Spring 5-2017

Comparison of Suicidality Among Heterosexual and Sexual Minority Individuals

Ashley R. Pate
University of Southern Mississippi

The University of Southern Mississippi

Comparison of Suicidality Among Heterosexual and Sexual Minority Individuals

By

Ashley Pate

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirements for the Degree of
Bachelor of Science
in the Department of Psychology

May 2017

Approved by

_____

Michael Anestis, Ph.D., Thesis Adviser
Assistant Professor of Psychology

_____

D. Joe Olmi, Ph.D., Chair
Department of Psychology

_____

Ellen Weinauer, Ph.D., Dean
Honors College

Abstract

Previous research suggests that sexual minority individuals have a higher risk of suicidal ideation and suicide attempts than do heterosexual individuals. Little research has been done to determine what may cause these differences and how living in a conservative region may contribute to it. This study sought to compare risk factors for suicidal ideation among heterosexual and sexual minority college students in southern Mississippi. To do so, suicidal ideation was examined, as well as thwarted belongingness (TB) and perceived burdensomeness (PB) – two robust predictors of suicidal ideation. It was hypothesized that sexual minorities would have elevated TB, PB, and suicidal ideation levels compared to heterosexual individuals. Feelings of actual and expected rejection were also examined in terms of their impact on TB, PB, and suicidal ideation. It was hypothesized that feelings of actual and expected rejection would serve as predictors of TB, PB, and ideation. Participants were 1199 undergraduate college students, 141 of whom identified as a sexual minority. It was found that PB was significantly higher among sexual minorities than heterosexual individuals ($F=19.59$, $p<.001$, ${}_p\eta^2=.016$), TB was not significantly different ($F=.500$, $p=.480$, ${}_p\eta^2<.001$), and suicidal ideation was not significantly different when controlling for depression ($F=.017$, $p=.897$, ${}_p\eta^2<.001$), but was significant when depression was not added as a covariate ($F=21.42$, $p<.001$, ${}_p\eta^2=.018$). It was also found that feelings of actual and expected rejection by important others did not predict TB, PB, or ideation. However, when rejection by a parent and rejection by a heterosexual friend were isolated, it was found that actual rejection by a heterosexual friend predicted TB and that actual rejection by a parent predicted suicidal ideation with depression as a covariate. These

results indicate that sexual minorities, when compared to heterosexual individuals, do not have higher TB, but do have higher rates of PB and suicidal ideation.

Key Words: suicidal ideation, sexual minorities, thwarted belongingness, perceived burdensomeness, rejection

Acknowledgements

I would foremost like to thank my adviser, Dr. Michael Anestis, for guiding and encouraging me through this process. Without his support and encouragement of my research endeavors, this thesis would not have been possible. I would also like to thank the members of the Suicide and Emotion Dysregulation Lab, particularly Claire and Lauren, for providing assistance and support for this project. Finally, I would like to thank my friends and family for their unwavering support and encouragement for this and all my other academic endeavors.

Table of Contents

Comparison of Suicidality Among Heterosexual and Sexual Minority Individuals

Suicide is the tenth leading cause of death in the United States and, among people ages 15 to 24 (the average age group for undergraduate college students), suicide is the second leading cause of death (CDC, 2015). As troubling as these numbers are on their own, research suggests that sexual minorities' risk for suicide is elevated even higher (Eisenberg & Resnick, 2006; Silenzio, Pena, Duberstein, Cerel, & Knox, 2007; Garcia, Adams, Friedman, & East, 2002). Sexual minorities are two times more likely to report suicidal ideation when compared to heterosexual individuals (van Heeringen & Vincke, 2000; King et al., 2008) and are twice as likely to attempt suicide as their heterosexual peers (King et al. 2008). These ideations and attempts are also often self-reported to be linked to their sexual orientation (D'Augelli, Hershberger, & Pilkington, 2001). Yet, despite the increased risk of suicidal behavior among sexual minorities, the relationship between sexual orientation and suicidal behaviors has been largely understudied (Haas et al., 2011).

What research that has been done shows a common theme in terms of risk factors that emerge for sexual minorities. Some of these risk factors that sexual minorities experience are also common for the general population, such as psychological disorders (McDaniel, Purcell, & D'Augelli, 2001). However, even for these common risk factors the rates tend to be increased among sexual minorities (Haas et al., 2011). For sexual minorities, the rates of depression, anxiety, and substance misuse, when compared to heterosexual peers, were roughly 1.5 times higher (King et al., 2008). When examining the rates of disorders among subgroups of sexual minorities, the rates become even higher. For instance, Kerr, Santurri, and Peters (2013) found that bisexual women are 3.1 times more

likely to be diagnosed with depression than heterosexual women and lesbian women are 2.4 times more likely. Comorbidity of these mental health concerns also appears to be higher among sexual minorities (Cochran, Sullivan, & Mays, 2003). These elevated rates of mental disorders, particularly depression, anxiety, and substance use, are associated with the increased risk of suicidal behaviors among sexual minorities and may, in part, account for why their risk is elevated compared to their heterosexual peers (Haas et al., 2010). Additionally, social stressors, such as intimate partner violence, sexual assault, discrimination, and family conflicts, are related to suicidal behaviors among the general population. However, for sexual minorities the rates of many of these risk factors increase and are significantly related to suicidal ideation (Blosnich & Bossarte, 2012).

In addition to the risk factors that are common among the general population, sexual minorities also have specific stressors that emerge due to their sexual orientation status. It has been suggested that factors such as discrimination, victimization, and rejection, may be related to increased suicidal behaviors (Haas et al., 2011). According to Herek (2009), sexual minorities are often the victims of violence, property crime, threat, verbal abuse, and job discrimination. These acts on the basis of sexual orientation range in prevalence from 11.2% to 49.2% of the respondents reporting an experience. Experiences such as these are associated with increased rates of depression, substance use, and suicidal ideation (Meyer, 2013). Additionally, experiencing discrimination and hate crimes removes feelings of security which may also lead to distress (Meyer, 2013). Another risk factor that is particularly relevant to sexual minority populations is family and peer rejection on the basis of sexual orientation. Most sexual minorities interviewed in one study had at least one person react positively to the disclosure of sexual identity, but over half of them had

at least one person reject them outright (Rosario, Schrimshaw, & Hunter, 2009). Sexual minorities who believed their parents to be more rejecting upon their coming out tend to experience more psychological distress (Puckett, Woodward, Mereish, & Pantalone, 2015). Indeed, those who experience less acceptance by family have over three times the risk of suicidal ideation and suicide attempts when compared with sexual minorities who experience more acceptance (Ryan, Russell, Huebner, Diaz, & Sanchez, 2010).

