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Internalized Homophobia of LGB Emerging Adults: Identity Complexities and Mental Health

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Running head: INTERNALIZED HOMOPHOBIA

Internalized Homophobia of LGB Emerging Adults:
Identity Complexities and Mental Health

by

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DISSERTATION

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**INTERNALIZED HOMOPHOBIA OF LGB EMERGING ADULTS:
IDENTITY COMPLEXITIES AND MENTAL HEALTH**

presented on April 8, 2019

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Dedication

To my loving partner Brett: Thank you for always pushing me toward my goals while also remaining empathic and validating to the challenges.

I dedicate this finished product to you and to our future.

To the Georgia State University Counseling & Testing Center: My spirit, energy, and compassion for our students and colleagues will forever remain in these hallways.

Thanks to each and every one of you; I will never forget my incredible experiences here.

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Abstract

Meyer's (2003) minority stress model explores the relationship between the social stress of sexual minorities and mental health. Internalized homophobia is linked to feelings of shame, guilt, and worthlessness, and contributes to the development of mental health problems (Ramirez-Valles, Molina, & Dirkes, 2013). The present study examined the relationship between internalized homophobia and mental health in young adults who identify as LGB. Participants ($N=130$) were recruited from universities in Connecticut and Georgia, as well as from the Amazon Mechanical Turk website. It was hypothesized that higher levels of internalized homophobia would be related to higher levels of self-reported anxiety, depression, and substance use. Pearson correlation analyses revealed significant moderate positive correlations between internalized homophobia and depression, $r = .565, p < .001$, anxiety, $r = .493, p < .001$, and substance use, $r = .360, p < .001$. Three one-way ANOVAs were performed to examine differences on depression, anxiety, and substance use, respectively, for levels of internalized homophobia. No significant differences were observed, although significance levels were narrowly missed for depression and substance use. The study revealed important multiple regression findings for sociodemographics with (a) depression scores decreasing for higher social class and increasing for international students, (b) anxiety scores increasing for lack of family support and international students' status, and (c) substance use scores decreasing for international students status and higher social class. The implications of LGB issues for social class and international student status are discussed with regard to recommendations for multicultural psychology. The complexities of internalized homophobia, its process, and its clinical assessment with LGB clients are also discussed.

Keywords: LGB, minority stress, internalized homophobia, mental health, assessment

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Internalized Homophobia of LGB Emerging Adults: Identity Complexities and Mental Health

Lesbian, gay, and bisexual (LGB) populations suffer from poorer mental health than their straight counterparts. King et al., (2008) conducted a meta-analysis of 25 epidemiological studies and concluded that LGB persons are 1.5 times more likely to suffer from symptoms of clinical depression and anxiety over the lifespan when compared to heterosexuals. Epidemiological studies have demonstrated high rates of internalizing and externalizing mental health disorders among LGB adults (Gattis, Sacco, & Cunningham-Williams, 2012; Haas et al., 2011; Mustanski, Garofalo, & Emerson, 2010). A common coping mechanism among LGB people is to self-medicate with drugs and alcohol, which can exacerbate mental health problems and lead to increased risk for suicidal ideation, suicide attempts, and potential death. King et al. (2008) found that openly homosexual and bisexual persons were at twice the risk for attempting suicide than heterosexuals.

The literature suggests that stigma and discrimination play a role in suicidal behavior and mental health problems among LGB individuals (Meyer, 2003). Internalized stigma refers to a sense of shame and self-loathing that are based on an internalization of negative societal views that LGB people are “abnormal” (Chaudoir, Earnshaw, & Andel, 2013; Goffman, 1963; Levy, Celen-Demirtas, Surguladze, & Sweeney, 2014). Internalized homophobia, a construct specific to the LGB population, occurs when LGB individuals accept culturally negative views of homosexuality and bisexuality. Negativism and shame then become part of their sexual identities (Ross & Rosser, 1996). However, the degree to which internalized homophobia leads to or exacerbates psychopathology in young adults is not well documented in the LGB literature.

Purpose of the Study

This study attempted to address the above-mentioned knowledge gap by providing information about LGB emerging adults' experience with internalized homophobia, and whether internalized homophobia was related to current negative mental health functioning. Specifically, this study was conducted to: (a) identify levels (low, moderate, and high) of internalized homophobia in LGB emerging adults; and (b) determine the relationship between internalized homophobia levels and self-reported depression, anxiety, and substance abuse problems in LGB emerging adults. This initial section introduces: (a) the nature of mental health concerns within the LGB community, (b) the nature of the problem of internalized homophobia, (c) proposed models for understanding LGB mental health concerns, and (d) applications of this knowledge to clinical mental health services.

A Review of the Literature

Research suggests that 25% of LGB persons suffer from significant mental and physical health disparities (Haas et al., 2011) relative to heterosexual individuals, though distinguishing the nature and types of health disparities for this population is still in its infancy. For instance, Boehmer (2002) compiled a large-scale review of the literature from the MEDLINE database (1980–1999) and found that only 0.1% of the articles included LGB health. The reason for the very limited literature may have been because in 1992, 1.8% of adult respondents to the National Health and Social Life Survey identified themselves as LGB. Self-identification of LGB persons has nearly doubled over the past 20 years. In 2012, the Gallup Daily Tracking Survey reported that 3.4% of people identified as LGBT (Gates & Newport, 2012). The most recent data suggest that while LGB persons may be more comfortable disclosing their sexual identity because of society's increasing acceptance of homosexuality, there remain other factors contributing to LGB

health problems.

For the purposes of the study, LGB mental health problems are separated into categories of: general mental health, substance use, and suicidal behavior (Haas et al., 2011; King et al., 2008). While it is comforting that diversity in sexual identity is becoming more widely recognized, the “battle” for fair and equitable treatment of LGB people is far from over.

General Mental Health Concerns for LGB People

As stated previously, epidemiological studies have documented high rates of internalizing and externalizing mental health disorders among LGB adults. The most commonly identified psychiatric concerns include: (a) mood disorders, (b) anxiety disorders, (c) substance use disorders, and (d) suicidal behavior (Gattis et al., 2012; Haas et al., 2011; Mustanski et al., 2010).

Sex differences for LGB people. When separated by sex, one study (Bostwick, Boyd, Hughes, & McCabe, 2010) showed that men who reported same-sex attraction and behavior also reported higher rates of most mood and anxiety disorders than lesbian women, who reported lower rates of every disorder examined. Men who identified as bisexual suffered a higher prevalence of psychological concerns than bisexual women, indicating the complexity and importance of the intersectionality of gender with sexual identity (Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002). Men were significantly more likely to develop mood disorders when unsure about their sexual identity than straight men, whereas unsure women were no more likely than heterosexual women to develop psychological disorders (Jorm et al., 2002). These findings about sex differences point to the importance of separating gender and sexual identity as well as studying intersectionality effects (i.e., gender and sexual identity) when examining risks for psychopathology in LGB individuals (Haas et al., 2011; Jorm et al., 2002).

Substance Use

As stated previously, a common coping mechanism among LGB people is self-medication with drugs and alcohol, which exacerbates mental health problems. Overall, elevated rates of substance use disorders have been reported in one third of adults who self-identify as LGB (Bostwick et al., 2010; King et al., 2008). When compared to heterosexuals, other research (Gattis et al., 2012) has indicated that LGB populations are at an increased risk for self-medicating with drugs and/or alcohol.

Sex differences in substance use. Based on gender and sexual identity, research examining the nature and severity of substance use among sexual minorities has yielded mixed results. A study examined substance use disorder and dependence along three dimensions: identity, attraction, and behavior (McCabe, Hughes, Bostwick, West, & Boyd, 2009). When compared to heterosexual women, lesbian women reported more marijuana and alcohol use and dependence, and bisexual women reported more past-year heavy drinking. Another study examined risk behaviors in heterosexual men who have sex with other men (i.e., behavior discordant); these behavior discordant men reported higher rates of alcohol and drug abuse during sexual encounters than behavior concordant men (as cited in McCabe et al., 2009). Taken together, results suggest that women with same sex attraction and behavior are at a higher risk to develop substance use than their female heterosexual counterparts, and that men who identify as straight but sleep with other men are also at increased risk (King et al., 2008; McCabe et al., 2009).

Suicidal Behavior

The LGB population is also at an increased risk for suicidal ideation, suicide attempts, and consequent deaths (Haas et al., 2011). King et al. (2008) found that openly homosexual and

bisexual persons were at twice the risk for attempting suicide than heterosexuals. Another study (Rutherford, McIntyre, Daley, & Ross, 2012) found even more pronounced differences, where sexual minority adults were 2.5 times more likely to have attempted suicide over the course of their lifetime. In a nonrandom sample (Remafedi, Farrow, & Deisher, 1991) of LGB youth who attempted suicide, 21% of suicide attempts were classified as lethal and required hospital admission, despite widespread concern about possible exaggeration of symptoms among LGB adolescents. In a longitudinal study in New Zealand, Haas et al. (2011) found that at age 21, those who identified as LGB were six times more likely to have attempted suicide at least once over the lifespan.

Sex differences in suicide. King et al. (2008) found that gay/bisexual men attempted suicide more frequently than lesbian/bisexual women. Gilman et al. (2001) differentiated between men and women, showing that lesbian/bisexual women were more likely to exhibit suicidal ideation, while gay/bisexual men were at increased risk for suicide attempts in comparison to heterosexual individuals.

Studies examining adolescents who identified as gay, lesbian, or bisexual tended to come to the same conclusions (Haas et al., 2011). Homosexual adolescents, specifically young men, were more likely to engage in suicidal behavior (ideation and attempts) than heterosexual adolescents. King et al. (2008) concluded that gay/bisexual male youth were four times more likely to attempt suicide when compared to heterosexual male peers.

In terms of suicide deaths, conclusions are not so easily drawn. It is rare that a suicide death report includes a person's sexual identity, and thus, it is difficult to demonstrate a correlation between the two. However, some researchers (as cited in Haas et al., 2011) have attempted the "psychological autopsy" method, in which sexual identity was determined by

speaking with family and friends of the deceased. Using this method, research has found that LGB persons were not overrepresented in suicide death statistics (Haas et al., 2011). However, this finding of no difference may be due to underreporting or difficulty in defining sexual identity.

Some of the risk factors associated with suicide in LGB individuals include: (a) individual discrimination, (b) minority stress, (c) prejudice, and (d) stigma (Haas et al., 2011). Below are models denoting the detrimental effects of stigma and minority stress on LGB mental health.

Models for Understanding LGB Mental Health Concerns

Feminist and Queer Theory. Feminist and queer theories are two conceptual frameworks that can be used to understand the problem of internalized homophobia and mental health concerns of LGB individuals. Feminist theory centers on social and gender-role analyses and consciousness raising on women's issues. This model emphasizes that female oppression and minority status, as perpetrated by the dominant patriarchy, lead to psychopathology (Israeili & Santor, 2000).

Queer theory (Watson, 2005) is an extension of feminist theory and is specific to the oppression of LGB individuals, although it is used to understand a diversity of sexual identity groups. Queer theory examines at the societal level normative and deviant categorization with regard to sexual identities and genders. Queer theory thus focuses on how identity is intertwined with culture, history, context, gender, and sexuality. Many queer theorists are deconstructionists and challenge the view of identity as singular and fixed. Identity is considered fluid. Queer theory suggests that persistent internalized homophobia develops within LGB individuals from socially constructed views about heteronormativity and resultant privilege, making LGB

individuals feel powerless against the dominant social structure and also increasing feelings of shame, low self-worth, and helplessness (Watson, 2005).

LGB Identity Development Models

A second framework that may aid in understanding mental health concerns of LGB individuals is sexual identity development (Zoeterman & Wright, 2014). Identity and personality formation as a sexual minority can be complicated by many factors other than adolescence and emerging adulthood, including: (a) social pressure to conform to heteronormativity, and (b) development of internalized homophobia (Ross & Rosser, 1996), lack of family and social support (Haas et al., 2011), and experiences of discrimination and violence (Meyer, 2003). There are two main paradigms of LGB identity development: (a) stage models, in which an individual progresses through exclusive phases (Mohr & Fassinger, 2000), and (b) dimensional models, which examine the specific aspects or dimensions of an LGB client's current experience as a sexual minority (Zoeterman & Wright, 2014).

Cass's (1984) stage model is among the most widely used and purports that LGB individuals pass through six stages in forming their unique identities: (a) identity confusion, (b) comparison, (c) tolerance, (d) acceptance, (e) pride, and (f) synthesis (as cited in Zoeterman & Wright, 2014). Initially, LGB persons are confused about their emotional and/or sexual feelings toward members of the same sex. They feel alienated from their straight peers, and thus seek support and guidance from LGB peers who may already be an established member of the LGB community. They then integrate themselves into the LGB community and find social support and connection. The final phase is eventual self-acceptance (Zoeterman & Wright, 2014).

A common criticism of Cass' (1984) model is that systemic contexts are largely ignored. Those LGB individuals living in societies where heteronormativity reigns may experience

self-stigma or internalized homophobia and have a challenging task in integrating their divergent identities. Additionally, this model presumes that all stages are linear; that is, once you have moved on to the next stage, it is unlikely that you will return to a previous stage (Zoeterman & Wright, 2014). This one-way progression becomes problematic for LGB individuals when they meet new people and need to decide when, where, how, and if to self-disclose.

