2020

LESBIAN, GAY, AND BISEXUAL DISCRIMINATION: AN EXAMINATION OF THE ROLE OF BLAME COGNITIONS IN PTSD AND DEPRESSION SYMPTOMS

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LESBIAN, GAY, AND BISEXUAL DISCRIMINATION: AN EXAMINATION OF THE ROLE OF BLAME COGNITIONS IN PTSD AND DEPRESSION SYMPTOMS

A dissertation submitted in partial fulfillment

of the requirements for the degree of

DOCTOR OF PHILOSOPHY

to the faculty of the

DEPARTMENT OF PSYCHOLOGY

of

ST. JOHN'S COLLEGE OF LIBERAL ARTS AND SCIENCES

at

ST. JOHN'S UNIVERSITY

New York

by

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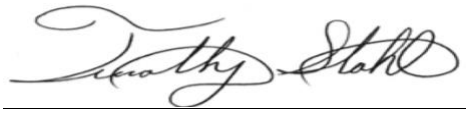
Date Submitted 4/2/2020 Date Approved 4/2/2020



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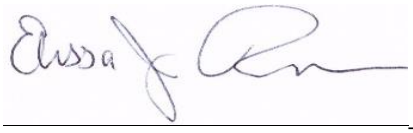

Elissa J. Brown, Ph.D.

ABSTRACT

LESBIAN, GAY, AND BISEXUAL DISCRIMINATION: AN EXAMINATION OF THE ROLE OF BLAME COGNITIONS IN PTSD AND DEPRESSION SYMPTOMS

Timothy Stahl

Lesbian, gay and bisexual (LGB) emerging adults experience higher rates of trauma and discrimination, and subsequent PTSD and depression, than heterosexual emerging adults (Feinstein et al., 2012; Hatzenbuehler et al., 2008; Roberts et al., 2010). Our understanding of the relations between trauma/discrimination and psychiatric sequelae in LGB emerging adults is limited by: (1) uncertainty in the possible differential impact of LGB-specific trauma versus non-LGB-specific trauma, (2) uncertainty of the unique impacts of trauma and discrimination, and (3) lack of studies integrating cognitive theories of trauma (Brewin & Holmes, 2003) into Hatzenbuehler's (2009) psychological mediation framework. This cross-sectional study included 82 gay men, 102 lesbians, 21 bisexual men, and 139 bisexual women (total N = 344; ages 18-25), all of whom experienced discrimination, trauma, and/or heard of other LGBs' traumatic and/or discriminatory experiences. To understand the relations of trauma and discrimination to psychiatric sequelae, we investigated the unique and combined impacts of LGB-specific discrimination, trauma, and vicarious trauma and non-LGB-specific trauma on PTSD and depression symptoms. To test the psychological mediation framework, we evaluated whether blame cognitions and rejection sensitivity mediated these relations. Findings

indicated that LGB-specific discrimination and vicarious trauma, and non-LGB specific trauma are positively and uniquely associated with PTSD and depression symptoms. Blame cognitions mediated the relations between discrimination, vicarious trauma, and non-LGB specific trauma, and PTSD and depression symptoms, supporting the psychological mediation framework. This study's clinical implications include broader assessment of traumatic and discriminatory experiences and LGB-affirmative modifications for trauma-informed interventions post-trauma and discrimination.

ACKNOWLEDGEMENTS

I would like to take this opportunity to acknowledge those who have trained, mentored, and supported me throughout my graduate career, especially in the preparation of this dissertation. I would first like to thank my mentor, Elissa Brown, Ph.D., for her excitement and encouragement from the idea stage of this dissertation, which continued through every step of the process. Your mentoring style of well-balanced encouragement, praise, constructive feedback, and challenging my thought process has been crucial in moving my project forward. It has enabled me to grow as a critical consumer of the science of psychology, who integrates science into his daily clinical practice. Your clinical supervision throughout my time at Child HELP Partnership as a doctoral fellow and clinician complemented your research mentorship by sharpening my clinical acumen to develop nuanced conceptualizations and evidence-based interventions. It significantly influenced my understanding of the art of therapy.

I would like to thank Andrea Bergman, Ph.D., for her impact on my development as a clinician and researcher. Your high standard for excellence in research and clinical training has been formative in my development as a clinical psychologist. I am very appreciative of your time as a mentor throughout my graduate training, particularly in regard to feedback on research writing in the past, which helped to lay the groundwork for my ability to complete this dissertation study.

I would also like to thank Ray DiGiuseppe, Ph.D. for his involvement and thoughtful feedback on my dissertation. Your insight as a researcher and clinician has not only impacted this project, but also my clinical skills both in conducting therapy and

neuropsychological assessment. Thank you for always sharing your knowledge and for your dedication to training the next generation of clinical psychologists.

I would also like to acknowledge another talented clinical researcher and clinician, Komal Sharma-Patel, Ph.D. Her wisdom in research and trauma-informed treatments, and support and humor has been essential throughout my graduate training.

I would also like to thank Richard LeBeau, Ph.D., for his support in the development of this project. The countless emails and video calls to discuss research, professional development, and networking were irreplaceable in my growth as clinical psychologist, who is interested in the intersection of trauma and sexual and gender minority issues.

I would like to thank my family and friends, both near and far. Your logistical and emotional support throughout graduate school has been a crucial part of reaching this milestone. The balance of listening to my stress and offering solutions and words of encouragement from all of you has kept me strong through the struggles and successes of graduate school. Your support has strengthened my self-confidence as a clinical psychologist and as a proud member of the LGBTQ+ community. Finally, a thank you to the LGBTQ+ community at large, whose strength, resilience, and compassion inspired this research.

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Introduction

Emerging adults are at a heightened risk for trauma exposure and subsequent PTSD and depression symptoms (Read et al., 2011). This risk is compounded for lesbian, gay, and bisexual (LGB) emerging adults who endure higher rates of trauma and, subsequently, experience more severe PTSD and depression symptoms than their heterosexual counterparts (Dragowski et al., 2011; Feinstein et al., 2012; Roberts et al., 2010). These elevated rates do not include LGB discrimination, which itself is related to PTSD symptoms and greater use of mental health services (Beckerman & Auerbach, 2014; Burgess et al., 2007; D'Augelli et al., 2006). Due to the psychological and economic costs of trauma and discrimination in emerging adults, there is a need to better understand the mechanisms responsible for PTSD and depression symptom development. This study evaluated the relative effects of non-LGB-specific trauma, and LGB-specific trauma and discrimination on PTSD and depression in LGB emerging adults. The mediating roles of cognitive interpretations of trauma and discrimination in the development of PTSD and depression were also investigated. Below is a summary of the prevalence and correlates of PTSD and depression in LGB emerging adults, highlighting current research limitations and needed next steps.

Rates of Trauma and Mental Health in Emerging Adulthood

Emerging adulthood (ages 18-25) is a unique period of development (versus adolescence and adulthood), in which an individual's identity, including sexual orientation, becomes more crystallized (Arnett, 2000). Adolescents tend to see their romantic relationships as more transitory whereas emerging adults explore potential longevity and emotional and physical intimacy. This change is related to one's own

identity and how that identity is reflected and congruent with his/her partner (Arnett, 2000). Sexual and romantic development becomes more complex for LGB emerging adults, many of whom are just beginning to solidify their sexual orientation unlike heterosexual peers who began this development in adolescence (Morgan, 2012). This complexity is rooted societal values of heterosexuality as the norm and homosexuality as abnormal, resulting in a LGB identity formation process that includes feelings of alienation, isolation, living a lie, and ultimately a sense of wholeness and integration (Flowers & Buston, 2001; Savin-Williams, 1998). Thus, LGB emerging adults are not only undergoing a common sexual and identity development process but are also experiencing unique developmental processes and psychological stressors.

During this developmental period, emerging adults are at high risk for experiencing trauma. By emerging adulthood, up to 66% of individuals have experienced trauma in their lives (Clodfelter et al., 2010; Federal Interagency Forum on Child and Family Statistics, 2014; Read et al., 2011). During emerging adulthood, half of the participants in a college sample reported experiencing at least one incidence of an interpersonal trauma (i.e., sexual and/or physical assault; Elhai et al., 2012), with 21% of emerging adults experiencing a trauma within a single 2-month period (Frazier et al., 2009). A national epidemiological study on frequency of LGB-specific trauma (i.e., trauma perceived to have occurred because of one's LGB identity) found high rates of trauma in LGB individuals with 1218 incidents in 2016 alone (United States Department of Justice, 2017). Researchers have found rates of LGB-specific trauma in LGB emerging adults to be as high as 50% (Balsam et al., 2005; Burgess et al., 2007). Thus, LGB emerging adults are at an especially higher risk for experiencing trauma than

heterosexual peers, yet there is limited literature on the effects of LGB-specific trauma in this population.

Studies on these higher rates of trauma exposure have shown that emerging adults (compared to adolescents and adults) had higher rates of PTSD symptoms regardless of number of traumas experienced (Walsh, et al., 2012). These results were echoed by Elhai et al. (2012) who found that in emerging adults with a lifetime history of trauma exposure, 59% of participants met diagnostic criteria for PTSD. Frazier et al. (2009) compared the effects of lifetime and recent (past two months) traumas in a longitudinal study of emerging adults and found that 8% of the 22 who had recently experienced trauma were experiencing clinically elevated PTSD symptoms. Compared to national prevalence rates of lifetime PTSD of 6.8% and of past year PTSD of 3.5% in adults (National Center for PTSD, 2017), emerging adults are at particular risk for developing PTSD. Further researchers (e.g., Swanholm et al., 2009) found significant associations between trauma and depression symptoms, with up to 17% of participants meeting diagnostic criteria for depression and over half endorsing clinically elevated symptoms. This literature ignores LGB emerging adults, who endorse PTSD and depression symptoms at rates as high as 9.4% and 33%, respectively (Burgess et al., 2007; Mustanski et al., 2016). Thus, the current study focused on LGB emerging adults to understand how trauma and other negative life events (i.e., discrimination) contribute to PTSD and depression symptoms.

Distinction between Trauma and Discrimination

Researchers of LGB populations often measure trauma and discrimination as one construct. Trauma refers to events that threaten the physical safety of an individual and

can result in injury and/or death (American Psychiatric Association, 2013). Discrimination refers to societal devaluation of a minority by a majority group at the structural (i.e., denial of services/housing, etc.) and individual level (i.e., use of derogatory terms/harassment; Meyer, 2003). Although discrimination lacks acts of interpersonal violence that threaten one's physical safety, it can psychologically threaten one's sense of safety and security (Root, 1992). Much of the current literature has only focused on LGB-specific trauma, measured trauma and discrimination as one construct, and ignored LGB emerging adults. Thus, the unique relations between LGB-specific discrimination and PTSD and depression symptoms are unclear, resulting in uninformed, and possibly underprepared, treating clinicians.

