



12-2014

Exploring Coping Mediators between Heterosexist Oppression and Post-Traumatic Stress Symptoms among Gay, Lesbian, and Bisexual Persons

Kyle M. Bander mann

University of Tennessee - Knoxville, kbanderm@utk.edu

Recommended Citation

Bander mann, Kyle M., "Exploring Coping Mediators between Heterosexist Oppression and Post-Traumatic Stress Symptoms among Gay, Lesbian, and Bisexual Persons." PhD diss., University of Tennessee, 2014.
https://trace.tennessee.edu/utk_graddiss/3108

This Dissertation is brought to you for free and open access by the Graduate School at Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a dissertation written by Kyle M. Bandermann entitled "Exploring Coping Mediators between Heterosexist Oppression and Post-Traumatic Stress Symptoms among Gay, Lesbian, and Bisexual Persons." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Dawn M. Szymanski, Major Professor

We have read this dissertation and recommend its acceptance:

Jacob J. Levy, Gina P. Owens, Donna M. Braquet

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

**Exploring Coping Mediators between Heterosexist Oppression and
Post-Traumatic Stress Symptoms among Gay, Lesbian, and Bisexual Persons**

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Kyle M. Bandermaun
December 2014

Copyright © 2014 by Kyle M. Bandermann
All rights reserved.

Dedication

To the Oppressor and the Oppressed:

May you both be able to love again.

Acknowledgements

It would be an egregious understatement to say completion of this dissertation would not be possible without the gentle prodding, pushing, and downright assertiveness of my dissertation chair, Dawn Szymanski. Dr. Szymanski is a passionate, effective individual who, at times, reminds me of my Drill Instructor Chiefs and still simultaneously is able to compassionately communicate why we engage in this type of research. Donna Braquet, Jacob Levy, and Gina Owens have been admirably flexible and accommodating in serving as my committee. They've provided guidance and support when I needed it but didn't deserve it. Moreover, they are all stellar professionals who I admire for their individual contributions to our university. Thank you all for your help. Bravo Zulu!

Lieutenant means "second in command," and that couldn't be truer of my home life as well as my military career. Everyone knows Lance steers the USS Buchandermann. I am indebted to my fiancé (and by the time of this publishing, God willing, husband) Lance for his love, support, and unconditional admiration. If we've gotten through the last years of my PhD and Internship together, we can get through anything! I love you!

Friends and family have supported me through the trials of graduate school, and I am forever thankful for that. My parents, in particular, have supported me emotionally, financially, and practically as I moved hundreds of miles away to pursue my dreams. Long car rides to Knoxville, emergency bank deposits, and loading up U-Hauls to move between homes weren't always ideal, but they provided me a sense of security I know I needed to make it through. My friends (both new and old) provided their own sense of support by getting my mind off of coursework on the weekends, and allowing me time away from our friend-group when duties

were getting particularly hectic, but allowing me to return as if nothing had changed upon their completion.

My clinical supervisors are also owed a debt of gratitude. Training in counseling psychology often feels like a duel threat of both a professional school and scholarship in philosophical theory—both theory and practice are necessary to inform the other. While this work comprises the summation of my academic work, it wouldn't be possible clinical guidance, particularly from Drs. Bill Richards and Fran Palin.

Thank you to all those who have ever oppressed, discriminated against, or aggressed me. You've given me motivation to make changes in my own special little way. I also owe a debt of gratitude to my level of privilege, and professionals like Dr. Szymanski who helped me acknowledge that it. It's because of that privilege that I have the opportunity and avenues to facilitate change. May I never stop being able to recognize both sides of this dynamic.

Thanks to the United States Navy and the Medical Service Corps for providing me a professional home. I am honored to be a part of such an incredible history and an even better future. You've turned an immature teenager afraid of conscription into a military psychologist and, more, a man of honor.

And finally, to the authentic individuals who trust me with their healthcare, their struggles, and their secrets—thank you for teaching me daily.

Abstract

Recently, scholars have begun to advocate that categories of traumatic events be expanded to include experiences that do not meet the traditional diagnostic criteria for post-traumatic stress disorder (PTSD), such as oppression. Our study builds on this work by examining experiences with two kinds of heterosexist oppression, one that meets the traditional diagnostic criteria for PTSD (i.e., sexual orientation-based hate crime victimization) and one that does not (i.e., heterosexist discrimination), as predictors of PTSD symptoms in a sample of 427 gay, lesbian and bisexual persons who responded to an online survey. In addition, we examined the mediating roles of coping with heterosexism via internalization, detachment, and drug and alcohol use in the heterosexist oppression-PTSD symptoms link. Results indicated that when examined concurrently, both sexual orientation-based hate crime victimization and heterosexist discrimination had direct and unique links to PTSD symptoms. In addition, the results of the mediational analysis using bootstrapping provided support for a theorized model in which coping with oppressive events via internalization, detachment, and drug and alcohol use mediated the link between heterosexist discrimination and PTSD symptoms but not between sexual orientation-based hate crime victimization and PTSD symptoms. Finally, the five variables in the model accounted for 42% of the variance in PTSD severity.

Keywords: heterosexism, hate crime, trauma, coping

Table of Contents

Chapter 1 Introduction and General Information.....	1
Heterosexism.....	2
Heterosexism Linked to Psychological Distress and PTSD Symptoms.....	3
Coping with Heterosexist Experiences via Internalization, Detachment, and Drug and Alcohol Use as Mediators.....	6
Present Investigation.....	12
Chapter 2 Method.....	14
Participants.....	14
Measures.....	15
Sexual Orientation-Based Hate Crime Victimization.....	15
Heterosexist Discrimination.....	16
Coping with Heterosexism via Internalization, Detachment, and Drug and Alcohol Use.....	16
PTSD Symptoms.....	18
Procedures.....	18
Chapter 3 Results.....	20
Missing Data Analyses.....	20
Sexual Orientation-Based Hate Crime Victimization Descriptives.....	20
Correlation and Regression Analyses.....	21
Mediation Analyses.....	22
Chapter 4 Discussion.....	24
Limitations of the Current Study.....	26

Suggestions for Future Research.....28

Clinical Implications.....30

List of References.....32

Appendix.....45

 Figure 1.....46

 Table 1.....47

 Table 2.....48

Vita.....49

Chapter 1

Introduction and General Information

Recently, scholars have begun to advocate that categories of traumatic events be expanded to include experiences that do not meet the traditional diagnostic criteria for post-traumatic stress disorder (PTSD), such as oppression (e.g., Bryant-Davis & Ocampo, 2005; Carter, 2007; Root, 1992; Sanchez-Hucles, 1999; Szymanski & Balsam, 2011). In an effort to expand the definition of trauma, researchers have examined how oppressive experiences might predict symptoms of PTSD among gay, lesbian, and bisexual (GLB) persons. These experiences with oppression include both those that meet the PTSD diagnostic criteria (e.g., sexual orientation-based hate crime victimization) in the *Diagnostic and Statistical Manual of Mental Disorders* [4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association (APA), 2000] and those that do not (e.g., heterosexist discrimination; Szymanski & Balsam, 2011). A large number of studies suggest that both of these experiences are important and predict negative psychosocial outcomes, such as psychological distress, anxiety, depression and suicidal ideation (e.g., Mays & Cochran, 2001; Meyer, 1995; Otis & Skinner, 1996; Szymanski, 2005, 2006, 2009; Szymanski & Meyer, 2008; Szymanski & Sung, 2010; Waldo, Hesson-McInnis, & D'Augelli, 1998), while a smaller number of studies have specifically linked these experiences to PTSD symptoms (c.f. Szymanski & Balsam, 2011; Herek, Gillis, & Cogan, 1999).

Given this small but growing body of literature, more research on the links between heterosexist oppression and PTSD is needed. In addition, it is important to examine potential mediators (i.e. variables that help explain the precise mechanisms by which experiences of

sexual orientation-based hate crime victimization and heterosexist discrimination may lead to PTSD symptoms) in the heterosexist oppression-PTSD symptom links, as suggested by scholars in the field (Frazier, Tix, & Barron, 2004; Szymanski & Balsam, 2011). Thus, the purpose of our study is to examine coping with heterosexist oppression via internalization, detachment, and drug and alcohol use as mediators in the relationship between both sexual orientation-based hate crime victimization and heterosexist discrimination and PTSD symptoms among GLB persons.

Heterosexism

Like members of other minority groups, GLB persons are likely to be subjected to stigmatization based on their minority status. Past research has focused on the widespread occurrence of the stigmatization of GLB persons, which may take its form in experiencing oppressive events, called heterosexism (Meyer, 1995). This oppression is not only a widespread problem that affects many GLB persons, it also occurs at multiple levels and across multiple domains of life. Heterosexism can be incurred on individual, familial, institutional, political, and cultural levels, and may occur openly in educational, career, religious, and social settings (Herek, 1995).

