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POSITIVE EXPLANATORY STYLE AS A PROTECTIVE FACTOR FOR
VICTIMIZED SEXUAL MINORITY ADOLESCENTS

By

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Positive Explanatory Style as a Protective Factor for Victimized Sexual Minority Adolescents

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Comprised of the attributions one makes about negative life events, explanatory style (ES) can be conceptualized as either negative (attributing adverse events as due to internal, global, and stable causes) or positive (attributing events to external, specific, and transient causes). A negative ES has been associated with higher levels of depression, whereas a positive ES may provide resilience from depression, as shown in previous research on the general population. However, research on ES has yet to extend to a sexual minority population. Sexual minority adolescents report higher levels of depressive symptoms than do their heterosexual peers, likely due to the increased levels of victimization they experience. The current study sampled 243 LGBT individuals between the ages of 18-22 from across the United States via an electronic survey. Participants were given measures assessing victimization, ES, and depression, in an attempt to investigate the relationships between the variables. It was hypothesized that level of victimization would predict level of depression. Additionally, it was predicted that a positive ES would lessen the relationship between victimization and depression. Results supported the first hypothesis; victimization significantly predicted depression. The second hypothesis was partially supported. A positive ES appeared to act as a protective factor in low and medium levels of self-reported victimization. However, when participants reported high levels of victimization, the differences between explanatory styles failed to be significant. Implications include various school-wide intervention strategies aimed at decreasing at-school victimization, as well as cognitive restructuring interventions infused with education regarding homophobic oppression.

Dedication

This manuscript is dedicated to the members of my family, all of who personify resilience in his or her own unique way, as well as provide supports for those lucky enough to be in close contact. Chris, Mom, and Dad, you are the world's best cheering section, if a little lacking in objectivity. Masters of the reframe, you make each of my challenges sound like bursts of brilliance. Scott, your continued perseverance in the face of adversity inspires me. Brian and Miko, you accept my busy schedule and stress level with grace, making my life easier, more enjoyable, and more fulfilling each and every day. I am so lucky to have you both. Finally, Mike. If all parents would follow your lead, providing their kids with the affirming support that you have, my research would be irrelevant.

I love and admire each and every one of you, more than any of you knows.

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Additionally, I would like to thank others within this university who have supported this project. First, thank you to the members of my committee for their validation and constructive criticism. To the indefatigable Dr. Cameo Borntrager, I will consider myself a success if I ever have a quarter of your drive. Dr. Annie Sondag, your thoughtful suggestions have all proved to be useful, and right on the mark. My cohort, Jordan Fiorillo and Jaime Long, are always available for advice, suggestions, and a shoulder whenever I need them, as are the affirming yet grounded Renee Madathil and my lab buddy, Ian Stephens. Then there is Nick Heck, who by some stroke of luck became my unofficial student mentor during my first year, giving me my first real taste of research. Ever since, he has been untiring in his encouragement, pushing me up this mountain of grad school. I would also like to thank Braydon Schilling, Kathleen Thom, and Kyla Keller, who helped me to build an extensive database of contact groups, from whom to recruit participants. Without all of you, this project could not have become a reality.

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Chapter I

Identifying protective factors for sexual minority adolescents has been largely neglected in favor of identifying the risks associated with sexual minority youth developing psychopathology (Rhee, 2004; Savin-Williams, 2001). Although recognizing risk factors is essential in the attempt to prevent negative outcomes, constantly viewing sexual minority youth through a pessimistic lens minimizes the myriad strengths they may possess. Rather than only focusing narrowly on risk factors, researchers also need to concern themselves with possible protective factors that help promote positive outcomes in the face of risk (Heck, Flentje, & Cochran, 2011; Savin-Williams, 2001).

Explanatory Style

One example of a potential protective factor that may guard against various forms of psychopathology is one's explanatory, or attributional, style. Through his work on the theory of learned helplessness, Martin Seligman (1984) organized attributions of uncontrollable events into three dimensions: global vs. specific, stable vs. unstable, and internal vs. external. The type of attributions one uses makes up their explanatory style (ES). For example, when a negative event occurs, one's attribution of it may be global. That is, the attribution suggests that the negative event/situation affects all aspects of the individual's life. Alternately, one may view the event as only affecting a specific portion of his or her functioning, thereby potentially minimizing the magnitude of the impact the event may hold. Secondly, the event may be perceived as something that is constant (stable), or temporary (unstable). A "constant" attribution means that the perceiver believes that factors contributing to his or her situation will be largely unchangeable: "It will always be this way." On the other hand, a "temporary"

attribution indicates the perception of a transient obstacle; a factor that will be different from one time to another. Lastly, the event can be perceived as caused by factors inherent to the individual (internal), or by outside factors (external).

Table 1. *Example of explanations for the event "I failed a math test."*

	Internal	External
Stable/Global	"I'm stupid, and I'll never learn anything."	"All my teachers hate me and will all probably give me poor grades."
Stable/Specific	"I'm really bad at math, and it's never going to get better."	"My math teacher doesn't know what he's doing. I don't see how I can pass this class with him as a teacher."
Unstable/Global	"I've really let everything go lately."	"Last week must've been a full moon – everything went wrong!"
Unstable/Specific	"I should have studied harder for this test."	"Had my teacher done a better job of explaining the material, I could've gotten a better grade on this test."

Modified from Peterson and Seligman (1984)

Peterson and Seligman (1984) postulated that those who explain negative life events (NLE) as due to internal, stable, and global causes (a negative ES), are at greater risk for depression. According to their reformulated theory on learned helplessness, those who provide global attributions of NLE tend to express that action is futile in many areas, since the NLE is perceived to be affecting many aspects of their life. This leads to a feeling of helplessness. Furthermore, those who explain NLE as having stable causes fail to see the possible abatement of negative events, and consequently expect said helplessness to persist. Finally, those who attribute NLE to internal causes tend to exhibit signs of a lowered self-esteem. Therefore,

attributing the NLE with a negative ES, or due to internal, stable, and global causes, tends to be a contributing factor for depression precisely due to the fact that it tends to produce feelings of lowered self-esteem and helplessness, and the expectation that the NLE will persist, despite any potential action (Peterson & Seligman, 1984).

Alternately, those who employ a positive ES, attributing the NLE to external, unstable, and specific causes, are provided with some resilience from developing depression (Peterson & Seligman, 1984). Using Table 1 as an example, if a student fails a math test, and explains the poor score due to her teacher's inability to explain the material adequately in that specific section, she is less likely to experience a decrease in self-esteem (an example of a focus on an external cause). If she realizes that her teacher may have "simply had a bad day" on that particular section of instruction, the student would be suggesting that the situation is likely unstable and, therefore, likely to be better for future sections. Finally, the student could attribute her poor performance on the math test to her own inadequacy in the subject without acknowledgement that her math difficulty is a consequence of a pervasive (global) cause, such as low intelligence, which would likely affect all areas of daily functioning. For these reasons, utilizing a positive ES when faced with a NLE may serve a buffering function in the face of NLE (Peterson & Seligman, 1984).

Building upon this work, Abramson, Metalsky, and Alloy (1989) articulated the theory of hopelessness depression, which they describe as a subtype of depression. In doing so, the emphasis placed on internal attributions for NLE is minimized, thereby postulating that stability and globality are the important causal attributions for hopelessness depression. In this theory, internal attributions are viewed as a symptom of hopelessness depression rather than a cause. Whereas the work by Abramson, Metalsky, and Alloy (1989) corroborates Seligman's theory

that negative attributions may contribute to depression, it also introduces the idea that two dimensions of negative attributions may be sufficient to increase the risk for depression.

A large body of research supports the premise that negative attributions may act as a diathesis for depression. For example, with the intention of exploring strengths and protective factors of children, Gardner (2008) conducted a study investigating the positive explanatory style of children. The *Children's Attributional Style Questionnaire* (CASQ; Seligman, 1984), the *Child Behavior Checklist* (CBCL; Achenbach & Rescorla, 2001) and the *Teacher Report Form* (TRF; Achenbach & Rescorla, 2001), along with other measures assessing intelligence and affect, were administered to 102 first graders. Although there were no significant findings in the relationship between positive explanatory style and teacher report of internalizing behaviors, results did indicate a significant negative correlation ($r = -.24$) between positive explanatory style and parent report of anxious and depressed behaviors. Moreover, a significant positive correlation between negative explanatory styles and teacher report of withdrawn and depressed behaviors ($r = .20$) was found. This is especially noteworthy, considering the young age of the participants; the majority of research is derived from samples of older participants. It is also one of the few studies published that suggests that a positive explanatory style is inversely correlated with specific behavioral indicators.