Effects of LGB-Specific Discrimination

Cross-sectional research in samples of racial and ethnic minority adults indicate that experiencing discrimination is related to PTSD and depression symptoms (Miranda et al., 2013). Similarly, experiences of LGB-specific discrimination in LGB adults and emerging adults is positively associated with PTSD and depression symptoms, with consistent discrimination intensifying symptom severity (Chen & Tryon, 2012; Rivers, 2004; Szymanski, 2005). However, these researchers combined trauma and discrimination into one variable, confounding discrimination's unique impact on PTSD and depression symptoms.

Specific and separate assessment of LGB-specific trauma and discrimination is crucial in understanding their unique effects on symptoms. Explicit assessment of LGB-specific trauma and discrimination in samples of adult gay men and lesbians demonstrated that both experiences are individually correlated with PTSD and depression

symptoms (Feinstein et al., 2012; Szymanski & Balsam, 2011). These researchers also found that the correlation between discrimination and PTSD symptoms was greater than that between trauma and PTSD symptoms. Similarly, Bandermann and Szymanski (2014) found that LGB-specific discrimination had a larger effect size in the prediction of PTSD symptoms than LGB-specific trauma. These researchers have advanced the literature by explicitly assessing for LGB-specific trauma and discrimination as distinct constructs, but there are limitations to internal and external validity. By including transgender individuals, who experience higher rates of trauma and discrimination than cisgender peers (Su et al., 2016), researchers are preventing clear understanding of the unique, and often more stressful, life experiences of transgender individuals. Also, these studies included a large age range (ages 18-90), which equates discrimination experiences across generations despite societal changes in LGB acceptance (Floyd & Bakeman, 2006). Finally, there is limited literature on LGB emerging adults, despite their unique developmental processes and elevated rates of trauma, discrimination, PTSD and depression.

Some researchers have focused their studies on LGB emerging adults, finding that LGB-specific trauma and discrimination are positively associated with PTSD and depression symptoms. Mustanski et al.'s (2016) longitudinal study found that experiencing continuous discrimination over a 4-year period significantly increased the severity of participants' PTSD and depression symptoms. Two cross-sectional studies found that LGB-specific trauma and discrimination were correlated to PTSD symptoms, with discrimination being more highly correlated to PTSD than trauma (Beckerman & Auerbach, 2014; D'Augelli et al., 2006). Internal validity of these studies is limited by

the inclusion of transgender individuals and/or lack of specific measurement of LGB-specific trauma (e.g., Beckerman & Auerbach, 2014; Mustanski et al., 2016). Additionally, the external validity of all three of these studies is limited by the participants being from large urban areas such as New York City or Chicago (e.g., D'Augelli et al., 2006). Furthermore, *non*-LGB-specific trauma was not measured thus confounding the unique influence of LGB-specific trauma and discrimination on PTSD and depression symptoms.

To address this limitation, Dworkin et al. (2018) conducted a longitudinal study of emerging adult lesbian and bisexual women to examine if non-LGB specific trauma and LGB-specific discrimination at baseline would predict PTSD symptoms at year 3. The researchers found that non-LGB-specific trauma and LGB-specific discrimination were positively correlated to, but not predictive of, PTSD symptoms. Importantly however, the researchers did not assess for LGB-specific trauma which could have led to underreporting of traumas and the non-significant results. Because LGB-specific trauma is related to PTSD symptoms (e.g., Beckerman & Auerbach, 2014), research should explore how non-LGB-specific trauma and LGB-specific trauma and discrimination all contribute to PTSD.

Per the authors' knowledge, there has been one study to date that examined how *non*-LGB-specific trauma and LGB-specific trauma and discrimination are related to PTSD and depression symptoms in LGB emerging adults. Dragowski et al. (2011) conducted a cross-sectional study of PTSD in LGB emerging adults, in which they controlled for non-LGB-specific trauma and then added LGB-specific trauma and discrimination as separate predictors. Overall, they found that non-LGB specific trauma

and LGB-specific discrimination were positively associated with PTSD symptoms. However, the relative contributions of LGB-specific discrimination versus LGB-specific trauma is unclear because the researchers added them in the same block in their regression analysis. Additionally, study measures were administered in a group, subjecting participants to social desirability and possible underreporting of experiences and symptoms, leading to dampened effects. Moreover, the data were collected 10 years prior to analysis, making it unrepresentative of current LGB-specific trauma and discrimination.

Thus, LGB-specific trauma and discrimination have unique effects on PTSD and depression symptoms, but it is unclear how these symptoms develop and are maintained. None of the reviewed studies on LGB-specific trauma and discrimination yielded results in which 100% of their emerging adult participants endorsed PTSD and depression symptoms, indicating that other unexplored constructs are influencing the relations. It is likely that mediators, such as blame cognitions one might have after experiencing LGB-specific trauma and/or discrimination, might be influencing this relation.

Influence of Blame Cognitions

Cognitive theories of trauma (e.g., Brewin & Holmes, 2003; Ehlers & Clark, 2000) purport that an individual's cognitive processing of a traumatic event results in the development and maintenance of PTSD and depression. The theory states that in processing trauma memories, a survivor can experience a continuous sense of threat. This threat can violate formerly held beliefs of safety and result in persistent behavioral and physiological fear responses. Through processing and consolidation of trauma memories, a trauma-survivor might generalize the happenings of that trauma, resulting in

beliefs that: the world is unsafe, s/he is the cause of the trauma, and that future trauma is likely. Simultaneously, sensory memories of the trauma trigger fight-or-flight responses because that individual feels as though the trauma is recurring, which is compounded by the cognition that trauma will recur.

Research on these cognitive theories of trauma have demonstrated that trauma and PTSD symptoms are highly correlated to blame cognitions: negative cognitions about the world (e.g., "The world is unsafe") and self-blame (e.g., "I deserve what happened"; Dunmore et al., 2001; Foa et al., 1999). Cross-sectional research in a sample of trauma survivors has found self-blame to positively predict PTSD while negative views about the world did not (Startup et al., 2007). Yet, longitudinal research has demonstrated that both these cognitions positively predict PTSD symptoms (Dunmore et al., 2001). Some researchers have found these cognitions to be flexible over time, with self-blame as a positive predictor of PTSD symptoms at 3-months post-trauma but a negative predictor at 12-months (O'Donnell et al., 2007). In addition to PTSD, these cognitions explain a significant portion of the variance in depression symptoms (Thompson & Kingree, 2010). Despite these mixed results, it is clear that blame cognitions are related to PTSD and depression symptoms with intervention researchers finding that reduction of these cognitions is positively associated with symptom reduction (Zalta et al., 2014). Thus, the cognitive theories of trauma explain the development and maintenance of PTSD and depression symptoms, but few researchers have applied the theories explicitly to LGB emerging adults, who have experienced trauma and/or discrimination. Instead, researchers have often focused on LGB-specific psychological theories and processes to explain symptom development and maintenance.

LGB-specific Psychological Processes as Mediators

Minority stress theory (Meyer 1995; 2003) purports that minority populations experience unique, chronic, and socially based stressors from the conflict between dominant societal values and their minority values. This stress manifests as experiences of discrimination and trauma because of his/her minority identity (e.g., LGB), which leads to minority-specific psychological processes and psychiatric sequelae. Much of LGB minority stress theory has focused on how symptoms are related to the cognitive-affective psychological process of rejection sensitivity (i.e., the perception/expectation of external rejection because of one's LGB identity resulting in experiences of anxiety; Downey & Feldman, 1996).

Pachankis et al. (2008) applied rejection sensitivity to LGB individuals by highlighting the personal, societal, and vicarious experiences of rejection due to being LGB. Several cross-sectional studies of gay men and lesbian and bisexual women have found that LGB-specific discrimination was positively associated with rejection sensitivity and depression symptoms (Dyar et al., 2016; Hatzenbuehler et al., 2008; Pachankis, et al., 2015). However, in these studies trauma and PTSD symptoms were not examined, discrimination was measured as others' tolerance of LGBs rather than explicit discriminatory acts, and participants were mostly from urban areas, despite higher discrimination rates in rural (versus urban and suburban) areas (Stange & Kazyak, 2015). Other researchers have examined rejection sensitivity as a mediator of the relations between LGB-specific trauma and discrimination and psychiatric sequelae in LGB adults with conflicting results. Liao et al. (2014) found that it did not mediate the relations

between LGB-specific discrimination and depression symptoms while Feinstein et al. (2012) found that it did. Thus, research on rejection sensitivity warrants continued study.

Although these studies have advanced our understanding of how psychiatric symptoms are maintained, they do have some methodological flaws. Few of these studies focused on LGB emerging adults, despite their higher rates of LGB-specific trauma and discrimination, PTSD, and depression. Additionally, these studies excluded bisexuals and/or included transgender individuals which prevents clear understanding of the unique effects of sexual orientation discrimination. Some of the studies recruited from public LGBT festivals, limiting participation to those comfortable speaking publicly about discrimination (and likely experience less rejection sensitivity). Furthermore, these studies ignored LGB- and non-LGB-specific trauma and/or did not explore PTSD despite its relations to trauma and discrimination. Finally, these studies ignored cognitive theories of trauma and blame cognitions (Ehlers & Clark, 2000).

Psychological Mediation Framework: Minority Stress and Trauma Theories together

Hatzenbuehler (2009) developed the psychological mediation framework to better integrate various psychopathology theories (e.g., minority stress and cognitive theory of trauma). The framework purports that both LGB-specific psychological processes (e.g., rejection sensitivity) and non-LGB-specific processes (e.g., blame cognitions) might mediate the relations between LGB-specific trauma and discrimination and psychopathology. Cross-sectional research has supported these framework, finding that non-LGB specific psychological processes (e.g., rumination) in LGB adults mediate the relation between LGB-specific discrimination and depression (Liao et al., 2014).

To date, two studies have integrated the cognitive theory of trauma (Ehlers & Clark, 2000) into the psychological mediation framework (Hatzenbuehler, 2009) to understand PTSD symptoms in LGB individuals. Bandermann and Szymanski (2014) examined two negative thinking patterns in LGB adults who have experienced LGB-specific trauma and discrimination: internalization of the event(s) (similar to "self-blame") and detachment (similar to "negative cognitions about the world"). Their cross-sectional study found that both patterns partially mediated the relations between LGB-specific discrimination and PTSD symptoms. However, participants included: several generations (ages 18-80), transgender individuals, and several "mostly heterosexual" participants. Moreover, negative thinking patterns were assessed by a coping skills questionnaire developed for racial discrimination. Taken together, these flaws muddle the results for LGB emerging adults and do not explicitly assess blame cognitions.