Heterosexism occurs at different magnitudes as well. On the less extreme end, GLB individuals are more likely than their heterosexual counterparts to experience discrimination in various domains of their daily lives, such as being passed over for a promotion at work for unfair reasons (Mays & Cochran, 2001). Indeed, the study found that over 50% of GLB participants reported any lifetime discriminatory event or any day-to-day experiences with discrimination. Using data from a national probability sample of GLB adults, Herek (2009) found that nearly half of the GLB respondents had experienced verbal harassment and more than 10% reported

having experienced employment or housing discrimination. Unique to heterosexist oppression, another study using a convenience sample of sexual minority men found that 34% reported being rejected by family members because of their sexual orientation, 49% reported being treated unfairly by their family due to their sexual orientation, and 52% heard anti-gay remarks from family members at least once in a while within the past year (Szymanski, 2009).

Yet heterosexism can also have a more brutal tone. Approximately 25% of sexual minority men and 20% of sexual minority women reported that they had been victims of a sexual orientation-based hate crime or attempted hate crime, such as physical assault, sexual assault, vandalism, or robbery (Herek, Gillis, & Cogan, 1999). Sexual minorities are also at a higher risk than their heterosexual counterparts for traumatic life experiences such as childhood physical, psychological, and sexual abuse (Balsam, Rothblum, & Beauchaine, 2005; Corliss, Cochran, & Mays, 2002; Hughes, Johnson, & Wilsnack, 2001), suggesting that GLB persons may be specifically targeted for abuse in their families as a function of sexual minority orientation.

Heterosexism Linked to Psychological Distress and PTSD Symptoms

Both heterosexist hate crimes and heterosexist discrimination can have potentially disastrous effects on GLB persons merely by their exposure. These effects have been hypothesized to cause disturbances in GLB persons' mental health, interpersonal relationships, and their interactions with society. While many studies focus merely on the increased prevalence of negative mental health outcomes for GLB persons compared to their heterosexual counterparts (e.g., Cochran, 2001; Meyer, 2003), more recent studies attempt to explain this increased incidence to external factors like experiences of heterosexist oppression. For example, using a between groups design, Mays and Cochran's (2001) findings revealed a direct link between the

sexual orientation difference in mental health indicators and the relatively higher rates of lifetime and day-to-day discrimination among GLB persons compared to their heterosexual counterparts. Other within groups research has demonstrated that exposure to a sexual orientation-based crime or attempted crime is related to a range of mental health symptoms, including lower self-esteem, anger, depression, anxiety, suicidal ideation and behavior, and global psychological distress (Herek, Gillis, & Cogan, 1999; Otis & Skinner, 1996; Szymanski, 2005; Waldo et al., 1998). Relatedly, other researchers have found that experiences of heterosexist discrimination were significantly and positively correlated with psychological distress among ethnically diverse samples of GLB persons (e.g., Szymanski, 2006, 2009; Szymanski & Meyer, 2008; Szymanski & Sung, 2010).

As mentioned previously, a small but growing number of studies have specifically linked these experiences to PTSD symptoms (e.g., Herek et al., 1999; Szymanski & Balsam, 2011). PTSD is a diagnosis that includes symptoms of avoiding stimuli associated with the event, feelings of re-experiencing the traumatic event, numbing, and increased arousal characterized by anxiety (APA, 2000). PTSD is unique among mental health diagnoses in that it is characterized not only by symptoms within the individual, but also is linked to an external traumatic event. Diagnostic standards are in flux at the time of this study, making the diagnosis and standard for a qualifying external event increasingly contentious. According to the DSM-IV-TR, in order to meet criteria for the diagnosis, this original precipitating event must involve actual or threatened death or physical injury or pose a threat to one's own or others' physical integrity (Criterion A1), and must also involve intense fear, helplessness, or horror (Criterion A2; APA, 2000). However, the most recent iteration of the DSM (DSM-5) is coming in to use at the time of this study and

proposes more detail as to the precipitating event (APA, 2013). More specifically, the quality of the precipitating event itself has been bolstered such that it is now more narrowly defined and restricted to threats of life, actual or threatened serious physical injury, or actual or threatened sexual violence. The previous Criterion A2, that the event must involve intense fear, helplessness, or horror has been removed (APA, 2000), allowing for a wider range of individual initial responses to the traumatic event. However, the DSM-5 has solidified that one must still experience harm or threat of harm externally in order to qualify for a PTSD diagnosis.

Recently, however, scholars have begun to advocate that the categories of traumatic events be expanded to include experiences that do not meet the traditional diagnostic criteria for PTSD, such as oppression that does not involve such external harm. Other scholars continue to contribute to the discussion of expanding experiences that might develop PTSD symptoms, especially with regard to oppression of minorities. For example, Root (1992) in her articulation of Insidious Trauma Theory posited that daily experiences of oppression, both blatant and subtle, buildup over time to produce trauma. That is, oppressed groups may experience trauma symptoms from the culmination of events that on their own would not be considered traumatic, and the effects of these events can be severe enough to bring on PTSD symptoms. Similarly, Balsam (2003) and Neisen (1993) conceptualized heterosexism, broadly defined, as an ongoing traumatic exposure that influences GLB people's well-being and psychological functioning.

Supporting these notions, Herek et al. (1999) found that GLB victims of sexual orientation-based hate crimes manifested greater PTSD symptoms than did GLB victims of other types of crimes not directed at their sexual orientation and those who had not experienced such events. D'Augelli, Grossman, and Starks (2006) found that 9% of GLB youth met the criteria for

a PTSD diagnosis and PTSD was associated with both physical victimization and verbal attacks based on perceived sexual orientation or gender atypicality. Finally, Szymanski and Balsam (2011) found that both heterosexist hate crime victimization, which would meet traditional criteria for PTSD, and heterosexist discrimination and rejection, which would not, were unique and significant positive predictors of lesbians' PTSD symptoms. This later finding has relevance for the ongoing debate in psychology regarding the nature of events that are considered to be "traumatic" (Weathers & Keane, 2007). In addition, it corroborates other research indicating that individuals reporting exposure to a non-Criterion A1 event have higher levels of PTSD symptoms than those reporting exposure to a Criterion A1 event (e.g., Alessi, Meyer, & Martin, 2011; Gold, Marx, Soler-Baillo, & Sloan, 2005; Long et al., 2008). Finally, it substantiates other research that suggests Criterion A2 (the individual's emotional response to the event) may have the most relevance for the development of PTSD symptoms (e.g., Boals & Schuettler, 2008).

Furthermore, Szymanski and Balsam (2011) found that self-esteem partially mediated, but did not moderate, the heterosexist discrimination-PTSD symptom link, underscoring the importance of examining the influence of additional variables in the link between heterosexism and PTSD symptoms. Given this scant body of research, more studies are needed examining the links between various types of heterosexist experiences and PTSD among GLB persons. In addition, more investigation is needed in order to explore the route by which heterosexism can lead to PTSD symptoms, including mediators and moderators.

Coping with Heterosexist Experiences via Internalization, Detachment, and Drug and Alcohol Use as Mediators

Potential mediators that exist to explain the path by which heterosexism predicts

outcomes of PTSD symptoms include coping mechanisms. Drawing from Clark, Anderson, Clark, and Williams's (1999) biopsychosocial model of racism and the empirical research on coping as a mediator in the racism-distress links among African American persons (e.g., Szymanski & Obiri, 2011; Thomas, Witherspoon, & Speight, 2008), Szymanski and Henrichs-Beck (2014) posited that coping styles can mediate the link between experiences of heterosexist oppression and psychological distress among GLB persons. That is, a GLB person's experiences with heterosexism demand that he or she implement coping strategies to deal with these environmental stressors. The coping responses a GLB person uses, whether adaptive or maladaptive, will influence mental health outcomes in different ways. That is, more use of maladaptive coping strategies are theorized to lead to more PTSD symptoms, whereas use of adaptive coping strategies are theorized to lead to less PTSD symptoms. In addition, scholars have theorized that experiences of heterosexism might lead to a predisposition toward more maladaptive coping, which in turn may lead to poorer psychosocial outcomes by limiting a GLB person's ability to feel as if she or he can assert her or himself. This may lead to feelings of powerlessness, helplessness, and confusion, and may thus result in increased use of passive or maladaptive coping (Szymanski & Henrichs-Beck, 2014; Szymanski & Obiri, 2011). Although researchers are apt to hypothesize these dynamics theoretically, there is little empirical research to investigate specific relationships between coping variables and perceived discrimination. In a recent meta-analysis of studies on perceived discrimination (Pascoe & Smart Richman, 2009), only nine of 134 studies looked at these relationships.

The existent empirical evidence reveals that experiences of heterosexist discrimination are related to more maladaptive general coping styles (e.g., suppressive and reactive coping

styles) but not to more adaptive general coping styles (e.g., reflective coping and GLB group level coping) among sexual minority women (e.g., Szymanski & Owens, 2009; Szymanski & Henrichs-Beck, 2014). In addition, Szymanski and Henrichs-Beck (2014) found that sexual minority women's maladaptive (i.e., suppressive and reactive) general coping styles mediated the links between heterosexist discrimination and psychological distress, while adaptive (i.e., reflective) general coping styles did not. These findings are consistent with previous research examining links between coping style and mental health, which indicate that adaptive, problem-solving coping may be less important than the use of maladaptive coping methods in relation to psychological distress (e.g., Bjorck & Thurman, 2007; Nyamathi, Wayment, & Dunkel-Schetter, 1993; Pargament, Smith, Koenig, & Perez, 1998; Szymanski & Obiri, 2011; Szymanski & Owens, 2009; Thomas et al., 2008; Utsey, Ponterotto, Reynolds, & Cancelli, 2000). Therefore, it is important to examine maladaptive coping styles that might mediate the links between heterosexism and PTSD symptoms. In addition, Wei, Alvarez, Ku, Russell, and Bonnett (2010) argue for considering stress-specific coping, rather than general coping styles, when examining oppression and mental health links. Three such stress-specific coping styles that might mediate the heterosexist oppression-PTSD symptom links are coping with heterosexist experiences via internalization, detachment, and drug and alcohol use (Wei et al., 2010).