Sexual Minorities and the Interpersonal Theory of Suicide

The understanding of the relationship between sexual orientation and the aforementioned risk factors – both general and sexual minority specific – can be heightened by the interpersonal theory of suicide (ITS; Joiner, 2005). This theory states that the most serious suicidal behavior occurs when a person has both the desire to die and has acquired the capability to act on that desire. The two constructs that impact the desire to die are thwarted belongingness and perceived burdensomeness. Thwarted belongingness is proposed to occur when a person feels lonely and perceives that they do not have relationships that provide reciprocal care. Perceived burdensomeness occurs when an individual feels as though they are a burden on important people in their lives and experience self-hating. Suicidal ideation emerges when an individual experiences both thwarted belongingness and perceived burdensomeness and feels hopeless that these states will change. However, the vast majority of those with suicidal ideation do not attempt suicide and of those who attempt, very few ultimately die (Klonsky & May, 2014). In order to transition from ideation to attempt, the ITS proposes that the individual must experience both thwarted belongingness and perceived burdensomeness and also be capable of suicide. The ITS recognizes that the act of dying by suicide is not an easy thing to do – it is

terrifying, and may involve serious pain or bodily harm. Therefore, to be capable of going through with the act, a person must develop a higher pain tolerance and lose their fear of death. (Van Orden et al., 2010).

The problems faced by sexual minority individuals, particularly discrimination, rejection, and victimization due to sexual orientation may lead to higher levels of thwarted belongingness and perceived burdensomeness. For instance, sexual minorities may perceive themselves to be a burden on important members of their family and peer group who now to have to come to their defense, discuss their coming out, or redirect negativity regarding their sexual orientation (Oswald, 2000, Hilton & Szymanski, 2011).

Furthermore, experiencing homophobia, both internal and external, may increase perceived burdensomeness on sexual minorities. Homophobia is a form of social punishment that occurs when a person transgresses heterosexual standards and its purpose is to shame the person doing the transgressing (McDermott, Roen, & Scourfield, 2008). Because of this, sexual minorities are vulnerable to feeling shame, which can lead them to condemning themselves as being a failure and believing that if others found out about their failure they would also condemn them (Johnson & Yarhouse, 2013). This shame and self-condemnation can increase perceived burdensomeness as it can make the person feel that they are a failure of a person and that they are a liability to others. Additionally, internalized homophobia, which are negative internal perceptions of any non-heterosexual orientations that arise from socialization in a largely heterosexual culture, can cause sexual minorities to negatively view themselves and to experience discomfort with their sexual orientation (Rosario, Schrimshaw, Hunter, Gwadz, 2002). Internalized homophobia can continue to be a source of negative self-perception long after they have come to terms with their sexuality

(Meyer, 2013). It is likely that these negative perceptions of oneself can contribute to feelings of self-hatred and perceived burdensomeness.

Another risk factor that can be linked to perceived burdensomeness is parental rejection. Experiencing parental rejection over sexual orientation may create an environment where the sexual minority person feels as though they have let important family members down because they did not meet expectations. Members of their family may express pain, disrespect, or even blame themselves for their family member's sexuality (Oswald, 2000), which can amplify perceptions of burdensomeness. In addition, parental or familial rejection can be tied to thwarted belongingness. Negative family reactions can lead to the sexual minority individual being excluded from the entire family or distanced from individual family members (Oswald, 2000), which could interfere with their connectedness to reciprocal relationships.

Additionally, fear of rejection leads many sexual minorities to conceal their true identity, which can interfere with their connections to others (Meyer, 2013; Schrimshaw, Siegel, Downing Jr., & Parsons, 2013) and impact feelings of thwarted belongingness. Feelings of isolation may also be a reality for sexual minorities, especially in less metropolitan areas (Yarbrough, 2003) and result in them feeling as though they have few connections. Sexual minorities also tend to endorse more feelings of loneliness than their heterosexual peers (Westefeld, Maples, Buford, Taylor, 2001), which is one of the two major components of developing feelings of thwarted belongingness.

To date, there have been at least four studies that have previously examined either perceived burdensomeness or both thwarted belongingness and perceived burdensomeness in sexual minority samples. The first of these studies was done by Hill and Pettit (2012),

who found that lesbian, gay, and bisexual college students endorsed higher rates of perceived burdensomeness, but not thwarted belongingness, than did their heterosexual peers, and that only perceived burdensomeness predicted suicidal ideation. The lower levels of thwarted belongingness were attributed to the college environment allowing for more connections.

In a community sample of sexual minority adults drawn from across the US, Woodward, Wingate, Gray, and Pantalone (2014) also found that only perceived burdensomeness was associated with suicidal ideation. They also found variation among subgroups of sexual minorities in that gay men who had higher perceived burdensomeness were three times more likely to endorse suicidal ideation than gay men with lower levels. Lesbian women who had higher scores of perceived burdensomeness were seven times more likely to endorse suicidal ideation. Bisexual women with higher scores of perceived burdensomeness were five times more likely to endorse suicidal ideation.

Silva, Chu, Monahan, and Joiner (2015) examined the roles of sex and perceived burdensomeness in sexual minority college students. They found that sexual minority students had higher perceived burdensomeness and suicidal ideation. It was also found that the relationship between sexual orientation and suicidal ideation was significant only for females, particularly for bisexual women.

Baams, Grossman, and Russell (2015) examined how thwarted belongingness and perceived burdensomeness are related to minority stress factors, depression, and suicidal ideation in sexual minorities. Again, they found that perceived burdensomeness played a more critical role in suicidal ideation, as well as depression.

Although these studies represent important early contributions to research on sexual minorities, a compelling case could be made that their findings may not be generalizable to other regions of the country. These four prior studies took place in larger cities in the southeast (Hill & Pettit, 2012; Silva et al., 2015), cities in the northeast, southwest, and west coast (Baams et al., 2015), or country-wide (Woodward et al., 2014). The results may not hold for regions of the country, such as more rural areas of the south, where acceptance of sexual minorities may be less common.