Sanjuan and Magallares (2009) also conducted research exploring the potential link between depression and explanatory style. Assessing female undergraduate college students in Spain, 130 participants were given a Spanish version of the *Attributional Style Questionnaire* (ASQ; Peterson, Semmel, von Baeyer, Abramson, Metalsky, & Seligman, 1982), which assesses for the controllability of causes (e.g. whether or not the participant has control over the event in question), as well as the dimensions of internality, stability and globality, and the *Beck*

Depression Inventory (BDI) at Time One. At Time Two, seven weeks after Time One, 101 participants again completed the BDI, just prior to final examinations. The researchers found a significant positive correlation between negative explanatory style at Time 1 with depression at Time 2 ($r = .29, p < .01$). Moreover, their results indicated a significant interaction between uncontrollability and negative explanatory style, suggesting that perceived controllability over the events in one's life is a salient factor when assessing ES for depression risk.

Using the Adolescent Cognitive Style Questionnaire (ACSQ) to measure AS, Calvete, Villardón, and Estévez (2007) surveyed 856 adolescents in Northern Spain. Investigating the relationships between hopelessness depression, stressors, and explanatory style, the researchers assessed the adolescents at two different times, six months apart. For the purposes of their study, stressors included such situations as, "You want to go to a party and nobody invites you," or "You get bad grades this semester." Explanatory style (referred to in this study as attributional style) was operationalized as the dimensions of globality and stability. Their results suggested that the global and stable dimensions of causal attribution moderate the influence of negative events on the progression of depression. Also utilizing a longitudinal model, Cole et al. (2008) followed children in grades 2-9 for four years. Their findings included support for ES representing a cognitive diathesis for depression, however not until adolescence, which contradicted the findings by Gardner, who found significance as early as first grade. This difference in findings may be due to the fact that Cole et al. (2008) were specifically investigating when ES emerges as a cognitive diathesis for depression, examining how the structure of children's attributions change over time. They found that while younger children do tend to have consistent attributions, the stress by attribution interaction does not appear until 8th or 9th grade. In contrast, Gardner's study was a snapshot of one point in time in the lives of her

participants, during which explanatory style and internalizing disorders were found to be correlated. Fresco, Alloy, and Reilly-Harrington (2006) added to the body of literature by examining ES for positive life events as well as NLE. Consistent with their expectations, Fresco et al. (2006) found evidence to support the idea that those who view NLE as due to internal and global causes, and positive life events as due to external and specific causes, are more likely to experience clinician-rated symptoms of depression, regardless of the actual number of positive events experienced.

Emotional Distress in LGBT Youth

Research has consistently shown sexual minority youth to be at greater risk for developing internalizing symptoms and disorders than their heterosexual peers. Findings by Williams, Connolly, Pepler, and Craig (2005) support this theory. Examining potential relations between sexual orientation, social support, and victimization in high school students, the researchers sampled 1,598 ethnically diverse adolescents. Using the BDI to measure depressive symptoms, a significant effect of sexual orientation on depressive symptoms $F(1, 193) = 8.94, p < .01$ was found. Further support comes from a study by Almeida, Johnson, Corliss, Molnar, and Azreal (2009). Utilizing the Boston Youth Survey to access data from 1,023 adolescents in 9th through 12th grades, the researchers studied perceived discrimination and emotional distress in sexual minority adolescents. Perceived discrimination was shown to significantly mediate the relationship between LGBT status and emotional distress. Additionally, a one-way ANOVA found both LGBT females and males to report higher mean levels of emotional distress than their heterosexual peers ($p < .05$).

Udry and Chantala (2005) studied sexual behavior in adolescents, and its associated risks in a sample of approximately 13,000 adolescents in grades 7 through 12. They compared same

sex interest and opposite sex interest in predicting risk, which was operationalized as depression, suicidal ideation, delinquency, substance abuse, and victimization. Same sex interest, for both males and females, was found to significantly increase the risk of depression and suicidal ideation. This supported the findings of Safren and Heimberg (1999), who found sexual minority youth to report a greater amount of depression, hopelessness, and suicidality than their heterosexual peers. However, this increase substantially dropped when stress, social supports, and coping styles were controlled for, indicating that environmental factors may explain a considerable amount of the mental health risks associated with sexual minority youth. Among transgender adolescents, the research consistently indicates that transgender adolescents experience more depressive symptoms than their gender conforming peers, regardless of sexual orientation (Lev, 2004). Increased suicidality is also significantly higher for this population (Lev, 2004; McGuire, Anderson, Toomey and Russell, 2010)

Victimization of LGBT Youth

A number of studies have also looked at the relationship between victimization and negative mental health outcomes in sexual minority adolescents. Not surprisingly, sexual minority youth who have experienced victimization are at increased risk for experiencing various forms of psychopathology, including both internalizing and externalizing disorders. For example, Williams et al. (2005) found that victimization significantly mediated the relationship between sexual orientation and externalizing symptoms (Sobel test = 2.33, $p < .05$).

Victimization also mediated the relationship between sexual orientation and depression at a level that approached significance ($p < .10$).

D'Augelli, Grossman, and Starks (2006) examined the effects of victimization based specifically on sexual orientation (SOV) on mental health. The researchers found that 78% of the

participants reported verbal SOV, 11% reported physical SOV, and 9% reported sexual SOV. Another relationship of interest was whether gender nonconformity (i.e. not abiding by gender norms) predicted SOV. The data showed a significant relationship between gender nonconformity and SOV. In turn, present mental health, as measured by the *Brief Symptom Inventory*, was strongly associated to past reports of gender nonconformity, such that current emotional distress was correlated with childhood experiences of gender nonconformity. These results indicate that children who express their gender differently than societal expectations are more likely to experience victimization, which may have a negative effect on their mental health into adulthood.

Also looking specifically at how gender nonconformity affects victimization, Toomey, Ryan, Diaz, Card, and Russell (2010) utilized data from the Family Acceptance Project's young adult survey, which included 245 LGBT individuals between the ages of 21 and 25. The study found that gender nonconformity, real or perceived, significantly predicted victimization ($r = .33$, $p < .001$). Toomey et al., (2010) used a structural equation model to investigate the relationships between gender nonconformity, LGBT victimization, and depression. LGBT victimization was found to significantly mediate the relationship between gender nonconformity and depression ($z = 3.14$, $p < .01$). The proportion mediated was 43.95%.

Birkett, Espelage, and Koenig (2009) investigated the effects of peer victimization at school on negative outcomes, such as mental health issues, for lesbian, gay, bisexual, and questioning (LGBQ) youth. They found that victimization in the form of homophobic teasing has greater negative outcomes, in terms of depression and suicidal ideation, for LGBQ students than for heterosexual students. Also investigating the effects of victimization on sexual minority youth in a study examining 1032 9th through 12th grade students, Almeida et al. (2009) found that

perceived discrimination or mistreatment based on sexual orientation (or perceived sexual orientation) was shown to significantly mediate the relationship between LGBT status and depressive symptoms.

Related to the concept of external factors contributing to the emotional distress of sexual minority teens is the Gay-Related Stress Hypothesis. Recently examined by Rosario, Schrimshaw, Hunter, and Gwadz (2002), this hypothesis states that simply existing in a hetero-normative society, which is generally intolerant of variations in sexual orientation other than heterosexuality, puts sexual minorities at greater risk for developing psychopathological outcomes, such as depression. This increased risk is a function of the chronic discrimination, and subsequent stress, that they experience due to their sexual orientation. Discrimination can be both implicit, such as rules and laws that favor heterosexual individuals, and explicit, such as verbal and physical abuse. According to Rosario et al. (2002), Gay-Related Stress can present as internalized homophobia, in which one incorporates the intolerant viewpoints of the society at large into one's own worldview, thereby feeling disgust and shame at one's own sexual orientation. Additionally, Gay-Related Stress can manifest as anxiety over the disclosure of one's own sexuality, due to fear of rejection, harassment, isolation, and/or an array of forms of victimization at the hands of strangers, friends, and family.

Rationale and Purpose

A considerable amount of evidence exists to support the theory that negative ES acts as a risk factor for internalizing disorders in general, and depression in particular. Conversely, there is some preliminary evidence that positive ES may be a protective factor (Gardner, 2008). In addition, the research supports the existence of a relationship between sexual minority youth who have experienced victimization, and internalizing disorders. In the current study, protective

factors for sexual minority adolescents will be investigated. Specifically, it will examine whether ES moderates the relationship between level of victimization of sexual minority youth and depression, with a positive explanatory style acting as a protective factor. Previous research by Cole and Turner (1993) suggests that once children enter into early adolescence, ES is more appropriately viewed as a moderator than a mediator, due to cognitive styles being more fixed by this stage of life. Whereas a mediational model suggests a temporal sequence between the stressor (victimization) and cognitive style (e.g. ES), and then between ES and depressive symptoms, a moderational model suggests that ES is a stable, trait-like quality, and may or may not impact the relationship between victimization and depression.