Coping with heterosexism via internalization is defined as the tendency to attribute the cause or responsibility of a discriminatory incident to oneself (Wei et al., 2010). It may be that some GLB persons have feelings of shame because of their experiences with heterosexism and see their own inferiority as the cause of such experiences, thus internalizing those heterosexist events (Sue & Sue, 2003). In addition, a lack of opportunity and repeated failures to enact one's

own intentions due to heterosexism, along with a belief in meritocracy, may make some GLB persons vulnerable to internalizing those experiences (Szymanski & Obiri, 2011). The internalization of heterosexist oppression may cause a person to experience PTSD symptoms as they may avoid related stimuli or have painful recollections of the event due to the negative associations they have formed innate to their internalization. Thus, heterosexism may predict symptoms of PTSD by way of the internalization coping strategy.

Supporting these notions, internalized heterosexism (i.e., internalization by GLB persons of negative attitudes and assumptions about sexual minorities prevalent in society; Szymanski, Kashubeck-West, & Meyer, 2008a), of which coping with heterosexism via internalization may form a part, has been linked to significant psychological distress for GLB persons (Szymanski et al., 2008b). In addition, research on sexual minority men's experiences with heterosexism has demonstrated that internalized heterosexism is related to their experiences of heterosexist discrimination, and internalized heterosexism mediates the relationship between heterosexist discrimination and depression (Szymanski & Ikizler, 2012). Coping with oppressive experiences via internalization has been shown to be a unique predictor of depressive symptoms, self-esteem, and life satisfaction, after controlling for general coping styles, among a racial and ethnic minority sample (Wei et al., 2010).

Another possible coping mechanism for dealing with heterosexist discrimination is detachment. Detachment refers to distancing oneself from social support and having no idea how to deal with discrimination (Wei et al., 2010). We predict that, as a GLB person experiences heterosexism, they may cope with this by detaching themselves socially from those who may support them, including other GLB persons and heterosexual allies. The detachment and social

isolation may cause the individual to experience PTSD symptoms, as avoidance of stimuli related to the trauma is a key symptom of the disorder (APA, 2000). With detachment reducing adequate social support, which is necessary to deal with anxiety, individuals may be directly eliminating relationships that would be supportive with this particular issue, by detaching themselves from supportive GLB role models and support. Thus, heterosexism predicts symptoms of PTSD by way of the detachment coping strategy.

Coping via detachment, like internalization, has not been investigated as a mediator of the link between heterosexism and any forms psychological distress, including PTSD symptoms, following a thorough review of the literature. Coping via detachment has, however, been investigated as a potential mediator in studies of other forms of oppression and their link to psychological health. Utsey et al. (2000) found that individuals coping with racist oppression commonly used coping styles that are defined by avoidance, which would include detachment. These avoidant coping styles were in turn found to be negative predictors of self-esteem and life satisfaction following the distress. Support was also found for avoidance as a partial mediator in the relationship between gendered racism and psychological distress among African American women (Thomas et al., 2008). However, none of these studies included oppression or discrimination aimed at sexual minorities.

A third possible maladaptive coping mechanism for dealing with heterosexist oppression is coping via drug and alcohol use. Drug and alcohol use has been extensively studied as a coping strategy used to mitigate the link between traumatic stressors and PTSD symptoms (Lehavot, Stappenbeck, Luterek, Kaysen, & Simpson, 2013). There is commonly a positive correlation between greater endorsement of drinking to cope and severity of PTSD symptoms

(e.g., Dixon, Leen-Feldner, Ham, Feldner & Lewis, 2009; O'Hare & Sherrer, 2011; O'Hare, Sherrer, Yeaman, & Cutler, 2009; Stewart, Mitchell, Wright, & Loba, 2004; Ullman, Filipas, Townsend, & Starzynski, 2005; Yeater, Austin, Green, & Smith, 2010). Further, symptoms of PTSD and substance use disorders can simultaneously affect individuals, as co-occurrence is common. Rates of PTSD range from 28% to 55% in individuals seeking treatment for alcohol or drug use (Coffey, Schumacher, Brady, & Cotton, 2007; Ouimette, Read, & Brown, 2005; Staiger, Melville, Hides, Kambouropoulos, & Lubman, 2009) and up to 52% of men and 28% of women with PTSD also meet lifetime criteria for alcohol abuse or dependence (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995).

The use of drugs and alcohol to cope with traumatic stressors is consistent with several models of substance use and PTSD. Foa, Hembree, and Rothbaum (2007) in their construction of Prolonged Exposure Therapy to treat PTSD, conceptualize drugs and alcohol as avoidance that may exacerbate PTSD. Avoidance is not only a key diagnostic indicator of PTSD (Criterion C, APA, 2013), but it is also an exacerbating or perpetuating factor in the maintenance of PTSD symptoms (Jelinek & Williams, 1984). Another model consistent with coping with traumatic stressors via drug and alcohol use is the self-medication model (Baker, Piper, McCarthy, Majeskie, & Fiore, 2004; Khantzian, 2003). Not only is the substance consumed in order to deal with traumatic stressors and alleviate symptom-related distress but, further, the associated relief reinforces continued substance use (Simpson, 2003; Stewart, Conrod, Pihl, & Dongier, 1999). Notably, many of these referenced studies were conducted on community samples or individuals self-identifying as having been exposed to traumatic experiences rather than individuals formally diagnosed with PTSD. This supports the notion that individuals who are exposed to events that

do not meet the criteria for PTSD cope in similar ways to those who do meet criteria and are subsequently diagnosed.

However, none of these studies included oppression or discrimination aimed at sexual minorities. The lack of research investigating such coping mechanisms in the link between oppression directed toward GLB persons and negative psychosocial outcomes presents an opportunity to extend this research to other minorities. Thus, studying coping via internalization, detachment, and drug and alcohol use as specific coping mediators in the relationship between heterosexism and PTSD symptoms may make a significant impact on the body of literature and future study.

Present Investigation

Building on previous research that posits that heterosexism predicts PTSD (e.g., Szymanski & Balsam, 2011), this study attempts to both corroborate those findings, adding strength to the model of heterosexism predicting PTSD symptoms in GLB persons, as well as explore particular coping factors that may serve as unique mediators between the heterosexism-PTSD link. Given the scant amount of existing literature in this area, the relationship between heterosexism and symptoms of PTSD and the mechanisms by which such a relationship might take place clearly deserves more investigation. Thus, the purpose of the current study is to explore the relationship between heterosexist experiences and PTSD symptoms among GLB individuals. Furthermore, it will explore the potential mediating roles of coping with heterosexism via internalization, detachment, and drug and alcohol use in the relationship between heterosexist experiences and PTSD symptoms.

Hypothesis 1: When examined concurrently, sexual orientation-based hate crime

victimization and heterosexist discrimination will have direct and unique links to PTSD symptoms.

Hypothesis 2: Coping with heterosexist oppression via internalization, detachment, and drug and alcohol use will mediate (either partially or fully) the relationship between both sexual orientation-based hate crime victimization and heterosexist discrimination and PTSD (see Figure 1; figures have been placed in the appendix).

Chapter 2

Method

Participants

The initial sample comprised 459 participants who completed an online survey. Five self-identified heterosexual participants and three respondents who described being only attracted to members of the opposite sex on the Kinsey type scale were eliminated as they did not meet the criteria of being a sexual minority person (i.e., a person who experiences attraction to a member of the same sex or both sexes). In addition, two participants who did not indicate their sex, one participant residing outside the United States, 20 participants who did not correctly respond to at least one of the three validity items (e.g., For this item, please click the button for the number 2), three participants who left at least one measure completely blank, and two participants who were missing more than 20% of items for a particular measure were eliminated from the dataset, which resulted in a final sample of 423 participants.

Of the participants in the final sample, 52% identified as female and 48% identified as male. Six percent of participants also identified as transgender. Participants self-identified as lesbian or gay (70%), bisexual (27%), and unsure (3%). Participants' description of their current feelings of romantic/sexual attraction on the Kinsey scale ranging from 0 to 6 were as follows: 47% attracted only to the same sex (6); 37% attracted more to the same sex than the opposite sex (5 and 4), 11% attracted equally to both sexes (3), and 5% attracted more to the opposite sex than the same sex (2 and 1). Ages of participants ranged from 18 to 85, with a mean age of 33.31 years ($SD = 14.66$). The sample consisted of 4% African American/Black, 4% Asian American/Pacific Islander, 82% White, 4% Latino/a, 1% Native American, 5% Multiracial

individuals, and 1% “other”. Forty five percent ($n = 192$) of participants were currently enrolled in a college or university, with 15% being Freshmen, 18% Sophomores, 17% Juniors, 18% Seniors, 30% Graduate Students, and 3% Other. Of the 55% who were not currently students ($n = 231$), 1% attained less than a high school diploma, 14% attained a high school diploma, 14% attained a two-year college degree, 33% attained a four-year college degree, and 38% attained a graduate/professional degree. United States geographical residence of participants included 14% West, 27% Midwest, 26% Northeast, and 34% South. Participants’ total household income included 25% under \$20,000; 28% with \$20,000-\$49,999; 23% with \$50,000-\$89,999; and 20% with \$90,000 and above. Self-reported social class was 3% Wealthy, 15% Upper-Middle Class, 39% Middle Class, 16% Lower Middle Class, 19% Working Class, and 9% Poor. Due to rounding, percentages may not add up to 100%.

