16.05, p < .001). In particular, participants who indicated they were single reported utilizing significantly more avoidant coping (M = 2.01, SD = .47) than those who were dating long term (M = 1.86, SD = .44), in non-legal committed partnerships (M = 1.82, SD = .43), and in legal partnerships (M = 1.77, SD = .42). Those that were dating casually reported significantly more utilization of avoidant coping (M = 1.99, SD = .44) than participants in legal partnerships. No significant differences were found among legal partnerships, non-legal committed partnerships dating long term. With regard to employment status, those who reported they worked full time utilized significantly less avoidant coping (M = 1.80, SD = .42) than those who were unemployed (M = 2.02, SD = .49) and those that were

employed part time (M = 1.93, SD = .44). No significant differences were found between participants employed part time and unemployed.

Psychological distress varied significantly by relationship status (F [4, 742] = 5.35, p < .001) and employment status (F [2, 745] = 17.64, p < .001). Specifically, single participants reported significantly higher levels of distress (M = 2.05, SD = .61) than those who were in legal partnerships (M = 1.81, SD = .56). No significant differences were found among participants that reported they were dating casually, dating long term, or in non-legal committed partnerships. With regard to employment status, participants indicated higher psychological distress when they were unemployed (M = 2.09, SD = .62) compared to those who reported being employed full-time (M = 1.81, SD = .54). Furthermore, those who indicated they worked part-time reported significantly higher psychological distress (M = 2.03, SD = .58) than those who worked full time. No significant differences were found between people who were unemployed compared to part-time.

Self-esteem also significantly varied by relationship status (F [4, 742] = 8.21, p < .001) and employment status (F [2, 745] = 37.22, p < .001). Specifically, those who were in legal partnerships (M = 2.05, SD = .63) and non-legal committed partnerships (M = 2.01, SD = .66) reported significantly higher levels of self-esteem than single participants (M = 1.71, SD = .70). There were no other significant differences found between the other relationship groups. With regard to employment status, participants who reported they were unemployed reported lower levels of self-esteem (M = 1.61, SD = .65) than those employed full-time (M = 2.09, SD = .62). Those who were employed part-time also reported significantly lower levels of self-esteem (M = 1.80, SD = .65) than those who

were employed full-time. No significant differences were found between people who were unemployed compared to people who were employed part-time. Based on these findings, the data were dummy coded. For relationship status, because there are five levels (single, dating casually, dating long term, non-legal committed partnerships, and legal partnerships), 4 dummy variables were created (k-1, where k is the number of levels of the original variable, 5-1 = 4 dummy variables). Dummy variables were created to correspond to each level (dating casually, dating long term, non-legal committed partnerships, and legal partnerships) and have values of yes or no (i.e., 1 or 0). If all variables have 0, that represented the comparison group (participants that are single). For employment, dummy variables were created to correspond to each level (full time employed, part time employed, and unemployed), therefore two dummy variables were created (part time and unemployed). If both variables contained a 0, that represented the comparison group (participants who work full time). The dummy variables created for relationship status and employment were utilized in the subsequent analyses. Results of the series of ANOVAs indicated that participants did not differ significantly on any of the criterion variables by race/ethnicity or region of residence.

Next bivariate correlations between continuous variables (e.g., age, social class, education, outness, dummy coded relationship status, and dummy coded employment status) and the criterion variables were examined. Given the number of analyses being performed, a more conservative alpha of .005 was used. Specifically a Bonferonni correction was utilized (.05/ # of analyses = .05/10 = .005). Also, with regard to education, because only four people reported they completed middle school/ junior high, they were combined with the participants who completed high school in the subsequent

analysis to form a junior high/high school group. The analysis indicated that age was positively associated with active coping (r = .26, p < .001), negatively associated with avoidant coping (r = -.26, p < .001), negatively related to psychological distress (r = -.20, p < .001), and positively associated with self-esteem (r = .30, p < .001). Social class was negatively associated with avoidant coping (r = -.11, p = .004), negatively related to psychological distress (r = -.14, p < .001), and positively associated with self-esteem (r =.14, p < .001). Education was positively associated with active coping (r = .24, p < .001), negatively related to avoidant coping (r = -.26, p < .001), negatively correlated with psychological distress (r = -.25, p < .001), and positively related to self-esteem (r = .31, p <.001). Overall outness was positively related to active coping (r = .24, p < .001), negatively related to avoidant coping (r = -.18, p < .001), negatively associated with psychological distress (r = -.19, p < .001), and positively related to self-esteem (r = .27, p <.001). Relationship status (legal partnerships) was the only relationship status significantly related to the criterion variables. Being in a legal partnership was positively associated with active coping (r = .12, p = .001), negatively related with avoidant coping (r = -.16, p < .001), negatively associated with distress (r = -.13, p < .001), and positively related to self-esteem (r = .15, p < .001). Unemployment was negatively associated with active coping (r = -.15, p < .001), positively related to avoidant coping (r = .17, p < .001), and psychological distress (r = .14, p < .001) and negatively associated with self-esteem (r = -.24, p < .001). Part time employment was significantly correlated with the criterion variables. Because unemployment was significantly correlated with all of the criterion variables, employment was recoded (0 =employed, 1 =unemployed). Additionally, because legal committed relationships was the only relationship status that was

significantly related to all of the criterion variables, relationship status was recoded (0 = legal partnerships, 1 = non-legal partnerships). Consequently age, social class, education, outness, dichotomized relationship status, and dichotomized employment status each were included as covariates in the subsequent analysis.

Descriptive Statistics

Descriptive statistics, internal consistency reliabilities, and intercorrelations obtained with the current sample for the variables of interest are reported in Table 1. Both univariate and multivariate normality were explored with the current data. First, the univariate skewness and kurtosis values for each variable of interest were examined. All of the values met the criteria proposed by Weston and Gore (2006) for univariate normality (i.e., absolute skewness values < 3, absolute kurtosis values < 10). Multivariate normality and potential multivariate outliers were then explored. Mardia's coefficient of multivariate kurtosis (Mardia, 1970) was utilized to assess for multivariate normality. According to Bollen (1989), Mardia's coefficient values less than P (P+2), where P is the number of observed variables, suggest that data are multivariate normal. Our value of 37.64 was lower than 306 [17 (17 + 1)]. Next, Mahalanobis distance values for each participant were evaluated to identify multivariate outliers. Twelve participants emerged as multivariate outliers with Mahalanobis distances significant at p < .001. The pattern of results did not change with the removal of the outliers, thus all participants were retained.

Statistical Analysis

The current study utilized Structural Equation Modeling (SEM) to test a model of mediation. The model included three predictor variables (i.e. perceived anti-bisexual

experiences in the L/G community, anti-bisexual experiences in the heterosexual community, and internalized heterosexism), two intervening variables (i.e. active and avoidant coping), and two outcome variables (i.e. psychological distress and self-esteem) (See Figure 1). Additionally, the significant relations involving age, social class, education, overall outness, dichotomized relationship status, and dichotomized employment status that emerged in the previously described demographic covariate analysis were included in the model. Next, overall model fit was assessed using several fit indices. These indices include chi-square statistic, Comparative Fit Index (CFI), Tucker-Lewis index (TLI), and Root Mean Square Error of Approximation (RMSEA). Models with a non-significant chi-square, *CFI* and *TLI* values greater than .95 and *RMSEA* values below .06 indicate a good fitting model (Hu & Bentler, 1999).

To create a latent variable for self-esteem, parcels were generated using item-toconstruct balance procedures (Little et al., 2002). Parceling facilitates model comparison (i.e., compare bisexual women and men) by increasing the model degrees of freedom (Little et al., 2002). To identify loadings for each item, a principal component analysis was conducted to obtain factor loading values. Items were assigned by the magnitude of their factor loading in a counterbalanced order to create three parcels for self-esteem (see Table 2).

Due to the addition of covariates, 76 participants missing data for age, social class, education, overall outness, relationship status, and/or employment status were excluded from the main analysis. This data was excluded because bootstrapping procedures that test the significance of the indirect effects can only be obtained with complete datasets. Overall model fit with the final sample of 673 (participants missing

covariate data excluded) was examined using maximum likelihood estimation. The fit statistics for the full model with a sample of 673 participants did not meet all the criteria for good fit that were specified a priori (χ^2 (54) = 218.07, p < .001, TLI = .91, CFI = .97, *RMSEA* = .07), specifically, a non-significant chi-square test and value of .95 or greater for TLI, and .06 or less for RMSEA. However, chi-square is sensitive to sample size and with a large sample size, the chi-square values will be inflated and may erroneously imply a poor data-to-model fit (Schumaker & Lomax, 2004). The model did meet the more liberal *RMSEA* standards (i.e., .06-.08) discussed by Browne and Cudeck (1993) and more liberal TLI criterion (.90 or better; Hu & Bentler, 1995), indicating acceptable fit of the model to the data. Importantly, additional fit statistics suggest that the model provides a good fit to the data: Goodness of Fit Index (GFI = .96) and Standardized Root Mean Square Residual (*SRMR* = .03). Weston and Gore (2006) posit that *SRMR* $\leq .08$, and GFI > .95 for samples larger than 500 indicate good fit, thus the model for the final sample seems to adequately fit the data and was retained. This model accounted for 14% of the variance in active coping, 18% of the variance in avoidant coping, 45% of the variance in psychological distress, and 45% of the variance in self-esteem.

Hypothesis 1: Relations between Anti-bisexual experiences from both the L/G and heterosexual community and mental health

Hypothesis 1 predicted that anti-bisexual experiences from both the L/G and heterosexual community would be positively related to psychological distress and negatively related to self-esteem. As indicated in Table 1, bivariate correlations indicated that perceived anti-bisexual experiences from the L/G Community (r = .11, p = .004) and heterosexual community (r = .24, p < .001) were positively correlated with psychological

distress. Perceived anti-bisexual experiences from the L/G community were not significantly related to self-esteem, but perceived anti-bisexual experiences from the heterosexual community (r = -.13, p = .001) were correlated negatively with self-esteem.

The pattern of findings was modified, however, when all of the variables were considered simultaneously in the structural equation model (see Figure 2). In the structural equation model anti-bisexual experiences from the L/G community did not have unique and direct links with psychological distress or self-esteem. Anti-bisexual experiences from the heterosexual community were related positively and directly to psychological distress ($\beta = .21$, p < .001) and related negatively and directly to self-esteem ($\beta = .10$, p = .042). Thus, Hypothesis 1 was partially supported.

Hypothesis 2: Relations between Internalized Biphobia and Mental Health

Hypothesis 2 predicted that internalized biphobia would be positively related to psychological distress and negatively related to self-esteem. Indeed, bivariate correlations indicated that internalized biphobia was positively and significantly correlated with psychological distress (r = .19, p < .001) and negatively and significantly correlated with self-esteem (r = -.22, p < .001). This pattern of findings was replicated in the structural equation model. Internalized biphobia had a unique positive link with psychological distress ($\beta = .10$, p = .008) and a unique negative link with self-esteem ($\beta = .11$, p < .001). Hypothesis 2 was fully supported.

Hypothesis 3: Relations between Perceived Anti-bisexual Experiences and Active and Avoidant Coping

Hypothesis 3 predicted that anti-bisexual experiences would be positively related to active coping styles and avoidant coping. Bivariate correlations indicated that antibisexual experiences from the L/G community were correlated positively with active coping (r = .09, p = .02), but not significantly related to avoidant coping. Anti-bisexual experiences from the heterosexual community were not significantly correlated with active coping, but correlated positively with avoidant coping (r = .15, p < .001). This pattern of findings was somewhat replicated in the structural equation model. Antibisexual experiences from the L/G community did not have a unique link to active coping or avoidant coping. Anti-bisexual experiences from the heterosexual community did not have a unique link to active coping, but did have a unique positive link with avoidant coping ($\beta = .13$, p = .016). Hypothesis 3 was partially supported.

Hypothesis: 4: Relations between Internalized Biphobia and Active and Avoidant Coping

Hypothesis 4 predicted that internalized biphobia would be negatively associated with active coping and positively related to avoidant coping. According to bivariate correlations, internalized biphobia was correlated negatively and significantly to active coping (r = -.11, p = .005) and correlated positively and significantly to avoidant coping (r = .19, p < .001). This pattern of findings was replicated in the structural equation model. Internalized biphobia was related negatively and directly with active coping ($\beta = .08$, p = .047), and positively and directly with avoidant coping ($\beta = .17$, p < .001). Thus, hypothesis 4 was fully supported.

Hypothesis 5: Relations between Active and Avoidant coping and Mental Health

Hypothesis 5 predicted that active coping would be associated with lower levels of psychological distress and higher levels of self-esteem and avoidant coping would be related to higher levels of psychological distress and lower levels of self-esteem. Indeed, active coping was correlated negatively to psychological distress (r = -.20, p < .001) and positively to self-esteem (r = .43, p < .001). Avoidant coping was positively and significantly related to psychological distress (r = .54, p < .001) and negatively to selfesteem (r = -.55, p < .001). In the structural equation model, active coping was not significantly linked to psychological distress. However, all other relations were consistent with the bivariate correlational results. Active coping was linked positively to selfesteem ($\beta = .23$, p < .001) and avoidant coping was linked positively to psychological distress ($\beta = .49$, p < .001) and negatively linked with self-esteem ($\beta = -.37$, p < .001). Thus, hypothesis 5 was partially supported.