Sexual minority adolescents are more likely to experience victimization than their heterosexual peers (Bontempo and D'Augelli, 2002; Swearer, Turner, Givens, & Pollack, 2008) and are at higher risk for experiencing internalizing disorders (Rosario, Schrimshaw, & Hunter, 2008; Williams, Connolly, Pepler, & Craig, 2005). Research also provides evidence for a positive correlation between victimization and psychological distress (Bontempo & D'Augelli, 2002; Rosario et al., 2008).

In the body of literature regarding explanatory style, there is broad support for the finding that negative explanatory style may be a risk factor for depression (Calvete, Villardón, & Estévez, 2007; Gillham, Hamilton, Freres, Patton, & Gallop, 2006). A few studies have shown a negative correlation between a positive explanatory style and internalizing disorders (e.g. Gardner, 2008). However, very little, if any, research has been conducted on explanatory style within the LGBTQ community. The majority of the research that has been done on sexual minorities has been focused on risk factors (Rhee, 2004), whereas the current study is interested in protective factors, or areas of resilience.

Within the context of the current study, it is hoped that focusing on resilience will expand the body of research on explanatory style. Specifically, the current study is concerned with whether a positive explanatory style (that is, attributing NLE to all three attributional dimensions: external, unstable, and specific causes) acts as a protective factor against depression for those sexual minority adolescents who have experienced victimization.

Hypotheses

The following hypotheses will be tested:

Hypothesis 1: Among sexual minority adolescents, there will be a significant positive correlation between level of victimization and severity of depression symptoms.

Hypothesis 2: Explanatory style will moderate the relationship between victimization and depression, such that a positive explanatory style will decrease the relationship between victimization and depression.

Chapter II

Method

Participants

Participants were recruited from college, community college, and university student groups for sexual minority students across the United States (such as gay-straight alliances), as well as from community centers designated for sexual minority adolescents. Group administrators from a total of 585 sites were contacted via e-mail and/or Facebook, and asked to forward a recruitment e-mail to their members aged 18-22, and/or post a link to the study on any social networking site pages with which they participate, and/or forward the link via email. The group administrators were asked to blind carbon copy (BCC) the researcher on any relevant recruitment e-mails sent to their members, in attempt to track the total number of groups

participating in the study, and triage any questions and/or concerns. Whereas 70 group administrators indicated they had forwarded the recruitment onto members, only 3 blind carbon copied the researcher, making it impossible to track the total number of groups participating. Additionally, some participants indicated that they had been recruited by groups not included on the master contact list, indicating the recruitment had been forwarded. Finally, three participants indicated they currently resided in a country other than the United States, and had found the survey on Facebook. No names or identifying numbers were used in the study, in order to protect anonymity. In addition, the online system used, Survey Monkey, created a unique user identification number for each respondent, blinding the researcher to potentially identifying email addresses.

Procedures

Participants were directed to the hyperlink of the study via emails and social networking sites, such as Facebook, which were provided by the researcher. Once there, they were presented with an informed consent form, on which they were given the options to agree or disagree to participate in the study. Of the 570 participants who started the study, only one declined to participate. In addition, participants were given a notification that as incentive for completing the study, they would be given the chance to enter a drawing for one of four 25 dollar gift cards after finishing the questionnaires. This was followed by a series of questionnaires, which took approximately 30 minutes to complete. In order to track the various methods in which participants were ultimately recruited, they were asked how they heard about the study. Options included, "From an email from my college Gay-Straight Alliance," "From an email from my local community center," "From a friend who participated," "From a social networking site (indicate which site)," or "Other (indicate how you heard about this study)". Upon finishing the

questionnaires and demographics section, participants were provided with a short debriefing statement that included contact information for any questions or concerns that may have arisen. Finally, participants were given the opportunity to enter a drawing for a gift card, through a separate link, in order to protect confidentiality.

Statistical procedures.

In order to determine whether a significant interaction, or moderating effect, was present, multiple moderated regression analyses were performed, in a hierarchical fashion. In order to guard against multicollinearity, mean-centering was necessary prior to analyses being run. To run the analyses, the model first included the variables that were to be used as controls: childhood trauma, the perceived acceptance of LGBT individuals in the community where the participant attended high school for the longest period of time (HS-A), and the perceived safety of the community where the participant currently resides (C-S), with depression as a criterion variable. Next, victimization was added as a predictor variable, in order to address hypothesis one, given the findings of previous research, which consistently support the significance of that relationship. Explanatory Style was then added to the model, in order to test both for a significant main effect of ES on depression, and for a significant interaction effect of victimization and ES on depressive symptoms. This analysis addressed hypothesis two, to explore whether ES moderates the relationship between victimization and depression, with a positive ES acting as a buffering agent against depression in victimized, sexual minority adolescents. Further, by use of an ANOVA, mean differences of victimization and depression as a function of ES were examined. The ANOVA was run twice, first including all genders, then by separating males, females, and other, in order to test for significant differences. Finally, the covariates were added, and an ANCOVA was run.

Sample Size Determination

The variability in effect sizes for these areas of research is quite large. For example, in correlating depression with attributional styles, Smith (2008) found a large (as operationalized by Cohen, 1988) effect ($r = .54$). When investigating the potential relationship between negative explanatory style and symptoms of depression, Sanjuan and Magallares (2009) found a moderate effect size ($r = 0.28$). Cole and Turner (1993) correlated cognitive errors with depression, and also found a moderate effect ($r = .23$), and a large effect for the relationship between attributional style and depression ($r = .59$). Examining the correlation between LGBT victimization and depression, Toomey et al. (2010) found a moderate effect ($r = .32$). Williams et al. (2005) found a small effect for both the correlation between sexual orientation and victimization experiences ($r = .18$) and the correlation between sexual orientation and depressive symptoms ($r = .17$). Given the inconsistency of research findings, predicting a total sample size needed to obtain adequate power to detect significant differences is difficult. According to G*Power (Faul, Erdfelder, Buchner, & Lang, 2009), in order to obtain a small effect size (.15) with sufficient power (.95), 119 participants will be necessary. Additionally, Kenny (2010) maintains that, due to the low power typically found in multiple moderation models that include at least one continuous variable, a sample size greater than or equal to 200 is recommended, in order to protect against the threat of a Type II error. The current study attempted to yield a total target sample size of 200. Finally, by recruiting a larger sample from multiple sites, at least two locations per state, it was intended that the sample will be more representative of populations of varying political climates, geographical regions, and degrees of acceptance.

Measures

Explanatory Style. To measure explanatory style, participants were asked to complete the Expanded Attributional Style Questionnaire (EASQ; Peterson & Villanova, 1988). This is a self-report measure containing 24 negative events, which produces scores along three dimensions of attributions: internal vs. external, global vs. specific, and stable vs. instable. Peterson and Villanova (1988) reported internal consistency coefficients of .66 for the dimension of internality, .85 for stability, and .88 for globality. Two items of this measure were slightly modified, in order to increase inclusivity (item 20: “Your Christmas vacation plans are canceled” was changed to, “Your winter vacation plans were canceled,” and item 23: “Your attempt to capture the interest of a specific person of the opposite sex is a failure” was changed to “Your attempt to capture the romantic interest of a specific person is a failure”). Participants yielded a total score for each dimension, as well as a mean total score that included all three dimensions. Internal consistencies for this measure were calculated both by dimensions, and as a whole. For the internality scale, internal consistency was acceptable ($\alpha = .755$). The stability ($\alpha = .897$) and globality ($\alpha = .867$) both showed good internal consistency. Overall, the EASQ showed excellent internal consistency ($\alpha = .922$).

Depression.

Depression was measured using the *Beck Depression Inventory* (BDI-II; Beck, Steer, Ball, & Ranieri, 1996), which showed excellent internal consistency ($\alpha=.938$) in this study. Scoring was accomplished by adding the ratings across all items. A score of 0-13 is considered to be in the minimal range; 14-19 is considered mild; 20-28 is moderate; and 29-63 is severe.

Victimization. Victimization was assessed using the *Olweus Bully Victim Questionnaire* (see Appendix B). This questionnaire was slightly modified to fit the present study in order to

assess victimization retrospectively. An additional question after each item asking whether or not the participant believes the victimization was due to sexual orientation was also added.

However, this question was automatically skipped if the participant had not endorsed victimization for that specific item. Items were then summed, then divided by the total number of victimization items, in order to find the mean. Internal consistency for this measure in the current study was good ($\alpha=.819$).

Demographics. Demographics included age, race/ethnicity, current occupational and/or educational status, gender, and sexual orientation. Gender included the following options: Female, male, male-to-female transgender, female-to-male transgender, and other. However, due to a low number of participants endorsing the options, “male-to-female transgender,” “female-to-male transgender,” and “other,” these three categories were collapsed into one broader category labeled “other” for purposes of adequate power. Questions included in the demographics section can be found in Appendix E.