Dworkin et al. (2018) conducted a longitudinal study in emerging adult lesbian and bisexual women to examine blame cognitions as a mediator of the relations between frequency of non-specific-LGB trauma and LGB-specific discrimination, and PTSD symptoms. The researchers assessed non-LGB-specific trauma and LGB-specific discrimination at baseline, blame cognitions at year 2, and PTSD symptoms at year 3. Only negative cognitions about the self partially mediated the relations between LGB-specific discrimination and PTSD symptoms. These findings are limited by the exclusion of gay and bisexual men and lack of assessment for psychotherapy engagement over the course of the study (which could have attenuated the clinically elevated symptom over time). Moreover, analyses of baseline data would have enhanced understanding of how blame cognitions mediate the relations between LGB-specific discrimination and current

PTSD symptoms. Finally, the researchers did not assess for LGB-specific trauma and its impact upon PTSD. Yet, both of these studies support the role of blame cognitions as mediators within the psychological mediation framework (Hatzenbuehler, 2009).

Current Study

Previous LGB research has included large age ranges, conflation of the experiences of cisgender versus transgender LGB individuals, conflation of trauma and discrimination as one construct, possible influence of social desirability bias, and the omission of cognitive theories of trauma. We addressed these gaps by using a cross-sectional design to enable simultaneous examination of the unique influences of non-LGB-specific trauma, and LGB-specific trauma and discrimination on blame cognitions, and PTSD and depression symptoms in cisgender LGB emerging adults. We hypothesized the following: (1) LGB-specific trauma would positively predict PTSD and depression symptoms, (2) LGB-specific discrimination would positively explain an incremental amount of the variance in PTSD and depression symptoms above that of LGB-specific trauma and vicarious experiences of trauma, (3a) Blame cognitions would partially mediate the relations between non-LGB-specific trauma and PTSD and depression symptoms, (3b) Blame cognitions would partially mediate the relations between LGB-specific trauma and PTSD and depression symptoms (3c) Blame cognitions would partially mediate the relations between LGB-specific discrimination and PTSD and depression symptoms, (3d) Blame cognitions would partially mediate the relations between vicarious experiences of trauma and PTSD and depression symptoms, (4a) Rejection sensitivity would partially mediate the relations between non-LGB-specific trauma and PTSD and depression symptoms, (4b) Rejection sensitivity would

partially mediate the relations between LGB-specific trauma and PTSD and depression symptoms, (4c) Rejection sensitivity would partially mediate the relations between LGB-specific discrimination and PTSD and depression symptoms, (4d) Rejection sensitivity would partially mediate the relations between vicarious experiences of trauma and PTSD and depression symptoms, (5) A full model in which rejection sensitivity and blame cognitions mediate the relations between LGB-specific trauma, non-LGB-specific trauma, LGB-specific discrimination, and vicarious experiences of trauma and PTSD and depression symptoms would be a better fit to the data than a reduced model with blame as the only mediator.

Method

Participants. The current study's inclusion criteria focused on cisgender LGB emerging adults (ages 18-25). Transgender and gender non-conforming/nonbinary LGBs were excluded, because transgender LGB individuals endure higher rates of discrimination and trauma than cisgender LGB cisgender individuals (Su, et al., 2016), and thus it might be misleading to conflate their experiences. The final sample included 344 participants, with the majority identifying as bisexual women, Caucasian, college students, and residing in a suburban setting (see Table 1). All participants endorsed experiencing discrimination, trauma, and/or vicarious experiences of trauma as follows: 6% vicarious experiences of trauma only; 29% personal experiences of discrimination and vicarious experiences of trauma; 2% personal experiences of discrimination, vicarious experiences of trauma, and LGB-specific trauma; 41% personal experiences of discrimination, vicarious experiences of trauma, and non-LGB-specific trauma; 1% vicarious experiences of trauma and LGB-specific trauma; 4% vicarious experiences of trauma and Non-LGB specific trauma; 17% all four types of experiences.

Measures

Demographics. Participants completed a questionnaire of sociodemographic variables, which assessed sexual orientation and gender identity with items from The GenIUSS Group (2014), and age, race, ethnicity, education level, and occupation from Hughes et al. (2016; see Appendix A for all questionnaires). Participants were asked to identify place of residence because higher rates of LGB discrimination occur in rural (versus urban and suburban) areas (Marsack & Stephenson, 2017; Stange & Kazyak, 2015).

LGB-specific Trauma and Discrimination. The *Daily Heterosexist Experiences Questionnaire* (DHEQ; Balsam et al., 2013) assessed frequency of LGB-specific discrimination, trauma, and vicarious trauma, using three subscales: Harassment and Discrimination (six items), and Vicarious Trauma (six items), and Victimization (four items). Harassment and Discrimination assessed being subjected to derogatory terms or being refused services (e.g., "Being called names such as 'fag' or 'dyke'"). Vicarious Trauma assessed for knowledge of another's experience of LGB-specific discrimination and/or trauma (e.g., "Hearing about LGB people you don't know being treated unfairly"). Victimization assessed for LGB-specific trauma (e.g., "Being punched, hit, kicked, or beaten because you are LGB"). We modified the questionnaire to assess lifetime (versus past year) frequency, which is deemed acceptable by developers. Participants endorsed frequency using the following choices from the *Traumatic Events Characteristics Survey* (TECS; Brown, 2001): 1 (*once*), 2 (*a few times (2-3)*), 3 (*about once a month*), 4 (*about once a week*), and 5 *(every day/multiple times a day*). We found comparable levels of reliability to the measure developers (Balsam et al., 2013): Discrimination α = .82, Vicarious experiences of trauma α = .79, Victimization α = .88.

Non-LGB-specific Trauma. The *Posttraumatic Stress Disorder Diagnostic Scale for DSM-5* (PDS-5; Foa et al., 2016) assessed frequency of non-LGB-specific trauma by modifying the instructions to say, "Have you ever experienced, witnessed, or been repeatedly confronted with any of the following and not attributed its occurrence to your sexual orientation?" Participants endorsed which traumas they experienced and their frequency: serious life-threatening illness, physical assault, sexual assault, military

combat or lived in a war zone, child abuse (physical and/or sexual), serious accident (motor vehicle, house fire), and natural disasters. Frequency was assessed using the following choices: 1 (*once*), 2 (*a few times (2-3)*), 3 (*about once a month*), 4 (*about once a week*), and 5 *(every day/multiple times a day*) (TECS; Brown, 2001). We found this measure to have acceptable internal consistency in our sample (α = .78).

LGB-Specific Processes.

Rejection Sensitivity. The *Gay-Related Rejection Sensitivity Scale* (GRS; Pachankis, et al., 2008) assessed participant's cognitive expectation and anxious reaction of rejection from others because of his/her LGB identity via 12 scenarios (e.g., "Your coworkers are celebrating a co-worker's birthday at a restaurant. You are not invited. How likely is it that you were not invited because of your sexual orientation?" How concerned or anxious would you be that you were not invited because of your sexual orientation?) Response choices ranged from 1 (*very unconcerned/unlikely*) to 6 (*very concerned/likely*). The current study focused on the cognitive expectation of rejection, by summing participant responses to the likelihood question. We used a modified version of this measure for use with men and women (developed by B.A. Feinstein; personal communication, March 20, 2018), and found it to have a comparable level of internal consistency (α = .88) to both Pachankis et al. (2008) and Feinstein et al. (2012).

Trauma-Specific Processes.

Blame Cognitions. The *Posttraumatic Cognitions Inventory (*PTCI; Foa et al., 1999) is a 36-item measure of trauma-related blame cognitions involved in the development and maintenance of PTSD. We modified the measure's instructions to assess for blame cognitions related to trauma and discrimination as follows: "We are

interested in the kinds of thoughts which you may have had after [experiencing LGB-specific trauma and/or discrimination.]" Participants rated the degree of agreement with each item on a Likert scale ranging from 1 (*Totally disagree*) to 7 (*Totally agree*) with sums calculated for each subscale. This study used the following subscales: Negative Cognitions About the World (e.g., "People can't be trusted") and Self-Blame (e.g., "The event happened because of the way I acted"), and found them to have good to high internal consistency (α = .91 and α = .80, respectfully). Because of the conceptual overlap between these scales, they served as indicators for a latent variable: Blame Cognitions.

Mental Health Outcomes.

Posttraumatic stress symptoms. The *Posttraumatic Stress Disorder Diagnostic Scale for DSM-5* (PDS-5; Foa et al., 2016) is a 24-item self-report measure of PTSD symptom severity in the past month. The current study used the first 20 items to assess severity of PTSD symptom clusters (i.e., intrusion, avoidance, changes in mood and cognition, and arousal and hyperactivity). Frequency/distress of each symptom were rated on a Likert scale ranging from 0 (*Not at all*) to 4 (*6 or more times a week/severe*) and summed to yield total symptom severity scale. We found high internal consistency (α = .96).

Depression. The *Center for Epidemiologic Studies Depression Scale* (CES-D Scale; Radloff, 1977) is a 20-item measure of depression symptoms: anhedonia, feelings of sadness, and insomnia. We modified it to assess symptom frequency in the past month (versus past week) using a Likert scale ranging from 0 (*rarely or none of the time*) to 3 (*most or all of the time*). Responses were summed to yield a total score. We found high

levels of internal consistency ($\alpha = .93$), consistent with the measure's previous use in emerging adults (Kenny & Sirin, 2006).

Procedures

All procedures and questionnaires for the current study were approved by the Institutional Review Board (IRB) at St. John's University. Study consent and questionnaires were administered through the Qualtrics website, which is an online survey system that complies with Federal Acts and regulations related to private data security (i.e., HIPAA). Online administration was chosen to enable recruitment of a socioeconomically-, racially-, ethnically-, and regionally diverse sample of LGB emerging adults across the United States.

Recruitment occurred for one year through social media postings (i.e., Facebook, Instagram, Twitter, LinkedIn), email listservs for professional organizations (i.e., APA Division 44, ABCT Sexual and Gender Minority Special Interest Group), college LGBTQ+ groups, and LGBTQ+ community centers throughout the United States. Posts and emails included a link to the Qualtrics website, which presented the study's consent form and the contact information for the study's principal investigator and the IRB at St. John's University. After consenting to participate, participants first completed the demographics form to determine inclusion criteria (i.e., cisgender LGB and ages 18-25). If inclusion criteria were not met, that participant was directed to a survey termination page. If inclusion criteria were met, the DHEQ, PDS-5 Trauma Screen, GRS, LGBIS, PTCI, PDS-5, and CES-D were administered randomized to avoid order effects. Participants who completed the survey were eligible to participate in a raffle to win a gift certificate (via entry of their e-mail address separate from their responses).