Measures

Sexual Orientation-Based Hate Crime Victimization. We assessed sexual orientation-based hate crime victimization using Herek, Gillis, and Cogan’s (1999) series of questions concerning victimization experiences. Participants were asked, “Have you ever been the victim of any sort of crime or attempted crime-such as a physical attack, sexual assault, robbery, or vandalism because you are gay, lesbian or bisexual?” Participants answering affirmatively were asked to describe their most recent victimization by indicating when the crime or attempted crime occurred (during the past 12 months, between 1 and 5 years ago, and more than 5 years ago), the nature of the incident (sexual assault; physical assault; burglary and theft; robbery, as in a holdup or mugging; witnessing the murder of a loved one; attempted physical assault; attempted sexual assault; and attempted property crime), and the perpetrator’s relationship to

them (biological family member, ex-boyfriend/ex-husband, coworker, acquaintance, and stranger).

Heterosexist Discrimination. We assessed heterosexist discrimination using the Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS; Szymanski, 2006), which consists of 14 items reflecting the frequency with which GLB persons report having experienced heterosexist harassment, rejection, and discrimination within the past year. Example items include “How many times have you been rejected by family members because you are a lesbian/gay/bisexual person?” and “How many times have you been treated unfairly by your employer, boss, or supervisors because you are a lesbian/gay/bisexual person?” Each HHRDS item is rated on a 6-point Likert-type scale, from 1 (the event has never happened to you) to 6 (the event happened almost all the time [more than 70% of the time]). Mean scores are used, with higher scores indicating greater experiences of heterosexist harassment, rejection, and discrimination in the past year. Validity was supported by exploratory factor analysis, by significant positive correlations with measures assessing depression, anxiety, interpersonal sensitivity, somatization, obsessive-compulsiveness, and global psychological distress, and by demonstrating that the HHRDS was conceptually distinct from internalized heterosexism. Reported alpha for the HHRDS full scale was .90 (Szymanski, 2006). Coefficient alpha for scores on the HHRDS for the current sample was .90.

Coping with Heterosexism via Internalization, Detachment, and Drug and Alcohol Use. Coping with heterosexism was assessed using the three subscales from the Coping with Discrimination Scale that assess these constructs (CDS; Wei et al., 2010). Participants were instructed to indicate how much each strategy best describes the ways they cope with

heterosexist discrimination and oppression. Example items from the Internalization subscale include “I wonder if I did something to provoke this incident” and “I wonder if I did something to offend others.” Example items from the Detachment subscale include “It’s hard for me to seek emotional support from other people” and “I do not talk with others about my feelings.” Example items from the Drug and Alcohol Use subscale include “I use drugs or alcohol to take my mind off things” and “I use drugs or alcohol to numb my feelings.” Participants responded to CDS items using a 6-point Likert scale from 1 (never like me) to 6 (always like me). The entire CDS (25 items) was administered to ensure the integrity of the measure; however, only the Internalization, Detachment, and Drug and Alcohol Use subscales were used in the analyses. Structural validity for the CDS was supported by exploratory and confirmatory factor analyses. Validity for the CDS-Internalization subscale was supported by significant positive correlations with measures assessing self-blame (Wei et al., 2010). Validity for the CDS-Detachment subscale was supported by significant positive correlations with measures assessing behavioral disengagement. Validity for the CDS-Drug and Alcohol Use subscale was supported by significant positive correlations with measures assessing substance use. Incremental validity evidence for the CDS was obtained by explaining variance in outcome variables (i.e., depression, life satisfaction, self-esteem, and ethnic identity) that could not be explained by general coping strategies. Reported internal consistency scores across three samples ranged from .77 to .88 for the CDS Internalization subscale, .73 to .76 Detachment subscale, and .72 to .80 Drug and Alcohol Use subscale. In addition, reported 2 week test-retest reliabilities were .82 Internalization, .73 Detachment, and .48 Drug and Alcohol Use (Wei et al., 2010). Alphas on the

CDS subscales for the current sample were .91 Internalization, .76 Detachment, and .91 Drug and Alcohol Use.

PTSD Symptoms. Symptoms of PTSD were assessed using the PTSD Checklist–Civilian Version (PCL-C; Weathers, Litz, Huska, & Keane, 1994), which consists of 17 items that correspond to the *DSM–IV–TR* (2000) 4th ed., text rev. diagnostic criteria for PTSD. Ruggiero, Del Ben, Scotti, and Rabalais’ (2003) review of the research suggests that this is the best self-report measure of PTSD symptoms. Example items include “Repeated, disturbing dreams of a stressful experience from the past” and “Feeling distant or cut off from other people.” Each item is rated on a 5-point Likert-type scale, indicating how much the participant has been bothered by the given problem in the past month, from 1 (not at all) to 5 (extremely). Validity was supported by exploratory factor analysis and strong correlations between the PCL-C and other PTSD measures, general psychopathology, and the PTSD module of the Structured Clinical Interview for the DSM (SCID; Weathers, Litz, Herman, Huska, & Keane, 1993; Weathers et al., 1994). Reported internal consistency reliabilities ranged from .94 to .97 and test–retest reliability was .96 (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Weathers et al., 1993; Weathers et al., 1994). Coefficient lpha for scores on the PCL-C for the current sample was .94.

Procedures

A Web-based Internet survey was used to collect the data. As an incentive to participate, all participants were given the chance to enter a raffle drawing, awarding a \$100 Amazon.com gift card to each of three randomly chosen individuals. Procedures for this Web site survey and for collecting data online are based on published suggestions (Birnbaum, 2004; Riggle,

Rostosky, & Reedy, 2005; Participants were recruited via a Facebook Advertisement announcing “Gay/Lesbian/Bisexual Research” and targeted to individuals who identified as GLB openly on their profile (i.e., men interested in men, men interested in women and men, women interested in women, and women interested in women and men), were part of GLB-related groups, or who liked GLB-related pages. Potential participants clicked on the advertisement in order to access the survey website.

Participants were also recruited via an e-mail of the study sent to a variety of GLB-related listservs, groups, and organizations primarily found through Internet searches of Gayyellowpages.com and university and community GLB centers. The announcement was sent to individuals on the website listed as either the contact person or the listserv owner. This person was then asked to forward the research announcement to their listserv and to eligible colleagues and friends. Potential participants used a hypertext link to access the survey website.

After reading an informed consent, participants were instructed to complete the online survey. In order to reduce response bias, PTSD symptoms were assessed prior to and independent of measuring the two heterosexist oppression and coping variables. This created “psychological separation” of the variables as a means of reducing common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This strategy also served to decrease the chances that participants’ memories of heterosexist oppression could influence their answers to the PTSD symptom questions. Participants reported hearing about the survey from a Facebook advertisement (30%), a GLB related group, organization or listserv (56%), a friend or colleague (11%) and “Other” (3%).

Chapter 3

Results

Missing Data Analyses

Of the 423 participants who were included in the study, some had missing data. Analysis of the patterns of missing data revealed that less than .33% of all items for all cases were missing, and 27.66% of the items were not missing data for any case. Considering individual cases, 87.23% of participants had no missing data. Finally, no item had 1.5% or more of missing values. In addition, Little's Missing Completely at Random analysis revealed an insignificant chi-square statistic, $X^2(1586 = 1445.77, p = .99)$, indicating that the data was missing completely at random. Given the very small amount of missing data, we used available case analysis procedures to address missing data points. When dealing with low-level item-level missingness, available case analysis is preferred over mean substitution because the latter can produce inflation of correlation coefficients among items (Parent, 2013).

Sexual Orientation-Based Hate Crime Victimization Descriptives

Fourteen participants responded to the sexual orientation-based hate crime victimization question (i.e., Have you ever been the victim of any sort of crime or attempted crime-such as a physical attack, sexual assault, robbery, or vandalism because you are a lesbian, gay man or bisexual person?") with the "not sure" option. We recoded five of these participants as "yes" for experiencing a hate crime because their answers to the sexual orientation hate crime victimization follow-up questions indicated that they had indeed experienced a sexual orientation-based hate crime, nine participants were recoded as a "no" because they did not answer any of the additional questions about their experiences of a sexual orientation hate crime

victimization suggesting they had not experienced a hate crime, and one participant was recoded as “no” because they did not meet the criteria of a hate crime indicating that they “got fired.” An additional nine participants, who self-identified as having experienced a sexual orientation-based hate crime were recoded as “no” because their responses to the follow up questions revealed that their experiences did not fit the criteria for a sexual orientation-based hate crime (e.g., “self and friends verbally threatened,” “arrested for flirting with an undercover cop,” “A man pulled a knife at the East TX Roadhouse”).