An important similarity between stage models and dimensional models is the characterization of common LGB sexual identity experiences. Overarching themes include: (a) self-definition by an LGB individual, (b) self-acceptance versus denial of sexual minority status, and (c) disclosure of sexual identity to others (Zoeterman & Wright, 2014). These three characteristics are crucial to understanding the development of identity and personality for LGB individuals.

Minority Stress Models

Research has shown a connection between minority stress of LGB individuals and mental health problems. Brooks (1981) defines minority stress as, “a state intervening between the sequential antecedent stressors of culturally sanctioned, categorically ascribed inferior status, social prejudice and discrimination, the impact of these environmental forces on psychological well-being, and consequent readjustment for adaptation” (p. 107, as cited in Alessi, 2014). LGB minority stress is unique. LGB individuals experience stigma and discrimination because their identity goes against cultural and social norms. It is suggested that LGB individuals are constantly attempting to live in a world where discrimination and prejudice can occur unexpectedly, and when unable to face these demands, psychological difficulties ensue (Alessi, 2014).

Minority stress models are appropriate for understanding the dynamic between social

stress and psychopathology. In Hatzenbuehler's (2009) framework, stress occurs due to a marginalized status in society. This position of oppression places LGB individuals at a higher risk for developing psychological distress. Furthermore, Hatzenbuehler stated that the relationship between minority stress and psychological dysfunction is mediated by general psychological processes, such as social/coping skills, emotional regulation, interpersonal skills, and cognitive processing. In addition, this model suggests various protective factors that mediate minority stress (see Figure 1). For example, an LGB individual with an accepting family and positive peer support may be at a lower risk for mental health concerns despite experiencing minority stress.

Meyer's (2003) minority stress model is commonly used to understand the relationship between social stress and pathology among the LGB population. This model focuses on coping. More specifically, Meyer suggests that minority stress for LGB persons operates along a continuum "from distal stressors, which are typically defined as objective events and conditions, to proximal personal processes, which are by definition subjective because they rely on individual perceptions and appraisals" (p. 676). Coping with social stress and discrimination is "easier" when the stressor is distal, such as witnessing a news story on a hate crime perpetrated against a gay man. However, individual coping responses become more difficult when a personal attack occurs (i.e., proximal stressor), potentially leading to anxiety and depression. Meyer distinguishes four components that are specific to LGB minority stress: (a) chronic and acute prejudice-related events, (b) concealment of sexual identity, (c) internalized stigma, and (d) internalized homophobia (Alessi, 2014).

Internalized homophobia. Internalized homophobia, proposed as a component in Meyer's (2003) minority stress model, appears to play an important role in exacerbating

psychopathology in LGB individuals. Ross and Rosser (1996) define internalized homophobia as the acceptance and integration of cultural heteronormativity into the self-appraisal of LGB individuals. Heteronormativity refers to the belief that heterosexuality, or relationships between men and women, is the only acceptable social norm. Self-hatred, loathing, disgust, and shame based on dissatisfaction with one's sexual identity become internalized at conscious and unconscious levels. This dissatisfaction is largely based on negative societal depictions of the LGB community, which are prevalent in the media and evident in a variety of other sources (Ross & Rosser, 1996).

Internalized homophobia is positively associated with depression and suicidal ideation (Ramirez-Valles et al., 2013). LGB individuals who report higher rates of internalized homophobia also report lower self-acceptance, lower self-esteem, fear of disclosing their sexual identity to heterosexual individuals, and acceptance of popular myths about homosexuality (Ross & Rosser, 1996). Frost and Meyer (2009) found that participants attempted to escape confronting their own internalized homophobia by self-medicating with drugs and alcohol, engaging in risky sexual behavior, avoiding long-term intimate relationships, and having anonymous sexual experiences.

Internalized Homophobia and College Campus Climate

Many college students and young adults contend with internalized homophobia and experiences of discrimination on college campuses. LGB individuals may develop, explore, and experience their sexual identity for the first time during college. *Campus climate*, a term that refers to the attitudes, beliefs, and behaviors of students and faculty members regarding inclusion/exclusion of certain groups, directly impacts the daily lives and mental health of the entire student body (Tetreault, Fette, Meidlinger, & Hope, 2013). Recent attention has been paid

to the campus climate for LGB students, attending to issues, such as: (a) sexual identity development, (b) best practices with LGB students in university counseling centers, (c) creating a supportive instead of neutral or negative environment, (d) inclusivity among peers, and (e) reducing safety concerns (Tetreault et al., 2013).

Research has indicated that LGB individuals report experiencing hostile campus environments due to anti-LGB attitudes of students and/or faculty members (Rankin, 2004). One study found that 19% of LGB students were concerned for their physical safety. LGB college students, then, are at an increased risk to develop mental health problems (e.g., substance use, anxiety, depression, and even the “first break” of psychosis) due to experiences of discrimination when compared to non-LGB students (Rankin, 2004). These experiences of discrimination on campus may cause or exacerbate internalized homophobia, in addition to the stress of one’s sexual identity being discovered by others.

Significance of the Study

The study of internalized homophobia within the LGB population is of importance to clinical psychology, especially with regard to multicultural counseling competencies (MCC) and the training of future psychologists to adequately treat this population. MCC includes knowledge, skills, and awareness related to the understanding and treatment of racially and ethnically diverse individuals (Sue, Arredondo, & McDavis, 1992). There is active involvement in attempting to meet the needs of a client based on individual and cultural differences rather than a passive or theoretical understanding of the client’s culture and worldview. The American Psychological Association published *Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality*, which addressed ethical responsibilities for working with racial and ethnic minority groups across several practices of psychology (APA, 2017).

The APA (2017) currently holds that providing evidenced-based treatment to minority groups is no longer a specialty, but rather an expectation for all psychologists. Psychologists consider the full range of evidence, including research, use their clinical expertise, and pay attention to client characteristics when working with both majority and minority clients (APA, 2017). Graduate psychology programs feature multicultural and/or diversity courses as part of their core curriculum, and many programs are committed to social justice and working with underserved populations. Sue et al.'s (1992) well-known MCC model is currently taught in many graduate programs. Areas of competency are broken down into: (a) beliefs/attitudes (i.e., therapist's awareness of own values, biases, and assumptions), (b) knowledge (i.e., the understanding of cultural norms, practices, terminology, and belief systems of culturally diverse clients), and (c) skills (i.e., culturally adapted interventions; use of indigenous methods).

LGB MCC

Sexual minorities experience discrimination, stigma, and marginalization based on their individual and cultural differences; therefore, competency guidelines are similar to the traditional MCC model. In the beliefs/attitudes domain of the model, mental health professionals and students who work with LGB clients engage in a self-reflective process and face their own sexual identity—whatever that may be (Hope & Chappell, 2015). Additionally, trainees are involved in identifying and working through any biases or stereotypes they hold about sexual minorities. This is necessary in order to guard against negative therapist messages that can become internalized by LGB clients (i.e., strengthening internalized homophobia). In the knowledge competency area, trainees are likely exposed to the history of LGB rights, legal issues and marriage laws, proper terminology/language usage, hate crime cases, the literature on intersecting identities (e.g., an African American lesbian woman who is a professional), and

differences within the LGB population. Knowledge and understanding of the LGB culture are imperative for evidence-based practice and the ethical treatment of LGB individuals. Finally, in the skills domain of the LGB MCC model, trainees learn to create a safe therapeutic relationship and environment for a client's disclosure of sexual identity (Hope & Chappell, 2015).

APA LGB guidelines. Research regarding the major health disparities for LGB individuals and the call for psychologists to become competent in their practice with sexual minorities led the APA (2012) to issue an updated version of "Guidelines for Psychological Practice with Lesbian, Gay, and Bisexual Clients." The original LGB guidelines were published in 2001. The 2012 guidelines are organized under the following topics: (a) attitudes toward homosexuality and bisexuality, (b) relationships and families, (c) issues of diversity, (d) economic and workplace issues, (e) education and training, and (f) research. There are 21 total guidelines for practice, including examples such as understanding the effects of stigma and discrimination based on sexual minority status, distinctions between sexual orientation and gender identity, challenges of parents and family, and religion and spirituality issues and LGB identification (APA, 2012).

Guidelines 19 and 20 in the APA LGB Guidelines (2012) emphasize the importance of graduate training with the LGB population: "Psychologists strive to include lesbian, gay, and bisexual issues in professional education and training" and "Psychologists are encouraged to increase their knowledge and understanding of homosexuality and bisexuality through continuing education, training, supervision, and consultation" (APA, 2012). However, evaluation into the effectiveness of implementing these guidelines in training programs and graduate courses is sparse, and there is currently no standard model of training (Bidell, 2014; Hope & Chappell, 2015).

Bidell (2014) conducted a study examining how psychology graduate students' multicultural courses addressed LGB multicultural counseling competencies and found that multicultural courses significantly predicted therapist multicultural competencies but did not predict therapist LGB competency. This finding suggests the need to address LGB diversity issues more specifically and substantively in graduate training programs. Biaggio, Orchard, Larson, Petrino, and Mihara (2003) examined institutional climate for LGB persons and put forth recommendations for training graduate students on how to work with these individuals. One recommendation was to provide psychotherapy to LGB individuals using LGB-affirmative interventions, such as LGB-affirmative Cognitive Behavioral Therapy.

Treatment implications for clinical psychology. Despite the wealth of information suggesting that LGB individuals are in need of mental health services and the release of APA guidelines for LGB practice in the past 16 years, there are very few evidence-based treatment approaches for this minority group. To address this issue, in part, the Gay and Lesbian Medical Association (GLMA) and LGBT Health Experts (2001) suggested that community and hospital-based mental health facilities should formulate nondiscrimination policies that support LGB-affirmative language and treatment options, in addition to recommending that insurance companies provide current listings of mental health clinicians that specialize in LGB practice (Alessi, 2014). A systematic review conducted by King, Semlyen, Killaspy, Nazareth, and Osborn (2007) indicated a need for specific interventions tailored to LGB individuals that focus on the unique experiences of sexual identity, especially in regard to the "coming out" process. Much of the evidence-based treatment literature supports the use of multiculturally sensitive cognitive behavioral interventions for sexual minorities (Proujansky & Pachankis, 2014).

LGB-affirmative psychotherapy. Proujansky and Pachankis (2014) propose affirmative,

evidenced-based, cognitive behavioral treatment guidelines that focus on sexual minority stress. Twenty gay and bisexual men and 21 clinicians were interviewed to obtain qualitative data that informed eight psychological principles in working with LGB clients.

The first principle is “Normalizing the Mental Health Impact of Minority Stress,” which refers to understanding the subtle ways in which sexual identity stress manifests itself, separating this type of stress from other psychological issues, and constructing a case conceptualization that captures this unique stress. “Facilitating Emotional Awareness, Regulation, and Acceptance,” the second principle, is an intervention, as research suggests that emotional dysregulation from experiencing minority stress directly affects the development of anxiety and depression in LGB persons (Hatzenbeuhler, 2009). “Decreasing Avoidance,” principle three, refers to targeting avoidance behaviors that reinforce many behavioral disorders. Sexual minority status can result in obvious avoidance behaviors (such as remaining “in the closet”), but also manifests in subtle ways, such as perfectionistic tendencies to gain acceptance, and avoiding relationship discussions in the therapy setting for fear of therapist judgment. The fourth principle, “Restructuring Minority Stress Cognitions,” is a CBT intervention strategy aimed at targeting negative thoughts about sexual minority status. LGB clients may feel guilt or shame for experiencing urges that are against societal norms, and thus they internalize negative schemas about themselves, which are direct pathways to internalized homophobia. This is addressed in affirmative therapy (Proujansky & Pachankis, 2014).

“Empowering through Assertive Communication,” the fifth principle, refers to aiding an LGB client with the coming out process and/or assertiveness skills training for those clients who are already out and need help navigating daily stressors. The sixth principle, “Validating Sexual Minority Individuals’ Unique Strengths,” capitalizes on the client’s strengths and assets, and

fosters resilience. This can be done by highlighting the resilience of the LGB community as a whole through decades of oppression and discrimination. The therapist may take on the role of an activist with the client. Principle seven, “Facilitating Supportive Relationships,” teaches LGB clients, especially adolescents, about the importance of peer and family support as a buffer against negative mental health consequences. Fostering these relationships is, therefore, an important aspect of treatment. Finally, principle eight is “Affirming Healthy, Rewarding Expression of Sexuality,” and involves integrating sex-positive communication into therapy and addressing same-sex relationships and sexual behaviors as normal, natural, and healthy (Proujansky & Pachankis, 2014).

Research Questions

The present study sought to investigate the relationship between internalized homophobia and mental health concerns in LGB emerging adults. More specifically, does the presence of internalized homophobia relate to poor mental health in LGB college students, a group diverse in gender and sexual identity? The study on LGB college students is guided by the literature, which indicates that LGB individuals self-report higher rates of depression, anxiety, and substance use than non LGB persons (cf. Haas et al., 2011); and by the literature that indicates that internalized homophobia consists of feelings of shame, worthlessness, and poor self-esteem, which are common symptoms of depression (Ramirez-Valles et al., 2013; Ross & Rosser, 1996). Therefore, internalized homophobia may be related to symptoms of depression, anxiety, and substance use disorders in LGB individuals. On the basis of this rationale, research questions are as follows:

1. Does the presence of high internalized homophobia in LGB emerging adults correlate with high rates of self-reported depression? Conversely, does the presence of low

internalized homophobia in LGB emerging adults correlate with low rates of self-reported depression? That is, will internalized homophobia and depression have a strong positive correlation?