Data Analysis/Analytic Strategy

Preliminary Analyses. Descriptive analyses were run for all variables using SPSS version 21 for Apple to determine shape and distribution of the data (Table 2). Several iterations of square root transformations were conducted to achieve normality for the following skewed variables: Personal experiences of discrimination, Non-LGB-specific trauma, PTSD symptom severity, Negative Cognitions about the World, and Rejection Sensitivity. LGB-specific trauma remained significantly skewed after five iterations and the final iteration was used in subsequent analyses. We conceptualized sexual orientation as a combination variable consisting of gender identity and sexual attraction. Based on this conceptualization and previous research indicating that bisexual women endorse higher rates of depression symptoms than gay and bisexual men (Hyde, & Abramson, 2008; Kilpatrick, et al., 2013), three dummy variables of sexual orientation were created with bisexual women used as the reference group. Age and these three dummy variables were entered as covariates in all analyses.

Statistical Analyses. *Mplus Diagrammer* 1.2 (1) (Muthén & Muthén, 2012-2014) was used to test all hypothesized paths and the simultaneous influence of multiple mediators via structural equation models. There was no missing data in this sample. Because bootstrapping is an appropriate statistical technique for models with several mediators (Preacher and Hayes, 2008), bootstrapped standard errors were estimated with 5,000 iterations to obtain 95% confidence intervals around effect sizes. If these intervals did not contain zero, this was considered evidence of a significant effect. Because this study's goal was to test the psychological mediation framework (Hatzenbuehler, 2009) in a sample that has experienced trauma and/or discrimination, two models were tested.

The first was a model with only the Blame Cognitions as a mediator, which was then compared to a model with Rejection Sensitivity as an additional mediator. Due to high comorbidity between PTSD and depression (Campbell, et al., 2007), the model included a correlation path between these two measures. Chi-square (χ_2), comparative fit index (CFI), root-mean-square error of approximation (RMSEA), Tucker-Lewis Index (TLI), and the Standardized Root Mean Square Residual (SRMR); were used to determine model fit as use of multiple indices is recommended (Byrne 2012). Acceptable values are as follows: $.95 \geq CFI \geq .90$, $.10 \geq RMSEA \geq .05$, $.95 \geq TLI \geq .90$ and $.15 \geq SRMR \geq .08$ (Watson & Gore, 2006). The chi-square difference test was used to compare model fit because the data was normally distributed and the models were nested (Tabachnick & Fidell, 2014).

Results

Preliminary Analyses to Identify Demographic Covariates

Independent-samples *t*-tests and one-way ANOVAs were conducted to identify possible covariates among the categorical demographic variables (see Tables 3 and 4, respectively). As presented in Table 3, bisexual women endorsed lower frequency of DHEQ-Discrimination versus gay men and lesbians. Bisexual women versus gay men, bisexual men and lesbians had higher scores on the CES-D. Due to these findings, the combination variable of sexual orientation and gender (hereafter called sexual orientation/gender) was included as a covariate in subsequent analyses to control for its effects on DHEQ-Discrimination, DHEQ- Victimization, the PDS-5 Trauma Screener, the PDS-5, and the CES-D.

Correlation coefficients were computed for all continuous variables. Because age was significantly correlated with the PDS-5, CES-D, and PTCI-Negative Cognitions about the World, it was included as a covariate in subsequent analyses. As a replication of previous studies, we examined the inter-correlations among hypothesized predictors, mediators, and criterion variables. All of these variables were significantly correlated with one another with the exception of PDS-5 Trauma Screener and the GRS (see Table 5).

Regression Analyses to Examine Relative Importance of Discrimination versus Trauma

A series of hierarchical regression analyses were conducted to test the first two hypotheses, in which we posited that DHEQ-Victimization and DHEQ-Discrimination would uniquely contribute to variance in the PDS-5 and CES-D. The first hierarchical

model tested the unique contribution of DHEQ-Victimization and DHEQ-Discrimination in the prediction of PDS-5. The final model, including age, sexual orientation/gender, PDS-5 Trauma Screener, DHEQ-Victimization, DHEQ-Discrimination, and DHEQ-Vicarious Trauma, was significant for the PDS-5, $F = 22.61$, $df = 343$, $p = .00$, accounting for 35% of the variance. In the final model, DHEQ-Victimization did not positively predict scores on the PDS-5 as hypothesized. DHEQ-Discrimination positively predicted scores on the PDS-5 above that of DHEQ-Victimization, as hypothesized. Age, PDS-5 Trauma Screen, DHEQ-Discrimination, and DHEQ-Vicarious Trauma all uniquely contributed to the variance explained in PDS-5 scores (see Table 6).

The second hierarchical model tested the unique contribution of DHEQ-Victimization and DHEQ-Discrimination in the prediction of CES-D. The final model, including age, sexual orientation/gender, PDS-5 Trauma Screener, DHEQ-Victimization, DHEQ-Discrimination, and DHEQ-Vicarious Trauma Screener significantly predicted the CES-D, $F = 17.71$, $df = 343$, $p = .00$, accounting for 30% of the variance. In the final model, DHEQ-Victimization did not positively predict scores on the CES-D, as hypothesized. DHEQ-Discrimination positively predicted scores on the CES-D above that of DHEQ-Victimization, as hypothesized. Age, bisexual women (compared to bisexual men), PDS-5 Trauma Screen, DHEQ-Discrimination, and DHEQ-Vicarious Trauma all uniquely contributed to the variance explained in CES-D scores (see Table 7). Because DHEQ-Victimization was not a significant predictor in these two analyses, it was dropped from further analyses.

Data Analyses – Structural Equation Model

Measurement Model. In our *a priori* hypotheses, we predicted that a latent factor of blame cognitions (as indicated by PTCI-Negative Cognitions about the World and PTCI-Self-Blame) would be correlated with the GRS. Because this measurement model was just identified, overall fit indices could not be calculated; however, parameter estimates of paths in the model can provide information about the local fit of indicators to the latent factor (Tabachnick & Fidell, 2014). PTCI-Negative Cognitions about the World and PTCI-Self-Blame were significant indicators of a latent construct. The structural model with DHEQ-Discrimination, DHEQ-Vicarious Trauma, PDS-5 Trauma Screener, Blame Cognitions, PDS-5 and CES-D was over-identified and yielded excellent model fit indices (see below). Additionally, the GRS was significantly correlated to Blame Cognitions, $r = .16$, $p = .00$. Based on these findings, analyses progressed to test and compare the two proposed models.

Structural Models. The first structural model (Figure 1) was designed to test the mediating effects of Blame Cognitions on the relations between the predictor variables (DHEQ-Discrimination, DHEQ-Vicarious Trauma, and the PDS-5 Trauma Screener) and criterion variables (PDS-5 and CES-D). As presented in Table 8, model indices indicated good fit. This model accounted for a significant portion of the variance in PDS-5, $R^2 = .60$, $p = .00$, and CES-D scores, $R^2 = .51$, $p = .00$. Significant, positive direct effects were found from scores of DHEQ-Discrimination, DHEQ-Vicarious Trauma, and Blame Cognitions to PDS-5 scores. Significant, positive direct effects were found from the PDS-5 Trauma Screener and Blame Cognitions to CES-D scores (see Figure 1). There were significant indirect effects from DHEQ-Discrimination, DHEQ-Vicarious Trauma,

and PDS-5 Trauma Screener scores to PDS-5 and CES-D scores through Blame Cognitions (see Table 8). Blame Cognitions fully mediated the relation between the PDS-5 Trauma Screener and the PDS-5. Blame Cognitions partially mediated the relations between DHEQ-Discrimination and DHEQ-Vicarious Trauma and the PDS-5. Blame Cognitions fully mediated the relations between DHEQ-Discrimination and DHEQ-Vicarious Trauma, and the CES-D. Blame Cognitions partially mediated the relation between the PDS-5 Trauma Screener and the CES-D.

In the second structural model (Figure 2), we added GRS scores as a mediator to test the hypothesis that the GRS would increase the amount of variance accounted for in the prediction of PDS-5 and CES-D scores. As presented in Table 8, model indices indicated good fit for Model 2. Significant, positive direct effects were found from DHEQ-Discrimination and DHEQ-Vicarious Trauma to GRS scores (Figure 2). There were no direct effects from GRS scores to PDS-5 and CES-D scores. There were no significant indirect effects between the predictor and criterion variables through GRS scores. The chi-square difference test between the two models indicated that addition of the GRS did not significantly improved model fit, $\chi_2(1) = .601$, $p>.25$.

Discussion

The current study was designed to explicate the unique relations of trauma and discrimination with PTSD and depression in a sample of LGB emerging adults. We utilized the psychological mediation framework to examine how both LGB-specific cognitive processes and blame cognitions might explain the relations of trauma and discrimination with PTSD and depression. This study replicated and extended previous literature (e.g., Bandermann and Szymanski, 2014 and Dworkin et al., 2018) by including rejection sensitivity and gay and bisexual men and differentiating LGB-specific from non-LGB-specific trauma.

The results support the psychological mediation framework and its integration of cognitive theories of trauma (Brewin & Holmes, 2003; Ehlers & Clark, 2000). Building and extending upon the findings of Dworkin et al. (2018), we found that blame cognitions, specifically self-blame and negative cognitions about the world, mediated the relations between discrimination, vicarious trauma, and non-LGB-specific trauma and PTSD and depression symptom severity. Our findings also suggest that discrimination, although not officially classified as a trauma, is related to severity of blame cognitions, PTSD, and depression and thus provides support for arguments to expand the criterion A definition of trauma (Alessi et al., 2013; Holmes et al., 2016). Furthermore, the findings provide support for the role of cognitive theories of trauma in symptom presentation in this sample of LGB emerging adults. In particular, we found that blame cognitions fully mediate the relation between non-LGB-specific trauma and PTSD. This indicates that how an individual interprets, and processes traumatic and/or discriminatory events plays a bigger role in symptom presentation and maintenance than simply the events'

occurrence themselves. Taken together, these findings expand previous research by highlighting that blame cognitions are not unique to trauma survivors but also are associated with cognitive processing and mental health symptoms following discrimination.

We did not find support for the mediating role of LGB-specific cognitive processes (i.e., rejection sensitivity) within the psychological mediation framework. This is consistent with Liao et al. (2014), who found that rejection sensitivity did not mediate the relationship between discrimination and depression symptoms. Similarly, Dworkin et al. (2018) found that a different LGB-specific cognitive process (i.e., internalized homophobia) also was not a significant mediator of these relations, nor of trauma and symptoms. It is likely that the positive correlations observed between rejection sensitivity and discrimination, vicarious trauma, and LGB-specific trauma is explained by the specific measurement of these variables in the current study (i.e., asking about situations that occurred because of one's LGB identity). Furthermore, we found that rejection sensitivity is positively correlated to PTSD and depression symptoms, which is consistent with previous research (Pachankis et al., 2015). Thus, it is likely that rejection sensitivity might be better understood as a criterion variable than a cognitive mediator.