Seventeen percent of participants ($n = 72$) reported that they had experienced a sexual orientation-based hate crime. Participants reported that the incident occurred during the past 12 months ($n = 17$; 24%), between 1 and 5 years ago ($n = 16$; 22%), and more than 5 years ago ($n = 39$; 54%). Participants reported the sexual orientation-based hate crime involved a physical assault/attempted physical assault, a sexual assault/attempted sexual assault, and/or being robbed (as in a hold-up or mugging; $n = 46$; 64%), property that was stolen property that was purposely damaged or vandalized, and/or attempted property theft/damage ($n = 15$; 21%), both an actual or attempted physical/sexual assault/hold-up/mugging robbery and both an actual or attempted robbery/property theft/damage ($n = 11$; 15%). Participants reported that the perpetrator’s relationship to them was stranger ($n = 45$, 63%), acquaintance ($n = 18$; 25%), ex-romantic partner ($n = 5$; 7%), family member ($n = 3$; 4%), and coworker ($n = 1$; 1%).

Correlation and Regression Analyses

Means, standard deviations, and inter-correlations among all variables assessed in this study are shown in Table 1 (tables have been placed in the appendix). Examination of skewness (range = .81 – 1.76) and kurtosis (range = .08 – 2.15) for each variable indicated sufficient normality

(i.e., skewness < 3, kurtosis < 10; Weston & Gore, 2006). To test the first hypothesis, a simultaneous multiple regression was conducted. Before running the regression analysis, several indices were examined to evaluate whether multicollinearity among predictor variables was a problem. Absolute value correlations below .90, condition indexes below 30, and variance inflation factors below 10 indicate that multicollinearity is not problematic (Myers, 1990; Tabachnick & Fidell, 2001). The absolute value correlation between the two predictor variables was .36, highest condition index value was 5.49, and highest variance inflation factor was 1.15 indicating that multicollinearity was not problematic. The results of this analysis were significant, $R^2 = .24$, $F(2, 420) = 67.01$, $p < .001$. As hypothesized both sexual orientation-based hate crime victimization ($\beta = .13$, $t = 2.81$, $p < .01$) and heterosexist discrimination ($\beta = .43$, $t = 9.44$, $p < .01$) were unique significant positive predictors of PTSD symptoms.

Mediation Analyses

To test the multiple mediation effects expressed in the second hypothesis, we used the Preacher and Hayes (2008) macro in order to conduct bootstrapping analyses using 1,000 bootstrap resamples to produce 95% confidence intervals for the indirect effect. Mediation analysis experts increasingly recommend bootstrap confidence intervals, which do not erroneously assume normality in the distribution of the mediated effect (e.g., Mallinckrodt, Abraham, Wei, & Russell, 2006; Preacher & Hayes, 2008). In addition, bootstrapping frees up power to assess multiple mediation models, reduces the number of tests, and controls for Type I error rates (Preacher & Hayes, 2008). If the confidence interval does not contain zero, one can conclude that mediation is significant and meaningful (Mallinckrodt et al., 2006; Preacher & Hayes, 2008).

We conducted one model with multiple independent variables and multiple mediators in predicting our dependent variable, PTSD symptoms. The 1,000 bootstrap samples were run with the bias-corrected percentile method to estimate the path coefficients. Point estimates of the magnitude of the indirect effect, that is, the products of the alpha path (i.e., from the independent variable to the mediator) and beta path (i.e., from the mediator to the dependent variable), together with the associated 95% confidence interval were also estimated through the same 1,000 bootstrap samples. Contrary to our hypothesis, coping via internalization, coping via detachment, and coping via alcohol and drug use did not mediate the sexual orientation-based hate crime victimization-PTSD link. Supporting our hypothesis, coping via internalization, coping via detachment, and coping via alcohol and drug use did mediate the heterosexist discrimination-PTSD link (see Table 2 and Figure 1, placed in appendix). Finally, the variables in the model accounted for 42% of the variance in PTSD scores.

Chapter 4

Discussion

The present study aimed to contribute to the small but growing body of research focused on the relationships between oppressive experiences and PTSD. Our findings supported Balsam and Szymanski's (2011) prior research finding that both sexual orientation-based hate crime victimization and heterosexist discrimination are positive and unique predictors of PTSD symptoms, while extending this from a sample of lesbian women to GLB persons as a whole. This finding is consistent with conceptualizations of oppressive experiences as traumatic events and prior research findings that they contribute to PTSD symptoms in much the same manner as events that are readily acknowledged as traumatic.

Our finding that heterosexist discrimination is just as important a predictor of PTSD symptoms in GLB persons as sexual orientation-based hate crime victimization is significant. Heterosexist discrimination does not meet the threshold for Criterion A as hate crimes do. However, the high degree to which experiences of heterosexist discrimination predict PTSD symptoms in GLB persons posits that they are equally as important. This finding has relevance for the ongoing debate in the mental health field regarding the nature of events that are considered to be "traumatic" (Weathers & Keane, 2007) and the diagnostic criteria for related disorders. In the DSM-5, PTSD has been removed from the anxiety disorders section and placed in a new section, "Trauma- and Stressor-Related Disorders" (APA, 2013). The new category with a general typology paves the way for PTSD and related diagnoses to be expanded to fit experiences that do not currently meet criteria but do result in similar symptoms for those affected. Alternatively, additional diagnoses can be created to match these clinical syndromes

studied here, with additional research. At least three other studies (Alessi et al., 2011; Gold et al., 2005; Long et al., 2008) corroborate our finding of higher levels of PTSD symptoms among individuals whose most stressful life event did not meet the DSM-IV-TR definition of Criterion A1 than those whose event did meet Criterion A1. Another perspective in the literature suggests the subjective emotional reaction to an event (Criterion A2) may have the most relevance for the development of PTSD symptoms (Boals & Shuettler, 2009). From this view, it may be that heterosexist discrimination has an emotional effect on its victims. Though discriminatory events do not pose a threat to one's physical integrity or life, which tend to take the place of more acute injuries, they may nevertheless cause psychological scars, engendering feelings of helplessness, hopelessness, and fear, which have the potential to have more chronic effects, such as pervasive symptoms of PTSD (Alessi et al., 2011; Bryant-Davis & Ocampo, 2005; Root, 1992; Szymanski & Balsam, 2011). It may also be that heterosexist discrimination shatters one's basic worldview (e.g., that the world is benevolent and meaningful and that one has self-worth; Brown, 2003). Furthermore, it may be that more incidences of heterosexist discrimination come from important others, such as family, friends, and colleagues, rather than strangers, which is often the case in sexual orientation based hate crime victimization and thus may have negative effects on PTSD symptoms due to disruptions of attachment and social relationships (Freyd, 2008).

Our findings are also consistent with newly emerging research on the mediating roles of general maladaptive coping in the link between heterosexist discrimination and psychological distress among sexual minority women (Szymanski & Henrichs-Beck, 2014). Our study extends this mediational influence to GLB persons as a whole and furthers it by investigating stress-specific coping responses. Our findings suggest that experiences of heterosexist discrimination

may influence GLB person's use of coping with heterosexism via internalization, detachment, and drug and alcohol use, which in turn negatively influences their PTSD symptoms. It may be that experiences of heterosexist discrimination limit a GLB person's ability to feel as if she or he can assert herself/himself in the face of an oppressive party who may identify with a more dominant group. This may leave victims feeling powerless, helpless, or confused, which may lead to feelings of self-blame. Our findings also suggest that experiences of heterosexist discrimination may lead to the use of avoidance coping responses, such as coping via detachment and coping via drug and alcohol use. GLB individuals who detach from important others may endure social isolation, which fuels their PTSD symptoms. Coping via detachment also involves being lost as to how to deal with discrimination, which may decrease feelings of self-efficacy. GLB individuals who cope via drug and alcohol use may be avoiding emotional content by numbing the body and mind. These two strategies and their links to PTSD symptoms make sense given that avoidance is not only a key diagnostic indicator of PTSD (Criterion C, APA, 2013), but it is also an exacerbating or perpetuating factor in the maintenance of PTSD symptoms (Jelinek & Williams, 1984). Taken together, these findings suggest that GLB persons should not internalize oppression experiences nor engage in avoidant type coping responses to heterosexist discrimination in order to alleviate PTSD symptoms.

Limitations of the Current Study

The present study is limited by the use of self-report measures, a convenience sample that was predominately White, well-educated, and willing to self-identify as GLB, and a correlational design. As is true with all self-report data, participants may have responded in a socially desirable manner. Results could be due to method variance or a general tendency to respond in a

negative manner. In addition, individuals are likely to have different perceptions of experiences that constitute heterosexist events.

Generalizability of this study is limited by the lack of racial and ethnic diversity in the sample. It is important to consider that GLB persons of color may also experience oppressive events related to their racial and ethnic group, as well as those related to being a sexual minority individual. Future research is needed to examine the impact of multiple oppressions on PTSD symptoms of GLB persons of color. Our study also does not include persons with relatively low educational attainment; however, our sample is similar to other volunteer-based samples of GLB persons (Szymanski et al., 2008b) and consistent with research indicating that GLB persons, on average, are better educated than their heterosexual peers (e.g., Rothblum, Balsam, & Mickey, 2004).