Hypothesis 6: Mediating Roles of Active and Avoidant Coping in the Links Between Anti-Bisexual Experiences and Internalized Biphobia to Mental Health

Hypothesis 6 predicted that active and avoidant coping would partially mediate the links between anti-bisexual experiences and biphobia to mental health (i.e., psychological distress and self-esteem). To test the significance of the indirect effects through active and avoidant coping, bootstrapping procedures were utilized (Preacher & Hayes, 2008). Specifically, 95% confidence intervals were formed around the estimates of the indirect effects. From the data collected, 1,000 bootstrap samples were created via random sampling and replacement. The 1,000 bootstrap samples were utilized in 1,000 analyses of the mediation model (Shrout & Bolger, 2002). Indirect effects were determined based on the results of the 1,000 estimates of each hypothesized indirect path. Next, each of the 1,000 bootstrapped indirect effects was assigned to the lower and upper ends of the 95% confidence interval for the mean indirect effects. If the confidence interval did not include zero, then the indirect effect was considered significant (Shrout &

Bolger, 2002). Additionally, Mathieu and Taylor (2006) assert that for partial mediation to be established, certain conditions need to be met (i.e., significant paths between the IV and mediator, mediator and DV, and IV and DV when all when considered simultaneously). According to the current analyses, anti-bisexual experiences from the heterosexual community had a positive and indirect link through avoidant coping with psychological distress ($\beta = .06$, p = .029, CI = .008, .115), and a negative and indirect link through avoidant coping with self-esteem ($\beta = -.05$, p = .031, CI = -.098, -.006). As mentioned in the previous hypotheses, the links between anti-bisexual experiences and avoidant coping, avoidant coping and mental health (i.e., distress and self-esteem), and anti-bisexual experiences from heterosexual community and mental health were all significant when examined simultaneously. Thus, avoidant coping partially mediated the relation between anti-bisexual experiences from the heterosexual community and mental health, such that anti-bisexual experiences from the heterosexual community increased use of avoidant coping, which increased distress and decreased self-esteem. Internalized biphobia had a negative and indirect link through active coping with self-esteem (β = -.02, p = .040, CI = -.048, -.001). Additionally, active coping partially mediated the link between internalized biphobia and self-esteem, such that internalized biphobia was related to less use of active coping and lower self-esteem. Internalized biphobia also had a positive and indirect link through avoidant coping with psychological distress ($\beta = .08$, p = .003, CI = .041, .116), and a negative and indirect link through avoidant coping with self-esteem ($\beta = -.07$, p = .002, CI = -.104, -.038). Avoidant coping also partially mediated the relationships between internalized biphobia and mental health, such that internalized biphobia increased utilization of avoidant coping, which increased

psychological distress and decreased self-esteem. There were no significant indirect links between anti-bisexual experiences from the L/G community and the criterion variables.

Multi-group SEM Analysis Comparing Bisexual Women and Men

Nested models with all paths constrained to equality and all paths freely estimated were compared to determine if gender differences exist in the relationship between the predictor, intervening, and outcome variables included in the original model. Specifically, gender differences were explored on all hypothesized paths in the model. This was implemented with both significant and non-significant paths in the model. A random subsample of 151 women was utilized in the multigroup analysis to obtain a sample size equivalent to the subsample of 151 men. No significant differences were found between the freely estimated model and the model with all paths constrained to equality $(\Delta \chi^2 (16) = 24.974, p = .07)$. Thus, gender did not moderate the model. The model with all paths constrained to equality provided adequate fit to the data (χ^2 (126) = 247.43, p < .001, TLI = .89, CFI = .95, RMSEA = .06. Because the model met more liberal RMSEA standards (i.e., .06-.08) discussed by Browne and Cudeck (1993), achieved the criterion for good model fit according to the CFI, and also demonstrated good fit across gender groups according to other indices (i.e., IFI = .95, SRMR = .04,) and more liberal standards for GFI = .91 (i.e., greater than or equal to .90; Hooper, Coughlan, & Mullen, 2008), the model was determined to be acceptable.

Supplementary Model Results

In addition to hypothesized direct and indirect relationships among the perceived discrimination, internalized biphobia, active and avoidant coping, and mental health variables, noteworthy direct and indirect relations were found among the covariates,

coping strategies, and mental health variables as well. Specifically, age ($\beta = .18, p < .18$.001), education ($\beta = .12$, p = .006), and overall outness ($\beta = .18$, p < .001), each were positively and directly related to active coping. Age, ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$, p < .001), education ($\beta = -.17$.12, p = .004), overall outness ($\beta = -.13$, p < .001), and employment ($\beta = -.08$, p = .038) each were negatively and directly linked with avoidant coping. Education ($\beta = -.10$, p =.017) and overall outness ($\beta = -.14$, p < .001) had a negative and direct relation with psychological distress. Age ($\beta = .12$, p = .009), social class ($\beta = .08$, p = .014), education $(\beta = .08, p = .043)$, overall outness $(\beta = .12, p < .001)$, and employment $(\beta = .08, p = .043)$.020) were positively linked to self-esteem. Furthermore, Age ($\beta = -.02$, p = .009, CI: -(.039, -.003), education ($\beta = -.01$, p = .007, CI: -.032, -.002), and overall outness ($\beta = -.02$, p = .005, CI: -.042, -.005) each had negative and indirect links through active coping with psychological distress. Age ($\beta = .05$, p = .003, CI: .025, .085), education ($\beta = .04$, p =.003, CI: .013, .068), and overall outness ($\beta = .05$, p = .001, CI: .031, .085) had positive and indirect links through active coping with self-esteem. Additionally, age ($\beta = -.08$, p =.002, CI = -.132, -.042), education (β = -.06, p = .006, CI = -.104, -.019), overall outness $(\beta = -.07, p = .002, CI = -.106, -.029)$, and employment status $(\beta = -.04, p = .030, CI = -.04)$.076, -.005) each had negative and indirect links through avoidant coping with psychological distress. Age ($\beta = .07$, p = .001, CI = .036, .117), education ($\beta = .05$, p = .05, p = ..006, CI = .016, .090), overall outness (β = .06, p = .002, CI = .023, .088), and employment status ($\beta = .03$, p = .036, CI = .003, .065) had positive and indirect links through avoidant coping with self-esteem.

Additional Analyses

In addition, to determine whether removing the 76 participants missing data on one or more of the covariates would influence the results, Amos 21.0 (Arbuckle, 2009) full information maximum likelihood (FIML) estimation method was utilized to test the proposed model with the full sample of 749 participants (missing covariate data not deleted). First, a MANOVA was utilized to explore mean differences on the variables of interest between the 76 participants missing covariate data and the sample of 673 with no missing data, and no significant differences were found. FIML estimation was used to compare the fit of the model with the sample of 749 participants. The fit of the full model with the sample of 749 participants appeared to be comparable to results obtained with the curtailed sample (χ^2 (54) = 238.56, p < .001, *TLI* = .90, *CFI* = .96, *RMSEA* = .07).

To investigate potential indirect effects, Sobel's tests were conducted with the full sample of 749. In order for the Sobel's test to be judged as statistically significant, the *z* score must be greater than +1.96 or less than -1.96 and have a significant *p* value. The pattern of results were identical to the analyses utilizing bootstrapping with the reduced sample. Thus, dropping the 76 participants did not impact the findings. Similar strategies were employed with the samples of 185 (utilizing Sobel's test) women and men. Although there were 512 identified women and transwomen in the sample, a random sample of 185 women were selected to obtain sample sizes equivalent to the subsample of men. Similarly to the full sample, the patterns of results were identical to the analyses utilizing bootstrapping 34 men from analysis did not seem to influence the data. Additionally, research suggests that bootstrapping is one of the more valid and powerful methods for testing intervening

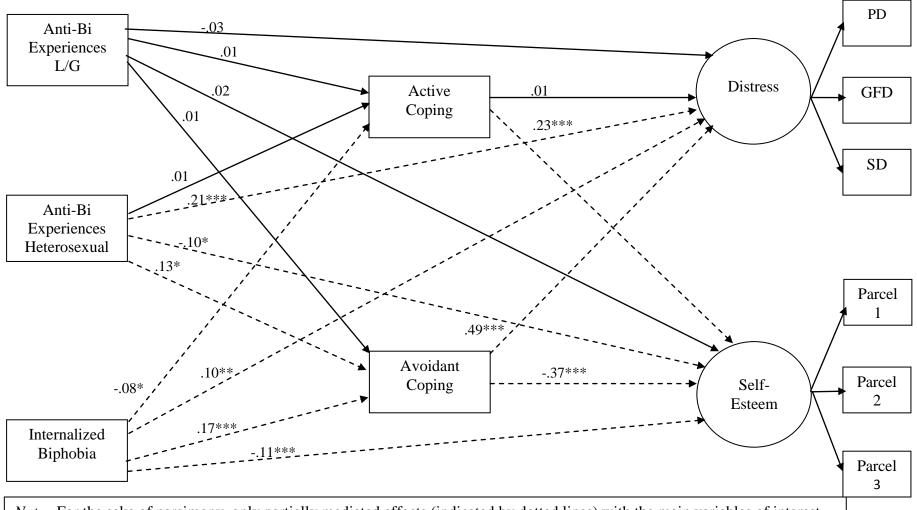
variable effects (Hayes, 2009; Williams & MacKinnon, 2008). Hayes (2009) states, "for this reason alone, it should be the method of choice" (p.412). Finally, bootstrapping is recommended for making inferences about indirect effects regardless of the complexity of the model and the number of paths between the independent and dependent variables (Hayes, 2009). Thus, the results obtained using maximum likelihood estimation and bootstrapping analyses to test the indirect and mediating effects were retained and interpreted.

(+) PD Anti-Bi (+) Experiences L/G (-) (-) Distress Active GFD Coping (+) (+) SD (+) (+) Anti-Bi Experiences (-) Heterosexual (+) Parcel 1 (+) Avoidant (-) Parcel Coping Self-(-) 2 Esteem (+) Internalized (+) Biphobia Parcel (-) 3

Figure 1. Hypothesized Mediational Model of Active and Avoidant Coping in the Discrimination-Mental Health Links.

Note. For the sake of parsimony, estimated covariances of the predictors were omitted in the figure. PD = Personal Difficulty, GFD =General Feelings of Distress, SD = Somatic Distress.

Figure 2. Standardized Regression Weights for Mediational Model of Active and Avoidant Coping in the Discrimination-Mental Health Links with Full Sample.



Note. For the sake of parsimony, only partially mediated effects (indicated by dotted lines) with the main variables of interest are presented and estimated covariances of the predictors were omitted from the figure. PD = Personal Difficulty, GFD =General Feelings of Distress, SD = Somatic Distress.

Table 1. Descriptives and Bivariate Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Anti-bisexual (LG)												
2. Anti-bisexual (H)	.74***											
3. Internalized Biphobia	.04	.06										
4. Active Coping	.09*	.02	11**									
5. Avoidant Coping	.05	.15***	.19***	33***								
6. Psychological Distress	.11**	.24***	.19***	20***	.54***							
7. Self-Esteem	.00	13***	22***	.43***	55***	63***						
8. Age	.12**	06	.07	.26***	26***	21***	.31***					
9. Class	12**	15***	.05	.05	11**	14***	.15***	.11**				
10. Education	.18***	.04	.01	.26***	25***	25***	.32***	.48***	.10***			
11. Outness	.19***	.11**	29***	.23***	20***	21***	.28***	00	.00	.16***		
12. Relationship Status	08*	08	04	14***	.14***	.12**	15***	51***	.12**	25***	.09*	
13. Employment Status	.09*	01	.03	.18***	18***	14***	.24***	.23***	.03	.31***	·.17***	15**
М	2.06	2.30	2.11	2.62	1.91	1.97	1.85					
SD	1.07	1.03	1.22	0.55	0.46	0.59	0.67					
α	0.96	0.95	0.83	0.88	0.79	0.92	0.92					

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

	Parcel 1	Parc	cel 2	Parcel 3		
Item	β	Item	β	Item	β	
10	0.83***	1	0.81***	9	0.79***	
2	0.75***	5	0.77***	7	0.78***	
3	0.72***	6	0.71***	4	0.69***	
					0.59***	
α	.78		.81		.78	

Table 2. Item Parcels for the Self-Esteem Measure

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

Age Range	<i>n</i> (%)
18-25	333 (50%)
26-40	214 (32%)
41-65	122 (18%)
66 and older	4 (1%)

 Table 3. Age characteristics of the survey sample

Chapter V

Discussion

The present study extends the research on the relationship between perceived discrimination experiences and mental health in a number of important ways. First, this study focused on bisexual women and men, a population whose experiences have received limited attention in the sexual orientation literature (Yost & Thomas, 2012). Although there is overlap between experiences of L, G, and B individuals, there are distinct differences in the experiences of these populations (Mulick & Wright, 2002). Many studies often combine LGB participants together, with bisexual individuals typically representing a small percentage of the total sample (Herek et al., 1997; Lewis et al., 2009; Szymanski, 2009; Szymanski & Meyer, 2008), making it difficult to investigate their unique experiences. Second, this study examined both external bisexual discrimination experiences (discrimination from the L/G and heterosexual communities) and internalized biphobia simultaneously in a model that tested their unique relationships with mental health. Third, in addition to examining the potential direct links between externalized and internalized discrimination and mental health, the present study also investigated indirect and mediated relations through active and avoidant coping. Finally, the model investigated in this study explained 45% of the variance in both psychological distress and self-esteem. This is a substantial proportion and suggests that the variables considered in this study have important implications for mental health with bisexual women and men.

A growing body of research is supporting a consistent relationship between heterosexist discrimination and psychological distress (Carter, Mollen, & Smith, 2013;

Szymanski & Henrichs-Beck, 2014; Talley & Bettencourt, 2011). The findings of the current investigation support this link as well. Bivariate correlations indicated that perceived anti-bisexual experiences from the L/G community and heterosexual community were correlated positively with psychological distress. The pattern of findings was modified, however, when discrimination experiences from the L/G community and the heterosexual community were considered simultaneously in the structural equation model. Specifically, the unique relation between anti-bisexual experiences in the L/G community became nonsignificant, while anti-bisexual experiences from the heterosexual community maintained a positive link with distress.