2. Does the presence of high internalized homophobia in LGB emerging adults correlate with high rates of self-reported anxiety? Conversely, does the presence of low internalized homophobia in LGB emerging adults correlate with low rates of self-reported anxiety? That is, will internalized homophobia and anxiety have a strong positive correlation?
3. Does the presence of high internalized homophobia in LGB emerging adults correlate with high rates of self-reported substance use? Conversely, does the presence of low internalized homophobia in LGB emerging adults correlate with low rates of self-reported substance use? That is, will internalized homophobia and self-reported substance use have a strong positive correlation?
4. Will there be differences between/among lesbian, gay, and bisexual emerging adults in internalized homophobia?
5. Will there be interactions between levels of internalized homophobia and sexual identities (i.e., LGB) for self-reported depression, anxiety, and/or substance use?

Definition of Terms

1. LGB: lesbian, gay, and bisexual individuals. Lesbian is a term that refers to a woman who is primarily attracted to other women. Gay is a term that is used to describe someone who is attracted to another person of the same sex, although it typically refers to men. Bisexual persons are those who report attraction to both men and women.
2. Internalized homophobia: a process by which oppressive societal views of LGB persons

are assimilated into the LGB individual identity (Ross & Rosser, 1996).

3. LGB MCCs: Multicultural Counseling Competencies (Sue et al., 1992) that have been extended to include practice with Lesbian, Gay, and Bisexual populations (Bidell, 2014). These competencies include knowledge, skills, and attitudes that are LGB-affirmative and view same sex attraction as healthy and legitimate (Bidell, 2014).
4. LGB health disparities: LGB youth and young adults experience a multitude of mental and physical health issues at higher rates than their heterosexual counterparts (U.S. Department of Health and Human Services, 2012), but have low acceptance from society and suffer inequality and inequity (i.e., access, resources) in treatment.

Method

The current study examined the relationships between internalized homophobia and self-reported symptoms of anxiety, depression, and substance use in LGB college students and young adults. The following section summarizes the theories from which this research was undertaken, with a focus on Meyer's (2003) minority stress model. In addition, the participants, estimation of effect size, measures, procedures, and research hypotheses are presented.

Theoretical Base

The present study was guided by queer theory (Watson, 2005), the stage model for LGB identity (Cass, 1984), and minority stress models (Meyer, 2003; Hatzenbuehler, 2009). It features the following general assumptions:

1. Gender and sexual identity are shaped by culture, history, and context.
2. Sexual identity is not singular or fixed; identity is fluid.
3. Persistent internalized homophobia is socially constructed and represents views of heterosexual dominance and privilege.

4. LGB individuals feel unable to change the dominant social structure of heteronormativity, and, as a result, experience powerlessness and shame for being different.
5. Sexual identity formation of a sexual minority person is complicated by social pressures to conform to heteronormativity, the experience of internalized homophobia, lack of support, and discrimination.
6. Cass's (1984) stage model states that LGB individuals pass through six stages in identity formation: confusion, comparison, tolerance, acceptance, pride, and synthesis. However, I contend that this model is limited because it does not address systemic, contextual influences and resulting intersectionality.
7. LGB minority stress refers to the relationship between sexual minority status and dominant heterosexual values. The resulting conflict experienced by the oppressed group is linked to mental health concerns in LGB individuals.
8. LGB individuals attempt to live in a world characterized by prejudice and discrimination. Psychological problems arise when LGB persons are unable to overcome such oppression.
9. Sexual minority stress is unique to LGB individuals; it is chronic, societally, and socially-based.

Essential within the above assumptions are the basic principles of minority stress, which explain the relationship between internalized homophobia and mental health concerns of the LGB population. Hatzenbuehler (2009) suggests that LGB individuals are at a great risk to develop psychological problems because of societal oppression and marginalization. Mediation processes (i.e., social support, coping and interpersonal skills, as well as emotional regulation)

aid in lowered risks for psychopathology.

Meyer's minority stress model and internalized homophobia. Meyer's (2003) minority stress model describes stressors that are specific to the LGB population, including: (a) experiences of prejudice and discrimination against homosexual and bisexual orientations, (b) expectations of rejection from others, (c) concealing of LGB sexual identity, and (d) the presence of internalized homophobia. The problem of external and internal homophobia in combination with social and self-stigma produces a hostile and unsafe environment that LGB individuals are compelled to continually face, resulting in significant stress which affects or exacerbates mental health concerns (Meyer, 2003).

Internalized homophobia is proposed as one of four components in Meyer's (2003) minority stress model. Ross and Rosser (1996) propose that internalized homophobia occurs when LGB individuals apply negative societal views of sexual minority identity to themselves. Homonegativity becomes fused with LGB individual identity, leading to self-hatred, self-loathing, shame, and guilt. In addition, internalized homophobia is related to depression, anxiety, substance use, and suicidal behavior (Ross & Rosser, 1996).

Internalized homophobia in college students. Recent attention has been paid to the mental health and safety concerns of LGB students on college campuses (Rankin, 2004). Research has shown that many LGB college students report experiencing hostile and unsafe campus communities due to the discrimination of peers and/or faculty members (Rankin, 2004). It stands to reason, then, that LGB college students may be at an increased risk for mental health problems (i.e., anxiety, depression, and substance use).

Participants

Participants ($N = 168$) were emerging adults and college and university students who

identified as lesbian, gay, or bisexual. After examining the data, 28 participants who did not answer the survey in its entirety were eliminated, leaving a sample of $N = 130$. Among the participants, 52.3% were female, 41.1% were male, 3.3% were transgender, and 3.3% identified their gender as other. Participants' ages ranged from 18 to 35 with a mean age of 23 ($SD = 2.76$). With regard to race and ethnicity, 45.4% of participants were White/White American, 23% Asian/Asian American/Pacific Islander, 14.5% Black/African American/Black American, 7.9% Latino/Latino American/Latinix, 7.2% Biracial/Multiracial, and 1.3% American Indian/Alaska Native. In addition, 16.1 % of the sample were international students. Altogether, 70% of participants were not White/White American or were People of Color, and more than 50% identified their sex as female.

Participants were asked to describe their various intersecting identities at the time of the survey, with the understanding that identity is fluid and not necessarily stable. White bisexual females from middle-class backgrounds were the most commonly reported intersectional identities ($n = 22$). Less commonly reported intersecting identities for White participants were as follows: (a) White bisexual males from the middle class ($n = 3$), (b) White gay males from the working class ($n = 6$), (c) White lesbian females from the working class ($n = 6$), (d) White lesbian females the upper class ($n = 3$), and (e) White gay males from the upper class ($n = 3$). Intersecting identities for African American participants were as follows: (a) African American bisexual females from the working class ($n = 2$), (b) African American bisexual males from the middle class ($n = 4$), (c) African American lesbian females from the working class ($n = 6$), (d) African American bisexual females from the middle class ($n = 2$), and (e) African American gay males from the middle class ($n = 2$). Intersecting identities for Latinx participants were as follows: (a) Latina bisexual females from the middle class ($n = 4$), (b) Latino gay males from the

upper class ($n = 2$), and (c) Latino bisexual male from the middle class ($n = 1$). Intersecting identities for Biracial and Multiracial participants were as follows: (a) mixed bisexual female from the middle class ($n = 2$), (b) mixed bisexual male from working class ($n = 1$), and (c) mixed lesbian female from middle class ($n = 1$). Intersecting identities for Asian American participants were as follows: (a) Asian bisexual male from the working class ($n = 5$), (b) Asian lesbian female from the middle class ($n = 2$), (c) Asian bisexual female from the middle class ($n = 1$), and (d) Asian gay male from the working class ($n = 4$). There were a few uncommon intersecting identities statements, such as: (a) “Korean Irish American from a first gen immigration family. Neither parents born in America. I am bisexual and have interest in men and women equally,” (b) “Native American lesbian women from the middle class,” and (c) “I am a pansexual black gender fluid person who is middle class. I choose to present myself androgynously.” The sample was diverse with interesting identities of race, ethnicity, mixed heritage, biological sex, sexual orientation, and class. Participants did not include their international student status in the intersecting identities demographic question.

Participants identified their sexual orientation as bisexual (48.4%), gay (21.6%), lesbian (13.1%), and other (5.9%). Among the women, 53% identified as bisexual, 23% identified as lesbian, 6% identified as gay, 10% identified as heterosexual, and 8% identified their sexual orientation as other. Among men, 43% reported being bisexual, 40% identified as gay, and 13% identified as heterosexual. Bisexuality was a near majority. Of note, 11.1% of participants identified as heterosexual, despite the study’s exclusion criteria. Figure 2 displays varying sexual orientation of participants.

Twenty-eight participants identified as enrolled college or university students, and 140 participants identified as young adults who were non-college students. Of note, regarding family

acceptance of sexual orientation, 68% reported family acceptance, and 32% stated that their families were not accepting of their sexual orientation.

Effect Size

The study assumed a medium effect size to determine the necessary number of participants. In order to detect a medium effect size for the statistical analyses, a minimum of 150 participants was required. An original sample of $N = 168$ resulted in an estimated power of .80 at $p < .05$. However, only the data from 130 participants were analyzed, and a small effect size was expected.

Measures

Demographic questionnaire. Initially, participants were asked to answer a total of eight demographic questions. Questions pertained to participants' age, gender, sexual identity, socioeconomic status, race, ethnicity, international student status, year in college, and academic major. Multiple choice/forced answer format was provided for these questions. To identify sexual identity, participants had the option of selecting *gay*, *lesbian*, or *bisexual*. See Appendix A for the demographic questionnaire. To address intersectionality, an open-ended question asked: Describe your various social identities (e.g., African American lesbian woman from the middle class; White gay male from the working class) and how these intersect with each other.

Internalized Homophobia Scale. The Internalized Homophobia Scale (IHS; Ross & Rosser, 1996) was used to measure the level of internalized homophobia in LGB participants. The IHS has 26 items that are rated on a 7-point Likert-type scale ranging from 1 (strongly agree) to 7 (strongly disagree). The IHS total score was used to indicate level of internalized homophobia; all items were reverse scored and higher scores indicated higher levels of internalized homophobia. The original instrument was developed specifically for men who have

sex with men (Ross & Rosser, 1996), and items were later reworded to include lesbian and bisexual terminology.

The IHS includes four subscales. The *Public Identification subscale* has 10 items and includes statements, such as, “I feel comfortable discussing homosexuality in a public setting,” and has an internal consistency reliability of α .85. The *Perception of Stigma subscale* has six items and includes statements, such as, “most people don’t discriminate against homosexuals” and has an internal consistency reliability of α .69. The *Social Comfort* subscale has six items and has statements, such as, “I feel comfortable about being seen in public with an obviously gay or lesbian person” and has an internal consistency reliability of α .64. Finally, the *Moral and Religious Acceptability* subscale has four items and includes items, such as, “homosexuality is not against the will of God,” and has an internal consistency reliability alpha of .62 (Ross & Rosser, 1996). The Cronbach alphas, although moderately low, are acceptable for subscales with a small number of items (Anastasi & Urbina, 1997).

The IHS has fair concurrent validity. Three of the four subscales were significantly related to variables regarding open identification as gay, amount of time spent with other gay people, and gay men’s relationships with and sexual attraction to men (Ross & Rosser, 1996). See Appendix B for the IHS.

PHQ-9. The Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001) was used to measure symptoms of depression. The PHQ-9 is a brief nine item screening instrument developed to make criteria-based diagnoses of depression in primary care settings. Participants were asked to assess how affected they were by their symptoms over the past 2 weeks. The nine questions in the PHQ-9 are based on the nine criteria for major depressive disorder in the DSM-IV-TR. Included are questions on sadness, loss of interest, difficulty

concentrating, suicidal ideation, and other symptoms of depression. It is a dual-purpose instrument that screens for presence of depressive disorders as well as severity of symptoms. As a measure of severity, total scores can range from 0–27, and each of the nine items range from 0 (not at all) to 3 (nearly everyday). With regard to the presence of depression, scores of ≥ 5 represent mild depression, ≥ 10 equates to moderate depression, and ≥ 15 severe depression. Additionally, at the end of the measure, there is a question pertaining to functional impairment, which states, “How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?” However, this open-ended question was not qualitatively analyzed and not included in the present study’s report. It is important to note that question number 9 pertaining to suicidal ideation was removed for purposes of the study of a non-clinical population. Thus, the total scores ranged from 0–24.

The reliability and validity of the PHQ-9 have been established in two studies with a combined sample of over 6,000 patients in medical care facilities (Kroenke et al., 2001). The PHQ-9 was found to have an internal consistency reliability (Cronbach’s alpha) of $\alpha = .89$. The correlation between the PHQ-9 and mental health professionals’ ratings on a diagnosis of depression was $r = .84$. Another study (Zhang et al., 2013) using a sample of 959 Chinese college students found an internal consistency reliability of $\alpha = .854$, and a test-retest reliability of 0.87. In addition, the scores of the PHQ-9 were significantly correlated ($r = .79$, $p < .05$) with scores on the Beck Depression Inventory (BDI), demonstrating good concurrent validity (Zhang et al., 2013). See Appendix C for the PHQ-9.