Our univariate analyses yielded results that are important to consider in understanding the overall study findings. Bisexual women endorsed fewer experiences of discrimination than gay men and women, consistent with previous research (Katz-Wise & Hyde, 2012). Balsam and Mohr (2007) found that bisexual men and women reported lower levels of sexual orientation self-disclosure and community connection, compared to gay men and women. Thus, it is possible that bisexual women in this study disclosed

their identity less, protecting them from experiencing as much discrimination as gay men and women. Despite lower frequency of discrimination, bisexual women endorsed higher rates of depression symptoms than gay and bisexual men in this sample, consistent with previous research (Hyde et al., 2008; Kilpatrick, et al., 2013). Researchers have found that LGB individuals who have disclosed their sexual orientation identity report fewer depression symptoms (Juster et al., 2013), while those who conceal this identity report more depression symptoms (Schrimshaw et al., 2013). Our findings suggest that bisexual women would benefit from advocacy and interventions that consider barriers to sexual orientation disclosure in the context of psychological symptoms.

Clinical Implications

This study's results suggest several clinical implications for therapeutic assessment and intervention. Because both discrimination and vicarious trauma are related to symptom severity, clinicians should expand their assessment of trauma beyond the Criterion A definition (American Psychiatric Association, 2013) to include discrimination and vicarious trauma. In addition, our findings suggest that survivors of discrimination and trauma should be assessed for blame cognitions at baseline and throughout treatment. Comprehensive assessment of these experiences and cognitive interpretations of them will enable clinicians to formulate a more nuanced clinical conceptualization of their LGB clients' and better guide their interventions.

Clinical interventions for LGB individuals who have survived trauma and discrimination include preventive interventions (with the goal of preventing a mental health disorder post trauma/discrimination) and long-term treatment (of trauma/discrimination-related mental health disorders). As a preventive intervention,

brief cognitive-behavioral therapy (CBT) programs have been found to be effective in preventing the development of PTSD and depression after one experiences a traumatic event (Bryant et al., 2003; Feldner et al., 2007; Foa, et al., 1995). Brief CBT as a preventive intervention includes psychoeducation, relaxation, and cognitive restructuring. Study findings suggest the need for LGB-specific modifications to these programs. These modifications might include psychoeducation on discrimination rates and common emotional, physiological, cognitive, and behavioral reactions to discrimination, LGB identity affirmation practices, and principles of acceptance and commitment therapy (Hayes et al., 2012) for situations in which an individual is unable to leave a discriminatory environment. These interventions could be easily implemented by outpatient clinicians in a skills group format to facilitate social connectedness amongst LGB clients, which can dampen the effects of adverse life events (Doty et al., 2010; Feinstein et al., 2014; McConnell et al., 2015).

In addition to brief preventive interventions, researchers have developed and evaluated LGB-affirmative CBT, a treatment that targets both unique minority stress process and universal psychopathological risk factors, and has been shown to reduce depression anxiety, substance use, rejection sensitivity, and risky sexual behaviors (Pachankis et al., 2015). However, this treatment does not incorporate trauma theory (Ehlers & Clark, 2000) and evidence-based trauma intervention techniques, such as exposure, to target PTSD symptoms. Given current study findings that LGB discrimination is related to blame cognitions, PTSD, and depression, clinicians should integrate trauma-informed and LGB-affirmative interventions. Trauma-informed interventions should include imaginal (and, if appropriate, in vivo) exposure to triggers,

cognitive processing and restructuring of blame cognitions, coping ahead skills, and safety planning. Imaginal exposure might focus on past events that have occurred, whereas in vivo exposure could include walking on a street where the client has had slurs yelled at him/her/them in order to reduce affective arousal. LGB-affirmative interventions should include: normalization of LGB-minority stress, restructuring of internalized stigma, affirmation of LGB identity, and increased social connectedness with other LGBs (Pachankis, 2014). The integration of these evidence-based techniques can be modified to the individual client's symptom presentation, if they live in a socially and/or legally anti-LGB environment, and/or are unable to avoid situations in which further discrimination might occur. Finally, treatment can have a greater focus on coping ahead to prevent adverse psychological effects should the individual experience more discrimination, trauma, or vicarious trauma in the future.

Research Limitations

Generalizability of the current study's results are limited by its research design, participants, and measurement. Understanding how participants came to have blame cognitions and PTSD and depression symptoms is limited by the study's cross-sectional design. A prospective study could examine if discrimination, trauma, and vicarious trauma are responsible for the development of blame cognitions and PTSD and depression symptoms.

Limitations in the selection of participants include the sampling strategy and sample characteristics. Participants were recruited from LGBTQ+ support/social groups at colleges and universities, and from LGBTQ+ community centers, which might have led to a sampling bias. As a result of belonging to these groups, study participants likely

had LGBTQ+ social connections and subsequently would have social support/affirmation of their sexual identity. These kinds of social connections have been shown to dampen the effects of trauma and discrimination on mental health (Doty et al., 2010; Feinstein et al., 2014; McConnell, et al., 2015). This might also explain the low range of rejection sensitivity scores in this sample. Furthermore, this study did not recruit "opportunity youth" (i.e., disconnected emerging adults) who are unemployed and disconnected from school and social support/connections, and subsequently have higher levels of psychopathology and utilization of mental health services (McLeigh & Boberiene, 2014; Mendelson et al., 2018). The absence of such individuals inthe sample might have led to lower frequencies of trauma and discrimination and lower severity of PTSD and depression symptoms.

The sample's low endorsement of trauma experiences compared to high endorsement of discrimination and vicarious trauma might have happened because participants were uncertain of why the trauma occurred. Items assessing discrimination and vicarious trauma explicitly identified the cause of the event to the participants and the trauma items did not. For example, a discrimination question used in this study was "Being treated unfairly in stores or restaurants because you are LGB," which explicitly indicates that one's LGB identity is the reason for which they are being discriminated. However, the attribution for a trauma might have been more ambiguous because an act of physical or sexual violence might not involve perpetrators explicitly indicating they are engaging in violence because of the individual's LGB identity. Such ambiguity might explain the significant positive skew of the LGB-specific trauma variable, as well as its drop from significance in hierarchical regressions conducted.

Future Research Recommendations

The following research recommendations address the aforementioned limits to internal and external validity. A more prospective research design would enable better understanding of the development of blame cognitions and psychopathology following various forms of discrimination and trauma. Such research could also measure how resiliency and posttraumatic growth might influence the development of blame cognitions and psychological symptoms (Tedeschi & Calhoun, 2004). Broader sampling strategies from non-LGB-specific organizations (e.g., general community centers/clinics) would help recruit "opportunity youth," which would enable researchers to examine how social connectedness might moderate the relations between trauma, discrimination, and PTSD and depression symptoms. This area of research would benefit from cross-sectional studies of large, racially/ethnically diverse samples completing measures of social connectedness/support, racism, sexism, sociopolitical environment, resiliency, and blame cognitions to understand how these constructs might interact and affect symptoms.

This study demonstrates the influence of discrimination and blame cognitions in the mental health functioning of LGB emerging adults. Clinicians working with LGB individuals can use these findings to develop and evaluate LGB-affirmative clinical interventions for survivors of discrimination and trauma. These interventions should also consider the current historical period and social environment of the patients. For example, over the past decade, there have been and are many legal battles over equal rights protections of LGB individuals in the United State (Human Rights Campaign, 2018). As legal battles continue to unfold across the country with rights and protections

differing by state, research on the impact of such initiatives may guide the development post-discrimination interventions for the mental health of LGB individuals.

Appendix A: Tables

Table 1

Demographic variable frequencies

Variable	Frequency	Percentage
Male	103	29.9
Female	241	70.1
Homosexual man/gay	82	23.8
Homosexual woman/lesbian	102	29.7
Bisexual man	21	6.1
Bisexual woman	139	40.4
Hispanic/Latinx &		
Caucasian or White	18	5.2
Multiracial	18	5.2
Not Hispanic/Latinx		
African American or Black	17	4.9
Asian or Asian American	21	6.1
Caucasian or White	251	73
Multiracial	19	5.5
Some/Graduated High School	16	4.7
Some College	221	64.2
Associate Degree	12	3.5
Bachelor's degree	70	20.3
Graduate Degree	25	7.3
Unemployed	22	6.4
Employed part-time	70	20.3
Employed full-time	38	11
Student	214	62.2
Urban	125	36.3
Suburban	175	50.9
Rural	44	12.8

Note. $N = 344$.

Table 2

Descriptive statistics for all variables

Variable	*M*	*Median*	*Mode*	*SD*	*Range in Sample*	*Skew (SE)*	*Kurtosis*
DHEQ-Discrimination	2.35	2.45	0	1.21	0-5.48	-.273 (.131)	-.265 (.262)
DHEQ-Vicarious Trauma	18.99	19	17	4.49	5-30	-.110 (.131)	.093 (.262)
DHEQ-Victimization	.20	0	0	.41	0-1.10	1.528* (.131)	.341 (.262)
PDS-5 Trauma Screener	.81	1	0	.66	0-2.43	-.184 (.131)	-1.449* (.262)
PDS-5	3.98	4.12	0	2.27	0-8.94	-.149 (.131)	-.752 (.262)
CES-D	24.75	23	27	12.89	0-57	.259 (.131)	-.713 (.262)
PTCI-Negative Cognitions About the World	1.91	1.89	1.89	.37	1-2.65	.002 (.131)	-3.19 (.262)
PTCI-Self-Blame	3.15	3.30	1	1.37	1-7	.059 (.131)	-.669* (.262)
GRS	6.37	6.32	6.08	.99	3.46-8.49	-.115 (.131)	-.026 (.262)

Note. *N* = 344. M = mean; SD = standard deviation; SE = standard error; DHEQ = Daily Heterosexist Experiences Questionnaire; PDS-5 = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; CES-D = Center for Epidemiologic Studies Depression Scale; PTCI = Posttraumatic Cognitions Inventory; GRS = Gay-Related Rejection Sensitivity Scale.