Sexual orientation. Sexual orientation can be measured on a number of different dimensions, including identity, behavior, and attraction (Diamond, 2003; Savin-Williams, 2006). Those who self-identify as sexual minority constitute the smallest group of individuals of these dimensions, although this is the dimension most often used to operationalize sexual minority status in research (Savin-Williams, 2001, 2006). In the current study, questions used to determine sexual orientation assessed identity, behaviors, and attractions on a continuous scale, as described by Savin-Williams (2006). For the purposes of this study, sexual minority included anyone who: (a) does not explicitly self-identify as heterosexual, (b) does not exclusively have sex with members of the opposite sex, or (c) does not exclusively find members of the opposite sex to be sexually attractive.

Covariates. For the purpose of potential statistical control, two additional measures were included. The *Childhood Trauma Questionnaire, Short Form* (CTQ-Short Form; Bernstein et al. 2003) was used to assess childhood abuse, including experiences of emotional, physical, and sexual abuse during childhood and adolescence. It has demonstrated excellent internal consistency reliabilities in past studies, with alphas ranging from .80 to .95 (Bernstein et al., 2003). In the current study, internal consistency was also excellent ($\alpha=.950$). The CTQ-Short Form is included in Appendix D. Additionally, participants were asked four questions assessing community climate, each on a continuous scale. These questions asked participants to rate how safe they perceived both the community in which they attended high school for the longest period of time (HS-S), and the community in which they currently live to be for sexual minorities (C-S). In addition, they were asked how accepting of sexual minorities they perceive both aforementioned communities to be (HS-A and C-A). For ranges, means, and standard deviations of all included variables, see Table A.3.

Chapter III

Results

Sample Characteristics

243 18-22 year old participants ($M = 19.95$, $SD = 1.461$) were recruited in the fall and early winter of 2011 from student and community groups from sexual minorities around the United States. The participants included 63 (25.9%) who identified as bisexual, 115 (47.3%) who identified as gay, 11 (4.5%) who identified as straight, 31 (12.8%) who identified as queer, 11 (4.5%) who were unsure/questioning of their sexual identity, and 12 (4.9%) who chose to identify as “other.” To elaborate upon sexual identity, participants were asked how they view their sexual orientation, given a 7-point likert scale. Five (2.1%) identified “exclusively

heterosexual” as best describing their sexual orientation. Fifteen (6.2%) identified as “predominately heterosexual, but incidentally homosexual,” while 25 (10.3%) identified as “predominately heterosexual, but more than incidentally homosexual.” 29 (11.9%) participants identified “equally heterosexual and homosexual” as best describing their sexual orientation, 40 (16.5%) participants identified as “predominately homosexual, but more than incidentally heterosexual,” 54 (22.2%) participants identified as “predominately homosexual, but only incidentally heterosexual,” and 75 (30.9%) participants identified “exclusively homosexual as best describing their sexual orientation. Of the five participants who best described their sexual orientations as “exclusively heterosexual,” one participant identified his gender as “transgender female-to-male,” and four participants identified their gender as female. All four female participants, who described their sexual orientation as exclusively heterosexual, reported having attractions to both males and females during their lifetimes.

The sample consisted of the following gender characteristics: 75 (30.9%) participants identified as male, 138 (56.8%) participants identified as female, five (2.1%) participants identified as transgender male-to-female, 15 (6.2%) participants identified as transgender female-to-male, and 9 (3.7%) participants chose “other” as their gender option.

The majority of participants (n = 220; 90.5%) in this study identified themselves as European American. Hispanic/Chicano/Mexican American participants made up the next largest racial/ethnic group (n = 16; 6.6%) followed by Asian Americans (n = 11; 4.5%), African Americans (n = 7; 2.9%), and Native Americans (n = 6; 2.5%). Additional demographic information related to the population of the town where participants attended high school, and the state where participants currently are located in Tables A.1 and A.2 in Appendix A.

Covariate determination

A correlation matrix (Table A.4) was run to determine which of the proposed covariates should be included in the model. All covariates (HS-S, HS-A, C-S, C-A, and self-reported childhood trauma) were significantly correlated with the dependent variable, self-reported depression. Due to the fact that C-S and C-A were strongly and significantly correlated with one another ($r = .677, p < .001$), suggesting they may account for similar variance in a multiple regression model, C-S was chosen, due to its larger correlation with depression. Similarly, because HS-S and HS-A were significantly correlated with one another ($r = .683, p < .001$), HS-A was chosen, again due to its stronger correlation with depression. Childhood trauma was not significantly correlated with any of the other potential covariates, but was significantly correlated with depression ($r = .467, p < .001$), so was also included as a covariate.

Statistical analyses

Hierarchical multiple regression was used to assess the ability of victimization and explanatory style (ES) to predict depression, after controlling for the effects of childhood trauma, the perceived safety of the communities in which participants currently resided for LGBT individuals (C-S), and the perceived acceptance of the communities in which participants attended high school (HS-A). Additionally, it was used to detect interaction effects between victimization and ES, in order to determine whether ES significantly moderated the relationship between victimization and depression. Childhood trauma, C-S, and HS-A were entered at Step 1, explaining 25% of the variance in depression. Next, victimization was added at Step 2, explaining 26.3% of the variance, $F(4, 214) = 19.122, p < .001$. After entry of ES, and the interaction of victimization and ES at Step 3, the total variance explained by the model as a whole was 37.3%, $F(6, 212) = 21.050, p < .001$. The two predictors and interaction term

explained an additional 11% of the variance, after controlling for childhood trauma, HS-A, and C-S, R^2 change = .110, F change (2, 212) = 18.611, $p < .001$. In the second model, victimization (beta = .142) approached significance at $p = .052$, providing support for Hypothesis One; victimization predicted depression in a sexual minority adolescent sample. In the final model, ES significantly predicted depression with victimization in the model (beta = .345, $p < .001$). Childhood trauma was statistically significant in its prediction of depression (beta = .362, $p < .001$). Additionally, HS-A was approaching significance (beta = .666, $p = .088$)¹. However, C-S and the interaction (victimization x ES) were not found to be significant (see Table A.5). Therefore, using this model, ES was not found to moderate the relationship between victimization and depression, and Hypothesis Two was not supported.

Next, to detect mean differences of victimization and depression as a function of ES, victimization was categorized into three groups (low, medium, and high), and ES was dichotomized (positive and negative, so that a two (level of ES) by three (level of victimization) ANOVA was run. There was a statistically significant main effect for levels of self-reported victimization $F(2, 232) = 17.433$, $p < .001$; partial eta squared = .131. Additionally, there was a statistically significant main effect for ES $F(1, 232) = 34.508$, $p < .001$; partial eta squared = .129. However, the interaction effect between victimization and ES was not significant $F(2, 232) = 1.880$, $p = .155$. Post-hoc comparisons using Tukey HSD indicated that the high victimization group ($M = 24.74$, $SD = 12.902$) differed significantly from both the low ($M = 14.27$, $SD = 10.997$) and medium ($M = 16.22$, $SD = 12.9888$) victimization groups, which did not differ significantly from each other (see Table A.6 and Figure A.1).

¹ Williams, Connolly, Pepler, and Craig (2005) published results in which a $p < .10$ is identified as “approaching significance” (pp. 477). Therefore, for the purposes of the current study, any p value between .05 and .10 will be labeled as approaching significant.

The sample was then split by gender (male, female, and other), in order to determine differences between the genders. For the male group ($n = 72$), the main effect for levels of self-reported victimization $F(2, 66) = 2.975$ approached significance ($p = .058$); partial eta squared = .083. Likewise, the main effect for ES $F(1, 66) = 3.535$ also approached significance ($p = .065$); partial eta squared = .051. The interaction between levels of self-reported victimization and levels of ES was not significant. Post-hoc comparisons using Tukey HSD indicated that the high victimization group ($M = 20.30$, $SD = 12.931$) differed significantly from both the low ($M = 12.52$, $SD = 11.183$) and medium ($M = 11.33$, $SD = 10.082$) victimization groups, which did not differ significantly from each other (see Table A.7 and Figure A.2).

In the female group ($n = 136$), there was a statistically significant main effect for levels of self-reported victimization $F(2, 130) = 11.061$, $p < .01$; partial eta squared = .145. There was also a statistically significant main effect for level of ES $F(1, 130) = 23.347$, $p < .001$; partial eta squared = .152. The interaction effect of level of self-reported victimization and ES was not significant. Post-hoc comparisons using Tukey HSD indicated that the high victimization group ($M = 27.51$, $SD = 13.361$) differed significantly from both the low ($M = 15.86$, $SD = 11.041$) and medium ($M = 18.00$, $SD = 13.851$) victimization groups, which did not differ significantly from each other (see Table A.8 and Figure A.3).