The Generalized Anxiety Disorder Scale-7. The Generalized Anxiety Disorder Scale-7 (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006) was used to measure symptoms of anxiety among LGB participants. The GAD-7 is a 7-item self-report screening instrument that measures

the severity of symptoms of general anxiety. The total scale score ranges from 0–21. Higher scores suggest higher levels of anxiety. Items feature questions on worry, restlessness, irritability, and panic, among other symptoms. Items are rated on a 4-point Likert-type scale: 0 (not at all), 1 (several days), 2 (over half the days), and 3 (nearly every day). Similar to the PHQ-9, the GAD-7 was developed to reflect the DSM-IV-TR diagnostic criteria for generalized anxiety disorder and was tested in primary care settings. Participants were asked how often they were bothered by their symptoms over the past two weeks. In developing the measure, Spitzer et al. (2006) used a patient sample of 2,739 in over 12 states. Results showed that the internal consistency reliability of the GAD-7 was excellent (Cronbach $\alpha = .92$). Inter-rater reliability was also good (average intra class correlation $r = 0.83$). Further, the GAD-7 had good construct validity, as evidenced by its strong relationship to other well-established measures of anxiety (Spitzer et al., 2006). See Appendix D for the GAD-7.

CAGE-AID. Substance use concerns among participants were measured using the CAGE-AID, a four-item instrument originally developed to screen for alcohol use only (Brown & Rounds, 1995), but later adapted to include alcohol and other drug use. CAGE is an acronym that contains the following four items: (a) “Have you ever felt you ought to Cut down on your drinking or drug use?” (b) “Have people Annoyed you by criticizing your drinking or drug use?” (c) “Have you ever felt bad or Guilty about your drinking or drug use?” (d) “Have you ever had a drink or used drugs first thing in the morning to steady your nerves or get rid of a hangover (Eyeopener)?” The term “eyeopener” refers to the physical/psychological need to use drugs or alcohol to wake up in the morning and start the day. Each question was answered with a yes or no option. Participants were asked to answer these questions based on the time period of the previous six months. One or more positive responses on the CAGE-AID was considered a

positive screening and was indicative of problematic alcohol and other drug use (Brown & Rounds, 1995). A preliminary study (Couwenbergh, Van Der Gaag, Koeter, De Ruiter, & Van den Brink, 2009) found that the CAGE-AID was an effective screening tool for alcohol and substance use among adolescents in community mental healthcare settings, and accurately predicted the diagnosis of substance use disorders, as measured by the DSM-IV. See Appendix E for the CAGE-AID.

Procedure

Permission to conduct the study was obtained from the Antioch University New England's IRB, the human subjects committee. Participants were recruited from state and private universities in Connecticut and Georgia, including Central Connecticut State University, University of Connecticut, University of Hartford, Georgia State University, and Georgia Institute of Technology. I chose to recruit participants from my two primary states of residence, Connecticut and Georgia. Participants were also recruited from the Amazon Mechanical Turk website.

LGB individuals were recruited to participate in a study about experiences with homophobia and general mental health. Participants were contacted and invited to participate in the study by faculty members and student leaders of LGBT centers at each university mentioned previously. For additional recruiting, I provided the survey link to the Amazon Mechanical Turk website, where young adults across the United States who checked that they met the study's criteria participated in the study. In order to meet the criteria to participate, participants needed to identify themselves as lesbian, gay, or bisexual, and were at least 18 years of age. Exclusion criteria included individuals who identified as heterosexual or were below age 18.

The recruitment letter, both electronic and hard copy, contained a link to an internet

research site (see Appendix F). Participants who agreed to participate were provided an informed consent form that included a brief description of the study, requirements for participation, the voluntary nature of participation, risks and benefits of participation, and information about confidentiality and anonymity. Please see Appendix G for the Informed Consent Form.

Interested participants chose to visit the research website at which time they were presented with the Informed Consent Form. Those individuals who chose to give implied consent by voluntarily clicking “yes” to the option of agreeing to participate were directed to the study on the next page. Participants were not penalized for discontinuing to participate in the study if they chose to do so. Once directed to the study webpage, participants first took a short survey consisting of demographic questions. Next, participants were asked to complete four brief surveys: (a) the Internalized Homophobia Scale, (b) the PHQ-9 (depression scale), (c) the GAD-7 (anxiety scale), and (d) the CAGE-AID (substance use scale).

At the end of the study, participants were directed to a webpage thanking them for their participation and providing my contact information should they have any concerns. Additionally, participants could choose to be entered into a raffle for one of two \$50 Amazon.com gift cards at the end of the study. The total survey was expected to take 15–20 minutes. Once the appropriate number of participants was obtained, the survey was discontinued. I then collected and downloaded the data to proceed with analyses.

Participant anonymity and confidentiality. Participants were not asked to provide names or other identifying information, such as address or date of birth. The IP address of their computers was not recorded. Therefore, all data remained anonymous. To protect confidentiality, data were downloaded onto my personal computer that was password protected. Additionally, analyses of data were password protected. In addition to the data and SPSS analyses being stored

in the computer's hard drive, the data and results were printed and placed in a locked filing cabinet in my home.

Participants who entered into the raffle were asked to send an email to a private email account established solely for the study. I had sole access to the study's email account. It was explained to the participants in the Informed Consent Form that their emails for the raffle prize were not connected to their responses on the study's questionnaires.

Research Hypotheses

The following hypotheses were made based on the previously stated research questions:

1. High levels of internalized homophobia will be positively correlated at the .05 significance level with high levels of self-reported depression in LGB emerging adults. Moderate levels of internalized homophobia will be positively correlated with moderate levels of self-reported depression in LGB emerging adults. Low levels of internalized homophobia will be positively correlated with low levels of self-reported depression in LGB emerging adults. Thus, the correlation between the IHS and the PHQ-9 will show a positive, strong significant correlation ($p < .05$).
2. High levels of internalized homophobia will be positively correlated with high levels of self-reported anxiety in LGB emerging adults. Moderate levels of internalized homophobia will be positively correlated with moderate levels of self-reported anxiety in LGB emerging adults. Low levels of internalized homophobia will be positively correlated with low levels of self-reported anxiety in LGB emerging adults. Thus, the correlation between the IHS and the GAD-7 will show a positive, strong significant correlation ($p < .05$).
3. High levels of internalized homophobia will be positively correlated with high levels of

self-reported substance use in LGB emerging adults. Moderate levels of internalized homophobia will be positively correlated with moderate levels of self-reported substance use in LGB emerging adults. Low levels of internalized homophobia will be positively correlated with low levels of self-reported substance use in LGB emerging adults. Thus, the correlation between the IHS and the GAGE-AID will show a positive, strong significant correlation ($p < .05$).

4. There will be one or more significant mean differences between internalized homophobia levels (low, medium, and high), and mental health scores (depression, anxiety, and substance use).
5. There will be interactions between levels of internalized homophobia and sexual identities (i.e., LGB) for self-reported depression, anxiety, and/or substance use.

One hundred and thirty emerging adults and college students who identified as lesbian, gay, and bisexual were recruited to participate in an online study about internalized homophobia and mental health. Participants were recruited from universities in Connecticut and Georgia and by using the Amazon Mechanical Turk website. Once directed to the study webpage, participants gave consent and took a short survey consisting of demographic questions. Next, participants were asked to complete four brief surveys: (a) The Internalized Homophobia Scale, (b) the PHQ-9 (depression scale), (c) the GAD-7 (anxiety scale), and (d) the CAGE-AID (substance use scale). The sample was diverse in biological sex, sexual orientation, race, ethnicity, international student status, and age. Permission to conduct this study was obtained from the Antioch University New England's IRB, the human subjects committee.

Results

A survey of lesbian, gay, and bisexual young adults examined the relationship between

internalized homophobia, or the integration of homonegativity into personal identity (Ross & Rosser, 1996), and self-reported depression, anxiety and substance use. Since it was a non-clinical sample, scores on the mental health measures were expected to be moderate. The primary hypothesis was that higher levels of internalized homophobia would be positively related to higher levels of depression, anxiety, and substance use among LGB young adults, and that there would be interactions among levels of internalized homophobia and sexual orientation for mental health concerns.

Internalized Homophobia Levels

The distribution of scores on the internalized homophobia scale (Ross & Rosser, 1996) was studied and categorized into low, medium, and high levels. Categories were defined by splitting total scores into three equal ranges. Low scores indicated higher internalized homophobia. Scores ranging from 27–80 were categorized as high internalized homophobia, 81–135 as medium internalized homophobia, and 136–189 as low internalized homophobia. The literature suggests that internalized homophobia is a normally distributed variable among the LGB population (Frost & Meyer, 2009), and most studies featuring internalized homophobia examine the variable on a continuum rather than categorically (Ross & Rosser, 1996; Frost & Meyer, 2009). For the purposes of expediency and to create a concrete distinction between low and high levels of internalized homophobia, I decided to examine the construct of internalized homophobia categorically rather than continuously. Specific cut off points for low, medium, and high internalized homophobia did not exist in the literature and were, thus, determined by me. Ninety-three percent of participants scored within the medium level ($n = 119$), while very few participants were categorized as having low internalized homophobia ($n = 5$), and high internalized homophobia ($n = 4$). Figure 3 depicts frequencies of internalized homophobia levels.

The distribution of scores appeared to follow a normal bell curve based on scores being split into three categories (low, medium, and high), where most individuals had medium levels of internalized homophobia. Skewness and kurtosis of the data fell within acceptable ranges for assumptions of normality according to recommended guidelines for social science research (West, Finch, & Curran, 1995; see Table 2). Due to unequally distributed scores, internalized homophobia group comparisons should be approached with caution.

Internal Consistency Reliability of Measures

The Internalized Homophobia Scale (Ross & Rosser, 1996) includes four subscales. The Public Identification subscale 1 (10 items) had an internal consistency reliability of Cronbach's $\alpha = .85$. The Perception of Stigma subscale 2 (6 items) had an internal consistency reliability of $\alpha = .69$. The Social Comfort subscale 3 (6 items) had an internal consistency reliability of $\alpha = .64$. Finally, the Moral and Religious Acceptability subscale 4 (4 items) had an internal consistency reliability of $\alpha = .62$. The Cronbach alphas, although moderately low for the three subscales 2, 3, and 4, were acceptable for subscales with a small number of items (Anastasi & Urbina, 1997). The PHQ-9 was found to have an internal consistency reliability of $\alpha = .89$. The internal consistency reliability of the GAD-7 was excellent at $\alpha = .92$. Finally, the CAGE-AID, examining substance and alcohol use, also had an excellent internal consistency reliability of $\alpha = .92$. Table 1 shows Cronbach's alphas for the mental health measures, PHQ-9, GAD-7, and CAGE-AID.

Descriptive Statistics of Measures

Table 2 shows the means and standard deviations for all measures. College students and young adults ($N = 130$) were surveyed on their level of internalized homophobia ($M = 83.71$, $SD = 47.61$) and its relationship to depression scores ($M = 6.77$, $SD = 6.29$), anxiety scores ($M =$

5.73 , $SD = 5.91$), and substance use scores ($M = .90$, $SD = 1.28$). The standard deviations were high relative to the means, suggesting a wide spread of scores for depression, anxiety, and substance use. In comparison, internalized homophobia had a narrower distribution with most scores falling around the mean. Scores on the Internalized Homophobia Scale ranged from 26 to 189. Scores on the PHQ-9, measuring depression, ranged from 0 to 24. Scores on the GAD-7, examining anxiety, ranged from 0 to 21. Scores on the CAGE-AID, measuring substance use, ranged from 0 to 4. Table 3 shows the means and standard deviations of mental health scores for each level of internalized homophobia. Participants with low IHS scores reported higher depression and anxiety scores, which was contrary to Hypothesis 1.

Test of Research Hypotheses

Hypotheses 1–3. To address Hypotheses 1–3, bivariate Pearson’s correlational analyses were used. Hypothesis 1 stated: high levels of internalized homophobia will be positively correlated at the .05 significance level with high levels of self-reported depression; moderate levels of internalized homophobia will be positively correlated with moderate levels of self-reported depression; and low levels of internalized homophobia will be positively correlated with low levels of self-reported depression. This hypothesis may not be retained.

Hypothesis 2 stated: high levels of internalized homophobia will be positively correlated at the .05 significance level with high levels of self-reported anxiety; moderate levels of internalized homophobia will be positively correlated with moderate levels of self-reported anxiety; and low levels of internalized homophobia will be positively correlated with low levels of self-reported anxiety. This hypothesis may not be retained.

Hypothesis 3 stated: high levels of internalized homophobia will be positively correlated at the .05 significance level with high levels of self-reported substance use; moderate levels of

internalized homophobia will be positively correlated with moderate levels of self-reported substance use; and low levels of internalized homophobia will be positively correlated with low levels of self-reported substance use. Due to mixed results, Hypothesis 3 may not be retained as well.

A Pearson's r correlation analysis revealed a significant moderate positive correlation between internalized homophobia and depression, $r = .565, p < .001$. Additionally, a Pearson's r correlation analysis showed a significant moderate positive correlation between internalized homophobia and anxiety, $r = .493, p < .001$. Finally, a third Pearson's r correlation analysis showed a significant modest positive correlation between internalized homophobia and substance use, $r = .360, p < .001$. The moderate and modest correlations were lower than expected, indicating an unevenness of scores for the two variables on the horizontal and vertical axes in the scatter plot. There may have been outliers.

On the other hand, a Pearson's r correlation analysis revealed a significant, strong positive correlation between depression and anxiety, $r = .837, p < .001$. Participants with higher depression also reported higher anxiety.