These findings are similar to one of the few studies using a solely bisexual sample that operationalized anti-bisexual experiences, internalized biphobia, psychological distress, and self-esteem similarly to the current study. Brewster, Moradi, DeBlaere, and Velez (2013) found that anti-bisexual experiences (ABES-LG and ABES-H subscales were combined in single composite score) correlated positively and significantly with psychological distress. However, combining ABES-LG and ABES-H subscales may have obfuscated important differences with regard to anti-bisexual experiences from the L/G and heterosexual communities. In the current investigation, when all variables were examined together, the relation between perceived anti-bisexual experiences from the L/G community and distress became nonsignificant. However, perceived anti-bisexual experiences from the theterosexual community and distress remained significant. This finding suggests that it may be important to examine discrimination separately by community of reference. Indeed, participants in this study reported significantly greater frequency (p < .001) of anti-bisexual experiences from the heterosexual community (M =

2.34, SD = 1.03) than from the L/G community (M = 2.07, SD = 1.07). This may be one reason why the relationship between perceived anti-bisexual experiences from the L/G community had no significant relationship with psychological distress when examined in conjunction with anti-bisexual experiences from the heterosexual community. Thus, for the present sample, perceived anti-bisexual experiences from the heterosexual community may have been more salient.

These findings are consistent with research that suggests heterosexual individuals may have more biphobic attitudes than their L/G counterparts. For instance, Herek (2002) found that, with the exception of injecting drug users, his sample of heterosexual participants had more negative attitudes toward bisexual women and men than toward other groups (e.g., racial, religious, L/G women and men, and political groups). As mentioned previously, Mulick and Wright (2002) examined the existence of biphobia in L/G and heterosexual populations. In their study, the heterosexual sample scored higher on the biphobia scale than the L/G participants. Mulick and Wright argued that L/G participants may be more empathetic toward individuals facing discrimination and have more contact with bisexual persons, which would explain their lower biphobic attitudes (Mulick & Wright, 2002). Taken together, prior research on heterosexual attitudes towards bisexual individuals may help explain, in part, why bisexual individuals in this sample may have perceived significantly more discrimination experiences from heterosexual individuals than from the L/G community. The fact that anti-bisexual experiences from the heterosexual community maintained a positive and significant relationship with distress is important when considering the deleterious nature of external

discrimination (specifically from heterosexuals) and the negative influence it can have on bisexual individuals' mental health.

Accumulating evidence is also supporting a link between internalized heterosexism and psychological distress (Szymanski & Henrichs-Beck, 2014). Internalized heterosexism encompasses a wide range of sexual minority identities (Meyer, 2003) whereas internalized biphobia is internalized oppression specifically with regard to having a bisexual identity. The findings of the present study support the relations between internalized heterosexism and distress in prior research. Bivariate correlations indicated that internalized biphobia was correlated positively with psychological distress and this link remained significant in the structural equation model. Prior research has found that internalized heterosexism has emerged as a significant and positive predictor of psychological distress with samples of predominantly White LGB females and males (Carter et al., 2013) and sexual minority African American women and men (Szymanki & Gupta, 2009). The current study's finding is also consistent with recent research that found that internalized biphobia was correlated positively with psychological distress with another sample of bisexual individuals (Brewster et al., 2013). This relation is critical as it demonstrates that internalized biphobia can have a negative impact on bisexual individual's mental health.

In an effort to provide a more thorough understanding of mental health, scholars have highlighted the importance of also investigating well-being variables, such as selfesteem (Balsam & Mohr, 2007; Major, Kaiser, & McCoy, 2003; Moradi & Hasan, 2004). As mentioned previously, prior examinations of the links between heterosexist experiences of discrimination and self-esteem are inconsistent (Crocker & Quinn, 2000),

with some studies finding a significant and negative link (e.g., Brewster et al., 2013; Swim et al., 2009) and others reporting no relation (e.g., Brewster & Moradi, 2010). Thus, the current study investigated the links between perceived anti-bisexual discrimination experiences and self-esteem. Bivariate correlations indicated that perceived anti-bisexual experiences from the L/G community were not significantly related to self-esteem, but perceived anti-bisexual experiences from the heterosexual community were correlated negatively with self-esteem. In the SEM, anti-bisexual experiences from the L/G community did not have unique and direct links with selfesteem but anti-bisexual experiences from the heterosexual community remained negatively and directly related to self-esteem. Again, participants in this study rated perceived frequency of anti-bisexual experiences from the heterosexual community significantly higher than anti-bisexual experiences from the L/G community. More frequent ratings of anti-bisexual experiences from the heterosexual community could mean that in the context of both forms of discrimination, heterosexual discrimination was more salient and therefore accounted for unique variance when both forms of discrimination were considered simultaneously.

Additionally, this study focused on personal self-esteem. It may be that investigating the relationship between discrimination with other forms of self-esteem (e.g., collective) would yield a different pattern of results. For instance, as stated previously, Swim et al. (2009) found that heterosexist hassles were related negatively to collective self-esteem (e.g., perception of public opinion of one's social group, group identification, and feelings of worthiness of one's group). Relatedly, Brewster and Moradi (2010) found that experiencing more discrimination from L/G and heterosexual

communities was positively correlated with awareness of public devaluation, one facet of collective self-esteem, with their bisexual sample. Furthermore, scholars have suggested that bisexual individuals are often perceived by the L/G community to have a certain amount of privilege because they can pass as heterosexual when they are not with a same gender partner (Ochs, 1996). Thus, bisexual individuals may feel excluded from some L/G communities because they may be perceived as less oppressed, consequently resulting in feelings of isolation (Ochs, 1996). Therefore, it could be that collective, more so than personal self-esteem, may be more negatively influenced by perceived anti-bisexual experiences from the L/G community.

Prior research also supports a relation between internalized heterosexism and selfesteem (Herek, et al., 2009; Herek, et al., 1997; Preston, et al., 2007). Indeed, in the current study, bivariate correlations indicated that internalized biphobia correlated negatively with self-esteem. Internalized biphobia maintained a unique negative link with self-esteem when examined simultaneously with external discrimination in the structural equation model. The present investigation's finding regarding the relationship between internalized biphobia and self-esteem is consistent with prior research. For instance, Brewster et al. (2013) found that internalized biphobia correlated negatively with psychological well-being (a composite of the measure of personal self-esteem and satisfaction with life) with a sample of bisexual women and men. Additionally, internalized homophobia was negatively related to self-esteem in a sample of bisexual men (Preston et al. 2007), a community sample of predominantly White LGB adults (Herek et al., 2009), and a sample of predominantly White sexual minority women and

men (Herek, et al., 1997). These findings suggest that it is critical to be aware of internalized biphobia and how it can impact an individual's self-esteem.

In addition to examining the direct links of anti-bisexual experiences and internalized biphobia with mental health indicators (e.g., psychological distress and selfesteem), direct links of anti-bisexual experiences and internalized biphobia with coping (e.g., active and avoidant) were also investigated. Bivariate correlations indicated that anti-bisexual experiences from the L/G community were correlated positively with active coping, but were not significantly related to avoidant coping. Conversely, anti-bisexual experiences from the heterosexual community were not significantly correlated with active coping, but positively related with avoidant coping. This pattern of findings was somewhat replicated in the structural equation model. Anti-bisexual experiences from the L/G community did not have a unique link to active coping or avoidant coping. Antibisexual experiences from the heterosexual community did not have a unique link to active coping, but did have a unique positive link with avoidant coping. This is similar to the results of a recent study with a sample of sexual minority women, which found no significant correlation between heterosexism and reflective coping (i.e., approach problems more actively), but did find a positive correlation with suppressive coping (i.e., approach problems with avoidance and denial; Szymanski & Henrichs-Beck, 2014). Furthermore, according to bivariate correlations, internalized biphobia was correlated negatively with active coping and positively with avoidant coping. This pattern of findings was replicated in the structural equation model and is consistent with past research that reported that internalized heterosexism was negatively related to active

coping and positively related to avoidant coping with a sample of sexual minority women (Szymanski & Owens, 2008).

Importantly, the current study also examined the direct relations between coping and mental health. As predicted, and consistent with prior research with racial/ethnic and sexual minority samples (Alvarez & Juang, 2010; Szymanski & Carr 2008), bivariate correlations indicated that active coping was negatively and significantly associated with psychological distress and positively and significantly related to self-esteem. Also, avoidant coping was positively and significantly associated with psychological distress and negatively and significantly related to self-esteem. When examined together in the SEM, the link between active coping and distress became nonsignificant, but all other relations remained significant. Taken together, this study's findings seem to contribute to accumulating evidence that suggests that active coping strategies promote mental health while avoidant strategies can have a detrimental impact.

In combination with the direct links between external and internal discrimination and mental health, external and internal discrimination and coping, and coping and mental health, the indirect and mediating effects through active coping and avoidant coping between discrimination and mental health relations were also investigated. When all variables were considered simultaneously, anti-bisexual experiences from the heterosexual community had a positive and indirect link through avoidant coping with psychological distress and a negative and indirect link through avoidant coping with selfesteem. In other words, avoidant coping partially mediated the relation between antibisexual experiences from the heterosexual community and mental health, such that antibisexual experiences from the heterosexual community predicted greater use of avoidant

coping, which predicted greater distress and lower self-esteem. This is consistent with other literature mentioned previously that investigated the mediating role of coping in other forms of discrimination and mental health. For instance, Thomas, et al. (2008), with their sample of African American women, found that avoidant coping partially mediated the relationship between gendered racism and psychological distress, such that greater discrimination predicted higher levels of avoidant coping, which predicted greater distress. In another study that investigated the mediating role of coping in the links of racism to both distress and self-esteem by gender, Alvarez and Juang (2010) found that avoidance coping mediated the relationship between perceived racial discrimination and psychological distress and self-esteem with their subsamples of women and men, such that discrimination was positively linked to avoidance coping, which predicted greater psychological distress and lower self-esteem.

Additionally, internalized biphobia had a negative and indirect link through active coping with self-esteem; active coping partially mediated the relationship between internalized biphobia and self-esteem, such that internalized biphobia was related to lower use of active coping and lower self-esteem. To this author's knowledge no study has explicitly tested the mediating role of active coping in the link between internalized biphobia and self-esteem. However, previous studies with sexual minority samples offer support for the links comprising this finding. For instance, a negative relationship between IH and self-esteem has been found in sexual minority women and men (Herek, et al., 2009; Herek, et al., 1997). Also, Szymanski and Owens (2008) found that internalized heterosexism was negatively related to active coping with their sample of sexual minority women. Further, active coping was found to be positively related to self-

esteem with a sample of Latino lesbians and gay men (Zea, Reisen, & Poppen, 1999). For the present sample, it may be that those who experience internalized biphobia may perceive acts of discrimination as normal or deserved. Therefore, they may be more likely to avoid the problem, pretend no problem exists, and/or participate less in active coping strategies, which may have lead to lower levels of self-esteem.

Internalized biphobia also had a positive and indirect link through avoidant coping with psychological distress and a negative and indirect link through avoidant coping with self-esteem. These links met criteria for partial mediation, such that internalized biphobia predicted increased utilization of avoidant coping, which predicted greater psychological distress and lower self-esteem. These findings are similar to a previous study with sexual minority women (Szymanski & Owens, 2008), which reported that avoidant coping partially mediated the link between internalized heterosexism and distress in an identical manner.

There were no significant indirect links between anti-bisexual experiences from the L/G community to the criterion variables. As discussed previously, it may be that discrimination from the L/G community emerged as a less salient construct when considered simultaneously with discrimination from the heterosexual community. In addition, no significant indirect effects through active coping were found in the links between anti-bisexual experiences from the L/G or heterosexual communities and mental health indicators. These findings were consistent with another study with a sexual minority sample, which found that suppressive coping, but not reflective coping, partially mediated the external heterosexism-distress and IH-distress links (Szymanski and Henrichs, 2013). It may be that because of the stereotypes and perceived illegitimacy of

bisexuality (Ochs, 1996), this particular sample believed that they could not do anything about the anti-bisexual experiences perpetrated against them. Heppner, Cook, Wright, and Johnson (1995) assert that increased utilization of types of avoidant coping may be cognitive attempts to minimize the impact of external and internalized experiences of oppression and behavioral attempts to avoid them. Moreover, prior research with racial/ethnic and sexual minority samples (e.g., Szymanski and Henrichs-Beck, 2014; Szymanski and Owens, 2009; Thomas et al., 2008) asserts that *implementing* active coping strategies, may be less important than *eliminating* avoidant coping methods in promoting mental health.

Subsequent to testing the hypotheses, gender differences were explored. Multigroup SEM analysis indicated that no significant gender differences were found with regard to the hypothesized relationships. It is important to note that the current study's sample consisted of a larger proportion of women than men and that the final subsample of men included in the gender comparison analysis (n = 151) was slightly smaller than originally proposed (n = 170). Research suggests that bisexual men are less likely to disclose and more likely to conceal their sexual orientation than men who identify as gay (Schrimshaw, Siegal, Downign, & Parsons, 2013). This may be why it was more difficult to recruit bisexual men than women for the current study. This is concerning given that Schrimshaw et al. (2013) found that concealment was associated with more depressive and anxious symptoms, and lower positive affect among bisexual men. The fact that bisexual men may be more likely to conceal their sexual orientation may be in part due to the more negative attitudes held about bisexual men than bisexual women by heterosexuals. For instance, Yost and Thomas (2011) found that heterosexual women

equally accepted bisexual women and men, but heterosexual men were less accepting of bisexual men than bisexual women. A mediation analysis indicated that the heterosexual person's sex (female or male) and greater acceptance of bisexual women was partially explained by eroticization of female same-sex sexuality. Moreover, participants described bisexual men negatively as "really gay" and gender non-conforming.

In addition to hypothesized direct and indirect relationships among the perceived discrimination, internalized biphobia, active and avoidant coping, and mental health variables, noteworthy direct and indirect relations were found among the covariates, coping strategies, and mental health variables as well. Specifically, education and overall outness each had a negative and direct link with psychological distress. Also, age, social class, overall outness employment was positively and directly linked to self-esteem. This is consistent with previous research with racially diverse samples and sexual minority samples that suggest that mental health indicators (e.g., psychological distress and self-esteem) may be linked with age, social class, and outness, (e.g., Brewster et al., 2013; Cotten, 1999; Gamarel, Reisner, Parsons, & Sarit, 2012; Szymanski & Henrichs-Beck, 2014; Twenge & Campbell, 2002).