Indeed in areas in the Deep South, where the current study takes place, there are widely accepted antigay sentiments that occur from the institutional level down to the individual level. For instance, until late 2014, Mississippi had a constitutional ban on same-sex marriage (Associated Press, 2014). Previous research has shown that in states where such amendments existed, sexual minorities have higher rates of psychiatric disorders and higher comorbidity rates (Hatzenbuehler, Keyes, & Hasin, 2010). Additionally, Mississippi does not have any state legislation to prohibit discrimination on the basis of sexual orientation (Human Rights Campaign, 2016). Hatzenbuehler, Keyes, and Hasin (2009) found that in states without legal protection from discrimination based on sexuality, psychiatric disorders and comorbidity were higher among sexual minorities than they were for sexual minorities living in states that offered them more protection.

In addition to these discriminations on an institutional level, sexual minorities living in areas that are less accepting are subjected to individual discrimination as well. In a 2014 survey conducted by the Human Rights Campaign in Mississippi, it was found that 38% of sexual minorities have been harassed in the workplace, 41% have been harassed by family members, 48% have been harassed in public establishments, 22% have been

frequently harassed at their religious establishments, and 46% have been harassed at school. Experiences like these lead sexual minorities to be vigilant and to constantly anticipate negativity (Meyer, 2013).

Therefore, sexual minority populations residing in these less accepting regions are a particularly vulnerable group and previous research may not generalize to them. In particular, thwarted belongingness may be more relevant in this population than in previous ones because of the high levels of discrimination that may interfere with feelings of connectedness among sexual minorities in this region.

Thus, the current study seeks to fill in the gaps of previous research by focusing on this understudied population of sexual minorities. To do so, thwarted belongingness and perceived burdensomeness as they relate to suicidal ideation and sexual orientation were examined. It was hypothesized that, as with previous studies, suicidal ideation, as well as thwarted belongingness and perceived burdensomeness, would be higher in sexual minorities than in their heterosexual peers. Additionally, levels of actual and expected rejection by important others was also assessed and it was hypothesized that actual and expected rejection would predict levels of thwarted belongingness, perceived burdensomeness, and suicidal ideation.

Method

Participants

Participants were 1199 undergraduate college students from a university in southern Mississippi, with a mean age of 21.04 (SD=4.94). Of these students, 1058 self-identified as heterosexual and 141 self-identified as a sexual minority. Participants were

primarily female (79.9%), with 19.3% male. The majority of participants identified as white/Caucasian (60%), followed by black/African American (34.4%).

Measures

Interpersonal Needs Questionnaire (INQ). The INQ (Van Orden, Cukrowicz, Witte, & Joiner, 2012) is a 15-item questionnaire that was used to measure perceived burdensomeness and thwarted belongingness. Six items measure perceived burdensomeness (e.g., *These days I feel like I am a burden on society*) and nine items measure thwarted belongingness (e.g., *These days I rarely interact with people who care about me*). Participants responded to these statements using a 7-point Likert scale (1=*Not at all true for me* to 7=*Very true for me*), with some questions being reverse coded. Higher scores indicated that the respective levels for perceived burdensomeness and thwarted belongingness are higher. Previous research has indicated that the INQ has good construct validity and reliability in undergraduate samples (Van Orden et al., 2012). Thwarted belongingness and perceived burdensomeness served as predictors in some analyses and outcomes in others. The alpha coefficient for thwarted belongingness was .883 and the alpha coefficient for perceived burdensomeness was .948.

Positive and Negative Suicide Ideation (PANSI). The PANSI (Osman, Gutierrez, Kopper, Barrios, & Chiros, 1998) is a 14-item self-report questionnaire that measures suicidal ideation during the past two weeks. The inventory measures both positive suicidal ideation (e.g. *Have you felt that you were in control of most situations in your life?*) and negative suicidal ideation (e.g., *Have you thought about killing yourself because you felt like a failure in life?*). Participants rated how each statement has applied to them on a 5-point Likert scale (1=*None of the time* to 5=*Most of the time*). Research has shown the

PANSI has good internal consistency, good reliability, and good concurrent and predictive validity in college samples (Osman et al., 1998). The PANSI served as an outcome measure in some analyses. The alpha coefficient for the negative suicidal ideation scale was .955.

Depression Anxiety Stress Scale – 21 (DASS-21). The DASS-21 (Lovibond & Lovibond, 1995) is a scale used to measure depression, anxiety, and stress symptoms during the past week. The measure is a 21-item self-report questionnaire that is a shortened form of the original 42-item DASS. Participants used a 4-point Likert scale (0=*Did not apply to me at all* to 3=*Applied to me very much, or most of the time*) to indicate how much statements, such as *I found it hard to wind down* and *I felt down-hearted and blue*, applied to them. Research has shown that the DASS-21 has adequate construct validity and high reliability in non-clinical adult samples (Henry & Crawford, 2005). Depression symptoms served as a covariate in some analyses. The alpha coefficient for the depression subscale was .904.

A**cceptance-Rejection Scale (ARS).** The ARS (Ross, 1985) was used to assess how a participant perceives other's responses to the disclosure of their sexual orientation. The original scale measured participant's perception of how they believed 20 important individuals (family, heterosexual friends, co-workers, religious ministers, teachers, etc.) actually reacted or were expected to react to the disclosure of their homosexual orientation. As this original wording does not reflect other sexual minority orientations, the instructions were modified so that participants are asked how significant others responded to the disclosure of their sexual orientation. Participants responded to the 20 items by indicating if the reaction was actual, expected, or not applicable (i.e., if the person does not have a brother, they indicate that the question does not apply). The participants then use a 9-point

Likert scale to rate the reaction (0=*accepted* to 8=*rejected*). As it is unlikely that heterosexual individuals would feel pressured to disclose their sexual orientation or face subsequent rejection, the measure is only presented to individuals who have selected any non-heterosexual orientation. The measure has been used in previous undergraduate samples (Hill & Pettit, 2012), but psychometric data is still limited. The ARS served as a predictor in some analyses.

Procedure

The institutional review board of the University of Southern Mississippi reviewed and approved the protocol for this study. Participants were recruited from an undergraduate psychology pool of subjects. All participants provided informed consent prior to the onset of the protocol. The entire protocol was completed online through a secure link accessed through the university SONA system. As compensation, participants were granted class credit.

Data Analytic Procedures

To test the first hypothesis, we conducted four analyses of covariance (ANCOVAs) with sexual minority status as the independent variable and TB, PB, suicidal ideation with depression as a covariate, and suicidal ideation without depression as a covariate each serving as the dependent variable in one analysis.