In addition, a Pearson's r correlation revealed a significant moderate positive correlation between depression and substance use, $r = .464, p < .001$, indicating a converging trend between depression and substance use. Finally, a third Pearson's r correlation analysis showed a significant, moderate positive correlation between anxiety and substance use, $r = .424, p < .001$, also indicating a converging trend between anxiety and substance use. See Table 4 for the Pearson Correlations among the measures.

Hypothesis 4. Hypothesis 4 stated that there would be one or more significant mean differences between internalized homophobia levels (low, medium, and high), and mental health

scores (depression, anxiety, and substance use). Three one-way ANOVAs were performed to examine if differences existed for individual scales of depression, anxiety, and substance scores for levels of internalized homophobia. For depression scores, an independent, between groups ANOVA did not yield a statistically significant effect, $F(2,122) = 2.95, p = .056$. Significance level was narrowly missed for depression. See Table 5 for ANOVA statistics. Unequal number of subjects per classification may have affected the standard error of mean. For anxiety scores, an independent, between groups ANOVA did not yield a statistically significant effect, $F(2, 125) = 1.03, p = .36$. See Table 6 for ANOVA statistics. Further, for substance scores, an independent, between groups ANOVA did not yield a statistically significant effect, $F(2, 125) = 2.93, p = .057$. Significance level was narrowly missed for substance use. See Table 7 for ANOVA statistics.

Hypothesis 5. Hypothesis 5 stated that there will be interactions between levels of internalized homophobia and sexual orientations (i.e., LGB) for self-reported depression, anxiety, and/or substance use. To address Hypothesis 5, a multivariate analysis of variance (MANOVA) was performed to examine the interaction of internalized homophobia and sexual orientation (lesbian, gay, or bisexual) on mental health scores (depression, anxiety, and substance use). A statistically significant MANOVA effect was not obtained, Pillai's Trace = .07, $F(9, 357) = .94, p = .49$. There were no differences between levels of internalized homophobia in combination with sexual orientation on mental health outcomes. Table 8 shows the results of the MANOVA.

Linear Multiple Regression. Finally, a linear multiple regression was performed to predict depression scores based on age, gender, family acceptance, race/ethnicity, international student status, year in school, and social class. A significant regression equation was found,

($F(7, 139) = 2.535, p = .017$), with an R^2 of .113, a small effect size. Participants' predicted depression scores were equal to $22.612 - .314(\text{age}) + .569(\text{gender}) + 1.615(\text{family acceptance}) + .316(\text{race/ethnicity}) - 3.603(\text{international student status}) - .164(\text{year in school}) - 1.543(\text{social class})$, where gender was coded 1 = female, 2 = male, 3 = transgender, 4 = other, 5 = prefer not to say; family acceptance was coded 1 = yes, 2 = no; race/ethnicity was coded 1 = African American, 2 = Asian/Pacific Islander, 3 = Caucasian, 4 = Latino/Hispanic, 5 = Native American, 6 = Biracial or multiracial, 7 = other; international student status was coded as 1 = yes, 2 = no; year in school was coded 1 = freshmen, 2 = sophomore, 3 = junior, 4 = senior, 5 = graduate student, 6 = not registered student; and social class was coded as 1 = poor, 2 = working class, 3 = middle class, 4 = upper middle class, 5 = wealthy, 6 = very wealthy; and age was measured in years. Depression scores decreased .3.603 for those who identified as non-international students (the U.S. students) and decreased 1.543 based on higher social class. Low social class and international student status of LGB participants were significant predictors of depression scores. Table 9 presents the linear multiple regression of demographic variables contributing variance to depression.

A second linear multiple regression was performed to predict anxiety scores based on age, gender, family acceptance, race/ethnicity, international student status, year in school, and social class. A significant regression equation was found, ($F(7, 139) = 2.050, p = .053$), with an R^2 of .094, a low effect size. Participants' predicted anxiety scores were equal to $17.03 - .361(\text{age}) + .851(\text{gender}) + 2.080(\text{family acceptance}) + .299(\text{race/ethnicity}) - 2.797(\text{international student status}) - .177(\text{year in school}) - .578(\text{social class})$, where gender was coded 1 = female, 2 = male, 3 = transgender, 4 = other, 5 = prefer not to say; family acceptance was coded 1 = yes, 2 = no; race/ethnicity was coded 1 = African American, 2 = Asian/Pacific Islander, 3 = Caucasian,

4 = Latino/Hispanic, 5 = Native American, 6 = Biracial or multiracial, 7 = other; international student status was coded as 1 = yes, 2 = no; year in school was coded 1 = freshmen, 2 = sophomore, 3 = junior, 4 = senior, 5 = graduate student, 6 = not registered student; and social class was coded as 1 = poor, 2 = working class, 3 = middle class, 4 = upper middle class, 5 = wealthy, 6 = very wealthy; and age was measured in years. Anxiety scores decreased 2.080 for those who reported family acceptance of sexual orientation and increased -2.797 for participants who identified as international students. Family acceptance and international student status were significant predictors of anxiety scores. Table 10 presents the linear multiple regression of demographic variables contributing variance to anxiety.

A third linear multiple regression was calculated to predict substance use scores based on age, gender, family acceptance, race and ethnicity, international student status, year in school, and social class. A significant regression equation was found, ($F(7, 139) = 2.065, p = .05$), with an R^2 of .094, a small effect size. Participants' predicted substance and alcohol use scores were equal to $4.431 - .068(\text{age}) - .039(\text{gender}) - .025(\text{family acceptance}) - .045(\text{race/ethnicity}) - 1.051(\text{international student status}) + .111(\text{year in school}) - .065(\text{social class})$, where gender was coded 1 = female, 2 = male, 3 = transgender, 4 = other, 5 = prefer not to say; family acceptance was coded 1 = yes, 2 = no; race and ethnicity was coded 1 = African American, 2 = Asian/Pacific Islander, 3 = Caucasian, 4 = Latino/Hispanic, 5 = Native American, 6 = Biracial or multiracial, 7 = other; international student status was coded as 1 = yes, 2 = no; year in school was coded 1 = freshmen, 2 = sophomore, 3 = junior, 4 = senior, 5 = graduate student, 6 = not registered student; and social class was coded as 1 = poor, 2 = working class, 3 = middle class, 4 = upper middle class, 5 = wealthy, 6 = very wealthy; and age was measured in years. Substance use scores decreased 1.051 for those who identified as international students,

and also decreased for social class. Both social class and international student status were significant negative predictors of substance use. Table 11 shows the linear regression of demographic variables for substance use scores.

Conclusion

A survey of LGB young adults examined the relationship between internalized homophobia and self-reported depression, anxiety and substance use. Pearson's r correlation analyses showed a significant moderate positive correlation between internalized homophobia and depression, $r = .565, p < .001$, a significant moderate positive correlation between internalized homophobia and anxiety, $r = .493, p < .001$, and a significant modest positive correlation between internalized homophobia and substance use, $r = .360, p < .001$.

Additionally, a Pearson's r correlation analysis revealed a significant, strong positive correlation between depression and anxiety, $r = .837, p = .000$. Three linear multiple regressions yielded significant results for depression, anxiety, and substance use. Depression scores decreased .3.603 for those who identified as non-international students (U.S. students) and decreased 1.543 based on higher social class. Anxiety scores decreased 2.080 for participants who reported family acceptance of sexual orientation and increased -2.797 for participants who identified as international students. Substance use scores decreased 1.051 for those who identified as international students and also decreased for social class. International student status, social class, and family acceptance were significant predictors of mental health concerns in LGB young adults.

Discussion

The study investigated the relationship between internalized homophobia, or the internalization of negative stereotypes about LGB individuals into self-concept, and self-reported

mental health concerns among emerging adult LGB participants, specifically with regard to symptoms of depression, anxiety, and substance use. The literature suggests that LGB individuals are more likely to report higher incidences of mental health concerns than heterosexual individuals, and that internalized homophobia is a major risk factor for poor health outcomes (Ramirez-Valles et al., 2013; Ross & Rosser 1996). The study also examined the interaction between sexual orientation (i.e., lesbian, gay, or bisexual) and levels of internalized homophobia (i.e., low, medium, or high) on self-reported mental health. Finally, the study explored what other variables for emerging LGB adults (i.e., sociodemographics) may be predictors of depression, anxiety, and/or substance use symptoms. This discussion presents the implications and conclusions about the study's findings in relation to the literature reviewed in the first section. Because of additional findings, some related new literature is reviewed to enhance understanding the challenges of the LGB population. Limitations of the study are considered, and recommendations for future research are suggested.

Descriptive Statistics

Bisexuality. The most common sexual identity reported among participants was bisexual; 48% of the sample identified as bisexual, while 21.6% identified as gay, 13.1% as lesbian, and 5.9% as other. The large bisexual representation represents a unique finding in the study. Most of the literature on internalized homophobia does not include such a large sample of bisexual individuals. According to Kinsey, Pomeroy, Martin, and Gebbard (1953), sexual identity is fluid, and 46% of people surveyed reported sexual experiences with both men and women, denoting the pervasiveness of bisexuality and fluid sexual experiences. Additionally, Copen, Chandra, and Febo-Vazquez (2016) found that 5.5% of women and 2% of men identified as bisexual, in comparison to 1.9% of women identifying as lesbian, and 1.9% of men identifying as gay. The

current study's representation of sexual identity fits with the literature, suggesting that sexual fluidity is becoming increasingly accepted and understood in the current LGBT society, especially for women. Additionally, the fact that half of the sample in this study identified as bisexual suggests that bisexual/fluid individuals also contend with some level of internalized homophobia. Future research may want to explore internalized biphobia and the unique health concerns of the bisexual community. The participants also reported diverse intersectional identities that included race, ethnicity, mixed heritage, biological sex, sexual orientation, and class. In addition, 70% of the participants were not White/American, which makes the study different from most LGB literature that focuses on the experiences of White LGB populations in the United States.

Internalized homophobia. The distribution of scores on the internalized homophobia scale meant that over 90% of the sample fell into the medium category, which provided incomparable groups. Consequently, groups were not evenly distributed and could not be accurately compared on mental health measures. However, this may be a more representative and realistic picture of the current LGB population. Many LGB individuals have contended with a medium degree of internalized guilt and shame based on societal homophobic/biphobic attitudes. It may be less common to experience extreme internalized homophobia just as nonexistent internalized homophobia is less possible. Possibly, emerging LGB adults may have a strong support system within their community or families which protects them against the development of strong internalized homophobia and self-stigma. Literature suggests that identifying as lesbian, gay, bisexual, or transgender is becoming more widely accepted and understood (Gates & Newport, 2012). Additionally, the increasing participation in advocacy and sociopolitical efforts and change among the LGBT community may serve to reduce the

development of strong internalized homophobia. Support and community engagement/advocacy likely act as protective factors against the development of strong internalized guilt and shame based on sexual orientation.

Most participants scored within the medium category, suggesting that almost all participants had some experiences of internalized homophobia. While this particular distribution of scores is not statistically extreme (no significant positive or negative skew), it is not an uncommon finding in the literature on internalized homophobia, showing that bisexual women and heterosexual individuals had lower levels of internalized homophobia than gay men, bisexual men, and lesbian women (Jorm et al., 2002). Moderate internalized homophobia scores may also be interpreted as denial of strong internalized homophobia, lack of self-awareness, or displacement of strong feelings of guilt or worthlessness based on sexual orientation. As a minority group, LGB individuals may assimilate to heteronormativity attitudes just as immigrants may assimilate with mainstream White American society that practices anti-immigrant discrimination (Roysircar, Masseratagah, Tran, & Neivestnava, 2019). Many LGB individuals struggle with some level of negative self-concept based on societal homonegativity. This also means that results should be interpreted with caution because the extremely uneven distribution of scores led to difficulty comparing groups based on internalized homophobia levels.

Participants with low internalized homophobia were more self-disclosing about depression and anxiety experiences. Possibly, those with lower self-stigma and shame based on sexual identity may be more open and honest regarding the status of their mental health. In other words, part of positive mental health is the ability to be vulnerable and admit when one is struggling. That LGB young adults with lower internalized homophobia reported higher

depression and anxiety may seem contradictory, it also suggests a level of psychological maturity, flexibility, and a willingness to disclose the reality of suffering. On the other hand, participants with high internalized homophobia reported lower depression and anxiety, which may suggest denial and displacement. Higher internalized homophobia has been shown to lead to self-loathing and shame (Ramirez-Valles et al., 2013), which may act as a barrier in recognizing and managing poor mental health.

Correlations

Correlational analyses revealed a strong positive relationship between depression and anxiety, and moderate correlations of depression and anxiety with substance use, suggesting that LGB individuals likely contend with comorbid mental health concerns. Mutanski et al. (2010) and Haas et al. (2011) reported that the most common co-occurring mental health disorders among the LGB population are mood disorders, anxiety disorders, and substance use disorders.

Moderate Pearson r correlations indicated that some participants with higher internalized homophobia also reported higher depression, anxiety, and substance use, which is consistent with the LGB mental health literature (Haas et al., 2011). Ramirez-Valles et al. discovered that internalized homophobia was positively correlated with depression and suicidal ideation. Studies indicated that LGB individuals who reported higher internalized homophobia also showed lower self-acceptance, lower self-esteem, and higher acceptance of negative stereotypes about homosexuality and bisexuality (Ramirez-Valles et al., 2013; Ross & Rosser, 1996). Frost and Meyer (2009) found that LGB individuals coped with high levels of internalized homophobia by self-medicating with drugs and alcohol, engaging in risky sexual behavior, struggling with long term intimate relationships, and having anonymous sexual experiences. This literature did not find strong support in the present study.