In the “other” gender group ($n = 29$), there was a significant main effect for levels of self-reported victimization $F(2, 23) = 5.968$, $p < .01$; partial eta squared = .342. The main effect for level of ES was also significant $F(1, 23) = 4.846$, $p < .05$; partial eta squared = .174. The interaction effect of level of self-reported victimization and ES was not significant. Post-hoc comparisons using Tukey HSD indicated that the low victimization group ($M = 10.22$, $SD = 8.969$) differed significantly from both the high ($M = 24.33$, $SD = 10.118$) and medium ($M =$

22.60, SD = 10.310) victimization groups, which did not differ significantly from each other (see Table A.9 and Figure A.4).

Finally, childhood trauma, HS-A, and C-S were then added as covariates, running a two (level of ES) by three (level of victimization) ANCOVA. In this model, the interaction effect between level of victimization and ES was not significant $F(2, 210) = 2.290, p = .104$; partial eta squared = .021. The main effect for levels of self-reported victimization approached significance $F(2, 210) = 2.702, p = .069$; partial eta squared = .025. Additionally, there was a statistically significant main effect for ES $F(1, 210) = 30.242, p < .001$; partial eta squared = .126 (see Table A.10 and Figure A.5).

Chapter IV

Discussion

Research consistently indicates that the higher levels of depression experienced by sexual minority adolescents, as compared to their heterosexual peers (Bontempo & D'Augelli, 2002), is largely a product of the disproportionately higher and more severe amounts of victimization that sexual minority youth are likely to experience (Birkett, Espelage, & Koenig, 2009).

Unfortunately, as research on sexual minority adolescents has historically focused on identifying risk factors, rather than on articulating the ways in which they may find and/or utilize resilience (Savin-Williams, 2001), there is a relative lack of information available to school psychologists and other mental health practitioners regarding protective factors for this population (Rhee, 2004). One such potential protective factor that has been found to be effective for the general population (Seligman, 1984) is the way in which an individual explains negative events that happen in his or her life, or explanatory style (ES). Specifically, there has been some preliminary evidence supporting the idea that a positive ES (explaining negative events with

external, unstable, and specific attributions), may provide resilience from depression (Gardner, 2008; Peterson & Seligman, 1984). The current study sought to extend this research to an LGBTQ adolescent population, to determine whether a positive ES might provide some protection to sexual minority adolescents who have experienced victimization, and therefore are more likely to develop symptoms of depression. To accomplish this, two hypotheses were tested. The first hypothesis predicted that among sexual minority emerging adults looking retrospectively at their adolescence, there would be a significant positive correlation between level of victimization and severity of depression symptoms. The second hypothesis stated that ES would moderate the relationship between victimization and depression, such that a positive ES would decrease the relationship between victimization and depression.

Hypothesis one

Consistent with previous research (Birkett, Espelage, & Koenig, 2009; Bontempo & D'Augelli, 2002), results from the current study supported hypothesis one, finding that level of self-reported victimization in high school significantly predicts self-reported current levels of depression in a sexual minority population. Although not surprising, the impact of this finding underscores the influence victimization can have upon mental health, oftentimes continuing years later. This is consistent with research by D'Augelli, Pilkington, and Hershberger (2002), in which participants, 92% of who were past high school, were asked to reflect upon their victimization experiences in high school. Results indicated that high school victimization predicted present levels of emotional distress. Similarly, in the current study, the more a participant reported he or she was victimized in high school, the more severe he or she reported current levels of depression to be. This finding supports the significance of making school safety

a priority, not only for the health and safety of currently attending school, but for their future mental health as well.

Hypothesis two

Contrary to expectations, results show that the relationship between victimization and depression does not significantly differ as a function of the level of ES, and thus hypothesis two is not supported, when using multiple regression to analyze the data. Similar research by Hirsch, Wolford, LaLonde, Brunk, and Parker-Morris (2009) showed explanatory style to moderate the relationship between negative life events, operationalized as trauma that included victimization, and suicidal ideation. However, that sample was not specific to sexual minority adolescents and measured suicidal ideation rather than simply depressive symptoms, perhaps in part explaining the difference in results.

Interestingly in the current study, when the predictors are categorized, and mean differences are examined by way of an ANOVA, a somewhat different picture emerges. With victimization broken up into the three groups (low, medium, and high), and ES dichotomized (positive and negative), results indicate that for those with a positive ES, levels of depression do not significantly vary between those with low to medium levels of victimization, but are significantly higher for the high victimization group (see Figure A.1). Perhaps with a larger sample size to account for the categorized groups, significance would have been achieved, partially supporting hypothesis two; a positive ES may, in fact, act as a protective factor for those experiencing low to medium levels of self-reported victimization.

These findings are similar for males (Figure A.2) and females (Figure A.3), yet are slightly different for those who self-identified in the “other” gender group (Figure A.4). Here, results show levels of depression do not vary significantly between the medium to high levels of

victimization, but are significantly different in the low victimization group. In other words, a positive ES may act as a protective factor, but only if low levels of self-reported victimization are reported. Moreover, when controlling for effects of childhood trauma, safety of participants' current communities and acceptance of participants' high school communities, the interaction was approaching significance. Results also indicate that those with a negative ES report significantly higher mean levels of depression than do those with a positive explanatory style, across victimization groups. Although this replicates previous findings from the general population, (Seligman, Reivich, Jaycox & Gilham, 1995) extending the results to a sexual minority population adds to the research base on the contribution of explanatory style to depression risk.

Implications

Results from the current study generally support a few implications. First, due to the fact that victimization in high school predicted current levels of self-reported depression in this LGBTQ sample, and that adolescents spend so much time in school per week, school-wide intervention and prevention strategies that target bullying behavior are vital for middle schools and high schools to ensure that school is a safe space. Second, since participants' mean levels of self-reported depression were lower for those with a positive ES, and ES can be modified (Gillham, Hamilton, Freres, Patton, & Gallop, 2006; Seligman et al., 1988), it stands to reason that ES modification interventions may be effective in protecting youth from depression, particularly for gender conforming adolescents who experience low and medium levels of victimization, and gender-nonconforming adolescents who experience low levels of victimization. Finally, it is important to recognize that, according to results of the current study, gender-nonconforming youth seem to have a lower threshold of victimization at which a positive

explanatory style ceases to buffer the effects of depression. This may be due to the larger amounts of victimization that gender-nonconforming students experience, over and above the victimization experienced by their LGB gender normative peers (Kosciw & Diaz, 2006; Toomey et al., 2010). For these adolescents, additional, more intensive supports should be made available. Furthermore, school-wide interventions that are inclusive of gender expression may make a considerable difference in whether or not school is perceived as safe for students who do not identify as either “male” or “female.”

The Gay, Lesbian, and Straight Education Network (GLSEN) and Hansen (2007) identify four strategies to maximizing the safety of a school: anti-discrimination policies, gay-straight student alliances, staff education, and inclusive curricula (Kosciw, 2004). According to GLSEN, many schools already have anti-discrimination policies, but fail to enact two necessary features, in order to ensure their effectiveness for LGBTQ youth: inclusiveness and dissemination.

Simply put, it is not sufficient to have a vaguely worded anti-discrimination policy.

”...comprehensive, enumerated policies...” send a clear message regarding the value of diverse individuals within a school (GLSEN, 2012). Additionally, according to the 2003 School Climate Survey, 33.6% of LGBTQ adolescents did not know whether or not their school had an anti-discrimination policy (Kosciw, 2004), suggesting that too often, existing policies are not adequately publicized and/or enforced within the school community.

Gay-straight student alliances (GSAs) have also been found to be an effective method of reducing victimization and increasing school safety (Kosciw, 2004). Student led groups that serve both as support groups for LGBTQ adolescents and as vehicles for LGBTQ cultural competence for the school (GLSEN, 2012), GSAs have been found to be associated with higher levels of perceived safety, lower levels of victimization (Szalacha, 2003), and lower levels of

emotional distress among the students in the schools where they exist (Goodenow, Szalacha, & Westheimer, 2006; Heck, Flentje, & Cochran, 2011).

Also essential to school safety are awareness building programs for school personnel, focused on the strengths and challenges faced by this unique population. A common finding in the literature on anti-gay bullying, is that when students hear homophobic or transphobic remarks, or even experience victimization on the basis of sexual orientation or gender expression, school staff often do not intervene (Kosciw, 2004). In fact, in the 2007 National School Climate Survey, Greytak, Kosciw, and Diaz (2009) found that approximately one-tenth of the respondents reported that school staff would intervene when witnessing verbal harassment. Moreover, when verbal or physical harassment was experienced and reported to school authorities, only 33% felt the situation was handled effectively. Unfortunately, school personnel commonly report that they are unsure of how or when to intervene when they witness anti-gay bullying. Only 48% of school personnel report that they received professional development on issues related to gender identity and sexual orientation, and only 23% reported they received training on LGBT families (Kosciw, 2004). The need for school personnel to be educated about the relationship between victimization and mental health, as well as the prevalence of victimization for LGBTQ adolescents, are supported by current findings that highlight the importance of decreasing the level of victimization in schools. Moreover, education regarding how to handle homophobic bullying when it does occur is essential to ensuring school safety for all.