To test the second hypothesis, we conducted four multiple regressions. In the first regression, gender, race/ethnicity, age, and PB were entered in Step 1 and actual/expected rejection levels were entered in Step 2. TB served as the outcome variable. In the second regression, gender, race/ethnicity, age, and TB were entered in Step 1 and actual/expected

rejection levels were entered in Step 2. The outcome variable was PB. In the third regression, gender, race/ethnicity, and depression were entered in Step 1 and actual/expected rejection levels were entered in Step 2. Suicidal ideation was the outcome variable. In the fourth regression, gender and race/ethnicity were entered in Step 1 and actual/expected rejection was entered in Step 2. The outcome variable was suicidal ideation.

Results

For variables used in the primary analysis, intercorrelations and descriptive statistics can be found in Table 1. Thwarted belongingness and suicidal ideation both displayed significant kurtosis and skew. Therefore, these two variables were rank transformed using Blom's formula to more closely resemble a normal distribution. These transformed variables were utilized in all analyses, but to make interpretation easier, non-transformed descriptive statistics are displayed in Table 1.

Covariate Selection

In order to determine covariates to include in the analyses, we examined the relationship between demographic variables and suicidal ideation, thwarted belongingness, and perceived burdensomeness. It was found that there were significant gender differences for all three variables; perceived burdensomeness ($F=5.02$, $p=.007$), thwarted belongingness ($F=4.83$, $p=.008$), and suicidal ideation ($F=9.52$, $p<.001$). Those who self-identified with a gender identity other than male or female reported higher levels of thwarted belongingness, perceived burdensomeness, and suicidal ideation. There were also significant differences based on race for all three variables; perceived burdensomeness

(F=6.03, p=.002), thwarted belongingness (F=15.91, p<.001), and suicidal ideation (F=7.33, p=.001). Those who identified as a race other than white/Caucasian or black/African-American reported higher levels on all three variables. Age was also found to be significantly associated with perceived burdensomeness (r = -.088; p=.002) and thwarted belongingness (r = -.077; p=.008). Additionally, thwarted belongingness was used as a covariate for perceived burdensomeness and vice versa in order to account for the overlap between these constructs.

Primary Analysis

The results indicated that, when controlling for gender, race, age, and thwarted belongingness, sexual minorities had significantly higher levels of perceived burdensomeness than did their heterosexual peers (F=19.59, p<.001, $_p\eta^2$=.016, R^2=.407; Table 2). When controlling for gender, race, age, and perceived burdensomeness, it was found that sexual minorities did not differ significantly from their heterosexual peers on levels of thwarted belongingness (F=.500, p=.480, $_p\eta^2$<.001, R^2=.411; Table 2).

Similarly, when controlling for gender, depression, and race, sexual minorities did not differ significantly from their heterosexual peers on suicidal ideation levels (F=.017, p=.897, $_p\eta^2$<.001, R^2=.448; Table 2). However, when depression was removed as a covariate in the analysis, sexual minorities were found to have significantly higher levels of suicidal ideation as compared to heterosexual individuals (F=21.42, p<.001, $_p\eta^2$=.018, R^2=.024; Table 2).

Analyses examining our second hypothesis indicated that neither actual nor expected rejection was not a significant predictor for thwarted belongingness, perceived

burdensomeness, or suicidal ideation (β's<.120, p's>.120; Tables 3-7). However, in an exploratory set of analyses, we further examined whether the role of rejection might depend upon the specific relationship being considered. When actual and expected rejections levels of parents and friends were isolated, results indicated that actual rejection by a heterosexual friend was a significant predictor for thwarted belongingness (β=.330, p=.009; Table 7) and actual rejection by a parent was a significant predictor for suicidal ideation without depression as a covariate (β= -.503, p=.023; Table 8).

Discussion

The aim of this study was to examine if heterosexual and sexual minority individuals in an understudied and highly conservative region of the country differ in terms of perceived burdensomeness, thwarted belongingness, and suicidal ideation, as well as whether perceptions of actual or expected rejection had any impact on the levels of the aforementioned constructs. It was hypothesized that levels of perceived burdensomeness, thwarted belongingness, and suicidal ideation would be elevated in sexual minorities as compared to heterosexual individuals. It was found that this hypothesis was only partially supported, with perceived burdensomeness being significantly higher among sexual minorities. Suicidal ideation was also found to be significantly higher, but only when depression was removed as a covariate in the analysis, a follow-up analysis that was conducted due to potential overlap in the questions on the depression and suicidal ideation measures used in our specific protocol. Thwarted belongingness was not found to be significantly different among heterosexual and sexual minority individuals. These findings are consistent with previous studies that found only perceived burdensomeness and suicidal ideation to be elevated in this population (Hill & Pettit, 2012; Woodward et al., 2014;

Baams et al., 2015) and thus extends the generalizability of those findings to a region of the country in which there are widely accepted antigay sentiments and sexual minorities face high levels of institutional and individual discrimination on the basis of their sexual orientation.

Additionally, it was hypothesized that levels of perceived acceptance and rejection by important others would be significant predictors of thwarted belongingness, perceived burdensomeness, and suicidal ideation. However, this hypothesis was not supported in the initial analysis using the full acceptance-rejection scale, as acceptance and rejection levels were found to have no impact on levels of thwarted belongingness, perceived burdensomeness, or suicidal ideation. However, given that the scale gives equal weight to rejection across all relationships (i.e. parental rejection and rejection by work associates), we decided to examine whether actual and expected rejection by parents and heterosexual friends would have more of an impact. In this analysis it was found that levels of actual rejection by friends predicted thwarted belongingness and levels of actual rejection by parents predicted suicidal ideation when depression was not a covariate.

These results indicate that sexual minority individuals have higher levels of perceived burdensomeness as compared to their heterosexual peers. This may indicate that they feel their sexual orientation is a burden on those around them. For instance, they may feel as though their coming out places an added burden on important others who may have to defend their sexual orientation to others (Oswald, 2000). Additionally, experiencing and internalizing homophobia may result in the development of self-hatred on the basis of sexual identity (Rosario et al., 2002) and the subsequent development of perceived burdensomeness.

Despite the study taking place in a more conservative region than previous studies (Hill & Pettit, 2012; Woodward et al., 2014; Baams et al., 2015), the results still suggest that thwarted belongingness is not significantly elevated among sexual minority individuals. This seems counterintuitive given that sexual minorities often face familial rejection on the basis of their sexual orientation (Rosario et al., 2009). However, one possible explanation for lower than expected levels of thwarted belongingness may be that sexual minorities are more likely to rely on and value the opinions of families of choice (or close friends within the LGBTQ community) rather than on biological family members (Dewaele, Cox, Van den Berghe, & Vincke, 2011; Blair & Pukall, 2015). Thus, relying on these groups, particularly at universities where there may be more opportunities to build these sorts of relationships, may serve as a buffer to thwarted belongingness and account for why these levels have not been found to be significantly higher among sexual minority individuals.