However, moderate correlational findings of the study should be interpreted with scientific objectivity and clinical insights. Correlational analyses are not causal and do not indicate a direct relationship or the effects of mediators. Correlations are linear relationships of scores on two axes. Thus, due to the combination of only few participants reporting high internalized homophobia as well as poor mental health and the inability to draw direct conclusions, the interpretation that lower internalized homophobia is related to poorer mental health in LGB young adults is debatable. The extreme groups (high and low internalized homophobia) reported higher depression, anxiety, and substance use mean scores than the medium internalized homophobia group. Also, descriptive statistics (means, standard deviations, and frequency distributions) and inferential statistics (ANOVAs and interaction effects) showed a complex picture of internalized homophobia and its relationship to mental health of LGB individuals. Taken together, the data suggested a need for further research with larger subgroups for comparison.

While the research in the field suggests that the integration of self-loathing and discrimination based on sexual identity into self-concept potentially increases the risks for developing symptoms of depression and anxiety (Ramirez-Valles et al., 2013), this finding was not substantiated in this study. This disconfirmation may have been due to other psychological variables not studied, such as, coping strategies, resilience, vulnerability, flexibility, social acceptance, or peer support. The findings could also indicate that internalized homophobia may not play as big of a role in poor mental health as was originally thought by LGB researchers, especially in 2019 when identifying as a sexual minority is becoming more normalized (Gates & Newport, 2012). Similarly, the high number of LGB participants who were bisexual, racial and ethnic minorities, international students, and of low income did not match the White/White

American middle-class orientation of LGB researchers.

Analyses of Variance

Three one-way ANOVAs were performed to examine if differences existed for individual scales of depression, anxiety, and substance scores for levels of internalized homophobia. No significant results were obtained. This finding suggests that self-identifying as having low, medium, or high internalized homophobia is not a strong predictor of self-reported symptoms of depression, anxiety, and/or substance use. While numerous studies have reported a link between internalized homophobia and poorer mental health outcomes when compared to heterosexual counterparts (Gattis et al., 2012; Haas et al., 2011; Mustanski et al., 2010), few, if any, have compared levels of internalized homophobia for mental health outcomes. Based on the lack of statistically significant analyses of variance, it can be concluded that differences between levels of internalized homophobia have no effect on mental health outcomes, which is a stark contradiction to the reviewed literature and rationale of this study (Haas et al., 2011). Given this contradiction, non-significant analyses of variance can potentially be explained by extremely uneven distribution of scores between comparison groups (i.e., five participants in the high internalized homophobia category).

Linear Multiple Regressions

Three linear multiple regressions were performed to predict depression, anxiety, and substance-use scores based age, gender, family acceptance, race/ethnicity, international student status, year in school, and social class. This analysis was performed to examine which other variables contributed to differences in mental health scores (e.g., higher or lower depression, anxiety, and/or substance use). A significant regression was found for depression. Depression scores decreased based on higher social class and international student status. Essentially, those

LGB participants who were American students and more affluent were less likely to report symptoms of depression.

A second linear multiple regression was performed to predict anxiety scores based on age, gender, family acceptance, race/ethnicity, international student status, year in school, and social class. A significant regression equation was found. Participants with higher family acceptance of their sexual orientation reported lower anxiety. Families who are understanding, accepting, and supportive of LGB individuals act as a buffer against developing more severe anxiety. LGB individuals with interpersonal support may feel more at ease, less nervous about disclosing, and have more confidence and higher self-esteem based on family acceptance, whereas those who have been ostracized based on sexual identity are more at risk for mental health concerns. As a clinical implication for this finding, it may be important for clinicians to provide education and intervention to family members of LGB individuals, if possible. Involving and educating family members about the power of support and acceptance may lead to better mental health outcomes for LGB young adults. Parents, Families and Friends of Lesbians and Gays (PFLAG) is an example of a family-based organization that is committed to promoting the health and well-being of LGBT individuals and their families. PFLAG offers online support, education, and advocacy, and represents a vital clinical resource for clinicians and LGBT families.

Additionally, non-international students also reported lower anxiety, suggesting that adjustment and comfort with culturally familiar environment and surroundings lead to general wellbeing. Anxiety scores increased -2.797 for participants who identified as international students ($M = 7.74$, $SD = 5.88$), as compared to non-international students' anxiety scores ($M = 5.98$, $SD = 5.88$).

The finding about international students' higher depression and anxiety scores is important mental health information. Psychologists need to be informed about the specific cultures of their international student clients, as well as the status of LGB identified people in these cultures. Pachankis et al. (2015) studied countries with high stigma against homosexuality and found that homosexual men in high stigma countries also had lower odds of HIV diagnosis and fewer sex partners. However, homosexual men also had higher odds of unmet mental health needs, risky sexual behaviors, and suboptimal mental and physical health service use. Additionally, homosexual men were more likely to conceal their sexual identities in countries with high stigma (Pachankis et al., 2015). Studies like that of Pachankis et al. have begun to address the relationship between structural forms of stigma and its impact on individual-level stigma processes. Sexual orientation stigmatization in several countries determines the way by which the combination of national legislation and social attitudes are linked to specific stigmatization processes at community and individual levels for sexual minority individuals. Pachankis et al. demonstrated that sexual minority men were more likely to conceal or hide their sexual orientation and/or gender identity in countries that were determined to have high levels of structural stigma as compared to low stigma countries.

Finally, a significant regression was discovered for substance use; those who identified as international students reported lower substance use concerns. It may be less culturally acceptable or common to engage in drug and alcohol use for those students from other countries. International students who come to the United States for educational purposes are likely more focused on academic success, and thus less likely to engage in activities which may threaten their success (Vivancos, Abubakar, & Hunter, 2009). Additionally, international students are typically of higher socioeconomic status and can afford an expensive education and travel to another

country. The study found that lower socioeconomic status was predictive of higher substance use. It has been adequately demonstrated in the literature (cf. Murali & Oyeboode, 2018) that poverty and social inequality have a negative impact on individual physical and mental health and wellbeing. The relationship between socioeconomic status and the risk of developing disease and/or psychiatric disorders is an enduring observation in public health. It is well known that those in the lowest income groups are more likely to suffer from poor health than their more affluent counterparts (Murali & Oyeboode, 2018). Additionally, people in lower social classes are typically exposed to more life stressors, and have fewer resources to cope with those stressors, leading to double victimization. Poverty is associated with many long-term health and psychiatric problems, including increased mortality rates, dropping out of school, crime, and substance use (Murali & Oyeboode, 2018).

Implications for treatment in college/university mental health may include attending to these issues of socioeconomic status, family acceptance, international student status, and other demographic and cultural factors that may impact success in higher education among sexual minorities. In other words, it is important to understand, explore, and treat the entire client and not just some aspects of their identity (e.g., sexual orientation). There are other mental health risk factors among the LGB college population that also require assessment and attention.

Clinical Implications

There are important implications for treatment based on significant correlational findings. When working with LGB individuals, it is imperative that mental health clinicians have a solid understanding of how to assess and conceptualize potential internalized homophobia at every level, as participants disclosed high anxiety and depression even at low levels of internalized homophobia. A concrete way to assess for varying degrees of internalized homophobia/biphobia

is to inquire about social or societal experiences with oppression and discrimination based on sexual identity, with a focus on nuanced experiences. Even slight or distanced experiences with discrimination, such as repeated microaggressions, may become unconsciously and negatively intertwined with sexual identity. Consequently, LGB individuals may not be aware of feelings of internalized homophobia and are therefore less likely to directly report internalized homophobia. Lack of client awareness and direct reporting may take some patience and psychoeducation on the part of the clinician; defining terms such as ‘microaggression’ and ‘internalized homophobia’ may be useful in providing insight and awareness to LGB individuals. It is also important to highlight resilience, strength-based assessment, and affirmative psychotherapy (APA, 2017). Clinicians may not want to automatically assume that all LGB clients struggle with repressed internalized shame and guilt based on their sexual identity. It is also important that clinicians are continuously aware of their own attitudes and biases regarding internalized homophobia to monitor potential collusion with clients. Results of the study demonstrate the complex and complicated nature of the internalization of negative societal views of identifying as a sexual minority.

Additionally, asking about the coming out process will likely present valuable data regarding internalized homophobia. Studies suggest that time period and age have important influence on sexual identity development (APA, 2017). Notably, both the context and historical period of time when an LGB individual has engaged in the coming out process accounts for sexual identity label (e.g., pansexual versus bisexual), gender identity (e.g., fluid, non-conforming), and continued disclosure of sexual orientation to others throughout the lifespan (APA, 2017). The coming out process for emerging youth is generally drastically different from older adults in the U.S., who may experience ageism within LGBT communities (APA, 2017).

LGB young adults may have an easier and more comfortable experience when coming out. LGB youth may incite more community support, as identifying as LGBT is becoming increasingly accepted and celebrated in the U.S. (APA, 2017; Gates & Newport, 2012).

Since it has been demonstrated in the literature and possibly in this study that higher rates of internalized homophobia lead to the development of mental health concerns, screening for internalized homophobia should be part of the clinical intake. Specifically, inquiring about experiences of discrimination and oppression based on sexual orientation, self-stigma, marginalization of high stigma cultures in nations outside the United States, exploring the client's coming out process or lack thereof, and understanding the role of family and peer support (or non-support) are all potential avenues for assessment and conceptualization.

Multicultural Implications

The study's linear multiple regression results on social class and international student status also have important implications for multicultural psychology. Specifically exploring and attending to issues of low social class and international student status in clinical work with college and university students may be relevant to understanding and treating depression and anxiety using a contextual lens. Multiculturally competent therapy in college mental health should address intersecting identities and pay close attention to socioeconomic status and students from other countries. As the results of the study demonstrated, those who were both international students and lower social class had higher depression and anxiety. Additionally, those with lower social class also reported higher substance use. These demographic categories tend to be risk factors for mental health concerns and should be part of an intake questionnaire in university counseling centers. Proper assessment of social class and international student status can thus lead to holistic treatment that pays more nuanced attention to various aspects of

intersecting identity, not just gender, race, and sexual orientation.

Limitations of the Study

A limitation of the study was a small sample size of 130 participants, which makes it challenging to generalize the results to the larger sexual minority population. Further, the study only examined those who identified as lesbian, gay, and bisexual, omitting other important and distinguishable sexual identities that are gaining attention in the current social climate, such as queer, questioning, pansexual, demi sexual, asexual, homo and heteroflexible, among others. This study did not examine gender in relationship to sexual orientation, and although the two are separate constructs, they are often linked within the LGBT community.

Another limitation was the sampling method of utilizing the Amazon Mechanical Turk website, which did not require participants to be enrolled as a college or university student, thus altering the original research questions which applied to university students' mental health. The original reasoning for using Mechanical Turk was that the researcher was having significant challenges recruiting college and university students to participate. Speculatively, this may be due to increased stress and time management concerns among college students (e.g., increased work load, balancing multiple responsibilities with academics, increase in nontraditional students with families, etc.). Low participation of college students may also be due to either discomfort or disinterest in the topic of LGB mental health. In 2019, it is much more widely accepted that LGB individuals exist, are out and proud, and contend with intersecting social identities (Gates & Newport, 2012). The conversation about intersectionality is especially common on college campuses, even more so at liberal arts colleges or large state universities. Perhaps college students felt that the study's area of research was not worth investigating further. Although the utilization of Amazon Mechanical Turk data is a notable limitation, the expanded sampling may

have led to a more representative sample of LGB young adults from various locations throughout the United States.

A final limitation is that I did not conserve alpha levels, potentially leading to type I error, given that multiple hypotheses were tested, increasing the likelihood of finding rare statistical events, which, however, did not occur in the study. All tests of difference were non-significant except for three multiple regressions with demographic items for the criterion variables of depression, anxiety, and substance use. A potential strategy for future studies may utilize alpha partitioning or splitting, or Bonferroni correction.

Future Directions in Research

Future studies may replicate this design with a larger sample size and more evenly distributed groups of internalized homophobia levels to get a better sense of potential differences in mental health among LGB individuals. With larger and more equal internalized homophobia subgroups, researchers may find interactions between internalized homophobia, mental health, and sexual identity. Future research may also seek to incorporate gender identity and other sexual orientations to deepen the understanding of intersecting gender and sexual identities and their relationships to mental health outcomes in comparison, for example, with cisgender homosexual individuals. Additionally, future research may want to include other types of mental health concerns frequently observed and reported in the LGBT community, such as eating disorders, obsessive-compulsive disorder, and suicide attempts (Haas et al., 2011).

Given that the correlations between internalized homophobia and depression and anxiety were less robust than expected, future studies may choose to examine the relationship of the four internalized homophobia subscales (public identification, perception of stigma, social comfort, and moral and religious acceptability) with the total scores of mental health measures (PHQ-9,

GAD-7, CAGE-AID, or others). In doing so, perhaps internalized homophobia subscale correlations would suggest that some specific domains of internalized homophobia are more associated with anxiety and depression than others.