With regard to coping, age, education, and overall outness, each were positively and directly related to active coping and negatively and directly linked with avoidant coping. This is consistent with research that suggests that age is positively related to problem- focused strategies (e.g., active coping) and negatively related to defensive/suppressive strategies (e.g., avoidant coping) (Blanchard-Fields & Irion, 1988; Szymanski & Henrichs-Beck, 2014). However, Tally and Bettencourt (2011) found that, with their sample of predominantly L/G undergraduate students from a Midwestern

university, overall outness was significantly and positively related to active coping but unrelated to avoidant coping. Because the present study's sample is solely bisexual and collected in the United States, this may explain why the current study did find a direct and negative link between outness and avoidant coping and Tally and Bettencourt (2011) did not. With regard to indirect effects, age, education, and overall outness each had negative and indirect links through active coping with psychological distress and positive and indirect links through active coping with self-esteem. Additionally, age, education, overall outness, and employment status each had negative and indirect links through avoidant coping with psychological distress and positive and indirect links through avoidant coping with self-esteem. With this sample, it seems the older, more educated, and more out an individual was, the more active coping strategies were utilized, which lowered distress and raised self-esteem. Conversely the younger, less educated, less out, and less employed an individual was the more avoidant strategies were implemented which resulted in higher levels of distress and lower levels of self-esteem. These findings suggest that certain demographic variables may play a role in coping with external and internal discrimination and how this impacts mental health. Perhaps participants in this sample who were older and well-educated, were better acquainted with resources and more experienced in coping adaptively with negative experiences (e.g., problem solving, seeking constructive solutions, using past problem solving strategies to approach current problems). Interestingly, half of the participants were in the age range of 18-25. Younger adults may have been more willing to participate because they were more willing to disclose their sexual orientation identity and experiences. Bisexuality has historically been believed to be an illegitimate sexual orientation (Ochs, 1996) and

perhaps older individuals do not identify with a bisexual identity because of the stigma associated with it. Younger adults, however, may be more accepting of this identity. Further, those participants who were more out may have also been more connected to the bisexual community and more aware of active coping strategies (e.g., put concerted effort into productively handling negative experiences) which helped in minimizing distress and increasing self-esteem.

This study extends the small but growing literature on bisexual discrimination experience and mental health in a number of ways. The current investigation collected data from a solely bisexual sample and requested information strictly related to bisexual individual's unique experiences. Often, when studies are conducted with sexual minority samples, bisexual individuals comprise a small percentage of the total participants, which may obscure the voices of bisexual women and men. This can contribute to the assumption that a bisexual orientation is illegitimate or not worthy of examination. Thus, this study fundamentally affirms and acknowledges the existence and legitimacy of a bisexual identity, which is imperative for a group that has been marginalized by L/G and heterosexual communities. Furthermore, although past research has implied that there may be gender differences between bisexual women and men; this is one of the few studies to directly test these implications empirically. Additionally, the current study included a measure that specifically explores bisexual discrimination experiences in both the L/G community and the heterosexual community. Importantly, the current model accounted for the influence of several covariates. Therefore, it might be that the current model represents a more stringent examination of perceived discrimination experiences and mental health with bisexual women and men. However, it is important to note the

consistent links between perceived external and internal discrimination and mental health. Sexual orientation-based discrimination has been conceptualized to have deleterious effects on mental health (Bolton & Sareen, 2011; Conron, Mimiaga, & Landers, 2010; Meyer, 2003) and the current study adds to the mounting data that supports this assertion.

Limitations

The present investigation adds to accumulating research on perceived external and internal bisexual discrimination, including an additional examination of the mediating roles of coping within such links, and exploration of gender differences. However, the findings of the present study should be considered in light of a number of limitations. First, external validity is a concern because results may not generalize to all people who are attracted to multiple genders (Heppner, Kivilghan, & Wampold, 2008). Despite efforts to utilize more inclusive language in the current study, some participants may have still have been hesitant to participate because of the use of the term bisexual, even if used only for brevity. Researchers have argued that the term "bisexual" is not inclusive of different cultures' terminology of being attracted to both women and men. Thus, this study's results may not be generalizable to all racial and cultural groups. Another limitation is the use of online data collection. Although this approach has several advantages, especially with sexual minority samples (Riggle et al., 2005), difficulty with accurately assessing attrition rates and the potential for multiple responses can be challenges of this method. Interestingly, 73 people clicked on the survey link, but did not answer any of the survey questions, and 518 people did not complete the survey after they started. ANOVA analyses indicated that the complete sample utilized for the current

study and the participants who dropped out were not statistically different with regard to demographic variables. However, there may have been several reasons participants chose to drop out of the study. For instance, upon clicking the survey link and reading the informed consent, individuals may have realized they did not meet the inclusion criteria for the study and exited the survey.

In addition, the survey instruments were not counterbalanced. The Anti-Bisexual Experiences Scale was the first instrument after the demographic survey. This may have inadvertently primed participants to the nature of this study and may have influenced their decision to drop out as these participants may not have been comfortable with the subject matter. Also, some individuals may have been painfully triggered by discriminatory experiences they encountered while taking the survey and as a result, decided to stop participation in the study. Also, all measures were self-report. Selfreport measures are subject to social desirability (e.g., Ancis, Szymanski, & Ladany, 2008) and may not be accurate reflections of actual experiences (DeBlaere et al., 2013). Furthermore, similar to other research studies that investigate samples who identify as sexual minorities, participants in this study were primarily White, well-educated individuals who self-identified as being emotionally and/or physically attracted (not necessarily to the same degree or the same time) to the same or other genders. Although studies with racially/ethnically diverse sexual minority samples have yielded similar results (i.e., significant relation between discrimination and mental health: Szymanski & Meyer, 2008; Szymanski & Sung, 2010), those samples had a small percentage of bisexual participants. Therefore it is important to look at the relations between discrimination and mental health with racially diverse bisexual samples as well. Thus, the

homogeneity of the current sample may jeopardize its generalizability to bisexual women and men with different social backgrounds and identities. Additionally, well-educated participants may have more access to resources to assist them in coping with discriminatory experiences (e.g., therapy, support groups) and feel more empowered to do something about these experiences (e.g., confront discrimination). Indeed, bivariate correlation results indicated that level of education was negatively related to psychological distress and positively related to self-esteem. Conversely less educated individuals may have less access to coping resources and less empowered to do anything about discriminatory experiences resulting in greater levels of distress and lower levels of self-esteem. Consequently, the results may not capture the experiences of those with less education. Finally, due to the design of the study, a causal link cannot be inferred between the variables of interest. Thus, perceived discrimination experiences may lead to psychological distress and lower self-esteem or greater distress and lower self-esteem may lead to more perceptions of discrimination. Future experimental and longitudinal studies could help to clarify the direction of causality and prediction in the hypothesized relationships between perceived discrimination and mental health indicators.

Clinical Implications

The findings of this study inform practice with bisexual women and men in multiple ways. First, the study quantitatively examined the relationship between both external and internalized discrimination experiences and mental health indicators with measures intended to assess the unique discrimination experiences of bisexual individuals. The findings suggest that it is imperative that psychologists be aware of the harmful effects that perceived bisexual discrimination could have on mental health. If

psychologists are not attuned to these negative mental health effects, it may rupture the therapeutic alliance and limit desire to receive counseling (Scherrer, 2013). It is imperative that psychologists seek to understand bisexual individuals' unique experiences to avoid making erroneous assumptions (e.g., bisexuality is a phase) that perpetuate experiences of marginalization and negatively impact mental health. With regard to specific therapeutic interventions, the current investigation's findings support the suggestions of other researchers (e.g., DeBlaere & Moradi, 2008) that discrimination experiences are important to acknowledge and explore in therapy with marginalized clients. In addition, an understanding of the coping strategies that promote mental health in the face of discrimination experiences and negative internalized messages can facilitate more effective practice interventions by therapists.

To this author's knowledge, this is the first study to investigate the role of coping in the links between external *and* internal discrimination and mental health. The findings of the current investigation suggest that utilization of avoidant coping strategies (e.g., denial, ignoring negative experiences of discrimination) to address external and internal discrimination experiences may contribute to higher levels of distress and lower levels of self-esteem and may be particularly salient to the mental health of bisexual women and men. Thus, psychologists may want to devote particular attention to assessing the types of coping mechanisms being utilized by their bisexual clients and, when appropriate, explore strategies that may be more adaptive as a means of promoting well-being. Importantly, the results of this study indicate that this attention to active coping strategies could be effective with both bisexual women and men. The findings of this study also suggest that individuals who report greater levels of internalized biphobia may be less

likely to use active coping strategies (e.g., active attempts to deal with discrimination), which may have negative implications for mental health. Therefore, psychologists should assess the extent to which their bisexual clients may be internalizing biphobic messages (e.g., believing their bisexual orientation is illegitimate, perceiving discrimination as deserved). Perhaps assisting clients to realize the legitimacy of their sexual orientation and validating their feelings related to discrimination may lower levels of internalized biphobia, which may encourage use of active coping strategies, and thereby increase self-esteem.

Future Research

Future studies could utilize these findings to inform the exploration of other potential mediating variables (e.g., collective action) in the discrimination-mental health link. Additionally, it would behoove researchers to conduct future studies on solely bisexual men to accurately represent their experiences. It seems research on bisexual men is limited and more information on this population is needed. Further, investigating sexism and perceived anti-bisexual experiences for women may be important, considering the negative stigma facing bisexual women (e.g., perceived as erotic, over sexualized in the media, unfaithful). In addition, acknowledgement of other within-group diversity variables for bisexual individuals beyond gender is important. Future studies could include other measures of discrimination (e.g., racism) as an extension of the current study's model. Also, the term bisexual can often be limiting. This study points to degrees in bisexual identification. For instance, 9% of the sample identified as "Other" (e.g., pansexual, queer) because it may have better captured their sexual identity. Thus, it could be helpful for researchers to acknowledge and assess the broad range of identity

labels that participants may use to describe their sexual orientations (Brewster et al., 2013). Future studies could give participants the option to rate emotional and physical attraction to same and other genders. This may assist in identifying varying degrees of an individual's bisexual orientation. One approach could be for researchers to provide an option for participants to provide their own identity category to more accurately represent their sample. Furthermore, this sample reported significantly more discrimination from the heterosexual community than the L/G community. This could reflect the communities (heterosexual or L/G) in which participants were more immersed. Thus, it would be beneficial for future studies to assess this factor. In conjunction with community of reference, future studies could also assess the gender of participant's partner at the time of participation and examine whether this is related to discrimination experiences (e.g., if being with a same gendered partner is related to more discrimination experiences than being with an opposite gendered partner). Finally, because there is such limited research on bisexual samples, replication studies to confirm the current study's findings would be beneficial.

References

- Allport, F. H. (1954). The structuring of events: Outline of a general theory with applications to psychology. *Psychological Review*, *61*, 281-303. doi:10.1037/h0062678
- Alvarez, A. N., & Juang, L. P. (2010). Filipino Americans and racism: A multiple mediation model of coping. *Journal of Counseling Psychology*, 57, 167-17. doi:10.1037/a0019091
- Ancis, J.R., Szymanski, D.M., & Ladany, N. (2008). Development and psychometric evaluation of the counseling women competencies scale (CWCS). *The Counseling Psychologist*, 36, 719-744. doi:10.1177/0011000008316325

Arbuckle, J. L. (2009). Amos 18.0 User's Guide. Chicago: SPSS.

- Balsam, K. F., & Mohr, J. J. (2007). Adaption to sexual orientation stigma: A comparison of bisexual and lesbian/gay adults. *Journal of Counseling Psychology*, *54*, 306-319. doi:10.1037/0022-0167.54.3.306
- Beals, K. P., & Peplau, L. A. (2005). Identity support, identity devaluation, and wellbeing among lesbians. *Psychology of Women Quarterly*, 29, 140-148. doi:10.1111/j.1471-6402.2005.00176.x
- Blanchard-Fields, F., & Irion, J. C. (1988). Coping strategies from the perspective of two developmental markers: Age and social reasoning. *The Journal of genetic psychology*, *149*, 141-151. doi:10.1080/00221325.1988.10532148

Bollen, K. A. (1989). Structural equations with latent variables. NewYork: Wiley.