Limitations and Future Directions

While this study expanded the scope of previous research on thwarted belongingness, perceived burdensomeness, and suicidal ideation among sexual minorities to a different region, there were a few limitations that impacted the study. The first of which was with some of the measures that were used. As mentioned previously, the acceptance-rejection scale gave equal weight to all important others (i.e. parents were ranked equally with customers). Thus, the scale may not provide an accurate measure of feelings of rejection as rejection by family members or friends may cause more distress than the rejection of people such as customers or coworkers. In the future, questionnaires for acceptance and rejection should account for the opinions of certain important others being

more influential. Additionally, there was an overlap with the measurements of depression and suicidal ideation. The questions on the PANSI scale are highly similar to the depression questions on the DASS. This may have spuriously led to depression diminishing the association between sexual minority status and suicidal ideation. Future studies should employ measures with less overlap between the constructs being measured.

In addition to the measures used, there were also limitations based upon the design of the study itself. This study was cross-sectional in nature and as such causality cannot be inferred from these results. Additionally, the study was comprised entirely of self-report measures which may have resulted in an inaccurate measure of participant feelings due to participants feeling the need to answer in certain ways. Future studies should rely less heavily on self-report measures.

Furthermore, the sexual minority sample was comprised in large part of bisexual individuals (47.5%). Bisexual individuals were found in previous studies to be the driving force behind higher levels of perceived burdensomeness and suicidal ideation (Silva et al., 2015) and may account for some of the higher levels in this study. However, given the relatively small number of sexual minorities in this sample, it was not feasible to analyze sexual orientations individually. Future studies should attempt to recruit larger numbers of sexual minority individuals in order to better determine if there are differences between different sexual orientations within the sexual minority population.

Finally, this study is limited in its ability to generalize to the community due to the participants all being undergraduate college students. University campuses tend to be far more accepting environments than the communities that surround them and as such, results from college students may not be applicable to the surrounding communities. In the future,

studies should attempt to recruit from community samples to determine how the levels of thwarted belongingness, perceived burdensomeness, and suicidal ideation compare for sexual minorities who are not as sheltered by a university environment.

Conclusion

Despite these limitations however, this study made important contributions by filling in the gaps in suicide research within sexual minority populations through focusing on an understudied region in the Deep South. This study found that, for this population, perceived burdensomeness and suicidal ideation are elevated in comparison to heterosexual individuals. This suggests that perceived burdensomeness may be an important factor to consider when addressing suicide prevention in sexual minority communities.

References

Associated Press. (2014, November 25). Judge overturns Mississippi same-sex marriage ban. USA Today. Retrieved from:http://www.usatoday.com/story/news/nation/2014/11/25/ mississippi-gaymarriage/70122822/

Baams, L., Grossman, A. H., & Russell, S. T. (2015). Minority stress and mechanisms of risk for depression and suicidal ideation among lesbian, gay, and bisexual youth. *Developmental Psychology, 51(5),* 688-696.

Blair, K.L. & Pukall, C.F. (2015). Family matters, but sometimes chosen family matters more: Perceived social network influence in the dating decisions of same- and mixed-sex couples. *The Canadian Journal of Human Sexuality, 24(3),* 257-270.

Blosnich, J. & Bossarte, R. (2012). Drivers of disparity: Differences in socially based risk factors for self-injurious and suicidal behaviors among sexual minority college students. *Journal of American College Health, 60(2),* 141-149.

Center for Disease Control. (2015). Health, United States, 2014. Retrieved from: http://www.cdc.gov/nchs/data/hus/hus14.pdf#020 on 3/7/2016

Cochran, S. D., Sullivan, J. G., & Mays, V.M. (2003). Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay, and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology, 71(1),* 53-61.

D'Augelli, A. R., Hershberger, S. L., & Pilkington, N. W. (2001). Suicidality patterns and sexual orientation-related factors among lesbian, gay, and bisexual youths. *Suicide and Life-Threatening Behaviors, 31(3),* 250-264.

Dewaele, A., Cox, N., Van der Berghe, W., & Vincke, J. (2011). Families of choice?

Exploring the supportive networks of lesbians, gay men, and bisexuals. *Journal of Applied Social Psychology, 41(2),* 312-331.

Eisenberg, M. E. & Resnick, M. D. (2006). Suicidality among gay, lesbian and bisexual youth: The role of protective factors. *Journal of Adolescent Health, 39*, 662-668.

Garcia, J., Adams, J., Friedman, L., East, P. (2002). Links between past abuse, suicide ideation, and sexual orientation among San Diego college students. *Journal of American College Health, 51(1),* 9-14.

Haas, A. P., Eliason, M., Mays, V.M., Mathy, R.M., Cochran, S.D., D'Augelli, A.R. . . . Clayton, P. J. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality, 58*, 10-51.

Hatzenbuehler, M. L., Keyes, K. M., & Hasin, D. S. (2009). State-level policies and psychiatric morbidity in lesbian, gay, and bisexual populations. *American Journal of Public Health, 99(12),* 2275-2281.

Hatzenbuehler, M. L., McLaughlin, K. A., Keyes, K. M., & Hasin, D. S. (2010). The impact of institutional discrimination of psychiatric disorders in lesbian, gay, and bisexual populations: A prospective study. *American Journal of Public Health, 100(3),* 452-459.

Henry, J. D. & Crawford, J. R. (2005). The short form version of the depression anxiety stress scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology, 44,* 227-239.

Herek, G. M. (2009). Hate crimes and stigma-related experiences among sexual minority

adults in the United States: Prevalence estimates from a national probability survey. *Journal of Interpersonal Violence, 24(1)*, 54-74.

Hill, R. M. & Pettit, J.W. (2012). Suicidal ideation and sexual orientation in college student: The roles of perceived burdensomeness, thwarted belongingness, and perceived rejection due to sexual orientation. *Suicide and Life-Threatening Behavior, 42(5)*, 567-579.

Hilton, A. N. & Szymanski, D. M. (2011). Family dynamics and changes in sibling of origin relationship after lesbian and gay sexual orientation disclosure. *Contemporary Family Therapy, 33*, 291-309.