Generalizability of findings is limited to individuals who answer surveys about sexual minority-related issues because the individuals who participated in this study may be different from nonparticipants in some meaningful way. For example, individuals who participated in this study, especially those who self-disclose their interest in same-sex relationships on social media (i.e., Facebook) may be more out than are GLB persons in the general population. In addition, GLB persons who have Internet access and who are able to seek out information related to their sexual orientation via GLB centers or Internet listservs may be more connected to GLB social supports and may have better coping strategies. Because of the small number of bisexual individuals included in the current sample, caution should be taken in generalizing these findings to this subgroup of sexual minority persons without further research.

The cross-sectional nature of our data precludes us from drawing conclusions about causal links between heterosexist oppression, coping responses, and PTSD symptoms and necessitates the consideration of alternate models. For example, heterosexist oppression might result in greater PTSD symptoms, or GLB persons with preexisting PTSD symptoms may be more likely to perceive negative events as related to their sexual orientation and engage in maladaptive coping. It is also possible that circular relationships exist between heterosexist oppression, maladaptive coping responses, and PTSD symptoms. Furthermore, other unmeasured variables such as lifetime and recent traumatic and stressful experiences that are not related to sexual orientation might play a role in the relationships among variables in our study. Finally, a self-report measure of PTSD symptoms did not allow us to make clinical diagnoses of PTSD or examine the level of functional impairment, which could have relevance for providers working with this population in a clinical setting.

Suggestions for Future Research

Future research is needed to extend our findings of the relationship between heterosexist experiences and PTSD symptoms and our proposed mediation model to other GLB populations, such as persons of color, those with lower educational levels, and bisexual-only samples. Future research could also extend our findings by broadening the conceptualization and measurement of heterosexism. Our study focused primarily on heterosexist experiences that occur on interpersonal levels—between individuals, within families, and at workplaces. However, heterosexism also occurs at system levels—within institutions, religions, cultures, and political practices (e.g., working for a company/institution that does not have sexual orientation included in their nondiscrimination policy, exposure to religious condemnation of homosexuality,

exposure to negative portrayals of GLB persons in the media, living in a state that recently passed anti-GLB legislation). Assessments of exposure to such systematic heterosexist events would be increasingly useful in understanding our findings. Research might also examine if heterosexism experienced specifically from important others (e.g., family, friends, colleagues) is relatively more distressing than heterosexism experienced from strangers or acquaintances. It is also important to note that GLB persons may also experience oppression based on sex, gender identity, race/ethnicity, disability status, age, and other demographic factors not addressed in this study. Research using more diverse samples and more complex measures of oppressive experiences might explore the intersections of such various cultural identities and might further our understanding of the role of oppression in GLB persons' PTSD symptoms.

Given the links between sexual orientation-based hate crime victimization and heterosexist discrimination and PTSD symptoms found in this study, it is important to identify other variables that could potentially moderate and/or mediate the links between these forms of oppression and PTSD symptoms. Using Meyer's (2003) theory of minority stress as a model, future investigations might examine whether individual and group-level social support and coping might buffer the negative impact of heterosexism on GLB persons' PTSD symptoms that may be exacerbated by negative coping mechanisms. Other potential moderators and/or mediators in these links might include comorbid psychiatric conditions, self-esteem, level of outness, reasons for living, locus of control, and spirituality. Finally, an important next step in the research is to identify and test treatment strategies that ameliorate the negative impact of heterosexist oppression and maladaptive coping responses on GLB persons' PTSD.

Clinical Implications

The first finding of our study suggests that heterosexist experiences of different content and processes can contribute to GLB persons' PTSD symptoms. Thus, clinicians working with GLB persons are encouraged to pay attention to specific external stresses and the heterosexist context of their clients' lives. Clinicians should be encouraged to inquire about a wide range of heterosexist experiences in their intake assessments and to include these experiences in their case conceptualizations. Therapy with GLB clients, particularly those with PTSD or PTSD symptoms, might include working with the client to understand how heterosexist oppression may be related to their symptoms and developing effective coping skills for dealing with and confronting heterosexism when it occurs. Educating GLB clients about the observed relationships between heterosexism and PTSD symptoms may provide them with a powerful tool for better understanding their own experiences and reactions. In addition, clinicians might lessen the potential impact that heterosexist discrimination has on GLB persons' PTSD symptoms by using therapeutic strategies designed to increase clients' awareness of their coping mechanisms and helping them select methods of coping that will decrease, rather than increase, symptoms. Finally, the results support the importance of advocacy and social justice efforts to eliminate heterosexism.

In conclusion, the current study adds to the accumulating body of research demonstrating the negative impact that heterosexism has on GLB persons' mental health. In addition, the findings suggest that experiences of oppression that do not meet the traditional diagnostic criteria for PTSD are important predictors of GLB persons' PTSD symptoms. Finally, it extends previous research by suggesting that heterosexist discrimination leads GLB persons to cope with

these experiences via internalization, detachment, and drug and alcohol use, which in turn negatively influence their PTSD symptoms. Finally, the heterosexist oppression and coping variables accounted for a large amount of variance in PTSD scores.

List of References

- Alessi, E. J., Meyer, I. H., & Martin, J. I. (2011). PTSD and sexual orientation: An examination of Criterion A1 and Non-Criterion A1 events. *Psychological Trauma: Theory, Research, Practice and Policy*, 5, 149 - 157. doi: 10.1037/a0026642
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Baker, T. B., Piper, M. E., McCarthy, D. E., Majeskie, M. R., & Fiore, M. C. (2004). Addiction motivation reformulated: An affective processing model of negative reinforcement. *Psychological Review*, 111, 33-51. doi: 10.1037/0033-295X.111.1.33
- Balsam, K. F. (2003). Traumatic victimization in the lives of lesbian and bisexual women. *Journal of Lesbian Studies*, 7, 1-14. doi: 10.1300/J155v07n01_01
- Balsam, K. F., Rothblum, E. D., & Beauchaine, T. P. (2005). Victimization over the life span: A comparison of lesbian, gay, bisexual, and heterosexual siblings. *Journal of Consulting and Clinical Psychology*, 73, 477-487. doi: 10.1037/0022-006X.73.3.477
- Birnbaum, M. H. (2004). *Methodological and Ethical Issues in Conducting Social Psychology Research via the Internet*. Thousand Oaks, CA, US: Sage: Thousand Oaks, CA.
- Blanchard, E. B., Jones-Alexander, J., Buckley, T. C., & Forneris, C. A. (1996). Psychometric properties of the PTSD checklist (PCL). *Behaviour Research and Therapy*, 34, 669-673. doi: 10.1016/0005-7967(96)00033-2
- Bjorck, J. P., & Thurman, J. W. (2007). Negative life events, patterns of positive and negative

- religious coping, and psychological functioning. *Journal for the Scientific Study of Religion*, 46, 159-167. doi: 10.1111/j.1468-5906.2007.00348.x
- Boals, A., & Schuettler, D. (2009). PTSD symptoms in response to traumatic and non-traumatic events: The role of respondent perception and A2 criterion. *Journal of Anxiety Disorders*, 23, 458-462. doi: 10.1016/j.janxdis.2008.09.003
- Brown, L. S. (2003). Sexuality, lies, and loss: Lesbian, gay, and bisexual perspectives on trauma. *Journal of Trauma Practice*, 2(2), 55-68.
- Bryant-Davis, T., & Ocampo, C. (2005). The trauma of racism: Implications for counseling, research, and education. *The Counseling Psychologist*, 33, 574-578. doi: 10.1177/0011000005276581
- Carter, R. T. (2007). Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist*, 35, 13-105. doi: 10.1177/0011000006292033
- Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist*, 54, 805-816. doi: 10.1037/0003-066X.54.10.805
- Cochran, S. D. (2001). Emerging issues in research on lesbians' and gay men's mental health: Does sexual orientation really matter? *American Psychologist*, 56, 931-947. doi: 10.1037/0003-066x.55.12.1440.
- Coffey, S. F., Schumacher, J. A., Brady, K. T., & Cotton, B. D. (2007). Changes in PTSD symptomatology during acute and protracted alcohol and cocaine abstinence. *Drug and Alcohol Dependence*, 87, 241-248. doi: 10.1016/j.drugaldep.2006.08.025

- Corliss, H. L., Cochran, S. D., & Mays, V. M. (2002). Reports of parental maltreatment during childhood in a United States population-based survey of homosexual, bisexual, and heterosexual adults. *Child Abuse & Neglect, 26*, 1165-1178. doi: 10.1016/S0145-2134(02)00385-X
- D'Augelli, A. R., Grossman, A. H., & Starks, M. T. (2006). Childhood gender atypicality, victimization, and PTSD among lesbian, gay, and bisexual youth. *Journal of Interpersonal Violence, 21*, 1462-1482. doi: 10.1177/0886260506293482
- Dixon, L. J., Leen-Feldner, E., Ham, L. S., Feldner, M. T., & Lewis, S. F. (2009). Alcohol use motives among traumatic event-exposed, treatment-seeking adolescents: Associations with posttraumatic stress. *Addictive Behaviors, 34*, 1065-1068. doi: 10.1016/j.addbeh.2009.06.008
- Foa, E. B., Hembree, E. A., & Rothbaum, B. O. (2007). *Prolonged Exposure Therapy for PTSD: Emotional Processing of Traumatic Experiences: Therapist Guide*. New York: Oxford University Press.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 51*, 115-134. doi: 10.1177/109442810144001
- Freyd, J.J. (2008). Betrayal trauma. In G. Reyes, J. D. Elhai, & J. D. Ford (Eds) *Encyclopedia of Psychological Trauma* (p. 76). New York: John Wiley & Sons.
- Gold, S. D., Marx, B. P., Soler-Baillo, J., & Sloan, D. M. (2005). Is life stress more traumatic than traumatic stress? *Journal of Anxiety Disorders, 19*, 687-698. doi: 10.1016/j.janxdis.2004.06.002