Indirectly, ensuring curricula that is inclusive of various sexual orientations and gender identities also affects school safety (Hansen, 2007). Perhaps due to the implicit message sent by including members of diverse cultures into lesson plans, inclusive curricula have been associated

with several positive outcomes. According to GLSEN, when students attend schools that strive to include positive role models of LGBTQ individuals into curricula, they are twice as likely to report victimization when it does occur, but also more likely to perceive the school climate as intolerant of anti-gay bullying (Kosciw, 2004).

For students who experience low and medium levels of self-reported victimization, interventions that focus on modification of explanatory style may also be effective in buffering the effects of depression. For example, in a sample of 25 boys age 11-14 in Australia, an intervention aimed at increasing the optimism of the participant's explanatory style showed a significant decrease in their depressive symptoms (Taylor, Gillies, & Ashman, 2009). Combining a cognitive restructuring intervention with psychoeducational material on discrimination also carries potential for school psychologists and other mental health professionals working with LGBTQ adolescents. Ross, Doctor, Dimito, Kuehl, and Armstrong (2008) found that for a sample of 70 LGBT adults, cognitive behavioral therapy in a group setting that incorporated discussion of homophobic oppression was effective in significantly reducing levels of depression, which held two months after the last treatment session. Although this intervention was not tested on adolescent participants, taken together with the findings of GLSEN's school climate survey suggesting education regarding oppression was negatively correlated with emotional distress, it stands to reason that a cognitive behavioral approach combined with psychoeducation on oppression of sexual minorities might be a promising avenue for adolescents. Moreover, the group format utilized in both aforementioned studies lends itself well to a school setting.

Limitations

There are some limitations of this study that warrant discussion, and should be considered when interpreting the results. First, the research design was largely correlational in nature. As such, no statement of causation or directionality can be implied. The most salient question this brings up is, although ES is shown to predict depressive symptoms, results could also be interpreted in the inverse; depressive symptoms predict ES. Likewise, victimization could predict change in ES. In fact, research by Gibb, Alloy, Walshaw, Corner, Shen, and Villari, (2006), suggested that these very relationships can be bidirectional. Second, as participants' ages ranged from 18-22, the retrospective recall of victimization experiences during their high school careers may have been less than accurate, particularly for the older participants. Along the same lines, the exclusively self-report nature of the design of this study lends itself to the threat of social desirability bias. It should also be noted, however, that there was a large range in the answers of all measures, perhaps suggesting an authentic diversity of experience.

There was substantial recruitment efforts made to include participants from a large range of socioeconomic and racial backgrounds by specifically attempting to recruit from both rural and urban areas from every state in the country, and soliciting community centers, community colleges, and vocational/technical institutes as well as four-year colleges and universities. However, the vast majority of the sample was European American and attending a four-year college or university. Due to the fact that research has shown greater amounts of victimization in high school to predict greater amounts of high school drop-out rates, it is possible that the current sample represents those who are higher functioning, and/or experienced lower levels of victimization. Additionally, despite efforts to obtain an ethnically diverse sample, it is questionable whether the results of the current sample could be generalized to a population of

individuals from ethnically diverse backgrounds. However, regional diversity was obtained. Participants from 37 different states from every region of the United States completed the study. In addition, the population of the towns where participants attended high school was normally distributed.

It should also be noted that 570 individuals started the survey, and only 243 fully completed it. Although 42.6% of participants who started the survey did complete it, it was observed that many of the participants dropped out during the EASQ, measuring explanatory style. This measure contains 24 scenarios, and for each scenario, there are 4 sections for the participant to complete, which perhaps is too tedious of a process for many to endure. However, this measure has a reliability that is far superior to the shorter, more frequently used measure (*Attribution Style Questionnaire*; Peterson, Semmel, Von Bayer, Abramson, Metalsky, & Seligman, 1982), so the apparent trade-off is reliability over sample size. It would be interesting to know, however, if the interaction would have been significant had fewer people been lost to attrition.

Finally, depression was assessed using only one measure, the BDI. Best practice for measuring any construct of interest includes utilizing multiple methods of assessment, in order to get at the construct in alternate ways. Unfortunately, due to the length of the EASQ, it was decided that one measure of depression would have to suffice.

Despite the limitations of the current study, it is hoped that the results contribute to and expand on the literature in several ways. For instance, the current study combines the literature on explanatory style and the literature on victimization, sampling a sexual minority population, which has not yet been seen in the published literature base. By doing this, results extend research on sexual minorities by examining a potential area of protection: explanatory style. The

results of the current study also replicates past findings on explanatory style by showing that those with a negative explanatory style report significantly higher levels of depressive symptoms than those with a positive ES. Furthermore, the current study supports the growing body of research indicating that, for sexual minorities, victimization in high school predicts higher levels of depression into adulthood. Taken together, these findings illustrate the importance of school safety for LGBTQ adolescents, using both school-wide and individual prevention and intervention strategies.

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Appendix A

Table A.1

<i>Sample Characteristics</i>		
Characteristic	Frequency	Percent of Sample
Gender		
Male	75	30.9
Female	138	56.8
Transgender male-to-female	5	2.1
Transgender female-to-male	15	6.2
Other	9	3.7
Age		
18	56	23.0
19	48	19.8
20	41	16.9
21	49	20.2
22	48	20.2
Ethnicity		
African American	7	2.9
Native American	6	2.5
Hispanic/Chicano	16	6.6
Asian American	11	4.5
European American	220	90.5
Other	11	4.5
Population of high school city/town		
Less than 2500	21	8.6
2,500-4,999	39	16.0
5,000-9,999	28	11.5
9,999-49,999	65	26.7
50,000-250,000	61	25.1
Over 250,000	29	11.9
Educational/Occupational Status		
Attending College	219	90.1
Attending Comm. College/Voc Tech	10	4.1
Employed FT; Not in school	6	2.5
Employed PT; Not in school	6	2.5
Unemployed	2	.8
Years of Education		
Less than 12	2	.8
12	65	26.7
13	45	18.5
14	36	14.8
15	59	24.3
16	29	11.9
17	4	1.6
18	1	.4

Table A.2*State in which participants currently reside*

State	Frequency	Percent
Alabama	12	4.9
Arizona	1	.4
California	18	7.4
Florida	3	1.2
Idaho	5	2.1
Illinois	13	5.3
Indiana	14	5.8
Iowa	2	.8
Kansas	10	4.1
Kentucky	10	4.1
Louisiana	10	4.1
Maine	2	.8
Maryland	4	1.6
Massachusetts	12	4.9
Mississippi	2	.8
Missouri	5	2.1
Montana	2	.8
Nebraska	1	.4
New Hampshire	4	1.6
New Jersey	1	.4
New York	10	4.1
North Carolina	12	4.9
Ohio	1	.4
Oklahoma	12	4.9
Oregon	6	2.5
Pennsylvania	5	2.1
Rhode Island	7	2.9
Tennessee	2	.8
Utah	2	.8
Vermont	5	2.1
Virginia	25	10.3
Washington	8	3.3
West Virginia	7	2.9
Wisconsin	1	.4
Wyoming	1	.4
Outside U.S.	3	1.2

Table A.3
Ranges, Means, and Standard Deviations of Variables

Measure	Range	Mean	Standard Deviation
Dependent			
BDI	0 - 55	18.03	13.03
Predictors			
EASQ	97 - 464	305.65	47.022
Victimization	1 - 4	1.769	.497
Covariates			
CTQ	27 - 120	50.87	19.21
C-S	1 - 5	2.30	1.05
HS-A	1 - 5	3.33	1.22

Note: BDI = Beck Depression Inventory, used to measure depression; EASQ = Extended Attributional Style Questionnaire, used to measure Explanatory Style; CTQ = Childhood Trauma Questionnaire, Short Form, used to measure childhood trauma; C-S = The safety of the community in which participants currently reside for LGBT individuals; HS-A = The acceptance of LGBT individuals in the community in which participants currently reside.