Human Rights Campaign. (2014). Human Rights Campaign unveils results of largest LGBT survey in Mississippi History. Retrieved from: http://hrc-assets.s3-website-us-east-1.amazonaws.com//files/assets/resources/Mississippi_Messaging_7.14.pdf

Human Rights Campaign. (2016). Mississippi. Retrieved from: http://www.hrc.org/local-issues/Mississippi

Johnson, V. R. F. & Yarhouse, M. A. (2013). Shame in sexual minorities: Stigma, internal cognitions, and counseling considerations. *Counseling and Values, 58*, 85-103.

Joiner, T. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.

Kerr, D. L., Santurri, L., & Peters, P. (2013). A comparison of lesbian, bisexual, and heterosexual college undergraduate women on selected mental health issues. *Journal of American College Health, 61(4)*, 185-194.

King, M., Semlyen, J., Tai, S. S., Killaspy, H., Osborn, D., Popelyuk, D., & Nazareth, I.

(2008). A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. *BMC Psychiatry, 8(70)*.

Klonsky, E. D. & May, A. M. (2014). Differentiating suicide attempters from suicide ideators: A critical frontier for suicidology research. *Suicide and Life-Threatening Behavior, 44(1),* 1-5.

Lovibond, P. F. & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the depression anxiety stress scales (DASS) with the Beck depression and anxiety inventories. *Behavior Research and Therapy, 33(3),* 335-343.

McDaniel, J. S., Purcell, D., & D'Augelli, A. R. (2001). The relationship between sexual orientation and risk for suicide: Research findings and future directions for research and prevention. *Suicide and Life-Threatening Behavior, 31,* 84-105.

McDermott, E., Roen, K., & Scourfield, J. (2008). Avoiding shame: Young LGBT people, homophobia and self-destructive behaviors. *Culture, Health, and Sexuality, 10(8),* 815-829.

Meyer, I. H. (2013). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychology of Sexual Orientation and Gender Diversity, 1,* 3-26.

Osman, A., Gutierrez, P. M., Kopper, B. A., Barrios, F. X., & Chiros, C. E. (1998). The positive and negative suicide ideation inventory: Development and validation. *Psychological Reports, 82(3),* 783-793.

Oswald, R. F. (2000). Family and friendship relationships after young women come out as bisexual or lesbian. *Journal of Homosexuality, 38(3),* 65-83.

Puckett, J. A., Woodward, E. N., Mereish, E. H., & Pantalone, D. W. (2015). Parental rejection following sexual orientation disclosure: Impact on internalized homophobia, social support, and mental health. *LGBT Health, 2(3),* 265-269.

Rosario, M., Schrimshaw, E. W., & Hunter, J. (2009). Disclosure of sexual orientation and subsequent substance use and abuse among lesbian, gay, and bisexual youths: Critical role of disclosure reactions. *Psychology of Addictive Behaviors, 23(1),* 175-184.

Rosario, M., Schrimshaw, E. W., Hunter, J., & Gwadz, M. (2002). Gay-related stress and emotional distress among gay, lesbian, and bisexual youths: A longitudinal examination. *Journal of Consulting and Clinical Psychology, 70(4),* 967-975.

Ross, M. W. (1985). Actual and anticipated societal reaction to homosexuality and adjustment in two societies. *The Journal of Sex Research, 21(1),* 40-55.

Ryan, C., Russell, S. T., Huebner, D., Diaz, R., & Sanchez, J. (2010). Family acceptance in adolescence and the health of LGBT young adults. *Journal of Child and Adolescent Psychiatric Nursing, 23(4),* 205-213.

Schrimshaw, E. W., Siegel, K., Downing Jr., M. J., & Parsons, J. T. (2013). Disclosure and concealment of sexual orientation and mental health of non-gay-identified, behaviorally bisexual men. *Journal of Consulting and Clinical Psychology, 81(1),* 141-153.

Silenzio, V. M. B., Pena, J. B., Duberstein, P. R., Cerel, J., & Knox, K. L. (2007). Sexual orientation and risk factors for suicidal ideation and suicide attempts among adolescents and young adults. *American Journal of Public Health, 97(11),* 2017-2019.

Silva, C., Chu, C., Monahan, K. R., & Joiner, T. E. (2015). Suicide risk among sexual minority college students: A mediated moderation model of sex and perceived burdensomeness. *Psychology of Sexual Orientation and Gender Diversity, 2(1),* 22-33.

van Heeringen, C., & Vincke, J. (2000). Suicidal acts and ideation in homosexual and bisexual young people: A study of prevalence and risk factors. *Social Psychiatry and Psychiatric Epidemiology, 35,* 494-499.

Van Orden, K. A., Cukrowicz, K. C., Witte, T. K., Joiner, T. E. (2012). Thwarted belongingness and perceived burdensomeness: Construct validity and psychometric properties of the interpersonal needs questionnaire. *Psychological Assessment, 24(1),* 197-215.

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner Jr., T. E. (2010). The interpersonal theory of suicide. *Psychological review, 117(5),* 575-600.

Westefeld, J. S., Maples, M. R., Buford, B., & Taylor, S. (2001). Gay, lesbian, and bisexual college students: The relationship between sexual orientation and depression, loneliness, and suicide. *Journal of College Student Psychotherapy, 15(3),* 71-82.

Woodward, E. N., Wingate, L., Gray, T. W., Pantalone, D. W. (2014). Evaluating thwarted belongingness and perceived burdensomeness as predictors of suicidal ideation in sexual minority adults. *Psychology of Sexual Orientation and Gender Diversity, 1(3),* 234-243.

Yarbrough, D. G. (2003). Gay adolescents in rural areas: Experiences and coping strategies. *Journal of Human Behavior in the Social Environment, 8(2/3),* 129-144.