Conclusion

The study sought to examine the relationship between internalized homophobia and mental health among lesbian, gay, and bisexual emerging adults. One hundred thirty emerging adults completed an online survey with demographic questions, the Internalized Homophobia Scale (IHS; Ross & Rosser, 1996), the PHQ-9 measuring depression, the GAD-7 measuring anxiety, and the CAGE-AID examining substance use. Participants were categorized into three levels of internalized homophobia: (a) low, (b) medium, and (c) high. Ninety-three percent of participants ($N = 119$) scored within the medium level, while very few participants were categorized as having low internalized homophobia ($n = 5$) and high internalized homophobia ($n = 4$), which made statistical analyses challenging based on uneven distribution of scores. Participants with low internalized homophobia were more self-disclosing about depression and anxiety experiences, suggesting that these LGB young adults may be more open and honest regarding the status of their mental health. Additionally, participants with high internalized homophobia reported lower depression and anxiety, which may be representative of denial and displacement. Higher internalized homophobia has been shown to lead to self-loathing and shame (Ramirez-Valles et al., 2013), which may act as a barrier in recognizing and managing poor mental health. These LGB individuals may have internalized social microaggressions and may view their sexual minority status as an abnormality (Meyer, 2003).

Linear regression results suggested that multiple demographic factors led to higher depression, anxiety, and substance use, such as: being an international student (depression and

anxiety) lack of family acceptance (anxiety), and low socioeconomic status (depression and substance use). However, substance use scores significantly decreased for international students and increased for low social class. There are important implications for mental health treatment of LGB emerging adults, including solid assessment and conceptualization of potential internalized homophobia, as well as attending to issues of socioeconomic status, family support, international student status, and other demographic and cultural factors that may impact success in higher education among sexual minorities.

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Appendix A
RECRUITMENT STATEMENT

Hello! My name is Emily Newbury and I am inviting lesbian, gay, or bisexual (LGB) individuals on college campuses to participate in a brief survey as part of my doctoral dissertation research. This anonymous survey will require that you answer a series of questions online on your experiences as a LGB college student, and this is expected to take you between 15 and 20 minutes. In order to thank you for your time, you will have the opportunity to enter a raffle for one of two \$50 gift cards to Amazon.com. To participate in this survey and/or for more information on the purpose of this research, your role, the risks and benefits of participation, how your responses will be used, and who to contact with concerns, please visit my site:

[Insert hyperlink here]

Thank you! Your consideration is greatly appreciated.

Appendix B

INFORMED CONSENT

LGB Mental Health Study

My name is Emily Newbury and I am a doctoral candidate in the Department of Clinical Psychology at Antioch University New England. In working as a therapist with lesbian, gay, and bisexual individuals (LGB), I am interested in better understanding how societal views of the LGB population have influenced LGB sexual identity and mental health functioning in LGB college students. If you identify as lesbian, gay, or bisexual, and are a registered college student over the age of 18, I am inviting you to participate in my study. Please read the following form as it explains the purpose of the study, your role and rights as a participant, foreseeable risks and benefits, and how the information you provide me will be used.

Purpose of the Study

The purpose of my study is to better understand how societal views of LGB have affected sexual identity and the mental health of LGB college students.

Your Role

Once you provide your consent, you will be taken to a survey and asked a series of mental health questions. Your responses are expected to take between 15 and 20 minutes of your time. Please know that your participation in this study is completely voluntary and you may discontinue at any point. Although I encourage you to respond to all items, you have the right to skip any questions you do not wish to answer. You will not be penalized in any way for discontinuing the survey or choosing not to answer a question. At the end of the survey, you will be provided with directions to an email address that is separate from the survey. Please send an email to this address in order to be entered in a randomly selected drawing for one of two \$50 gift certificates to Amazon.com.

Risks and Benefits

It is possible that completing this survey may cause you to think about things you do not normally think about or bring up negative thoughts and emotions. The emotional risk associated with this survey is considered minimal. However, if you feel bad, I encourage you to visit your university counseling center. If your university counseling center is closed and you are experiencing distress, please contact your campus police. At the end of the survey is a list of university counseling center addresses, including yours. In addition, you may contact me by email given below, so that I can support you and help you to reach your university counseling center or campus police.

On the positive side, your participation in my study will help to increase understanding about the needs and difficulties of the LGB college student population. You may also feel it increases your own awareness of your attitudes or beliefs and experiences as an LGB person.

How Information will be Used

I am not asking for your name or other identification details. Your survey responses will be kept confidential. For the purpose of analyses, only I will use your data in conjunction with the

responses of other participants. Results will be reported as averages. An email address for the gift card drawing has been established for this survey and is only accessible by me. Your email to me to participate in the raffle cannot be connected to your answered questionnaire. Therefore, your responses will not be associated with your name or email address in any way. Please feel free to respond as openly and honestly as possible. Once the survey is discontinued, the data will be used as part of my doctoral dissertation. Once the dissertation is completed, all data will be destroyed. I may inform my study's findings in professional reports and conferences.

If you have any questions or concerns about your rights as a research participant, please contact: _____, Director of IRB at: Antioch University New England, 40 Avon Street, Keene, NH 03431 or _____ phone _____ or _____@antioch.edu. You may also contact me with questions regarding this survey at: _____

Thank you! Your participation in my survey is greatly appreciated.

By checking the box below, you agree that you have read and understood the above information and willingly and freely consent to participation in this study.

I consent to participation in this study.

Appendix C
INTERNALIZED HOMOPHOBIA SCALE

Fill out this scale by writing the number that best describes your response in the space to the left of each statement. Give your first response and don't spend too much time on any one item. The responses are:

- 1 = Strongly agree
- 2 = Moderately agree
- 3 = Slightly agree
- 4 = Neither agree nor disagree
- 5 = Slightly disagree
- 6 = Moderately disagree
- 7 = Strongly disagree

- ___ 1. Obviously effeminate homosexual men make me feel uncomfortable.
- ___ 2. I prefer to have anonymous sexual partners.
- ___ 3. It would be easier in life to be heterosexual.
- ___ 4. Most of my friends are homosexual or bisexual.
- ___ 5. I do not feel comfortable about making an advance toward someone of the same sex.
- ___ 6. I feel comfortable in gay bars.
- ___ 7. Social situations with gay men or lesbian women make me feel uncomfortable.
- ___ 8. I don't like to think about my homosexuality/bisexuality
- ___ 9. When I think about gay men, lesbians, or bisexuals, I think of negative situations.
- ___ 10. I feel uncomfortable being seen in public with an obviously gay or lesbian person.
- ___ 11. I feel comfortable discussing homosexuality in a public setting.
- ___ 12. It is important to me to control who knows about my homosexuality/bisexuality.
- ___ 13. Most people have negative reactions to homosexuality/bisexuality.
- ___ 14. Homosexuality/bisexuality is not against the will of God.
- ___ 15. Society still punishes people for being gay, lesbian, or bisexual.
- ___ 16. I object if someone tells a joke about gays or lesbians in my presence.
- ___ 17. I worry about growing old and being homosexual/bisexual.
- ___ 18. I worry about becoming unattractive.
- ___ 19. I would prefer to be more heterosexual.
- ___ 20. Most people don't discriminate against homosexuals/bisexuals.
- ___ 21. I feel comfortable about being homosexual/bisexual.
- ___ 22. Homosexuality/bisexuality is morally acceptable.
- ___ 23. I'm not worried about anyone finding out that I am gay/lesbian/bisexual.
- ___ 24. Discrimination against gay men and lesbians is still common.
- ___ 25. Obviously masculine lesbian women make me feel uncomfortable.
- ___ 26. Even if I could change my sexual orientation, I wouldn't.
- ___ 27. Homosexuality is as natural as heterosexuality.

Appendix D
PHQ-9

Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not At all	Several Days	More Than Half the Days	Nearly Every Day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed or hopeless	0	1	2	3
3. Trouble falling asleep, staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself - or that you're a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or, the opposite - being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3

If you checked off any problems, how difficult have those problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all

Somewhat difficult

Very difficult

Extremely difficult

Appendix E
GAD-7

Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not At all	Several Days	More Than Half the Days	Nearly Every Day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3

If you checked off any problems, how difficult have those problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all

Somewhat difficult

Very difficult

Extremely difficult

Appendix F
CAGE-AID

When thinking about drug use, include illegal drug use and the use of prescription drug use other than prescribed.

Questions	YES	NO
Have you ever felt that you ought to cut down on your drinking or drug use?	YES	NO
Have people annoyed you by criticizing your drinking or drug use?	YES	NO
Have you ever felt bad or guilty about your drinking or drug use?	YES	NO
Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?	YES	NO

Appendix G

PERMISSION TO USE AND REPRODUCE INTERNALIZED HOMOPHOBIA SCALE

From: [REDACTED]
Sent: Monday, April 29, 2019 2:43 PM
To: Emily Christine Newbury [REDACTED]
Subject: Re: permissions for IHS

Dear Emily, I would be happy for that. However, note that in the 23 years since that paper, there have been several revisions published (for our latest paper on a revision on well over 100,000 MSM, see attached) and the scale has been appreciably shortened, best regards, Mike Ross.

Michael W. Ross PhD MedDr MPH
Joycelyn Elders Professor and Chair of Sexual Health Education
Department of Family Medicine
University of Minnesota Medical School
1300 South 2nd Street #180
Minneapolis, MN 55454
mwross@umn.edu

On Mon, Apr 29, 2019 at 1:21 PM Emily Christine Newbury <enewbury@gsu.edu> wrote:
April 29, 2019

Dear Dr. Ross,

I am completing a doctoral dissertation at Antioch University New England entitled "Internalized Homophobia of LGB Emerging Adults: Identity Complexities and Mental Health." I would like your permission to use and reprint in my dissertation the Internalized Homophobia Scale, from: Ross, M. W., & Rosser, S. B. R. (1996). Measurement and correlates of internalized homophobia: A factor analytic study. *Journal of Clinical Psychology*, 52(1), 15-21. doi:[10.1002/\(SICI\)1097-4679\(199601\)52:1<15::AID-JCLP2>3.0.CO;2-V](https://doi.org/10.1002/(SICI)1097-4679(199601)52:1<15::AID-JCLP2>3.0.CO;2-V).

The requested permission extends to any future revisions and editions of my dissertation, including nonexclusive world rights in all languages, and to the prospective publication of my dissertation by ProQuest through its UMI® Dissertation Publishing business. ProQuest may produce and sell copies of my dissertation on demand and may make my dissertation available for free internet download at my request. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you. Your reply of this email will also confirm that you own the copyright to the above described material. If these arrangements meet with your approval, please reply to this email granting permission. Thank you so very much for your time.

Sincerely,
Emily Newbury, PsyD

Appendix H
PERMISSION TO USE AND REPRODUCE PHQ-9

April 29, 2019

Dear Dr. Kroenke,

I am completing a doctoral dissertation at Antioch University New England entitled “Internalized Homophobia of LGB Emerging Adults: Identity Complexities and Mental Health.” I would like your permission to use and reprint in my dissertation the PHQ-9, from: Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613. doi: 10.1046/j.1525-1497.2001.016009606.x

The requested permission extends to any future revisions and editions of my dissertation, including nonexclusive world rights in all languages, and to the prospective publication of my dissertation by ProQuest through its UMI® Dissertation Publishing business. ProQuest may produce and sell copies of my dissertation on demand and may make my dissertation available for free internet download at my request. These rights will in no way restrict republication of the material in any other form by you or by others authorized by you. Your reply of this email will also confirm that you own the copyright to the above described material. If these arrangements meet with your approval, please reply to this this email granting permission. Thank you so very much for your time.

Sincerely,

Emily Newbury, PsyD
Department of Clinical Psychology
Antioch University New England
40 Avon Street
Keene, NH 03431
enewbury@antioch.edu

From: **Burgett, Donna F** <[REDACTED]>
Date: Tue, Apr 30, 2019 at 10:05 AM
Subject: RE: PHQ-9 permissions
To: enewbury@antioch.edu [REDACTED]

Hello,

The PHQ is now in public domain and freely available for use. Copies of the PHQ family of measures, including the GAD-7 are available at the website: www.phqscreeners.com. Translations, a bibliography, and other information are also provided on the website. Attached please find an instruction manual with scoring information.

Kind regards,

Donna

Appendix I
PERMISSION TO USE AND REPRODUCE GAD-7

Over the last 2 weeks, how often have you been bothered by the following problems? (Use “✓” to indicate your answer) Not at all Several days More than half the days Nearly every day 1. Feeling nervous, anxious or on edge 0 1 2 3 2. Not being able to stop or control worrying 0 1 2 3 3. Worrying too much about different things 0 1 2 3 4. Trouble relaxing 0 1 2 3 5. Being so restless that it is hard to sit still 0 1 2 3 6. Becoming easily annoyed or irritable 0 1 2 3 7. Feeling afraid as if something awful might happen 0 1 2 3 (For office coding: Total Score T_____ = _____ + _____ + _____)

Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.

Appendix J

PERMISSION TO USE AND REPRODUCE CAGE-AID

1. CAGE - Adapted to Include Drugs (CAGE-AID)

Year: 1991

Developers:

Brown, Richard L.; Saunders, Laura A.

Description:

The CAGE-AID modifies the CAGE questions for use in screening for drugs other than alcohol. Like the CAGE, the CAGE-AID focuses on lifetime use; although individuals who are drug dependent may screen positive, individuals who are at risk may not. In a study of its usefulness in a community family practice (Brown & Rounds, 1991), it had a sensitivity of 79 percent and a specificity of 77 percent. The authors suggested that stigma associated with illicit drugs may have limited its sensitivity. Limitations of the CAGE-AID are similar to the CAGE, in that it does not distinguish between active and inactive problems and has not been validated for identifying hazardous or harmful use.