Table A.4*Correlations*

	BDI	CTQ	C-S	HS-A	Vict	ES	Vict x ES
Pearson							
Correlation							
BDI	1.00	.467	.185	.226	.384	.427	.129
CTQ	-	1.00	.150	.159	.530	.164	.200
C-S	-	-	1.00	.175	.184	.022	.133
HS-A	-	-	-	1.00	.324	.200	-.007
Vict	-	-	-	-	1.00	.170	.189
ES	-	-	-	-	-	1.00	.149
Vict x ES	-	-	-	-	-	-	1.00
Sig. (one-tailed)							
BDI	.	.002	.000	.000	.023	.000	
CTQ	.000	.	.013	.009	.000	.007	.001
C-S	.002	.013	.	.003	.002	.370	.020
HS-A	.000	.009	.003	.	.000	.001	.456
Vict	.000	.000	.002	.000	.	.004	.002
ES	.000	.007	.370	.001	.004	.	.011
Vict x ES	.023	.001	.020	.456	.002	.011	.
N							
BDI	240	220	239	238	240	238	238
CTQ	220	220	220	219	220	220	220
C-S	239	220	242	241	242	237	237
HS-A	238	219	241	241	241	236	236
Vict	240	220	242	241	243	238	238
ES	238	220	237	236	238	238	238
Vict x ES	238	220	237	236	238	238	238

*Note:*BDI = Beck Depression Inventory; CTQ = Childhood Trauma Questionnaire; C-S = Safety of the community for LGBT individuals where participant currently resides; HS-A = Acceptance of LGBT individuals in the community where participant attended high school for the longest period of time; Vict = High school victimization; ES = Explanatory Style; Vict x ES = interaction term.

Table A.5*Hierarchical Regression Predicting Depression*

Predictor	ΔR^2	β
Block 1	.250	
CTQ		7.132***
C-S		1.580
HS-A		2.323**
Block 2	.013	
CTQ		5.217
C-S		1.419
HS-A		1.716*
Vict		1.958*
Block 3	.110	
CTQ		5.049***
C-S		1.787*
HS-A		.798
Vict		1.813*
ES		6.090***
Vict x ES		-.426

Note: * $p < .10$. ** $p < .05$. *** $p < .001$.

Table A.6

Analysis of Variance; Dependent Variable: Depression

	<i>df</i>	<i>F</i>	η
Vict	2	17.433*	.131
ES	1	34.508*	.129
Vict x ES	2	1.880	.016
Error	232		

Note: * $p < .001$; R Squared = .244 (Adjusted R Squared = .228)

Figure A.1

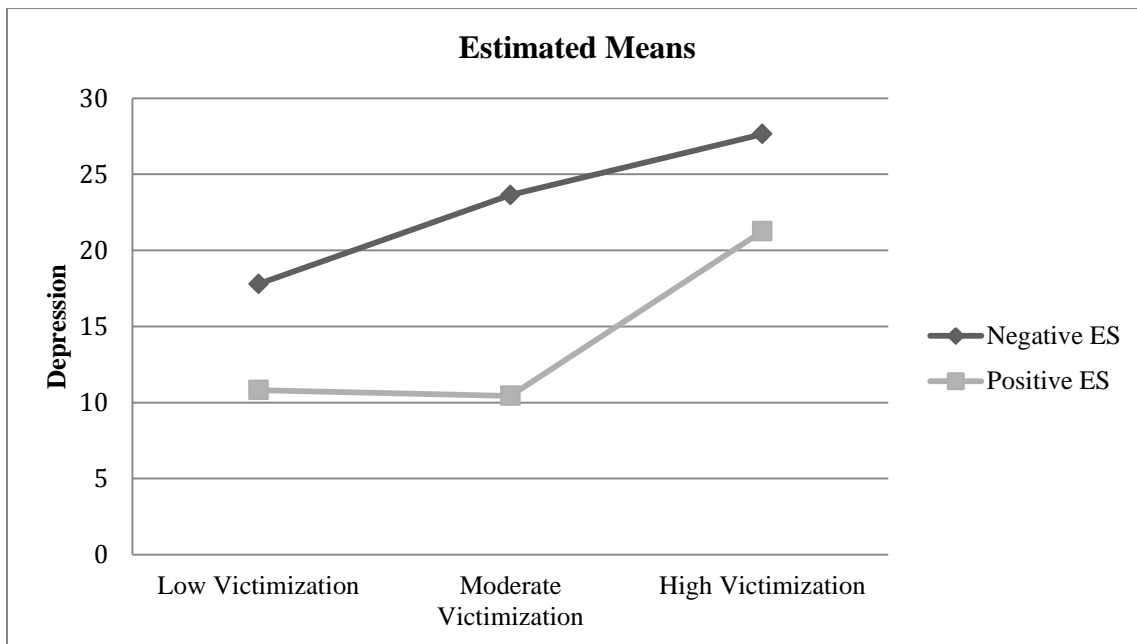


Table A.7

ANOVA males only; dependent variable: depression

	<i>df</i>	<i>F</i>	η
Vict	2	2.975*	.051
ES	1	3.535*	.083
Vict x ES	2	.421	.013
Error	66		

Note: * $p < .10$; R Squared = .158 (Adjusted R Squared = .094)

Figure A.2

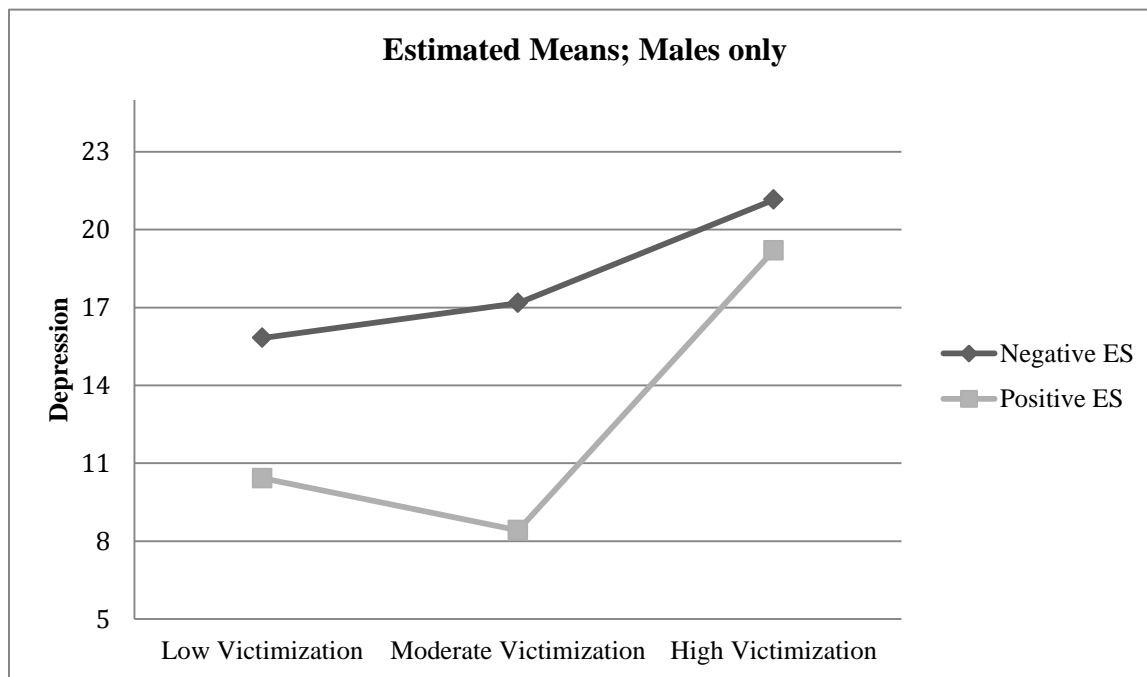


Table A.8

ANOVA females only; dependent variable: depression

	<i>df</i>	<i>F</i>	η
Vict	2	11.061*	.145
ES	1	23.347*	.152
Vict x ES	2	1.146	.017
Error	130		

Note: * $p < .001$; R Squared = .272 (Adjusted R Squared = .244)