**indicates significant skew (Skew/SE > 2).

Table 3

One-way ANOVAs and t-test of demographics on independent variables

		Discrimination		*Vicarious Trauma*		*Victimization*		*PDS-5 Trauma Screener*	
Demographics	*df/N*	*M* (SD)	*t/F*	*M* (SD)	*t/F*	*M* (SD)	*t/F*	*M* (SD)	*t/F*
Sexual Orientation	3, 340	2.35 (1.21)	6.14**[a]	18.98 (4.49)	.81	.20 (.41)	2.28	.81 (.66)	1.36
Race/Ethnicity	3, 340	2.35 (1.21)	1.47	18.98 (4.48)	1.18	.20 (.40)	.71	.81 (.66)	2.21
Education Level	3, 340	2.35 (1.21)	1.04	18.98 (4.48)	.73	.20 (.41)	.35	.81 (.66)	.48
Occupation Status	3, 340	2.35 (1.21)	2.29	18.98 (4.48)	.51	.20 (.41)	.37	.81 (.66)	1.41
Location	3, 340	2.35 (1.21)	.64	18.98 (4.48)	.05	.20 (.41)	.95	.81 (.66)	1.61

Note. *N* = 344. PDS-5 = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; df = degrees of freedom; M = mean; SD = standard deviation.

** *significant at the .01 level.*

[a]Bisexual women had lower levels than homosexual men and homosexual women.

Table 4

One-Way ANOVAs and t-test of demographics on dependent variables

		PDS-5		*CES-D*	
Demographics	*df/N*	*M* (SD)	*t/F*	*M* (SD)	*t/F*
Sexual Orientation	7, 336	3.98 (2.27)	1.57	24.75 (12.89)	3.07*[a]
Race/Ethnicity	7, 336	3.98 (2.27)	1.91	24.75 (12.89)	2.41
Education Level	7, 336	3.98 (2.27)	4.19**[b]	24.75 (12.89)	3.86**c
Occupation Status	7, 336	3.98 (2.27)	1.30	24.75 (12.89)	1.08
Location	7, 336	3.98 (2.27)	1.52	24.75 (12.89)	2.76

Note. *N* = 344. PDS-5 = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; CES-D = Center for Epidemiologic Studies Depression Scale; df = degrees of freedom; M = mean; SD = standard deviation.

** significant at the .05 level; ** significant at the .01 level.*

[a] Bisexual women had higher scores than homosexual/gay men; [b, c] Some college had higher levels than bachelor's degree.

Table 5

Overall sample correlations

Variable	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. Age	-									
2. DHEQ-Discrimination	.05	-								
3. DHEQ-Vicarious Trauma	-.08	.54**	-							
4. DHEQ-Victimization	-.04	.40**	.28**	-						
5. PDS-5 Trauma Screener	-.02	.35**	.23**	.33**	-					
6. PDS-5	-.17**	.47**	.43**	.27**	.39**	-				
7. CES-D	-.20**	.36**	.37**	.21**	.39**	.75**	-			
8. PTCI-Neg Cognitions About World	-.20**	-.33**	-.31**	-.18**	-.32**	-.60**	-.55**	-		
9. PTCI-Self-Blame	-.10	.25**	.21**	.27**	.26**	.47**	.45**	-.53**	-	
10. GRS	-.05	.34**	.41**	.24**	.05	.33**	.24**	-.27**	.24**	-

Note. *N* = 344. DHEQ = Daily Heterosexist Experiences Questionnaire; PDS-5 = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; CES-D = Center for Epidemiologic Studies Depression Scale; PTCI = Posttraumatic Cognitions Inventory; GRS = Gay Related Rejection Sensitivity Scale.

** correlation is significant at the .05 level (2-tailed); ** correlation is significant at the .01 level (2-tailed).*

Table 6

Multiple regression predicting PDS-5 scores

Variable	*B*	*SE B*	*sr*	R^2	$\Delta R2$
Block 1				.04*	
Block 2				.18**	.14**
Block 3				.21**	.02**
Block 4				.32**	.12**
Block 5				.35**	.03**
Age	-.16**	.05	-.15**		
Gender					
Female Bisexuals (compared to Male Bisexuals)	-.50	.27	-.08		
Female Bisexuals (compared to Female Homosexuals)	-.23	.25	-.04		
Female Bisexuals (compared to Male Homosexuals)	-.49	.43	-.05		
PDS-5 Trauma Screener	.76**	.17	.20**		
DHEQ-Victimization	.16	.28	.03		
DHEQ-Discrimination	.55**	.11	.22**		
DHEQ-Vicarious Trauma	.10**	.03	.16**		

Note. *N* = 344. PDS-5 = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; SE =standard error; sr = semi-partial correlation; DHEQ = Daily Heterosexist Experiences Questionnaire.

** significant at the .05 level (2-tailed); ** significant at the .01 level (2-tailed).*

Table 7

Multiple regression predicting CES-D scores

Variable	*B*	*SE B*	*sr*	R^2	$\Delta R2$
Block 1				.06**	
Block 2				.20**	.14**
Block 3				.21	.01
Block 4				.28**	.07**
Block 5				.30**	.02**
Age	-1.11**	.29	-.18**		
Gender					
Female Bisexuals (compared to Male Bisexuals)	-4.05*	1.61	-.12*		
Female Bisexuals (compared to Female Homosexuals)	-2.012	1.47	-.06		
Female Bisexuals (compared to Male Homosexuals)	-3.69	2.57	-.07		
PDS-5 Trauma Screener	5.19**	1.00	.24**		
DHEQ-Victimization	-.16	1.65	-.01		
DHEQ-Discrimination	2.20**	.65	.16**		
DHEQ-Vicarious Trauma	.50**	.16	.14**		

Note. N = 344. CES-D = Center for Epidemiologic Studies Depression Scale; SE = standard error; sr = semi-partial correlation; PDS-5 = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; DHEQ = Daily Heterosexist Experiences Questionnaire.

** significant at the .05 level (2-tailed); ** significant at the .01 level (2-tailed).*

Table 8

Fit indices and indirect effects

	χ^2	*df*	*p*	*RMSEA*	*CFI*	*TLI*	*SRMR*	*β*	*SE*	*95% CI*	*p*
Model 1 (Figure 1)	11.90	8	.156	.038	.995	.978	.017				
Indirect Pathways via Blame Cognitions											
From PDS-5 Trauma Screener to PDS-5								.16**	.04	[.08, .23]	.00
From DHEQ-Discrimination to PDS-5								.16**	.05	[.06, .25]	.00
From DHEQ-Vicarious Trauma to PDS-5								.09*	.04	[.01, .16]	.03
From PDS-5 Trauma Screener to CES-D								.15**	.04	[.06, .23]	.00
From DHEQ-Discrimination to CES-D								.15**	.05	[.05, .25]	.00
From DHEQ-Vicarious Trauma to CES-D								.08*	.04	[.01, .16]	.03
Model 2 (includes GRS; Figure 2)[1]	12.38	9	.193	.033	.996	.980	.016				

Note. $N = 344$. χ^2 = Chi-Square; *df* = degrees of freedom; *p* = *p*-value; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; SRMR = Standardized Root Mean Square Residual; SE = standard error; CI = Confidence Interval; PDS-5 = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; DHEQ = Daily Heterosexist Experiences Questionnaire; CES-D = Center for Epidemiologic Studies Depression Scale; GRS = Gay Related Rejection Sensitivity Scale.

[1]No indirect pathways with GRS were significant.

Appendix B: Figures

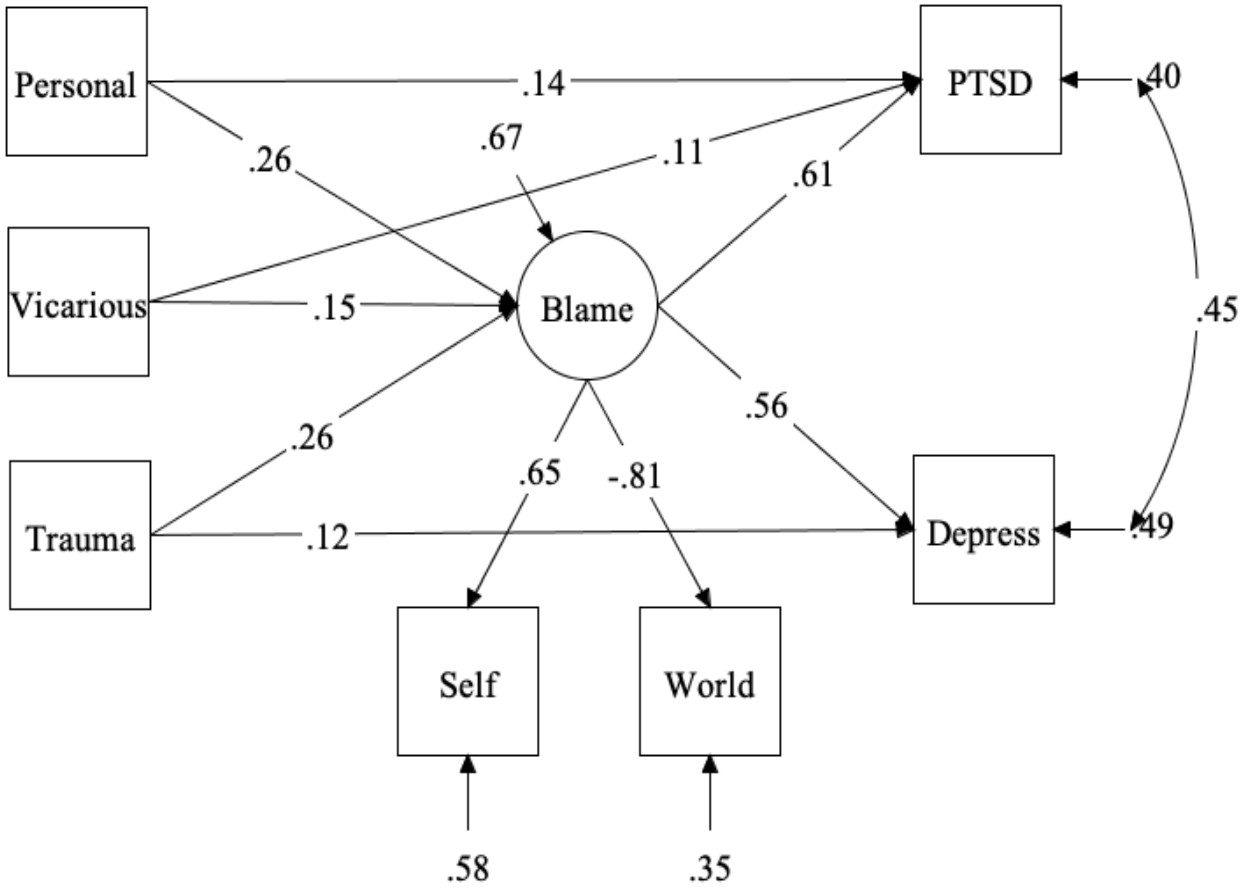

Figure 1. Structural Model 1 (Standardized Estimates Included).
Note. Personal = Daily Heterosexist Experiences Questionnaire - Discrimination; Vicarious = Daily Heterosexist Experiences Questionnaire - Vicarious Trauma; Trauma = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5 Trauma Screener; Blame =Blame Cognitions; Self = Self-Blame; World = Negative Cognitions about the World; PTSD = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; Depress = Center for Epidemiologic Studies Depression Scale.