1. Have you ever felt that you ought to **C**ut down on your drinking or drug use?
2. Have people **A**nnoyed you by criticizing your drinking or drug use?
3. Have you ever felt bad or **G**uilty about your drinking or drug use?
4. Have you ever had a drink or used drugs first thing in the morning (**E**ye-opener) to steady your nerves (e.g., get rid of a hangover, or get the day started)?

One or more "yes" responses constitute a positive screening test. Note, however, that due to language barriers, individual interpretation of the questions, or other confounding factors, individuals answering "no" to all CAGE -AID questions may still be at risk due to elevated drinking or drug use levels.

The CAGE-AID has been validated as four-item self-report and parent-report versions as a screen for substance use disorders among adolescents in mental health care.

Instrument Details:

Source Reference:	Brown RL, Rounds LA. Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in primary care practice. <i>Wis Med J</i> 1995;94:135-140.
Population studied:	Adolescents; Co-occurring clients; Adults
Instrument Type:	Screening
Recommended By:	TIP 16; TIP 24
Administration/Scoring:	One or more "yes" responses constitute a positive screening test. Note, however, that due to language barriers, individual interpretation of the questions, or other confounding factors, individuals answering "no" to all questions may still be at risk due to elevated drinking or drug use levels.

Supporting References:

- Hinkin CH, Castellon SA, Dickson-Fuhrman E, Daum G, Jaffe J, Jarvik L. Screening for drug and alcohol abuse among older adults using a modified version of the CAGE. *Am J Addict* 2001;10:319-326.
- Couwenbergh C; Van Der Gaag RJ; Koeter M; De Ruiter C; Van Den Brink W. Screening for substance abuse among adolescents: validity of the CAGE-AID in youth mental health care. *Substance Use and Misuse* 2009;44(6):823-834.

Other Resources:

- [ADAI Library Search: CAGE-AID](#)

Instrument Use & Availability

This measure is in the public domain.

Download the

instrument: <http://www.integration.samhsa.gov/clinical-practice/screening-tools> (SAMHSA-HRSA Integrated Health Solutions)

<http://adaai.uw.edu/instruments/pdf/CAGE-AID.pdf> (Download on ADAI website.)

Permanent URL for this page:

<http://bit.ly/CAGE-AID-info>

Table 1

Cronbach's Alpha Values for Mental Health Measures

Mental Health Measures	No. of Items	α
PHQ-9	9	.89
GAD-7	7	.92
CAGE-AID	4	.92

Note. $N = 130$. IHS=Internalized Homophobia Scale, PHQ-9=Patient Health Questionnaire-9, GAD-7=Generalized Anxiety Disorder-7

Table 2

Descriptive Statistics for All Measures

Measure	Mean	SD	Range of Scores	Skew	Kurtosis
IHS	83.71	47.61	27-189	-1.02	-.55
PHQ-9	6.77	6.29	0-24	.53	-.77
GAD-7	5.73	5.91	0-21	.66	-.74
CAGE-AID	.90	1.28	0-4	1.07	-.20

Note. $N = 130$. IHS=Internalized Homophobia Scale, PHQ-9=Patient Health Questionnaire-9, GAD-7=Generalized Anxiety Disorder-7

Table 3

Means and Standard Deviations for Mental Health Scores at each Level of Internalized Homophobia

		PHQ-9		GAD-7		CAGE	
IHS Levels	<i>n</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Low	5	14.80	2.68	11.00	6.71	2.20	1.48
Medium	119	8.48	5.70	7.26	5.70	1.11	1.33
High	4	9.00	8.41	6.75	6.99	2.25	1.30

Note. IHS=Internalized Homophobia Scale, PHQ-9=Patient Health Questionnaire-9, GAD-7=Generalized Anxiety Disorder-7

Table 4

Pearson Correlations among Internalized Homophobia, Depression, Anxiety, and Substance Use

	PHQ-9	GAD-7	CAGE-AID
IHS	.565**	.493**	.360**
PHQ-9	1.00	.837**	.464**
GAD-7		1.00	.424**
CAGE-AID			1.00

Note. $N = 130$. ** $p < .01$. IHS=Internalized homophobia scale, PHQ-9=Patient Health Questionnaire-9, GAD-7=Generalized Anxiety Disorder-7.

Table 5

One Way Analysis of Variance of Depression Scores by Internalized Homophobia Levels

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between groups	2	191.99	95.99	2.95	.056
Within groups	125	4074.50	32.60		
Total	127	4266.49			

Table 6

One Way Analysis of Variance of Anxiety Scores by Internalized Homophobia Levels

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between groups	2	68.79	34.40	1.04	.358
Within groups	125	4153.67	33.23		
Total	127	4222.50			

Table 7

One Way Analysis of Variance of Substance Use Scores by Internalized Homophobia Levels

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between groups	2	10.37	5.19	2.93	0.57
Within groups	125	221.13	1.77		
Total	127	231.50			

Table 8

Multiple Analysis of Variance of Mental Health Scores by Internalized Homophobia Levels and Sexual Orientation

	Pillai's Trace	<i>F</i>	<i>df</i>	<i>p</i>
Internalized Homophobia Levels	.06	1.3	6	.253
Sexual Orientation	.06	.85	9	.567
Interaction of Internalized Homophobia And Sexual Orientation	.07	.94	9	.494

Note. *N* = 130

Table 9

Linear Multiple Regression of Demographic Variables for Depression Scores

Source	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Age	-.34	.202	-.140	-1.56	.121
Gender	.569	.698	.066	.815	.417
Family Acceptance	1.165	1.103	.122	1.464	.146
Race/Ethnicity	.316	.404	.066	.783	.435
International Student Status	-3.603	1.443	-.219	-2.496	.014
Year in School	-.164	.365	-.039	-.448	.655
Social Class	-1.543	.593	-.218	-2.603	.010

Note. *N* = 130

Table 10

Linear Multiple Regression of Demographic Variables for Anxiety Scores

Source	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Age	-.361	.196	-.130	-1.843	.068
Gender	.851	.679	.103	1.253	.212
Family Acceptance	2.080	1.072	.164	1.939	.054
Race/Ethnicity	.299	.393	.065	.761	.448
International Student Status	-2.797	1.403	-.177	-1.993	.048
Year in School	.117	.355	-.029	-.329	.743
Social Class	-.578	.576	-.085	-1.003	.317

Note. *N* = 130

Table 11

Linear Multiple Regression of Demographic Variables for Substance Use Scores

Source	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>
Age	-.068	.043	-.145	-1.589	.114
Gender	-.039	.147	-.021	-.262	.794
Family Acceptance	-.025	.233	-.009	-.106	.916
Race/Ethnicity	-.045	.085	-.045	-.530	.597
International Student Status	-1.051	.304	-.306	-3.451	.001
Year in School	.111	.077	.127	1.439	.152
Social Class	-1.543	.593	-.218	-2.603	.010

Note. *N* = 130

Figure 1

Hatzenbuehler (2009) model of minority stress and mediating psychological processes and protective factors.

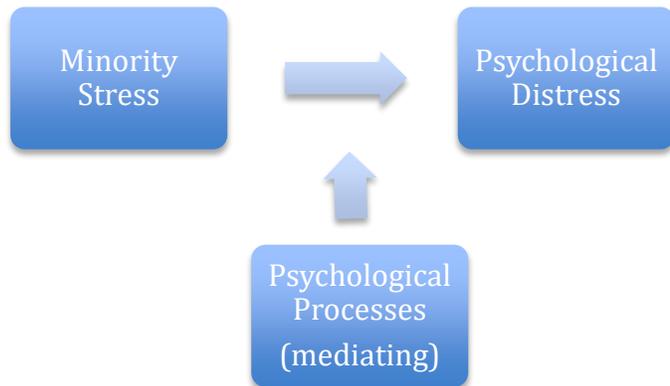
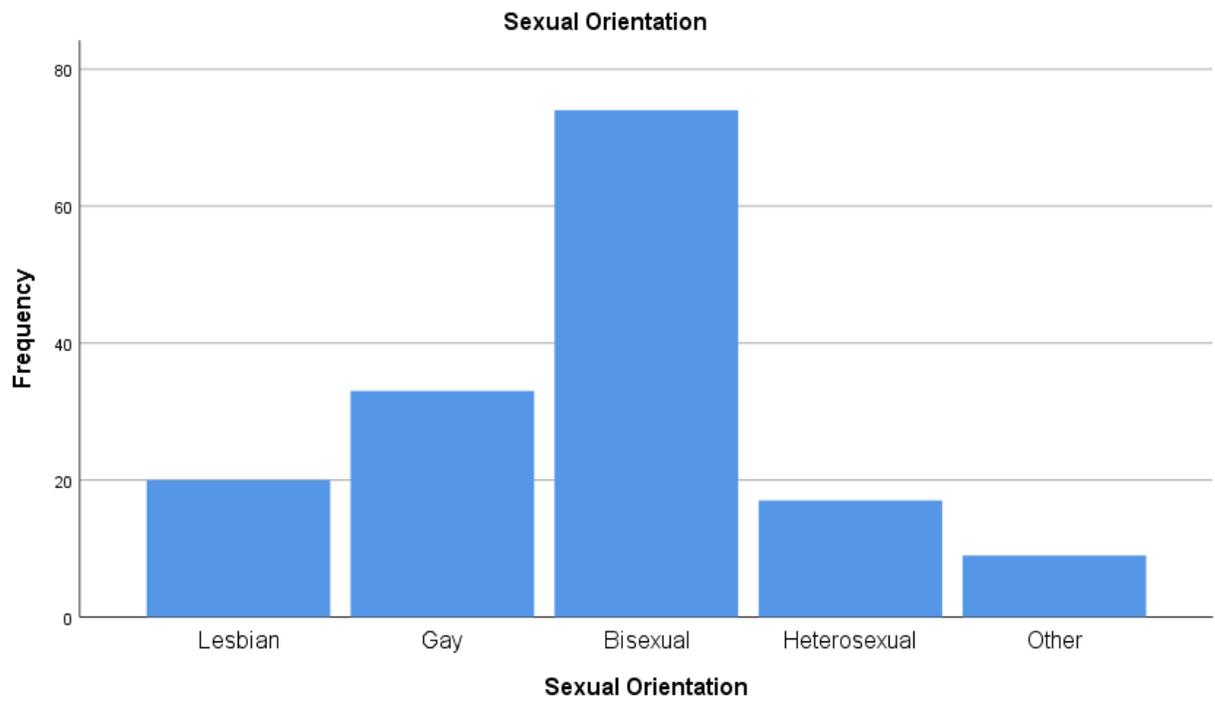
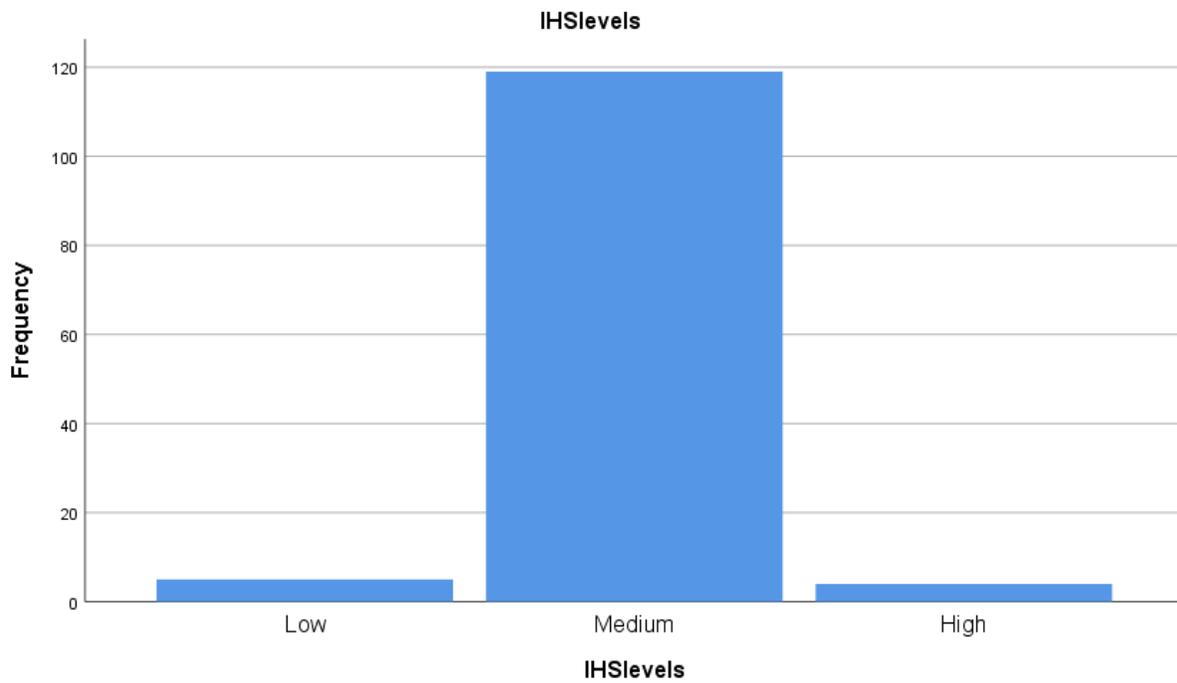


Figure 2

Sexual Identities of Participants

Note. $N = 130$

Figure 3

Frequencies of Internalized Homophobia Levels

Note. $N=130$. IHSlevels=Levels of Internalized Homophobia Scale