- Herek, G. M. (1995). *Psychological Heterosexism in the United States*. Oxford University Press: New York, NY.
- Herek, G. M. (2009). Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence, 24*, 54-74.
- Herek, G. M., Gillis, J. R., & Cogan, J. C. (1999). Psychological sequelae of hate-crime victimization among lesbian, gay, and bisexual adults. *Journal of Consulting and Clinical Psychology, 67*, 945-951. doi: 10.1016/0145-2134(92)90011-f
- Hughes, T. L., Johnson, T., & Wilsnack, S. C. (2001). Sexual assault and alcohol abuse: A comparison of lesbians and heterosexual women. *Journal of Substance Abuse, 13*, 515-532. doi: 10.1016/S0899-3289(01)00095-5
- Jelinek, J. M., & Williams, T. (1984). Post-traumatic stress disorder and substance abuse in Vietnam combat veterans: Treatment problems, strategies and recommendations. *Journal of Substance Abuse Treatment, 1*, 87-97.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry, 52*, 1048-1060.
- Khantzian, E. J. (2003). The self-medication hypothesis revisited: The dually diagnosed patient. *Primary Psychiatry, 10*, 47-48, 53-54.
- Lehavot, K., Stappenbeck, C. A., Luterek, J. A., Kaysen, D., & Simpson, T. L. (2013). Gender differences in relationships among PTSD severity, drinking motives, and alcohol use in a

- comorbid alcohol dependence and PTSD sample. *Psychology of Addictive Behaviors*, doi: 10.1037/a0032266
- Long, M. E., Elhai, J. D., Schweinle, A., Gray, M. J., Grubaugh, A. L., & Frueh, B. C. (2008). Differences in posttraumatic stress disorder diagnostic rates and symptom severity between criterion A1 and non-criterion A1 stressors. *Journal of Anxiety Disorders*, 22, 1255-1263. doi: 10.1016/j.janxdis.2008.01.006
- Mallinckrodt, B., Abraham, W. T., Wei, M., & Russell, D. W. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling Psychology*, 53, 372-378. doi: 10.1037/0022-0167.53.3.372
- Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health*, 91, 1869-1876. doi: 10.2307/2676322.2001-10008-004
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36, 38-56. doi: 10.2307/2137286
- 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.
- Myers, R. H. (1990). *Classical and Modern Regression with Applications* (2nd ed.). Boston: PWS-Kent.
- Neisen, J. H. (1993). Healing from cultural victimization: Recovery from shame due to heterosexism. *Journal of Gay & Lesbian Psychotherapy*, 2, 49-63.

- Nyamathi, A., Wayment, H. A., & Dunkel-Schetter, C. (1993). Psychosocial correlates of emotional distress and risk behavior in African American women at risk for HIV infection. *Anxiety, Stress & Coping: An International Journal*, *6*, 133-148. doi: 10.1080/10615809308248375
- O'Hare, T., & Sherrer, M. (2011). Drinking motives as mediators between PTSD symptom severity and alcohol consumption in persons with severe mental illnesses. *Addictive Behaviors*, *36*, 465-469. doi: 10.1016/j.addbeh.2011.01.006
- O'Hare, T., Sherrer, M. V., Yeaman, D., & Cutler, J. (2009). Correlates of post-traumatic stress disorder in male and female community clients. *Social Work in Mental Health*, *7*, 340-352. doi: 10.1080/15332980802052373
- Otis, M. D., & Skinner, W. F. (1996). The prevalence of victimization and its effect on mental well-being among lesbian and gay people. *Journal of Homosexuality*, *30*, 93-121. doi: 10.1300/J082v30n03_05
- Ouimette, P., Read, J., & Brown, P. J. (2005). Consistency of retrospective reports of DSM-IV criterion A traumatic stressors among substance use disorder patients. *Journal of Traumatic Stress*, *18*, 43-51. doi: 10.1002/jts.20009
- Parent, M. C. (2013). Handling item-level missing data: Simpler is just as good. *The Counseling Psychologist*, *41*, 568-600. doi: 10.1177/0011000012445176
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, *37*, 710-724. doi: 10.2307/1388152

- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, *135*, 532-554. doi: 10.1037/a0016059
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879-903. doi: 10.1037/0021-9010.88.5.879
- 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
- Riggle, E. D. B., Rostosky, S. S., & Reedy, C. S. (2005). Online surveys for GLBT research: Issues and techniques. *Journal of Homosexuality*, *49*(2), 1-21. doi: 10.1300/J082v49n02_01
- Root, M. P. (1992). Reconstructing the impact of trauma on personality. In L.S. Brown & M. Ballou (Eds.), *Personality and psychopathology: Feminist reappraisals* (pp.229-265). New York: Guilford.
- Rothblum, E. D., Balsam, K. F., & Mickey, R. M. (2004). Brothers and sisters of lesbians, gay men, and bisexuals as a demographic comparison group: An innovative research methodology to examine social change. *Journal of Applied Behavioral Science*, *40*, 283-301. doi: 10.1177/0021886304266877
- Ruggiero, K. J., Del Ben, K., Scotti, J. R., & Rabalais, A. E. (2003). Psychometric properties of the PTSD checklist--civilian version. *Journal of Traumatic Stress*, *16*, 495-502. doi: 0.1023/A:1025714729117

- Sanchez-Hucles, J. V. (1999). Racism: Emotional abusiveness and psychological trauma for ethnic minorities. *Journal of Emotional Abuse, 1*(2), 69-87. doi: 10.1037/10555-022
- Simpson, T. L. (2003). Childhood sexual abuse, PTSD, and the functional roles of alcohol use among women drinkers. *Substance Use & Misuse, 38*, 249–270. doi:10.1081/JA-120017248
- Staiger, P. K., Melville, F., Hides, L., Kambouropoulos, N., & Lubman, D. I. (2009). Can emotion-focused coping help explain the link between posttraumatic stress disorder severity and triggers for substance use in young adults? *Journal of Substance Abuse Treatment, 36*, 220-226. doi: 10.1016/j.jsat.2008.05.008
- Stewart, S. H., Conrod, P. J., Pihl, R. O., & Dongier, M. (1999). Relations between posttraumatic stress symptom dimensions and substance dependence in a community-recruited sample of substance-abusing women. *Psychology of Addictive Behaviors, 13*, 78-88. doi: 10.1037/0893-164X.13.2.78
- Stewart, S. H., Mitchell, T. L., Wright, K. D., & Loba, P. (2004). The relations of PTSD symptoms to alcohol use and coping drinking in volunteers who responded to the Swissair flight 111 airline disaster. *Journal of Anxiety Disorders, 18*, 51-68. doi: 10.1016/j.janxdis.2003.07.006
- Sue, D. W., & Sue, D. (2003). *Counseling the culturally diverse: Theory and practice (4th ed.)*. Hoboken, NJ, US: John Wiley & Sons Inc, Hoboken, NJ.
- 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. (2006). Does internalized heterosexism moderate the link between heterosexual 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 heterosexual 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., & Balsam, K. F. (2011). Insidious trauma: Examining the relationship between heterosexism and lesbians' PTSD symptoms. *Traumatology, 17*(2), 4-13. doi: 10.1177/1534765609358464
- 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., & Ikizler, A. S. (2012). Internalized heterosexism as a mediator in the relationship between gender role conflict, heterosexual discrimination, and depression among sexual minority men. *Psychology of Men & Masculinity, 14*, 211-219. doi: 10.1037/a0027787
- Szymanski, D. M., Kashubeck-West, S., & Meyer, J. (2008a). Internalized heterosexism: A historical and theoretical overview. *The Counseling Psychologist, 36*, 510-524. doi: 10.1177/0011000007309488
- Szymanski, D. M., Kashubeck-West, S., & Meyer, J. (2008b). Internalized heterosexism: Measurement, psychosocial correlates, and research directions. *The Counseling Psychologist, 36*, 525-574. doi: 10.1177/0011000007309489

- 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*(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. (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.1471-6402.2009.01489.x
- 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. (2001). *Using Multivariate Statistics* (5th ed.). Boston, MA: Allyn & Bacon/Pearson Education, Boston, MA.
- Thomas, A. J., Witherspoon, K. M., & Speight, S. L. (2008). Gendered racism, psychological distress, and coping styles of African American women. *Cultural Diversity and Ethnic Minority Psychology, 14*, 307-314. doi: 10.1037/1099-9809.14.4.307
- Ullman, S. E., Filipas, H. H., Townsend, S. M., & Starzynski, L. L. (2005). Trauma exposure, posttraumatic stress disorder and problem drinking in sexual assault survivors. *Journal of Studies on Alcohol, 66*, 610-619.
- Utsey, S. O., Ponterotto, J. G., Reynolds, A. L., & Cancelli, A. A. (2000). Racial discrimination, coping, life satisfaction, and self-esteem among African Americans. *Journal of*

Counseling & Development, 78, 72-80. doi: 10.1002/j.1556-6676.2000.tb02562.x

Waldo, C. R., Hesson-McInnis, M., & D'Augelli, A. R. (1998). Antecedents and consequences of victimization of lesbian, gay, and bisexual young people: A structural model comparing rural university and urban samples. *American Journal of Community Psychology*, 26, 307-334. doi: 10.1023/A:1022184704174

Weathers, F. W., & Keane, T. M. (2007). The criterion A problem revisited: Controversies and challenges in defining and measuring psychological trauma. *Journal of Traumatic Stress*, 20, 107-121. doi: 10.1002/jts.20210

Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993, October). *The PTSD checklist (PCL): Reliability, validity, and diagnostic utility*. Paper presented at the annual meeting of the International Society for Traumatic Stress Studies, San Antonio, TX.