Table 1

Descriptive statistics and correlations

	1	2	3	4	5	6
1 Sexual Minority	-					
2 Suicidal Ideation	.117**	-				
3 Burdensomeness	.164**	.720**	-			
4 Belongingness	.132**	.483**	.578**	-		
5 Actual Rejection		.116	.187*	.177*	-	
6 Expected Rejection		.002	.124	.141	.134	-

Note: * = significant at $p < .05$ level; ** = significant at $p < .01$ level

Table 2

	R^2	*F*	*P*	$_p\mu^2$
Thwarted Belongingness				
	.411			
Gender		.604	.437	.001
Race/Ethnicity		32.597	<.001	.027
Age		5.172	.023	.004
Perceived Burdensomeness		733.024	<.001	.382
Sexual Minority		.500	.480	<.001
Perceived Burdensomeness				
	.407			
Gender		.794	.373	.001
Race/Ethnicity		5.865	.016	.005
Age		.303	.582	<.001
Thwarted Belongingness		733.024	<.001	.382
Sexual Minority		19.591	<.001	.016
Suicidal Ideation with depression covariate				
	.448			
Gender		.626	.429	.001
Race/Ethnicity		8.134	.004	.007
Depression		908.019	<.001	.434
Sexual Minority		.017	.897	<.001
Suicidal Ideation without depression covariate				
	.024			
Gender		.285	.594	<.001
Race/Ethnicity		7.611	.006	.006
Sexual Minority		21.420	<.001	.018

Table 3

Actual/Expected Rejection predicting Perceived Burdensomeness

	R^2	ΔR^2	β	t	p
	.419				
Race/Ethnicity			.024	.310	.757
Gender			.141	1.804	.074
Age			-.116	-1.542	.126
Belongingness			.568	7.192	<.001
	.419	.000			
Actual Rejection			-.012	-.155	.877
Expected Rejection			.020	.253	.801

Table 4

Actual/Expected Rejection predicting Thwarted Belongingness

	R^2	ΔR^2	β	t	p
	.405				
Race/Ethnicity			.098	1.286	.201
Gender			.107	1.341	.183
Age			.001	.011	.992
Belongingness			.582	7.192	<.001
	.419	.014			
Actual Rejection			.120	1.569	.120
Expected Rejection			.015	.185	.854

Table 5

Actual/Expected Rejection predicting Suicidal Ideation with depression covariate

	R^2	ΔR^2	β	t	p
	.453				
Race/Ethnicity			.121	1.680	.096
Gender			.107	1.434	.155
Depression			.617	8.258	<.001
	.465	.012			
Actual Rejection			.057	.785	.434
Expected Rejection			-.102	-1.379	.171

Table 6

Actual/Expected Rejection predicting Suicidal Ideation without depression covariate

	R^2	ΔR^2	β	t	p
	.104				
Race/Ethnicity			.178	1.949	.054
Gender			.283	3.100	.002
	.118	.014			
Actual Rejection			.109	1.179	.241
Expected Rejection			-.062	-.654	.514

Table 7

Actual/Expected Friend Rejection predicting Thwarted Belongingness

	R^2	ΔR^2	β	t	p
	.485				
Race/Ethnicity			.090	.647	.522
Gender			.165	1.242	.223
Age			.028	.202	.841
Burdensomeness			.621	4.732	<.001
	.617	.132			
Actual Friend Rejection			.330	2.816	.009
Expected Friend Rejection			.112	.880	.386

Table 8

Actual/Expected Parental Rejection predicting Suicidal Ideation without depression covariate

	R^2	ΔR^2	β	t	p
	.334				
Race/Ethnicity			.319	1.608	.126
Gender			.503	2.534	.021
	.551	.217			
Actual Parental Rejection			-.503	-2.540	.023
Expected Parental Rejection			.291	1.412	.177

Appendix A

IRB Approval

THE UNIVERSITY OF
SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
  Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 16011302
PROJECT TITLE: Comparison of Suicidality Among Heterosexual and Sexual Minority Individuals
PROJECT TYPE: New Project
RESEARCHER(S): Ashley Pate
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Psychology
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 01/20/2016 to 01/19/2017
Lawrence A. Hosman, Ph.D.
Institutional Review Board

Appendix B

Informed Consent Form

Comparison of Suicidality Among Heterosexual and Sexual Minority Individuals Informed Consent Form

Consent is hereby given to participate in the study titled: "Comparison of Suicidality Among Heterosexual and Sexual Minority Individuals"

1. Purpose: The purpose of this study is to investigate the relationship between sexual orientation and suicidality. The results of this study will help researchers better understand risk factors for suicidality in sexual minorities.

2. Description of Study: Participation in this study will take approximately 1 hour of your time and can be completed entirely online. Accordingly, you will be awarded 1 research credit, which will be posted to your account on SONA.

A total of approximately 1000 USM students will participate in this study, conducted online, over a series of one or two semesters. During this study, you will complete a brief series of questionnaires that will ask about different aspects of your personality and psychological functioning, past history of certain behaviors, and a few questions about your background characteristics, such as age, gender, and ethnicity.

3. Benefits: By participating in this study, you will earn 1 experimental research credit, which will either count towards your required research credit, or extra credit, as specified by your instructor. There are no other tangible benefits or compensation for participating in this study.

4. Risks: Some of the questions on these tests deal with personal matters and it is possible that you may experience some discomfort while responding to them. If you experience distress as a result of the questionnaires and would like to seek counseling the following free or low cost services are available for students: Student Counseling Services (601-266-4829), USM Psychology Clinic (601-266-4588), and Community Assessment and Counseling Clinic (601-266-4601). Additionally, if you experience any thoughts of suicide, you can call the National Suicide Prevention Lifeline at (800-273-TALK) for free, anonymous, 24-7 help. However, please keep in mind that your responses will be completely anonymous. In addition, if there are specific questions that you do not feel comfortable answering, you are free to skip those questions. Skipping such questions will in no way affect the credit you receive for participation. Further, if you become so distressed that you wish to drop out of the study, you may do so without losing credit for the time you spent participating.

5. Anonymity: This consent form will be signed electronically via a checkbox at the bottom of the screen if you choose to participate in this study. If you participate, you will be asked to provide your name, which we have to have in order to post your research credit to your SONA account. However, once your credit is posted and verified, your name will

be deleted from the database, so your questionnaire responses will be rendered anonymous. No other personally identifying information will be recorded and, as such, all of your answers will be entirely anonymous

6. Alternative Procedures: Research participation credit for General Psychology courses can also be obtained by writing summaries of psychology journal articles, or other alternative learning experiences, as detailed by your instructor. You may also participate in other research studies listed on SONA, other than this one, if others are available.

7. Participant's Assurance: Strong efforts are made for this study to be designed according to high scientific standards. Participation in this study is voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to Dr. Mike Anestis, available by email at michael.anestis@usm.edu.

8. **Signatures**: By checking a box below, you are verifying the following: (a) you have read and understand the explanation provided to you, (b) you have had all of your questions answered to your satisfaction, (c) you voluntarily agree to participate in this study, (d) **you are at least 18 years of age**, and (e) you have printed a copy of this form for your own records (if desired).