- Bolton, S. & Sareen, J. (2011). Sexual orientation and its relation to mental disorders and suicide attempts: Findings from a nationally representative sample. *The Canadian Journal of Psychiatry*, 56(1), 35-43.
- Bradford, M. (2004). The bisexual experience: Living in a dichotomous culture. *Journal of Bisexuality*, *4*, 7-23. doi:10.1300/J159v04n01 02
- Brewster, M. E., & Moradi, B. (2010). Perceived experiences of anti-bisexual prejudice:
 Instrument development and evaluation. *Journal of Counseling Psychology*, 57, 451-468. doi:10.1037/a0021116
- Brewster, M. E., Moradi, B., DeBlaere, C., & Velez, B. L. (2013). Navigating the borderlands: The roles of minority stressors, bicultural self-efficacy, and cognitive flexibility in the mental health of bisexual individuals. *Journal of Counseling Psychology*, 60, 543-556. doi:10.1037/a0033224
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit.*Sage Focus Editions*. (pp 136-162). Newbury Park, California: Sage Publications Ltd.
- Carter II, L. W., Mollen, D., & Smith, N. G. (2013). Locus of control, minority stress, and psychological distress among lesbian, gay, and bisexual individuals. *Journal of counseling psychology*, *61*, 169. doi:10.1037/a0034593
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267-283. doi:10.1037/0022-3514.56.2.267
- Conron, K. J., Mimiaga, M. J., & Landers, S. J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health*, 100, 1953-1960. doi:10.2105/AJPH.2009.174169

- Cotten, S. R. (1999). Marital status and mental health revisited: Examining the importance of risk factors and resources. *Family Relations*, *48*(3), 225-233.
- Crocker, J., & Major, B. (2003). The self-protective properties of stigma: Evolution of a modern classic. *Psychological Inquiry*, *14*, 232-237.
 doi:10.1080/1047840X.2003.9682885
- Crocker, J., & Quinn, D. M. (2000). Social stigma and the self: Meanings, situations, and self-esteem. In T. F. Heatherton, R.E. Kleck, & M. R. Hebl (Eds.), *The Social Psychology of Stigma* (pp. 153-183). New York, NY: Guilford Press
- Deane, F. P., Spicer, J., & Leathem, J. (1992). Effects of videotaped preparation information on expectations, anxiety, and psychotherapy outcome. *Journal of Consulting and Clinical Psychology*, 60(, 980. doi:10.1037/0022-006X.60.6.980
- DeBlaere, C., Brewster, M. E., Bertsch, K. N., DeCarlo, A. L., Kegel, K. A., & Presseau,
 C. D. (2013). The protective power of collective action for sexual minority
 women of color: An investigation of multiple discrimination experiences and
 psychological distress. *Psychology of Women Quarterly*,

doi:10.1177/0361684313493252

- DeBlaere, C., & Moradi, B. (2008). Structures of the schedules of racist and sexist events: Confirmatory factor analyses of African American women's responses. *Psychology of Women Quarterly, 32*, 83-94. doi:10.1111/j.1471-6402.2007.00409.x
- Derogatis, L. R., Lipman, R. S., Rickels, K., Uhlenhuth, E. H., & Covi, L. (1974). The Hopkins Symptom Checklist (HSCL): A self-report symptom inventory. *Behavioral science*, 19, 1-15. doi:10.1002/bs.3830190102

- Diamond, L. (2008). Female bisexuality from adolescence to adulthood: Results from a 10-year longitudinal study. *Developmental Psychology*, 44, 5-14.
 doi:10.1037/0012-1649.44.1.5
- Diaz, R. M., Ayala, G., & Bein, E. (2004). Sexual risk as an outcome of social oppression: Data from a probability sample of Latino gay men in three U.S. cities. *Cultural Diversity and Ethnic Minority Psychology*, *10*, 255-267. doi:10.1037/1099-9809.10.3.255
- Dodeen, H. M. (2003). Effectiveness of valid mean substitution in treating missing data in attitude assessment. Assessment and Evaluation in Higher Education, 28, 505-513. doi:10.1080/02602930301674
- Edwards, L. M., & Romero, A. J. (2008). Coping with discrimination among Mexican descent adolescents. *Hispanic Journal of Behavioral Sciences*, 30, 24-39. doi:10.1177/0739986307311431
- Eliason, M. (2001). Bi-negativity: The stigma facing bisexual men. *Journal of Bisexuality*, *1*, 137-154. doi:10.1300/J159v01n02_05
- Eliason, M. J. (1997). The prevalence and nature of biphobia in heterosexual undergraduate students. *Archives of Sexual Behavior*, *26*, 317-326. doi:10.1023/A:1024527032040
- Firestein, B. A. (2007). Becoming visible: Counseling bisexuals across the lifespan. New York, NY: Columbia University Press
- Fox, R. C. (2003). Bisexual identities. In L.D. Garnets (Ed.), *Psychological perspective* on lesbian, gay, and bisexual experiences (pp. 86-129). New York, NY: Columbia University Press.

Gamarel, K. E., Reisner, S. L., Parsons, J. T., & Golub, S. A. (2012). Association between socioeconomic position discrimination and psychological distress: findings from a community-based sample of gay and bisexual men in New York City. *American journal of public health*, *102*(11), 2094-2101 doi:10.2105/AJPH.2012.300668

Gonsiorek, J. C., & Rudolph, J. R. (1991). Homosexual identity: Coming out and other developments. In J. C. Gonsiorek & J. D. Weinrich (Eds.), *Homosexuality: Research implications for public policy* (pp. 161-176). Newbury Park, CA: Sage.

- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust webbased studies? A comparative analysis of six preconceptions about Internet questionnaires. *American Psychologist*, 59, 93-104. doi:10.1037/0003-066X.59.2.93
- Green, D. E., Walkey, F. H., McCormick, I. A., & Taylor, A. J. (1988). Development And Evaluation Of A 21-Item Version Of The Hopkins Symptom Checklist With New Zealand And United States Respondents. *Australian Journal of Psychology*, 40, 61-70. doi:10.1080/00049538808259070
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76, 408-420. doi:10.1080/03637750903310360
- Heppner, P. P., Cook, S. W., Wright, D. M., & Johnson, W. C. (1995). Progress in resolving problems: A problem-focused style of coping. *Journal of Counseling Psychology*, 42, 279. doi:10.1037/0022-0167.42.3.279

- Heppner, P. P., Kivlighan, D. M., Jr., Wampold, B. E. (2008). *Research design in counseling* (3rd ed.). Belmont, CA: Wadsworth.
- 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, 273-298. doi:10.1080/00918360902728517
- Herek, G. M. (2004). Beyond "homophobia": Thinking about sexual prejudice and stigma in the twenty-first century. *Sexuality Research & Social Policy: A Journal* of the NSRC, 1, 6-24. doi:10.1525/srsp.2004.1.2.6
- 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., & Garnets, L. D. (2007). Sexual orientation and mental health: *Annual Review of Clinical Psychology*, *3*, 5353-375.
 doi:10.1146/annurev.clinpsy.3.022806.091510
- Herek, G. M., Gills, J. R., & Cogan, J. C. (2009). Internalized stigma among sexual minority adults: Insights from a social psychological perspective. *Journal of Counseling Psychology*, 56,32-43. doi:10.1037/a0014672
- Herek, G. M., Gills, J. R., Cogan, J. C, & Glunt, E. K. (1997). Hate crime victimization among lesbian, gay, and bisexual adults. *Journal of Interpersonal Violence*, 12, 195-215. doi:10.1177/088626097012002003
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling:
 Guidelines for determining model fit. *Journal of Business Research Methods*, 6(1), 53-60.

- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Coventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55. doi:10.1080/10705519909540118
- Johnson, M. O., Carrico, A. W., Chesney, M. A., & Morin, M. A. (2008). Internalized heterosexism among HIV-positive, gay-identified men: Implications for HIV prevention and care. *Journal of Consulting and Clinical Psychology*, 76, 829-839. doi:10.1037/0022-006X.76.5.829
- Lazarus, R. S., & Folkman, S. (1984). The concept of coping. In A. Monat & R. Lazarus (Eds.), *Stress and coping: An anthology* (3rd ed.) (pp. 189-206). New York, NY: Columbia University Press.
- Lewis, R. J., Derlega, V. J., Brown, D., Rose, S., & Henson, J. M. (2009). Sexual minority stress, depressive symptoms, and sexual orientation conflict: Focus on the experiences of bisexuals. *Journal of Social and Clinical Psychology*, 28, 971-992. doi:10.1521/jscp.2009.28.8.971
- Liang, C. T. H., Alvarez, A. N., Juang, L. P., & Liang, M. X. (2009). The role of coping in the relationship between perceived racism and racism-related stress for Asian Americans: Gender differences. *Asian American Journal of Psychology, S*, 56-69. doi:10.1037/1948-1985.S.1.56
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighing the merits. *Structural equation modeling*, 9, 151-173. doi10.1207/S15328007SEM0902_1

- Major, B., Kaiser, C. R., & McCoy, S. K. (2003). It's not my fault: When and why attributions to prejudice protect self-esteem. *Personality and Social Psychology Bulletin*, 29, 772-781. doi:10.1177/0146167203029006009
- Mardia, K. V. (1970). Measures of multivariate skewness and kurtosis with applications. *Biometrika*, 57, 519-530. doi:10.1093/biomet/57.3.519
- Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior*, 27, 1031-1056. doi:10.1002/job.406
- Mayfield, W. (2001). The development of an internalized homonegativity inventory for gay men. *Journal of Homosexuality*, *41*, 53-56. doi:10.1300/J082v41n03_05
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674-697. doi:10.1037/0033-2909.129.5.674
- Miller, C. T., & Kaiser, C. R. (2001). A theoretical perspective on coping with stigma. *Journal of Social Issues*, 57, 73-92. doi:10.1111/0022-4537.00202
- Mohr, J., & Fassinger, R. (2000). Measuring dimensions of lesbian and gay male
 experience. *Measurement and Evaluation in Counseling and Development*, 33, 66-90. doi:2000-05649-001
- Mohr, J., & Rochlen, A. B. (1999). Measuring attitudes regarding bisexuality in lesbian, gay male, and heterosexual populations. *Journal of Counseling Psychology*, 46, 353-369. doi:10.1037/0022-0167.46.3.353

- Moradi, B., & Hasan, N. T. (2004). Arab Americans person's reported experiences of discrimination and mental health: The mediating role of personal control. *Journal* of Counseling Psychology, 51, 418-428. doi:10.1037/0022-0167.51.4.418
- Moradi, B., & Risco, C. (2006). Perceived discrimination experiences and mental health of Latina/o American persons. *Journal of Counseling Psychology*, 53, 411-421. doi:10.1037/0022-0167.53.4.411
- Moradi, B., & Subich, L. M. (2004). Examining the moderating role of self-esteem in the link between experiences of perceived sexist events and psychological distress.
 Journal of Counseling Psychology, *51*, 50-56. doi:10.1037/0022-0167.51.1.50
- Mulick, P. S., Wright Jr., L. W. (2002). Examining the existence of biphobia in the heterosexual and homosexual populations. *Journal of Bisexuality*, 2, 45-64. doi:10.1300/J159v02n04_03
- Nadal, K. L. (2008). Preventing racial, ethnic, gender, sexual minority, disability, and religious microaggressions: Recommendations for promoting positive mental health. *Prevention in Counseling Psychology: Theory, Research, Practice and Training*, 2(1), 22-27.Nadal, K. L. Y. (2011). Responding to racial, gender, and sexual orientation microaggressions in the work place. In M. A. Paludi, C. A. Paludi Jr., E. R. DeSouza (Eds). *Praeger Handbook on Understanding and Preventing Workplace Discrimination* (Vols 1 & 2)., (pp.155-180). Santa Barbara, CA: Praeger/ABC-CLIO

- Nadal, K. L., Wong, Y., Issa, M., Meterko, V., Leon, J., & Wideman, M. (2011). Sexual orientation microaggressions: Processes and coping mechanisms for lesbian, gay, and bisexual individuals. *Journal of LGBT Issues in Counseling*, 5, 21-46. doi:10.1080/15538605.2011.554606
- Ochs, R. (1996). Biphobia: It goes more than two ways. In B. Firestein (Ed.). *Bisexuality: The psychology and politics of an invisible minority* (pp. 217-239). Thousand
 Oaks, CA: Sage Publications Inc.
- Ochs, R. (2007). What's in a name? Why women embrace or resist bisexual identity. In
 B. Firestein (Ed). *Becoming visible: Counseling bisexuals across the lifespan* (pp. 217-239). Thousand Oaks, CA: Sage Publications, Inc.
- Oswalt, S. B., & Wyatt, T. J. (2011). Sexual orientation and differences in mental health, stress, and academic performance in a national sample of U.S. college students. *Journal of Homosexuality*, 58, 1255-1280. doi:10.1080/00918369. 2011.605738
- Peterson, T. L., & Gerrity, D. A. (2006). Internalized homophobia, lesbian identity development, and self-esteem in undergraduate women. *Journal of Homosexuality*, 50, 49-75. doi:10.1300/J082v50n04_03
- Pittman, C. T. (2011). Getting mad but ending up sad: The mental health consequences for African American using anger to cope with racism. *Journal of Black Studies*, 42, 1106-1124. doi:10.1177/0021934711401737
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891. doi:10.3758/BRM.40.3.879

- Preston, D. B., D'Augelli, A. R., Kassab, C. D., & Starks, M. T. (2007). The relationship of stigma to the sexual risk behavior of rural men who have sex with men. *AIDS Education and Prevention*, 19, 218-230. doi:10.1521/aeap.2007.19.3.218
- Riggle, E. D. B., Rostosky, S. S., & Reedy, C. S. (2005). Online surveys for BGLT research: Issues and techniques. *Journal of Homosexuality*, 49, 1-21. doi:10.1300/J082v49n02_01
- Rosenberg, M. (1965). Society and the adolescent self-image.
- Ross, L. E., Dobinson, C., & Eady A. (2010). Perceived determinants of mental for bisexual people: A qualitative examination. *American Journal of Public Health*, 100, 496-502. doi:10.2105/AJPH.2008.156307
- Ross, M. W., Rosser, B. R., & Neumaier, E. R. (2008). The relationship of internalized homonegativity to unsafe sexual behavior in HIV-seropositive men who have sex with men. *AIDS Education and Prevention*, 20, 547-557. doi:10.1521/aeap.2008.20.6.547
- Rostosky, S. S., Riggle, E. D. B., Horne, S. G., Denton, F. N., & Huellemeier, J. D. (2010). Lesbian, gay, and bisexual individuals' psychological reactions to amendments denying access to civil marriage. *American Journal of Orthopsychiatry*, 80, 302-310. doi:10.1111/j.1939-0025.2010.01033.x
- Rust, P. C. (1993). Neutralizing the political threat of the marginal woman: Lesbians' beliefs about bisexual women. *Journal of Sex Research*, *30*, 214-228. doi:10.1080/00224499309551705
- Scherrer, K. (2013). Culturally Competent Practice with Bisexual Individuals. *Clinical Social Work Journal*, *41*, 238-248. doi:10.1007/s10615-013-0451-4