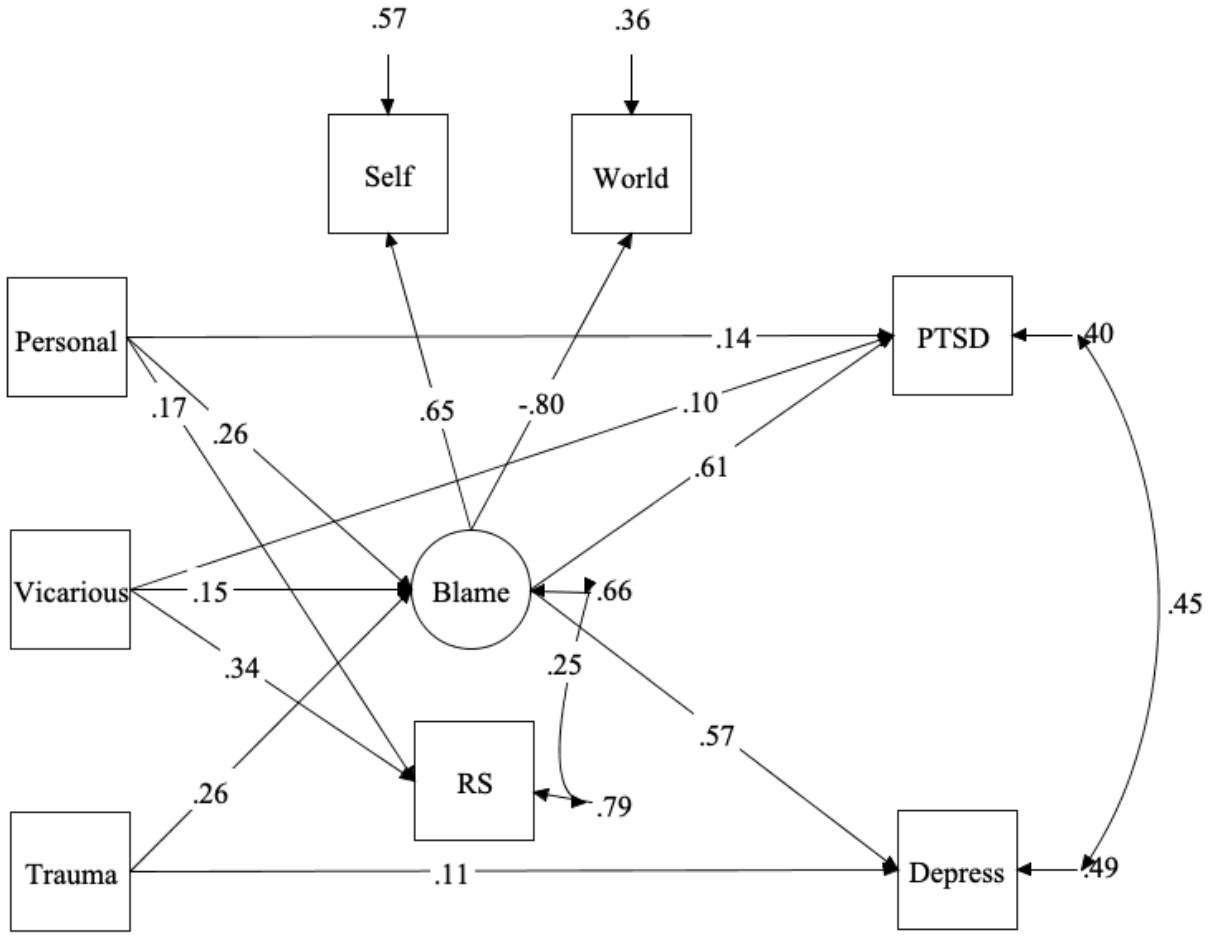

Figure 2. Structural Model 2 (Standardized Estimates Included).
Note. Variable names shortened for diagram purposes; full names as follows:
Personal = Daily Heterosexist Experiences Questionnaire - Discrimination; Vicarious = Daily Heterosexist Experiences Questionnaire - Vicarious Trauma; Trauma = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5 Trauma Screener; Blame =Blame Cognitions; Self = Self-Blame; World = Negative Cognitions about the World; RS = Gay Related Rejection Sensitivity Scale; PTSD = Posttraumatic Stress Disorder Diagnostic Scale for DSM-5; Depress = Center for Epidemiologic Studies Depression Scale

Appendix C: Study Questionnaires

Demographic Questionnaire

Please answer the following questions about yourself:

1. Age: ____
2. Personal Pronouns used: _____
3. Gender Identity:
    a. Male
    b. Female
    c. Trans male/trans man
    d. Trans female/trans woman
    e. Genderqueer/gender non-conforming
    f. Other identity _____
4. Sexual Orientation:
    a. Homosexual man/gay
    b. Homosexual woman/lesbian
    c. Bisexual man
    d. Bisexual woman
    e. Other _____
5. Race (check all that apply):
    a. African American or Black
    b. American Indian or Alaskan Native
    c. Asian or Asian American
    d. Caucasian or White
    e. Middle Eastern
    f. Native Hawaiian or other Pacific Islander
    g. Multiracial
6. Ethnicity:
    a. Hispanic or Latinx
    b. Not Hispanic or Latinx
7. Education Level:
    a. Some high school
    b. High school diploma or equivalent
    c. Some college
    d. Associate degree
    e. Bachelor's degree
    f. Master's degree
    g. Professional degree beyond a bachelor's degree
    h. Doctorate degree
8. Occupation:
    a. Unemployed
    b. Employed part-time
    c. Employed full-time
    d. Student
9. Location of residence:

a. Urban
b. Suburban
c. Rural

Daily Heterosexist Experiences Questionnaire (DHEQ)

The following is a list of experiences that LGBT people sometimes have. Please read each one carefully, and then respond to the following questions:

How much has this problem distressed or bothered you*?*

0 - Did not happen/not applicable to me
1 - It happened, and it bothered me NOT AT ALL
2 - It happened, and it bothered me A LITTLE BIT
3 - It happened, and it bothered me MODERATELY
4 - It happened, and it bothered me QUITE A BIT
5 - It happened, and it bothered me EXTREMELY

For problems you have experienced, please rate their frequency?

1 - once
2 - a few times (2-3)
3 - about once a month
4 - about once a week
5 - every day/multiple times a day

1. Hearing about LGBT people you know being treated unfairly

Distress/Frequency___/___

2. Hearing about LGBT people you don't know being treated unfairly

Distress/Frequency___/___

3. Hearing about hate crimes (e.g., vandalism, physical or sexual assault) that happened to

LGBT people you don't know *Distress/Frequency___/___*

4. Being called names such as "fag" or "dyke" *Distress/Frequency___/___*

5. Hearing other people being called names such as "fag" or "dyke"

Distress/Frequency___/___

6. Hearing someone make jokes about LGBT people *Distress/Frequency___/___*

7. People staring at you when you are out in public because you are LGBT

Distress/Frequency___/___

8. Being verbally harassed by strangers because you are LGBT

Distress/Frequency___/___

9. Being verbally harassed by people you know because you are LGBT

Distress/Frequency___/___

10. Being treated unfairly in stores or restaurants because you are LGBT

Distress/Frequency___/___

11. People laughing at you or making jokes at your expense because you are LGBT

Distress/Frequency___/___

12. Hearing politicians say negative things about LGBT people

Distress/Frequency___/___

13. Being punched, hit, kicked, or beaten because you are LGBT

Distress/Frequency___/___

14. Being assaulted with a weapon because you are LGBT *Distress/Frequency___/___*

15. Being raped or sexually assaulted because you are LGBT

Distress/Frequency___/___

16. Having objects thrown at you because you are LGBT *Distress/Frequency___/___*

PTSD Diagnostic Scale for DSM-5 (PDS-5) – Trauma Screener

Have you ever experienced, witnessed, or been repeatedly confronted with any of the following [and not attributed its occurrence to your sexual orientation]? Please check all that apply and indicate how frequently you have had that experience from the following choices:

1 - once
2 - a few times (2-3)
3 - about once a month
4 - about once a week
5 - every day/multiple times a day

- ☐ Serious, life threatening illness (heart attack, etc.) *Frequency*_____
- ☐ Physical Assault (attacked with a weapon, severe injuries from a fight, held at gunpoint, etc.) *Frequency*_____
- ☐ Sexual Assault (rape, attempted rape, forced sexual act with a weapon, etc.) *Frequency*_____
- ☐ Military combat or lived in a war zone *Frequency*_____
- ☐ Child abuse (severe beatings, sexual acts with someone 5 years older than you, etc.) *Frequency*_____
- ☐ Accident (serious injury or death from a car, at work, a house fire, etc.) *Frequency*_____
- ☐ Natural disaster (severe hurricane, flood, earthquake, etc.) *Frequency*_____

Gay-Related Rejection Sensitivity Scale – Male version (GRS)

Please read the following descriptions of situations and answer the two questions that follow each one. Imagine each situation as vividly as you can, as if you were actually there:

1. You bring a male partner to a family reunion. Two of your old-fashioned aunts don't come talk to you even though they see you.

a. How *concerned or anxious* would you be that they didn't talk to you because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned				Very Concerned	

b. How *likely* is it that they didn't talk to you because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

2. A 3-year old child of a distant relative is crawling on your lap. His mom comes to take him away.

a. How *concerned or anxious* would you be that she took him away because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned				Very Concerned	

b. How *likely* is it that she took him away because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

3. You've been dating someone for a few years now, and you receive a wedding invitation to a straight friend's wedding. The invite was addressed only to you, not you and a guest.

a. How *concerned or anxious* would you be that the invite was addressed only to you because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned				Very Concerned	

b. How likely is it that the invite was addressed only to you because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely				Very Likely	

4. You go to a job interview and the interviewer asks if you are married. You say that you and your partner have been together for 5 years. You later find out that you don't get the job.

a. How *concerned or anxious* would you be that you didn't get the job because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned				Very Concerned	

b. How *likely* is it that you didn't get the job because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely				Very Likely	

5. You are going to have surgery, and the doctor tells you that he would like to give you an HIV test.

a. How *concerned or anxious* would you be that the doctor would like to give you an HIV test because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How *likely* is it that the doctor would like to give you an HIV test because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

6. You go to donate blood and the person who is supposed to draw your blood turns to her co-worker and says, "Why don't you take this one?"

a. How *concerned or anxious* would you be that she said that because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How *likely* is it that she said that because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

7. You go get an STD check-up, and the man taking your sexual history is rude towards you.

a. How concerned or anxious would you be that he was rude to you because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How likely is it that he was rude to you because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