Weathers, F. W., Litz, B. T., Huska, J. A., & Keane, T. M. (1994). *The PTSD Checklist—Civilian Version (PCL-C)*. Boston: National Center for PTSD.

Wei, M., Alvarez, A. N., Ku, T. Y., Russell, D. W., & Bonett, D. G. (2010). Development and validation of a Coping with Discrimination Scale: Factor structure, reliability, and validity. *Journal of Counseling Psychology*, 57, 328-344. doi: 10.1177 /0011000006287

Weston, R., & Gore, P. A. (2006). A brief guide to Structural Equation Modeling. *The Counseling Psychologist*, 34, 719-751. doi: 10.1177/0011000006286345

Yeater, E. A., Austin, J. L., Green, M. J., & Smith, J. E. (2010). Coping mediates the relationship between posttraumatic stress disorder (PTSD) symptoms and alcohol use in homeless, ethnically

diverse women: A preliminary study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2, 307-310. doi: 10.1037/a002177

Appendix

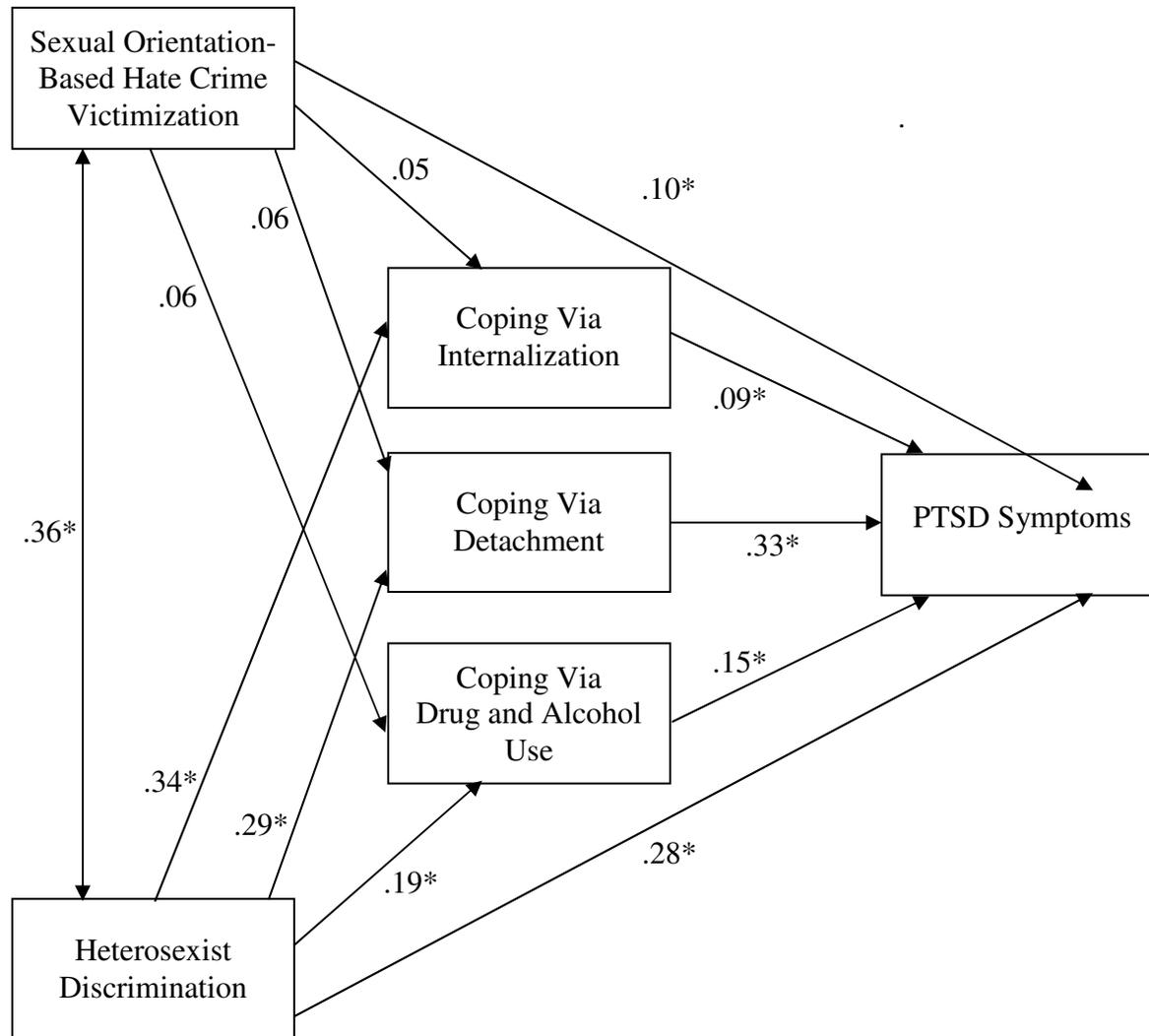


Figure 1. Model Predicting PTSD Symptoms

Note: All coefficients are standardized. * $p < .05$; $R^2 = .42$.

Table 1. Descriptives and Correlations among all Study Variables

Variable	<i>M (SD)</i>	1	2	3	4	5
1. Sexual Orientation-Based Hate Crime Victimization	.17 (.38)	---				
2. Heterosexist Discrimination	1.70 (.74)	.36*	---			
3. Coping via Internalization	2.35 (1.31)	.17*	.36*	---		
4. Coping via Detachment	2.52 (1.06)	.16*	.31*	.49*	---	
5. Coping via Drug and Alcohol Use	1.99 (1.31)	.13*	.22*	.37*	.25*	---
6. PTSD Symptoms	2.19 (.88)	.29*	.48*	.43*	.51*	.34*

Note: * $p < .05$

Table 2. Indirect Effects on Post-Traumatic Stress Symptoms

Independent variable	Mediator	Dependent variable	β (standardized path coefficient and product)	Mean Indirect effects or b (SE) ^a	95 % CI for Indirect Effect ^a	
					Lower	Upper
SO-Based Hate Crime Victimization	→ Coping Via Internalization	→ PTSD Symptoms	.05 X .09* = .00	.01 (.02)	-.0141	.0466
SO-Based Hate Crime Victimization	→ Coping Via Detachment	→ PTSD Symptoms	.06 X .33* = .02	.04 (.04)	-.0450	.1317
SO-Based Hate Crime Victimization	→ Coping Via Alcohol and Drug Use	→ PTSD Symptoms	.06 X .15* = .01	.02 (.02)	-.0163	.0772
Heterosexist Discrimination	→ Coping Via Internalization	→ PTSD Symptoms	.34* X .09* = .03*	.04 (.02)*	.0020	.0829
Heterosexist Discrimination	→ Coping Via Detachment	→ PTSD Symptoms	.29* X .33* = .10*	.11 (.03)*	.0661	.1699
Heterosexist Discrimination	→ Coping Via Alcohol and Drug Use	→ PTSD Symptoms	.19* X .15* = .03*	.04 (.02)*	.0126	.0688

Note. SO = Sexual Orientation; PTSD = Post-Traumatic Stress Disorder. ^a These values are based on unstandardized path coefficients; * $p < .05$

Vita

Kyle M. Bandermann was born and raised in a small town in Southeast Missouri and is a graduate of the University of Missouri (Mizzou). Following his undergraduate degree, Kyle began his Doctor of Philosophy degree in Counseling Psychology at the University of Tennessee in 2008. During his graduate studies, he found a passion for multicultural issues, individuals struggling with traumatic stressors, teaching, and systems interventions aimed at maximizing individual and group psychological health.

For his pre-doctoral internship, Kyle was selected by the United States Navy to commission as a Medical Service Corps Officer and serve active-duty and retired service members and their dependents at military medical centers and on forward-deployed operating bases around the globe. After training at Naval Officer Training Command in Newport, Rhode Island, LT Bandermann reported to Walter Reed National Military Medical Center-Bethesda, near Washington, DC. Following his year of internship and residency at Walter Reed-Bethesda, LT Bandermann reported to Naval Hospital Guam where he serves as a Staff Psychologist.