- Schmitt, M. T., & Branscombe, N. R. (2001). The good, the bad, the manly: Threats to one's prototypicality and evaluations of fellow in-group members. *Journal of Experimental Social Psychology*, 37, 510-517. doi:10.1006/jesp.2001.1476
- Schmitt, M. T., Branscombe, N. R., Kobrynowicz, D., & Owen, S. (2002). Perceiving discrimination against one's gender group has different implications for well-being in women and men. *Personality and Social Psychology Bulletin, 28*, 197-210. doi 10.1177/0146167202282006
- Schrimshaw, E. W., Siegel, K., Downing Jr, M. J., & Parsons, J. T. (2013). Disclosure and concealment of sexual orientation and the mental health of non-gayidentified, behaviorally bisexual men. *Journal of consulting and clinical psychology*, *81*, 141. doi:10.1037/a0031272
- Schumacker, R. E., & Lomax, R. G. (2004). A beginner's guide to structural equation modeling. Psychology Press.
- Sharma, S., & Sharma, M. (2010). Globalization, threatened identities, coping and wellbeing. *Psychological Studies*, 55, 313-322. doi:10.1007/s12646-010-0048-8
- Sheets Jr, R. L., & Mohr, J. J. (2009). Perceived social support from friends and family and psychosocial functioning in bisexual young adult college students. *Journal of Counseling Psychology*, 56, 152. doi:10.1037/0022-0167.56.1.152
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445. doi:10.1037//1082-989X.7.4.422
- Smith, N. G., & Ingram, K. M. (2004). Workplace heterosexism and adjustment among lesbian, gay, and bisexual individuals. The role of unsupportive social

interactions. *Journal of Counseling Psychology*, *51*, 57-67. doi:10.1037/0022-0167.51.1.57

- Sophie, J. (1987). Internalized homophobia and lesbian identity. *Journal of Homosexuality*, *14*, 53-65. doi:10.1300/J082v14n01_05
- Steinman, E. (2011). Revising the invisibility of (male) bisexuality: Grounding (queer) theory, centering bisexual absences and examining masculinities. *Journal of Bisexuality*, 11, 399-411. doi:10.1016/j.janxdis. 2011.05.001
- Swim, J. K., Johnson, K., & Pearson, N. B. (2009). Daily experiences with heterosexism: Relations between heterosexist hassles and psychological well-being. *Journal of Social and Clinical Psychology*, 28, 597-629. doi:10.1521/jscp. 2009.28.5.597
- Szymanski, D. M. (2006). Does internalized heterosexism moderate the link between heterosexist events and lesbians' psychological distress? *Sex Roles*, *54*, 227-234. doi:10.1007/s11199-006-9340-4
- Szymanski, D. M. (2009). Examining potential moderators of the link between heterosexist events and gay and bisexual men's psychological distress. *Journal of Counseling Psychology*, 56, 142-151. doi:10.1037/0022-0167.56.1.142
- Szymanski, D. M. (2005). Heterosexism and sexism as correlates of psychological distress in lesbians. *Journal of Counseling & Development*, 83, 355-360. doi:10.1002/j.1556-6678.2005.tb00355.x
- Szymanski, D. M., & Carr, E. R. (2008). The gender role conflict and internalized heterosexism in gay and bisexual men's psychological distress: Testing two mediation models. *Psychology of Men & Masculinity*, 9, 40-54. doi:10.1037/1524-9220.9.1.40

- Szymanski, D. M., & Gupta, A. (2009). Examining the relationships between multiple oppressions and Asian American sexual minority persons' psychological distress. *Journal of Gay & Lesbian Social Services: Issues in Practice, Policy & Research,* 21, 267-281. doi:10.1080/10538720902772212
- Szymanski, D. M., & Henrichs-Beck, C. (2014). Exploring Sexual Minority Women's Experiences of External and Internalized Heterosexism and Sexism and their Links to Coping and Distress. *Sex Roles*, 70, 28-42. doi:10.1007/s11199-013-0329-5
- Szymanski, D. M., & Kashubeck-West, S. (2008). Mediators of the relationship between internalized oppressions and lesbian and bisexual women's psychological distress. *The Counseling Psychologist, 36*, 575-594. doi:10.1177/0011000007309490
- Szymanski, D. M., & Meyer, D. (2008). Racism and heterosexism as correlates of psychological distress in African American sexual minority women. *Journal of LGBT Issues in Counseling*, 2, 94-108. doi:10.1080/15538600802125423
- Szymanski, D. M., & Obiri, O. (2011). Do religious coping styles moderate or mediate the external and internalized racism-distress links? *The Counseling Psychologist*, 39, 438-462. doi:10.1177/0011000010378895
- Szymanski D.M. & Owens, G. P. (2008). Do coping styles moderate or mediate the relationship between internalized heterosexism and sexual minority women's psychological distress? *Psychology of Women Quarterly, 32*, 95-104. doi:10.1111/j.1471-6402.2007.00410.x

- Szymanski, D. M., & Owens, G. P. (2009). Group-level coping as a moderator between heterosexism and sexism and psychological distress in sexual minority women. *Psychology of Women Quarterly, 33*, 197-205. doi:10.1111/j.1471-6402.2007.00410.x
- Szymanski, D.M., & Stewart, D.N. (2010). Racism and sexism as correlates of African American Women's psychological distress. *Sex Roles*, 63, 226-238. doi:10.1007/s11199-010-9788-0
- Szymanski, D. M., & Sung, M. R. (2010). Minority stress and psychological distress among Asian American sexual minority persons. *The Counseling Psychologist*, 38, 848-872. doi:10.1177/0011000010366167
- Tabachnick, B. G., Fidell, L.S. (2007). *Using Multivariate Statistics* (5th ed.). Boston: Pearson Education.
- Talley, A.E. & B. A. Bettencourt (2011). The moderator roles of coping style and identity disclosure in the relationship between perceived sexual stigma and psychological distress. *Journal of Applied Psychology*, *41*, 2883-2903. doi:10.1111/j.1559-1816.2011.00863.x
- Thomas, A.J., Speight, S.L., & Witherspoon, K.M. (2008). Gendered racism,
 psychological distress, and coping styles of African American women. *Cultural Diversity and Ethnic Minority Psychology*, 14, 307-314. doi:10.1037/10999809.14.4.307
- Twenge, J. M., & Campbell, W. K. (2002). Self-esteem and socioeconomic status: A meta-analytic review. *Personality and Social Psychology Review*, 6, 59-71. doi:10.1207/S15327957PSPR0601_3

- Volpp, S. Y. (2010). What about the "B" in LGB: Are bisexual women's mental health issues the same or different? *Journal of Gay & Lesbian Mental Health*, 14, 41-51. doi:10.1080/19359700903416016
- Wei, M., Ku, T. Y., Russell, D. W., Mallinckrodt, B., & Liao, K. Y. H. (2008).
 Moderating effects of three coping strategies and self-esteem on perceived discrimination and depressive symptoms: A minority stress model for Asian international students. *Journal of Counseling Psychology*, 55, 451.
 doi:10.1037/a0012511
- Weston, R., & Gore, P. A. (2006). A brief guide to structural equation modeling. The Counseling Psychologist, 34, 719-751. doi:10.1177/0011000006286345
- Williams, K. A., & Chapman, M. V. (2011). Comparing health and mental health needs, service use, and barriers to services among sexual minority youths and their peers. *Health & Social Work, 36*, 197-206. doi:10.1093/hsw/36.3.197
- Yost, M. R., & Thomas, G. D. (2012). Gender and binegativity: Men's and women's attitudes toward male and female bisexuals. *Archives of sexual behavior*, 41, 691-702. doi:10.1007/s10508-011-9767-
- Zea, M. C., Reisen, C. A., & Poppen, P. J. (1999). Psychological well-being among
 Latino lesbians and gay men. *Cultural Diversity and Ethnic Minority Psychology*,
 5, 371. doi:10.1037/1099-9809.5.4.371

Appendix A Recruitment Letter for Participants

Hello! My name is Kristin Bertsch, and I am a doctoral student in the College of Education at Lehigh University. I am conducting my dissertation on the life experiences and well-being of women and men that identify as being emotionally and/or physically attracted (not necessarily to the same degree or the same time) to the same or other genders, under the supervision of my advisor, Dr. Cirleen DeBlaere. It is my hope that with this study, we can contribute to the understanding of the experiences of these individuals. Your participation is essential to achieving this goal, so we hope that you will take part in our study.

In order to participate, you must identify as <u>being emotionally and/or physically attracted</u> (not necessarily to the same degree or the same time) to the same or other genders, currently reside in the United States, and be 18 years of age or older. If you would like to participate in my study, please click on the link below and you will be directed to the online survey:

*Insert link here

Thank you VERY much in advance for your time! Please feel free to pass on this link to other people who might be eligible.

If you have any questions about this study, please feel free to contact me at knb208@lehigh.edu. This research has been approved by the Lehigh University Institutional Review Board (IRB###).

Sincerely,

Kristin Bertsch, M.A. Doctoral Candidate Counseling Psychology Lehigh University Cirleen DeBlaere, Ph.D. Assistant Professor Counseling Psychology Lehigh University

Appendix B Informed Consent

Dear Participant,

We are conducting a study on the life experiences and well-being of women and men who identify as being emotionally and/or physically attracted (not necessarily to the same degree or the same time) to the same and other genders. For the purposes of brevity, the term bisexual is used throughout the survey, however we understand that not all who participate in the study necessarily use that term to identify themselves. With this study, we hope to contribute to the understanding of the experiences and needs of bisexual individuals. Participation in our study will involve completing a survey that will take approximately 20-25 minutes.

In order to participate you must:

• Be at least 18 years old

• Identify as being emotionally and/or physically attracted (not necessarily to the same degree or the same time) to the same and other genders or bisexual

• Reside in the U.S.

Although some questions may be of a personal nature and have the potential to elicit uncomfortable feelings/memories, you do not have to answer any question you do not wish to answer. Responses will be reported in the form of group averages that include data from other participants. Also, no identifying information will be collected by Survey Monkey making it impossible for the electronic responses to be linked to individuals; therefore all responses will be confidential. You are free to withdraw your consent to participate and may discontinue your participation in the study at any time without consequence.

There is no compensation or direct benefit to you for participating in this study. If you have any questions about this research and what is expected of you in this study, you may contact Kristin Bertsch, M.A., at <u>knb208@lehigh.edu</u> or at (610) 758-3880 or Dr. Cirleen DeBlaere at <u>cid209@lehigh.edu</u> or at (610)-758-3227.

You may report problems that may result from participation or direct questions in regard to your rights as a subject in this study to Susan Disidore, Office of Research and Sponsored Programs, Lehigh University, (610) 758-3020. All reports or correspondence will be kept confidential.

Sincerely,	
Kristin Bertsch, M.A.	Cirleen DeBlaere, Ph.D.
Doctoral Candidate	Assistant Professor
Counseling Psychology	Counseling Psychology
Lehigh University	Lehigh University

This research has been approved by the Lehigh University Institutional Review Board (##). I have read the procedure described above and by clicking the "Next" button below, I am voluntarily agreeing to participate in this survey study.

Appendix C Demographics Information Sheet

DEMOGRAPHIC INFORMATION

Below are a set of items and questions to gather general information about your background for the purpose of the study. Please choose the response that BEST describes you. This information will be maintained in the strictest of confidence.

1. Have you ever opened this research study before?

____No ____Yes

If no: Participant will be directed to the "your current age" item and the rest of the survey

If yes: Participant will be directed to this question: Have you completed this survey in its entirety before?

If yes: The participant will get a message that tells them "Thank you for taking our survey. We only ask that you only fill this out once."

If no: The participant will be asked "How much of the survey have you completed?"

0%-25% of the survey 51% to 75\% of the survey

____26% to 50% of the survey ____76% to or more of the survey

The participant will then be directed to the following demographic questionnaire and survey:

2. Your current age: _____

3. Gender:

____Man ____Transman

____Woman ____Transwoman

____Other gender (e.g. androgynous, genderqueer)

4. Race/Ethnicity

_____African American/ Black

Asian/ Asian American/Pacific Islander	Caucasian/White
American Indian/Native American	Multiracial
Hispanic/Latina/o	Other race/ethnicity. Please specify
5. Relationship Status	
Single	Civil Union
Dating, Casual	Domestic Partnership (legal)
Dating, long term	Married
Committed Partnership (non-legal)	Other relationship status. Please Specifiy

6. If you are in a relationship(s), what is the gender of your partner(s)? Please check all that apply.

____Woman

____Man

_____Transwoman

____Transman

____Other (e.g. Androgynous, Genderqueer) _____

- 7. Highest level of education completed (please select the bubble for the one best descriptor):
- ____Elementary School
- ____Middle/Junior High School
- ____High School
- ____Some College/Technical School
- ____College
- ____Some Professional/Graduate School
- ____Professional/Graduate School
- 8. Please indicate what you consider your sexual orientation to be:
- ____Exclusively Lesbian/Gay
- ____Mostly Lesbian/Gay
- ____Bisexual
- ____Mostly Heterosexual
- ____Exclusively Heterosexual
- ____Asexual
- ____Other (please briefly describe) _____
- 9. How involved are you in political activism related to bisexual issues?
- ____1: Not at all involved
- ____2: Slightly involved
- _____3: Somewhat involved
- ____4: Extremely involved
- 10. Your employment status (please select the bubble for the one best descriptor):

____Employed Full Time

_Employed Part Time

____Not Employee

11. Your annual household income (the combined income of people who are currently responsible for you financially):

<\$25,000	\$50,000 to <\$75,000
\$25,000 to <\$35,000	\$75,000 to <\$100,000
\$35,000 to <\$50,000	>\$100,000

12. Your current social class:

Lower Class	Upper Middle Class
-------------	--------------------

Working Class	Upper Class
---------------	-------------

____Middle Class

13. In what region of the country do you live?

rthwest
1

____Southeast ____Southwest

____Midwest

Appendix D Outness Inventory (To be used for demographic purposes only)

Use the following rating scale to indicate how open you are about your sexual orientation to the people listed below. Try to respond to all of the items, but leave items blank if they do not apply to you.