8. You bring a guy you are dating to a fancy restaurant of straight patrons, and you are seated away from everyone else in a back corner of the restaurant.

a. How concerned or anxious would you be that you were seated in the back of the restaurant because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How *likely* is it that you were seated in the back of the restaurant because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

9. You and your partner are on a road trip and decide to check into a hotel in a rural town. The sign out front says there are vacancies. The two of you go inside, and the woman at the front desk says that there are no rooms left.

a. How concerned or anxious would you be that she said that because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How likely is it that she said that because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

10. You go to a party and you and your partner are the only gay people there. No one seems interested in talking to you.

a. How concerned or anxious would you be that no one seemed interested in talking to you because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How likely is it that no one seemed interested in talking to you because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

11. You are in a locker room in a straight gym. One guy nearby moves to another area to change clothes.

a. How *concerned or anxious* would you be that he moved away because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How likely is it that he moved away because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

12. Your colleagues are celebrating a co-worker's birthday at a restaurant. You are not invited.

a. How concerned or anxious would you be that you were not invited because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How likely is it that you were not invited because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

Gay-Related Rejection Sensitivity Scale – Female version (GRS)

Please read the following descriptions of situations and answer the two questions that follow each one. Imagine each situation as vividly as you can, as if you were actually there:

1. You bring a female partner to a family reunion. Two of your old-fashioned aunts don't come talk to you even though they see you.

a. How *concerned or anxious* would you be that they didn't talk to you because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How *likely* is it that they didn't talk to you because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

2. A 3-year old child of a distant relative is crawling on your lap. Her mom comes to take her away.

a. How *concerned or anxious* would you be that she took him away because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How *likely* is it that she took him away because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

3. You've been dating someone for a few years now, and you receive a wedding invitation to a straight friend's wedding. The invite was addressed only to you, not you and a guest.

a. How *concerned or anxious* would you be that the invite was addressed only to you because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned				Very Concerned	

b. How likely is it that the invite was addressed only to you because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely				Very Likely	

4. You go to a job interview and the interviewer asks if you are married. You say that you and your partner have been together for 5 years. You later find out that you don't get the job.

a. How *concerned or anxious* would you be that you didn't get the job because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned				Very Concerned	

b. How *likely* is it that you didn't get the job because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely				Very Likely	

5. You are going to have surgery, and the doctor tells you that he would like to give you an HIV test.

a. How *concerned or anxious* would you be that the doctor would like to give you an HIV test because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned				Very Concerned	

b. How *likely* is it that the doctor would like to give you an HIV test because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

6. You go to donate blood and the person who is supposed to draw your blood turns to her co-worker and says, "Why don't you take this one?"

a. How *concerned or anxious* would you be that she said that because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned					Very Concerned

b. How *likely* is it that she said that because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

7. You go get an STD check-up, and the man taking your sexual history is rude towards you.

a. How concerned or anxious would you be that he was rude to you because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned					Very Concerned

b. How likely is it that he was rude to you because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

8. You bring a girl you are dating to a fancy restaurant of straight patrons, and you are seated away from everyone else in a back corner of the restaurant.

a. How concerned or anxious would you be that you were seated in the back of the restaurant because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned					Very Concerned

b. How *likely* is it that you were seated in the back of the restaurant because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

9. You and your partner are on a road trip and decide to check into a hotel in a rural town. The sign out front says there are vacancies. The two of you go inside, and the woman at the front desk says that there are no rooms left.

a. How concerned or anxious would you be that she said that because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned					Very Concerned

b. How likely is it that she said that because of your sexual orientation?

1	2	3	4	5	6
Very Unlikely					Very Likely

10. You go to a party and you and your partner are the only gay people there. No one seems interested in talking to you.

a. How concerned or anxious would you be that no one seemed interested in talking to you because of your sexual orientation?

1	2	3	4	5	6
Very Unconcerned					Very Concerned

b. How likely is it that no one seemed interested in talking to you because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

11. You are in a locker room in a straight gym. One girl nearby moves to another area to change clothes.

a. How *concerned or anxious* would you be that he moved away because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How likely is it that he moved away because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

12. Your colleagues are celebrating a co-worker's birthday at a restaurant. You are not invited.

a. How concerned or anxious would you be that you were not invited because of your sexual orientation?

1 2 3 4 5 6

Very Unconcerned Very Concerned

b. How likely is it that you were not invited because of your sexual orientation?

1 2 3 4 5 6

Very Unlikely Very Likely

Posttraumatic Cognitions Inventory

"We are interested in the kinds of thoughts which you may have had after [experiencing LGB-specific trauma and/or discrimination.]" Please read each statement carefully and tell us how much you AGREE or DISAGREE with each statement. People react to in many different ways. There are no right or wrong answers to these statements.

1 – Totally disagree
2 – Disagree very much
3 – Disagree slightly
4 – Neutral
5 – Agree slightly
6 – Agree very much
7 – Totally agree

1. The event happened because of the way I acted. _____
2. I can't trust that I will do the right thing. _____
3. I am a weak person. _____
4. I will not be able to control my anger and will do something terrible. _____
5. I can't deal with even the slightest upset. _____
6. I used to be a happy person but now I am always miserable. _____
7. People can't be trusted. _____
8. I have to be on guard all the time. _____
9. I feel dead inside. _____
10. You can never know who will harm you. _____
11. I have to be especially careful because you never know what can happen next. _____
12. I am inadequate. _____
13. I will not be able to control my emotions, and something terrible will happen. _____
14. If I think about the event, I will not be able to handle it. _____
15. The event happened to me because of the sort of person I am. _____
16. My reactions since the event mean that I am going crazy. _____

17. I will never be able to feel normal emotions again. _____
18. The world is a dangerous place. _____
19. Somebody else would have stopped the event from happening. _____
20. I have permanently changed for the worse. _____
21. I feel like an object, not like a person. _____
22. Somebody else would not have gotten into this situation. _____
23. I can't rely on other people. _____
24. I feel isolated and set apart from others. _____
25. I have no future. _____
26. I can't stop bad things from happening to me. _____
27. People are not what they seem. _____
28. My life has been destroyed by the trauma. _____
29. There is something wrong with me as a person. _____
30. My reactions since the event show that I am a lousy coper. _____
31. There is something about me that made the event happen. _____
32. I will not be able to tolerate my thoughts about the event, and I will fall apart. _____
33. I feel like I don't know myself anymore. _____
34. You never know when something terrible will happen. _____
35. I can't rely on myself. _____
36. Nothing good can happen to me anymore. _____

PTSD Diagnostic Scale for DSM-5 (PDS-5)

Instructions: Please read each statement carefully and circle the number that best describes how often that problem has been happening and how much it upset you over THE LAST MONTH.

For example, if you've talked to a friend about the trauma one time in the past month, you would respond like this: (because one time in the past month is less than once a week)

Talking to other people about the trauma

0	(1)	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

1. Unwanted upsetting memories about the trauma

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

2. Bad dreams or nightmares related to the trauma

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

3. Reliving the traumatic event or feeling as if it were actually happening again

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

4. Feeling very EMOTIONALLY upset when reminded of the trauma

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

5. Having PHYSICAL reactions when reminded of the trauma (for example, sweating, heart racing)

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

6. Trying to avoid thoughts or feelings related to the trauma

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

7. Trying to avoid activities, situations, or places that remind you of the trauma or that feel more dangerous since the trauma

0	1	2	3	4
NOnce a week oor less/a little t a t a l l		2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

8. Not being able to remember important parts of the trauma

0	1	2	3	4
NOnce a week oor less/a little t a t a l l		2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

9. Seeing yourself, others, or the world in a more negative way (for example, "I can't trust people," "I'm a weak person")

0	1	2	3	4
NOnce a week oor less/a little t a t a l l		2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

10. Blaming yourself or others (besides the person who hurt you) for what happened

0	1	2	3	4
NOnce a week oor less/a little t a t a l l		2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

11. Having intense negative feelings like fear, horror, anger, guilt or shame

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

12. Losing interest or not participating in activities you used to do

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

13. Feeling distant or cut off from others

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

14. Having difficulty experiencing positive feelings

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

15. Acting more irritable or aggressive with others

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

16. Taking more risks or doing things that might cause you or others harm (for example, driving recklessly, taking drugs, having unprotected sex)

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

17. Being overly alert or on-guard (for example, checking to see who is around you, being uncomfortable with your back to a door)

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

18. Being jumpy or more easily startled (for example when someone walks up behind you)

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

19. Having trouble concentrating

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

20. Having trouble falling or staying asleep

0	1	2	3	4
	NOnce a week oor less/a little t a t a l l	2 to 3 times a week/somewh at	4 to 5 times a week/very much	6 or more times a week/severe

DISTRESS AND INTERFERENCE

21. How much have these difficulties been bothering you?

0	1	2	3	4
NOne at all	Once a week or less/a little bit	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

22. How much have these difficulties been interfering with your everyday life (for example relationships, work, or other important activities)?

0	1	2	3	4
NOne at all	Once a week or less/a little bit	2 to 3 times a week/somewhat	4 to 5 times a week/very much	6 or more times a week/severe

SYMPTOM ONSET AND DURATION

23. How long after the trauma did these difficulties begin? [circle one]
    a) Less than 6 months
    b) More than 6 months

24. How long have you had these trauma-related difficulties? [circle one]
    a) Less than 6 months
    b) More than 6 month

Center for Epidemiologic Studies Depression Scale (CES-D)

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past month.

	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	☐	☐	☐	☐
2. I did not feel like eating; my appetite was poor.	☐	☐	☐	☐
3. I felt that I could not shake off the blues even with help from my family or friends.	☐	☐	☐	☐
4. I felt I was just as good as other people.	☐	☐	☐	☐
5. I had trouble keeping my mind on what I was doing.	☐	☐	☐	☐
6. I felt depressed.	☐	☐	☐	☐
7. I felt that everything I did was an effort.	☐	☐	☐	☐
8. I felt hopeful about the future.	☐	☐	☐	☐
9. I thought my life had been a failure.	☐	☐	☐	☐
10. I felt fearful.	☐	☐	☐	☐
11. My sleep was restless.	☐	☐	☐	☐
12. I was happy.	☐	☐	☐	☐
13. I talked less than usual.	☐	☐	☐	☐
14. I felt lonely.	☐	☐	☐	☐
15. People were unfriendly.	☐	☐	☐	☐
16. I enjoyed life.	☐	☐	☐	☐
17. I had crying spells.	☐	☐	☐	☐
18. I felt sad.	☐	☐	☐	☐

19. I felt that people dislike me.	☐	☐	☐	☐
20. I could not get “going.”	☐	☐	☐	☐

References

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