- **I consent to participate in this survey**
- **I do not consent to participate in this survey**

This project and this consent form have been reviewed by the Institutional Review Board of The University of Southern Mississippi, which ensures that research projects involving human subjects follow federal guidelines. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, (601) 266-6820. A copy of this form will be given to you, the research participant.

Appendix C

Demographic Questions and Survey Scales

Demographics

Please enter your name as it appears on SONA. Note: This is only used for granting credit. Your name will not be included in downloaded data.

What is your gender?
- Male
- Female
- Trans Man
- Trans Woman
- Agender
- Intersex
- Other _____

What is your age? _____

What is your sexual orientation?
- Heterosexual
- Gay
- Lesbian
- Bisexual
- Pansexual
- Asexual
- Queer
- Questioning
- Other _____

What is your race/ethnicity?
- White/Caucasian
- Black/African American
- Hispanic/Latino(a)
- Asian/Pacific Islander
- Native American
- Other _____

What is your marital status?
- Never married
- Currently married and consider marriage active (e.g., not separated)
- Currently married but do not consider marriage active (e.g., separated but not divorced)
- Divorced
- Widowed and not remarried

What is your religious affiliation?
- Baptist
- Methodist
- Catholic
- Christian (non-denominational)
- Muslim
- Jewish
- Mormon
- Buddhist
- Atheist
- Agnostic
- Other _____

Interpersonal Needs Questionnaire (INQ)

The following questions ask you to think about yourself and other people. Please respond to each question by using your own current beliefs and experiences, NOT what you think is true in general, or what might be true for other people. Please base your responses on how you've been feeling recently. Use the rating scale to find the number that best matches how you feel and circle that number. There are no right or wrong answers: we are interested in what *you* think and feel.

1	2	3	4	5	6	7
Not at all true for me			Somewhat true for me			Very true for me

1. These days the people in my life would be better off if I were gone
2. These days the people in my life would be happier without me
3. These days I think I am a burden on society
4. These days I think my death would be a relief to the people in my life
5. These days I think the people in my life wish they could be rid of me
6. These days I think I make things worse for the people in my life
7. These days, other people care about me
8. These days, I feel like I belong
9. These days, I rarely interact with people who care about me
10. These days, I am fortunate to have many caring and supportive friends
11. These days, I feel disconnected from other people
12. These days, I often feel like an outsider in social gatherings
13. These days, I feel that there are people I can turn to in times of need
14. These days, I am close to other people
15. These days, I have at least one satisfying interaction every day

Positive and Negative Suicide Ideation Scale (PANSI)

Below is a list of statements that may or may not apply to you. Please read each statement carefully and circle the appropriate number in the space to the right of each statement.

During the past two weeks, including today, how often have you:	1 = None of the time	2 = Very rarely	3 = Some of the time	4 = A good part of the time	5 = Most of the time
1. Seriously considered killing yourself because you could not live up to the expectations of other people?	1	2	3	4	5
2. Felt that you were in control of most situations in your life?	1	2	3	4	5
3. Felt hopeless about the future and you wondered if you should kill yourself?	1	2	3	4	5
4. Felt so unhappy about your relationship with someone you wished you were dead?	1	2	3	4	5
5. Thought about killing yourself because you could not accomplish something important in your life?	1	2	3	4	5
6. Felt hopeful about the future because things were working out well for you?	1	2	3	4	5
7. Thought about killing yourself because you could not find a solution to a personal problem?	1	2	3	4	5
8. Felt excited because you were doing well at school or at work?	1	2	3	4	5
9. Thought about killing yourself because you felt like a failure in life?	1	2	3	4	5
10. Thought that your problems were so overwhelming that suicide was seen as the only option for you?	1	2	3	4	5
11. Felt so lonely or sad you wanted to kill yourself so that you could end your pain?	1	2	3	4	5
12. Felt confident about your ability to cope with most of the problems in your life?	1	2	3	4	5
13. Felt that life was worth living?	1	2	3	4	5
14. Felt confident about your plans for the future?	1	2	3	4	5

DASS-21

INSTRUCTIONS: Please read each statement and choose the number which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

0 = Did not apply to me at all
1 = Applied to me to some degree, or some of the time
2 = Applied to me to a considerable degree, or a good part of the time
3 = Applied to me very much, or most of the time

_____ 1. I found it hard to wind down.
_____ 2. I was aware of dryness in my mouth.
_____ 3. I couldn't seem to experience any positive feeling at all.
_____ 4. I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion).
_____ 5. I found it difficult to work up the initiative to do things.
_____ 6. I tended to over-react to situations.
_____ 7. I experienced trembling (e.g., in the hands).
_____ 8. I felt that I was using a lot of nervous energy.
_____ 9. I was worried about situations in which I might panic and make a fool of myself.
_____ 10. I felt that I had nothing to look forward to.
_____ 11. I found myself getting agitated.
_____ 12. I found it difficult to relax.
_____ 13. I felt down-hearted and blue.
_____ 14. I was intolerant of anything that kept me from getting on with what I was doing.
_____ 15. I felt I was close to panic.
_____ 16. I was unable to become enthusiastic about anything.
_____ 17. I felt I wasn't worth much as a person.
_____ 18. I felt that I was rather touchy.
_____ 19. I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).
_____ 20. I felt scared without any good reason.
_____ 21. I felt that life was meaningless.

Acceptance-Rejection Scale

Please consider each of the following individuals in your life and rate how they have responded to learning about your sexual orientation, or how they would respond, if they are not aware of your sexual orientation. Selecting 0 means they have or would accept you completely and selecting 8 means they have or would rejected you completely.

Use an X to select a rating for those who know about your sexual orientation (*actual* acceptance or rejection) and a √ for those who do not (*expected* acceptance or rejection). If an item refers to more than one individual, you may place more than one X or √ on the continuum. If you do not have someone who fits in a given category, please circle N/A for that item.

1	Mother	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
2	Brother	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
3	Aunts	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
4	Best heterosexual friend (Same sex)	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
5	Teachers	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
6	Grandparents	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
7	Other people at work	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
8	Neighbors	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
9	Customers or clients	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
10	Most other heterosexual friends (same sex)	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
11	Father	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
12	Sister	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
13	Uncles	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
14	Best heterosexual friend (opposite sex)	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
15	Ministers of religion	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
16	Work associates	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
17	Your boss	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
18	Heterosexuals in general	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
19	Friends of parents	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A
20	Most other heterosexual friends (opposite sex)	Accept	0	1	2	3	4	5	6	7	8	Reject	N/A