1 = person <u>definitely</u> does NOT know about your sexual orientation status

2 = person <u>might</u> know about your sexual orientation status, but it is NEVER talked about

3 = person probably knows about your sexual orientation status, but it is NEVER talked about

4 = person <u>probably</u> knows about your sexual orientation status, but it is RARELY talked about

 $5 = person \frac{definitely}{definitely}$ knows about your sexual orientation status, but it is RARELY talked about

 $6 = person \underline{definitely}$ knows about your sexual orientation status, and it is SOMETIMES talked about

7 =person <u>definitely</u> knows about your sexual orientation status, and it is OPENLY talked about

0 =not applicable to your situation; there is no such person or group of people in your life

1. mother	1	2	3	4	5	6	7	0
2. father	1	2	3	4	5	6	7	0
3. siblings (sisters, brothers)	1	2	3	4	5	6	7	0
4. extended family/relatives	1	2	3	4	5	6	7	0
5. my <u>new</u> straight friends	1	2	3	4	5	6	7	0
6. my work peers	1	2	3	4	5	6	7	0
7. my work supervisor(s)	1	2	3	4	5	6	7	0
8. members of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
9. leaders of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
10. strangers, new acquaintances	1	2	3	4	5	6	7	0
11. my <u>old</u> heterosexual friends	1	2	3	4	5	6	7	0

Appendix E Anti-Bisexual Experiences Scale

INSTRUCTIONS: Please rate how often the experience reflected in each of the following items has happened to you personally. We are interested in your personal experiences as a bisexual individual and realize that each experience may or may not have happened to you. To tell us about your experiences, please rate each item using the scale below:

Check 1st bubble= If this has NEVER happened to you

Check 2nd bubble= If this has happened to you ONCE IN A WHILE (less than 10% of the time)

Check 3rd bubble= If this has happened to you SOMETIMES (10%-25% of the time)

Check 4th bubble= If this has happened to you A LOT (26%-49% of the time)

Check 5th bubble= If this has happened to you MOST OF THE TIME (50%-70% of the time)

Check 6th bubble= If this has happened to you ALMOST ALL OF THE TIME (more than 70% of the time)

Please answer each question TWICE, once to report how often you have had each experience with lesbian/gay people and again to report how often you have had the experience with heterosexual people.

1. People have addressed my bisexuality as if it means that I am simply confused about my sexual orientation

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

2. I have been excluded from social networks because I am bisexual

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

3. Others have pressured me to fit into a binary system of sexual orientation (i.e., either gay or straight)

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

4. When I have disclosed my sexual orientation to others, they have continued to assume that I am really heterosexual or gay/lesbian

had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 1 - 2 - 3 - 4 - 5 - 6		
5. People have not wanted to be my friend because I identify as bisexual			
had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 $1 - 2 - 3 - 4 - 5 - 6$		
6. People have acted as if my sexual orientation is just a tra	ansition to a gay/lesbian orientation		
had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 1 - 2 - 3 - 4 - 5 - 6		
7. People have acted as if my bisexuality is only a sexual c	uriosity, not a stable sexual orientation		
had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 $1 - 2 - 3 - 4 - 5 - 6$		
8. People have assumed that I will cheat in a relationship b	ecause I am bisexual		
had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 1 - 2 - 3 - 4 - 5 - 6		
9. Others have treated me negatively because I am bisexual			
had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 1 - 2 - 3 - 4 - 5 - 6		
10. People have not taken my sexual orientation seriously because I am bisexual			
had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 $1 - 2 - 3 - 4 - 5 - 6$		
11. People have denied that I am really bisexual when I tell them about my sexual orientation			
had this experience with lesbian or gay people had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6 $1 - 2 - 3 - 4 - 5 - 6$		
12. People have treated me as if I am likely to have an STD/HIV because I identify as bisexual			

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

13. People have stereotyped me as having many sexual partners without emotional commitments

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

14. When my relationships haven't fit people's opinions about whether I am lesbian/gay, they have discounted my relationships as "experimentation"

Please Mark Most of the Time	1 - 2 - 3 - 4 - 5 - 6
had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

15. Others have acted uncomfortable around me because of my bisexuality

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

16. I have been alienated because I am bisexual

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

17. People have treated me as if I am obsessed with sex because I am bisexual

had this experience with lesbian or gay people	1 - 2 - 3 - 4 - 5 - 6
had this experience with heterosexual people	1 - 2 - 3 - 4 - 5 - 6

Appendix F Internalized Binegativity Scale

For each of the following statements, mark the response that best indicates your experience as a bisexual person. Please be as honest as possible in your responses.

1------5-----6-----7

Disagree	Agree
Strongly	Strongly

- 1. ____ I would rather be straight if I could.
- 2. ____ I am glad to be a bisexual person.
- 3. _____Bisexual lifestyles are not as fulfilling as heterosexual lifestyles.
- 4. _____ I'm proud to be part of the bisexual community.
- 5. ____ I wish I were heterosexual.

Appendix G COPE Inventory

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

1 = I usually don't do this at all

- 2 = I usually do this a little bit
- 3 = I usually do this a medium amount

4 = I usually do this a lot

1. I try to grow as a person as a result of the experience.	1 2 3 4
2. I turn to work or other substitute activities to take my mind off things.	1 2 3 4
3. I get upset and let my emotions out.	1 2 3 4
4. I try to get advice from someone about what to do.	1 2 3 4
5. I concentrate my efforts on doing something about it.	1 2 3 4
6. I say to myself "this isn't real."	1 2 3 4
7. I put my trust in God.	1 2 3 4
8. I laugh about the situation.	1 2 3 4
9. I admit to myself that I can't deal with it, and quit trying.	1 2 3 4
10. I restrain myself from doing anything too quickly.	1 2 3 4
11. I discuss my feelings with someone.	1 2 3 4
12. I use alcohol or drugs to make myself feel better.	1 2 3 4

13. I get used to the idea that it happened.	1	2	3	4
14. I talk to someone to find out more about the situation.	1	2	3	4
15. I keep myself from getting distracted by other thoughts or activities.	1	2	3	4
16. I daydream about things other than this.	1	2	3	4
17. I get upset, and am really aware of it.	1	2	3	4
18. I seek God's help.	1	2	3	4
19. I make a plan of action.	1	2	3	4
20. I make jokes about it.	1	2	3	4
Please mark 3	1	2	3	4
21. I accept that this has happened and that it can't be changed.	1	2	3	4
22. I hold off doing anything about it until the situation permits.	1	2	3	4
23. I try to get emotional support from friends or relatives.	1	2	3	4
24. I just give up trying to reach my goal.	1	2	3	4
25. I take additional action to try to get rid of the problem.	1	2	3	4
26. I try to lose myself for a while by drinking alcohol or taking drugs.	1	2	3	4
27. I refuse to believe that it has happened.	1	2	3	4
28. I let my feelings out.	1	2	3	4
29. I try to see it in a different light, to make it seem more positive.	1	2	3	4
30. I talk to someone who could do something concrete about the problem.	1	2	3	4
31. I sleep more than usual.	1	2	3	4
32. I try to come up with a strategy about what to do.	1	2	3	4
33. I focus on dealing with this problem, and if necessary let other things slide a little	. 1	2	3	4
34. I get sympathy and understanding from someone.	1	2	3	4

35. I drink alcohol or take drugs, in order to think about it less.	1	2	3	4
36. I kid around about it.	1	2	3	4
37. I give up the attempt to get what I want.	1	2	3	4
38. I look for something good in what is happening.	1	2	3	4
39. I think about how I might best handle the problem.	1	2	3	4
40. I pretend that it hasn't really happened.	1	2	3	4
41. I make sure not to make matters worse by acting too soon.	1	2	3	4
42. I try hard to prevent other things from interfering with my efforts at dealing with this.	1	2	3	4
Please Mark 4	1	2	3	4
43. I go to movies or watch TV, to think about it less.	1	2	3	4
44. I accept the reality of the fact that it happened.	1	2	3	4
45. I ask people who have had similar experiences what they did.	1	2	3	4
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.	1	2	3	4
47. I take direct action to get around the problem.	1	2	3	4
48. I try to find comfort in my religion.	1	2	3	4
49. I force myself to wait for the right time to do something.	1	2	3	4
50. I make fun of the situation.	1	2	3	4
51. I reduce the amount of effort I'm putting into solving the problem.	1	2	3	4
52. I talk to someone about how I feel.	1	2	3	4
53. I use alcohol or drugs to help me get through it.	1	2	3	4
54. I learn to live with it.	1	2	3	4
55. I put aside other activities in order to concentrate on this.	1	2	3	4
56. I think hard about what steps to take.	1	2	3	4

57. I act as though it hasn't even happened.	1	2	3	4
58. I do what has to be done, one step at a time.	1	2	3	4
59. I learn something from the experience.	1	2	3	4
60. I pray more than usual.	1	2	3	4

Appendix H Hopkins Symptom Checklist – 21

How have you felt during the past seven days including today? Use the following scale to describe how distressing you have found these things over this time.

1. Difficulty in speaking when you are excited.

1234Not at all.....A little....Quite a bit....Extremely

2. Trouble remembering things.

1	2	3	4
Not at all	A little	Quite a bit	Extremely

3. Worried about sloppiness or carelessness.

1	2	3	4
Not at all	A little	Quite a bit	Extremely

Please select Extremely.

1234Not at all.....A little.....Quite a bit.....Extremely

4. Blaming yourself for things.

1234Not at all.....A little....Quite a bit....Extremely

5. Pains in the lower part of your back.

	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
6. Feeling lonely.				
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
7. Feeling blue.				
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
8. Your feelings	being easily hurt.			
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
9. Feeling others	do not understand	you are unsy	mpathetic.	
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
10. Feeling that p	people are unfriend	lly or dislike	you.	
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely

11. Having to do	things very slowl	y in order to b	e sure you are doin	ng them right.
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
12. Feeling inferio	or to others.			
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
13. Soreness of yo	our muscles.			
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
14. Having to check and double-check what you do.				
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
			-	2
15. Hot or cold sp	ells.			
Ĩ	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
				5
16. Your mind go	ing blank.			
· · · · · · · · · · · · · · · · · ·	1	2	3	4
			Quite a bit	
	1,01 ut u11			·······································

17. Numbness or tingling in parts of your body.

	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
18. A lump in y	our throat.			
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
19. Trouble con	centrating.			
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
20. Weakness in	n parts of your b	ody.		
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely
21. Heavy feeli	ngs in your arms	and legs.		
	1	2	3	4
	Not at all	A little	Quite a bit	Extremely

Appendix I Rosenberg Self-Esteem Scale (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 high school juniors and seniors from 10 randomly selected schools in New York State.

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, check off SA. If you agree with the statement, check off A. If you disagree, check off D. If you strongly disagree, check off SD.

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

Appendix J Debriefing Form

Thank You!

Thank you for participating in our research. The goal of this study is to learn more about the experiences, attitudes and feelings of women and men who identify as being "emotionally and/or physically attracted, not necessarily to the same degree or the same time, to same- and other-gendered individuals." If this survey has caused you any distress, you may want to call the Affirmations Helpline at 1-800-398-4297. Additional information about this helpline and other services is available at this website: <u>http://www.goaffirmations.org/group/TFHL</u>

We urge you to not reveal the purpose of this study to others because if they choose to participate, then their responses might be biased and would invalidate the study. However, please feel free to encourage other bisexual women and men to participate.

As a reminder, you may contact Kristin Bertsch, M.A., at <u>knb208@lehigh.edu</u> or at (610)758-3880 with additional questions or concerns about this study. You may also report problems that may result from participation or direct questions in regard to your rights as a subject in this study to Susan Disidore, Office of Research and Sponsored Programs, Lehigh University, (610) 758-3001. All reports or correspondence will be kept confidential.

Again, we greatly appreciate your participation!

Kristin N. Bertsch Curriculum Vitae

EDUCATION

Ph.D. Candidate	Lehigh University, Bethlehem, PA Counseling Psychology: APA Accredited
	Dissertation: The relationship among anti-bisexual discrimination experiences and coping on
	bisectuation. The relationship antiong anti-orsectual disertification experiences and coping on bisectual women and men's mental health
	Defended: April, 2014
	Chair: Grace I. L. Caskie, Ph.D.
	Co-Chair: Cirleen DeBlaere, Ph.D.
Doctoral Internship	University of Pennsylvania, Philadelphia, PA
-	APA Accredited, In Progress
M.A. May 2007	Arcadia University, Glenside, PA Counseling Psychology
B.A. May 2004	Siena College, Loudonville, NY Major: Psychology

AWARDS & GRANTS

 Society for the Psychology of Women (Division 35), American Psychological Association; for DeBlaere, C., Brewster, M. E., Bertsch, K. N., DeCarlo, A. L., Keg K. A., & Presseau, C. D. Multiple perceived discrimination experiences and psychological distress of sexual minority women of color: The moderating role of collective action. <u>Psychology of Women Quarterly</u>, Revise and resubmit. 2012 Women of Color Psychologies Award 	
K. A., & Presseau, C. D. <i>Multiple perceived discrimination experiences and psychological distress of sexual minority women of color: The moderating role of collective action.</i> <u>Psychology of Women Quarterly</u> , Revise and resubmit.	
psychological distress of sexual minority women of color: The moderating role of collective action. <u>Psychology of Women Quarterly</u> , Revise and resubmit.	
collective action. Psychology of Women Quarterly, Revise and resubmit.	
2012 Women of Color Psychologies Award	
Association for Women in Psychology; for DeBlaere, C., Brewster, M. E., Bertsch,	К.
N., DeCarlo, A. L., Kegel, K. A., & Presseau, C. D. Multiple perceived discrimination	n
experiences and psychological distress of sexual minority women of color: The	
moderating role of collective action. Psychology of Women Quarterly, Revise and	
resubmit.	
2012 College of Education Diversity Committee Travel Grant	
Lehigh University College of Education Diversity Committee	
2010 & 2012 College of Education Dean's Endowed Student Travel Scholarship	
Lehigh University College of Education	
2009 College of Education Equity & Community Initiative Grant	
College of Education Diversity Committee at Lehigh University. Awarded for the	
development of a training video aimed at addressing microaggressions in academia.	
2008 & 2011 Graduate Student Senate Travel Grant	
Lehigh University Graduate Student Life Office	

CLINICAL EXPERIENCE

August 2013 to Present	Doctoral Internship
	University of Pennsylvania, Philadelphia, PA
	• Provide 12-18 individual therapy college students from diverse backgrounds and
	presenting concerns on a weekly basis using a brief therapy model.

- Supervise beginner masters' level trainee on a weekly basis. Review tape, paperwork, and provide evaluations.
 - Participate on triage team and 2 hours of telephone triage screening weekly and conduct brief screening interviews designed to identify presenting concerns, and assess for urgency and severity. Following the assessment, make appropriate recommendations for treatment (e.g., assign for crisis, urgent, or routine intake appointment). Also respond to parent, staff, and faculty phone calls.
 - Service as on-call counselor 3 hours weekly to students in crisis and assess for severity and recommend next treatment steps.
 - Collaborate with multidisciplinary treatment team to ensure comprehensive and individualized treatment to clients served. Present client cases and receive and give feedback to team members.

June 2009 to July 2013

Outpatient Therapist

Step By Step, Inc., Allentown, PA

- Provided over 700 hours of of individual therapy with individuals from diverse backgrounds that are diagnosed with co-occurring disorders.
- Responsible for diagnostic work up, treatment planning, and keeping paper work up-to-date. Keep in ongoing communication with client's treatment team.
- Participate in crisis intervention and risk assessment on regular basis.
- Conduct drug screens on a weekly basis for mandated clients.
- Participate in supervision with Program Director as well as peer supervision with colleagues on biweekly basis.

September 2009 to July 2013

Graduate Assistant

Lehigh University Counseling and Psychological Services, Bethlehem, PA

- Assisted with intake assessments, individual therapy, and alcohol and other drug (AOD) interventions as needed. AOD interventions include individual sessions or group sessions with undergraduate students who have AOD violations.
- Co-facilitated a mix gendered process therapy group for diverse group of undergraduate students on a weekly basis under supervision of program director (began in September of 2012). In previous years, I have co-facilitated a mindfulness group with undergraduate students aimed at helping students utilize mindfulness in everyday life and social interactions.
- Assisted with development of research initiatives related to student social development.
- Planned, developed, and implemented outreach programming related to international student concerns, peak performance, alcohol, and orientation programs.
- Served as a teacher's assistant to director for substance abuse, trauma, advanced counseling, and sports psychology courses. Responsible for building coursesite, creating assignments, test development, grading, and meeting with students.
- Maintained communication with other organizations on campus to coordinate programming that will benefit a diverse and vast amount of students.
- Participated in weekly case conferences, staff meetings, and supervision.

August 2011 to March 2012

Practicum Trainee

Lafayette College Counseling Center, Easton, PA

- Provided individual therapy of individuals form diverse backgrounds and administered, interpreted and provided feedback to clients on assessments such as the NEO-PI-R and STRONG Interest Inventory.
- Assisted with outreach initiatives as needed.

	 Responsible for keeping up-to-date paperwork and ongoing communication with counseling staff. Participated in weekly case conferences with staff and individual supervision with a licensed psychologist. Conducted alcohol and other drug evaluations and utilized substance abuse interventions on a regular basis. Trained in client directed Outcome informed therapy which emphasized client feedback as a central component of treatment. To gather feedback, clients were administered outcome rating scale (ORS) that assessed effectiveness of services and the session rating scale (SRS) that provided feedback regarding the status of the therapist-client relationship.
September 2010 to June 2011	 Practicum Trainee Friends Hospital – 1st Rotation: Admissions and Evaluations Center, 2nd Rotation: Recovery Oriented Unit – an inpatient setting Admissions and Evaluations Center Completed individual crisis assessments, diagnosed, and determined level of care for individuals ranging from adolescence to late adulthood under the supervision of supervisor, physician and triage nurses. Work with diverse clients with mild to severe clinical diagnoses. Interfaced with managed care for approval of services. Engage in continuity of care efforts by referring patient to appropriate agency or inpatient unit. Attend weekly grand rounds and training seminars. Recovery Oriented Unit Conducted individual and group therapy with a diverse range of individuals under supervision of unit director. Worked collaboratively with a multidisciplinary treatment team to provide holistic and culturally appropriate treatment for each individual on the inpatient unit. Responsible for treatment planning and keeping progress notes up-to-date.
September 2010 to April 2011	 Supervision Practicum Lehigh University, Bethlehem, PA Supervised four masters level counseling trainees, one locally and three internationally (two in Kuwait, one in Saudi Arabia) on a weekly basis. Participated in supervision of supervision provided by program coordinator. Acclimated supervisees to goals and tasks of supervision. Reviewed tapes of each supervisee weekly, and provided feedback on their therapeutic interventions during supervision sessions. Transcribed selected supervisee counseling sessions and provided detailed feedback on counseling theory, interventions, strengths, and growth edges. Kept up-to-date records on all cases. Evaluated supervisee progress consistently throughout sessions and provided formal evaluation at mid and end points of the semester for both fall and spring.

September 2009 to May 2010	Practicum Trainee Lehigh University Counseling and Psychological Services, Bethlehem, PA
	 Conducted individual therapy for mix gendered undergraduate and graduate students from diverse backgrounds with presenting concerns ranging from adjustment disorder and depression, to more severe mental illness. Co-led eating disorder therapy group sexual orientation therapy group for undergraduate and graduate students from diverse backgrounds under supervision from program director. Completed intake evaluations and conduct individual and group substance abuse evaluations and interventions, utilizing motivational interviewing along with other interventions.
September 2006 to May 2007	Practicum Trainee Gwynedd Mercy College Counseling Center, Gwynedd Valley, PA
	 Conducted individual therapy with undergraduate students from diverse backgrounds under the supervision of the Program Director. Coordinated, planned and implemented social, recreational and cultural programs on campus. Responsible for organizing and keeping all client paper work up to date. Maintained consistent communication with other departments on campus to better meet the needs of the students.
September 2004 to May 2006	Behavioral Health Day Specialist II, Employee Partial Hospital and Social Rehabilitation Program, PATH Inc., Philadelphia, PA
	 Conducted groups, and provided individual and group therapy with adults with mild to severe mental illness from diverse backgrounds under supervision of Program Director. Carried individual caseload under supervision of Program Director. Responsible for developing client evaluation, treatment plan and diagnostic work-up. Served on task force committee to aide in creating a new vision for recovery. Maintained effective communication with all treatment providers involved with clients.
PUBLICATIONS	
Peer-Reviewed Publicati	on

- **Bertsch, K. N.**, Bremer-Landau, J., Inman, A. G., DeBoer Kreider, E., Price, T., DeCarlo, A. (in press). Evaluation of the critical events in supervision model using gender related events. *Training and Education in Professional Psychology*.
- DeBlaere, C., & Bertsch, K. N. (2013). Perceived sexist events and psychological distress of sexual minority women of color: The moderating role of womanism. *Psychology of Women Quarterly*, 37, 168-178. doi: 10.1177/0361684312470436
- DeBlaere, C., <u>Brewster, M.E.</u>, **Bertsch, K.N.**, DeCarlo, A., Kegel, K., & Presseau, C. (2013). The protective power of collective action for sexual minority women of color: An investigation of multiple discrimination experiences and psychological distress. *Psychology of Women Quarterly*. Advance online publication. doi:10.1177/0361684313493252

PROFESSIONAL PRESENTATIONS

National Presentations

- **Bertsch, K.N.** (March, 2013). *Did you say what I think you just said? Addressing microaggressions in academia.* Workshop presented with training video produced by author at the Association for Women in Psychology Annual Conference, Salt Lake City, UT.
- DeBlaere, C., & **Bertsch, K.N.** (March, 2013). *The protective power of collective action for sexual minority women of color: An investigation of multiple discrimination experiences and psychological distress*. Symposium presented at the Association for Women in Psychology Annual Conference, Salt Lake City, UT.
- Bertsch, K. N., Bremer-Landau, J., DeCarlo, A., Kreider, L., Price, T., Inman, A. G. (February, 2012). *Evaluation* of the critical events in supervision model using gender related events. Symposium presented at Teachers College Winter Roundtable, New York City, NY.
- Heard, S., & Bertsch, K. N. (March, 2012). *Finding mentors: A way towards self-care for all graduate students.* Structured discussion presented at the Association for Women in Psychology Conference in Palm Springs, California.
- Bertsch, K.N., & DeBlaere, C. (August, 2011). *Perceived sexist events and psychological distress: The moderating role of womanist identity.* Structured discussion presented at the American Psychological Association in Washington, D.C.
- Soheilian, S., **Bertsch, K.N.**, & Kreider, E. (August, 2011). *The effects of speedfriending on social confidence and future expectations*. Poster presented at the American Psychological Association in Washington, D.C.
- **Bertsch, K.N.**, Kreider, E., & Bremer, J. (February, 2011). *Empowering bisexual women across generations*. Structured discussion presented at Association for Women in Psychology Conference in Philadelphia, PA.
- DeBlaere, C., Brewster, M., Kegel, K., Bertsch, K.N., DeCarlo, A., & Presseau, C. (January, 2011). Multiple perceived discrimination experiences and psychological distress of sexual minority women of color: The moderating role of collective action. In K. Anhalt & N. Nakamura (Chairs), *Risk and resiliency among LGBT people of color: Linking science and practice*. Symposium presented at the National Multicultural Conference and Summit, Seattle, WA.
- Bertsch, K.N., & Kaduvettoor, A. (February, 2010). *Caring for Each Other as we Address "-isms" in the Classroom and other Educational Settings*. Workshop presented at the Association for Women in Psychology Conference, Portland, Oregon.
- O'Shaughnessy, T., & Bertsch, K.N. (February, 2010). *Role Conflict for Feminist Supervising Psychologists: Obtaining Support in Evaluative Roles.* Structured discussion presented at the Association for Women in Psychology Conference, Portland, Oregon.
- Franco, J., Bertsch, K.N., & Kaduvettoor, A. (March, 2009). *Finding Your Voice: Strategies for Speaking out Against "-isms" in the Classroom.* Workshop presented at the Association for Women in Psychology Conference, Newport, RI.
- Bertsch, K.N., & Klinger, R. (March, 2009). *Examining Feminist Therapy with Behavioral Approaches when Treating PTSD related to Interpersonal Abuse.* Poster presented at the Association for Women in Psychology Conference, Newport, RI.
- Gillem, A.R., Bartoli, E., Bertsch, K.N., & Bellamy, S. (February, 2009). The Multicultural Counseling and Psychotherapy Test: An Objective Measure. Symposium presented at Teachers College Winter Roundtable, New York City, NY.

University Conferences

Bertsch, K.N., & Berkowitz, A. (2012). *Culturally sensitive training with college students*. Presentation given to college students at the Altitude Conference at Lehigh University.

- Bertsch, K.N., & Heard, S. (November, 2011). *Intersectionality discussion*. Structured discussion presented at the LGBTQIA Retreat at Lehigh University in Bethlehem, PA.
- Gillem, A.R., Bartoli, E., **Bertsch, K.N.**, & Bellamy, S. (October, 2009). *The Multicultural Counseling and Psychotherapy Test: An Objective Measure.* Symposium for CE credit presented at Philadelphia College of Osteopathic Medicine, Philadelphia, PA.

Invited Presentations

- **Bertsch, K.N.** (June, 2013). Did you just say what I think you just said? Addressing sexuality and gender identity microaggresions. Keynote speaker at networking event sponsored by Child and Adolescent Services at the Institute of Living/ Hartford Hospital in Harford, CT.
- Bertsch, K.N. (October, 2011). Aspects of culturally competent counseling. Presentation given to practicum students and employees at Step By Step Inc. in Allentown, PA.

PROFESSIONAL ACADEMIC EXPERIENCE

June 2009 to November 2010	Producer – "Did you just say what I think you just said? Addressing microaggressions in academia" (Diversity training video - Grant Funded)	
	Lehigh University, Bethlehem, PA Faculty Member: Arpana G. Inman, PhD.	
	 Assisted in writing grant proposal for College of Education Diversity Committee for project for college and community work involving multiculturalism. Project involved development of training video that included five skits comprised of 'isms in academic settings and strategies on how to work through them as students and early career professionals. Recruited volunteers to audition for roles, casted parts, coordinated schedules with other organizations on campus to assist with funding and filming. Fund-raised for actor stipends and meals throughout filming. 	
January 2009 to May 2009	Graduate Assistant, Lehigh University Professor: Arnold Spokane, PhD	
	• Collected research materials and created Ref Works page to organize research articles for faculty manuscript.	
September 2008 to December 2008	Graduate Assistant, Lehigh University Professor: Nick Ladany, Ph.D	
	 Collected and organized research articles for on multiple aspects of supervision. Served as conference assistant for the North American Society Psychotherapy Research conference, organized registrants and payments utilizing excel program. 	
September 2006 to December 2006	Graduate Assistant Office of Career Development, Arcadia University, Glenside, PA	
	 Conducted mock interviews for diverse range of undergraduate students. Assisted in creating Career Development Handbook. Constructed a variety of handouts for students to utilize for career related services. 	

October 2003 to January 2004	Conference Assistant The Second National Battered Mother's Conference, Siena College, Loudonville, NY	
	 Assisted in participant registration process. Publicized event through mailing and posting notices throughout community Ensured participants and guest speakers were accommodated. 	
August 2001 to May 2004	Resident Assistant Office of Residential Life, Siena College, Loudonville, NY	
	 Served as a liaison between students and the Office of Residential Life. Created, planned and implemented educational, social, and recreational programs among students. Participated in on-call duty rotation and provided emergency crisis response for residential area of 675 students and enforced and upheld college policies. Conducted conflict mediation sessions with students in residence 	
September 2003 to May 2004	Internship Mercy House: A Shelter a Women in Crisis, Albany, NY	
	 Observed psychological assessments given by case manager on new women in the house. Completed new guests' referral and intake paperwork. Provided an atmosphere of love, respect, and hope for guests. 	

PROFESSIONAL INVOLVEMENT

American Psychological Association, Student Member o Division 17

Association for Women in Psychology, Student Member