Figure A.3

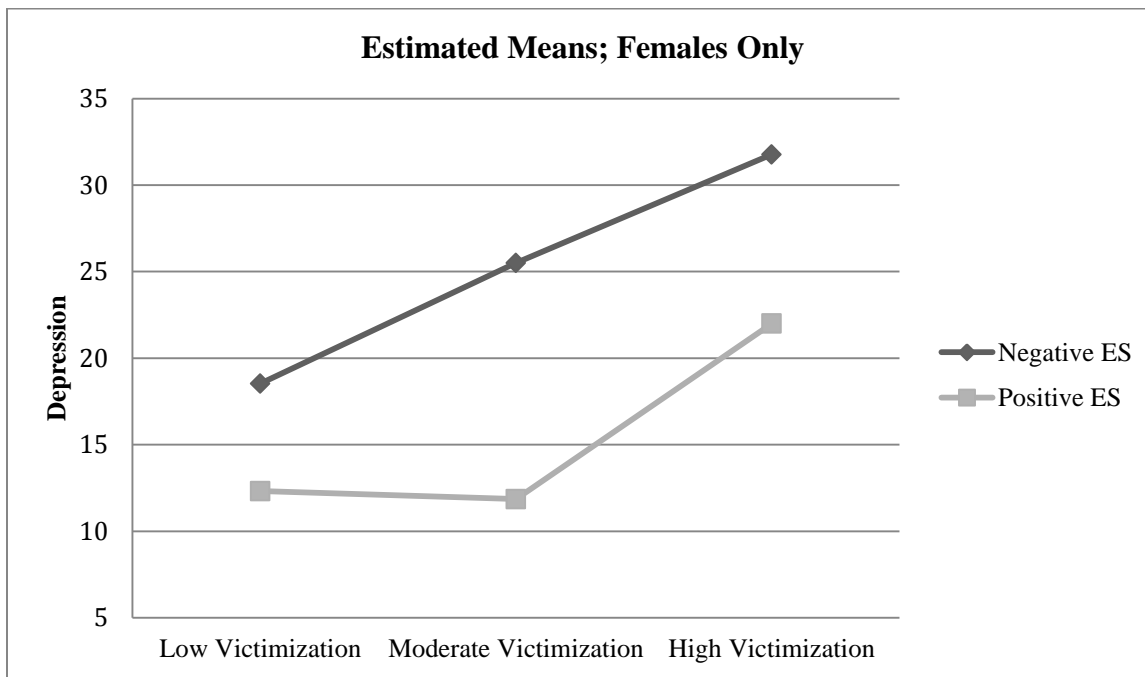


Table A.9

ANOVA "other" only; Dependent variable: depression

	<i>df</i>	<i>F</i>	η
Vict	2	5.968**	.342
ES	1	4.846*	.174
Vict x ES	2	.572	.047
Error	23		

Note: ** $p < .01$; * $p < .05$; R Squared = .461 (Adjusted R Squared = .343)

Figure A.4

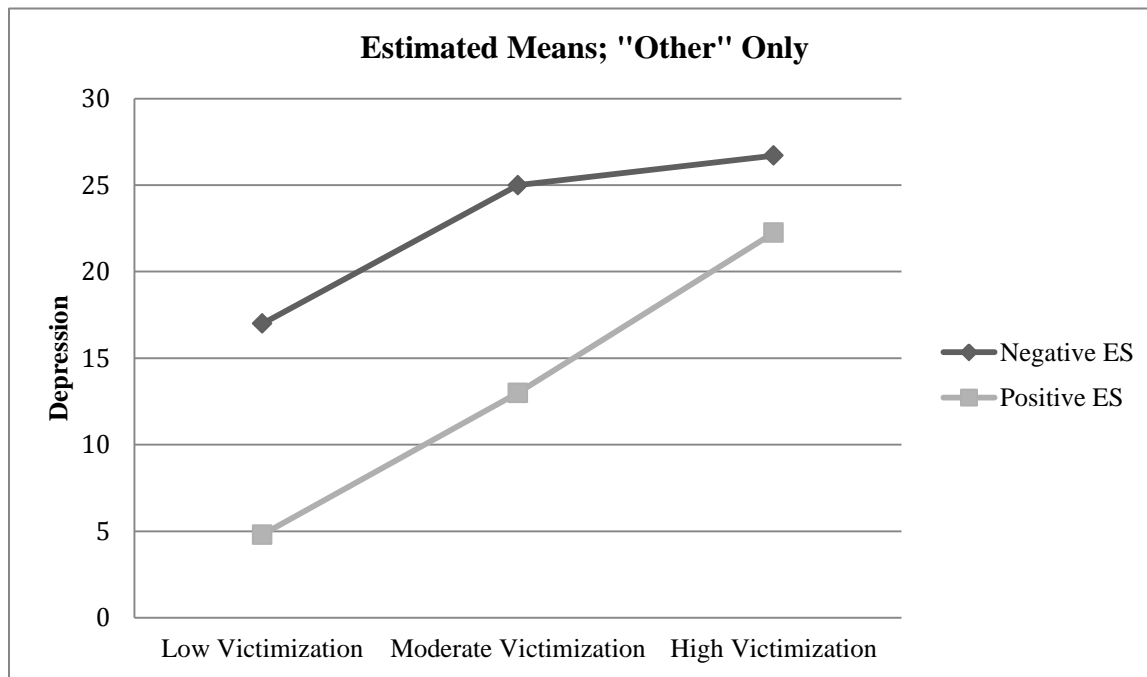


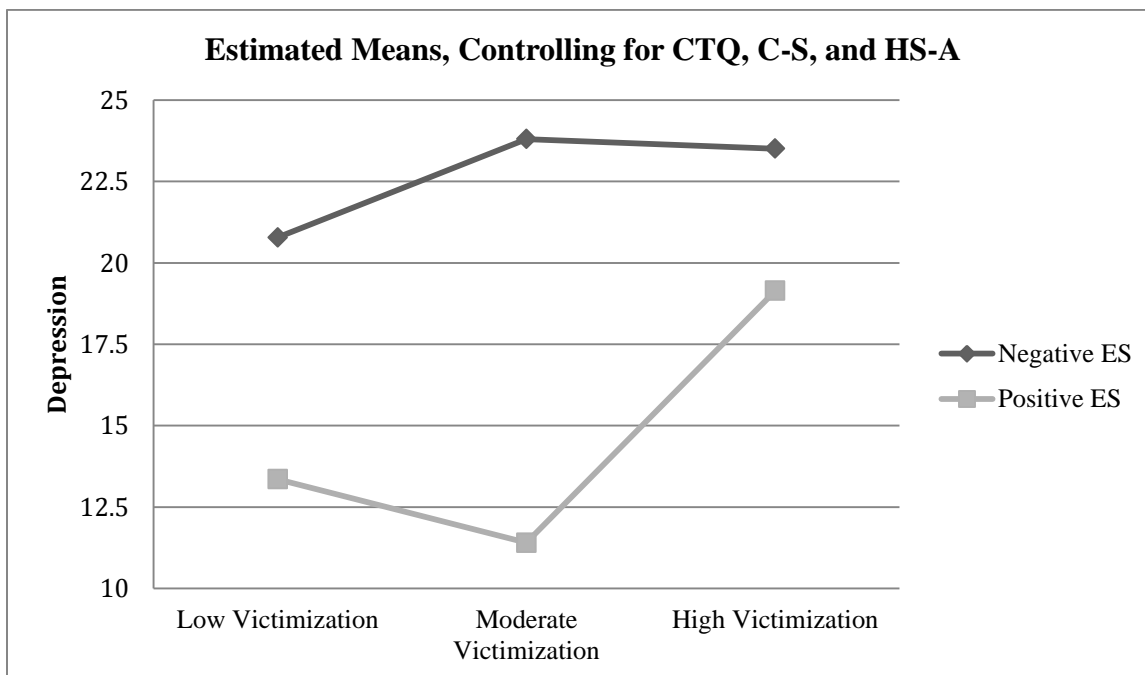
Table A.10

ANCOVA; Dependent variable: depression

	<i>df</i>	<i>F</i>	η
CTQ	1	32.362**	.134
C-S	1	2.233	.011
HS-A	1	3.095*	.015
Vict	2	2.702*	.025
ES	1	30.242**	.126
Vict x ES	2	2.290	.021
Error	210		

Note: ** $p < .001$; * $p < .10$; R Squared = .371 (Adjusted R Squared = .347)

Figure A.5



Appendix B
Modified Olweus' Bullying and Victimization Scale

For the following items please select the statement which most accurately reflects your experiences in high school:

1. In high school I was called mean names, was made fun of, or teased in a hurtful way by other students:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

2. In high school, I was hit, kicked, pushed, or shoved around:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation or gender identity?

- Yes
- No

3. In high school, other students told lies, or spread false rumors about me and tried to make others dislike me:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

4. In high school, I had money or other things taken away from me or damaged:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

5. In high school, I was threatened or forced to do things I didn't want to do:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

6. In high school, I experienced hurtful or threatening messages in the form of phone calls, text messages, or over the internet:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

7. In high school, I experienced physical abuse which required medical attention:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

8. In high school, I was called mean names, was made fun of, or teased in a hurtful way, by one or more teachers, staff members, or coaches at my school:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

9. In high school, I was sexually victimized or sexually assaulted:

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

10. In high school, did you hear gay jokes or homophobic comments?

- This never happened to me in high school
- This happened rarely, maybe once or twice a year
- This happened to 2 or 3 times per month
- This happened on a weekly basis
- This happened several times each week

Did you feel this experience was related to your sexual orientation?

- Yes
- No

Appendix C

Expanded Attributional Style Questionnaire

Interpretations of Events

Please try to imagine yourself in the situations that follow. If such a situation happened to you, what would you feel would have caused it? While events may have many causes, we want you to pick only one – **THE MAJOR CAUSE IF THIS EVENT HAPPENED TO YOU.**

Please type the cause in the blank provided after each event. Next we want you to answer three questions about the cause you provided. First, is the cause of this even something about you or something about other people or circumstances? Second, is the cause of this event something that will persist across time or something that will never again be present? Third, is the cause of this even something that affects all situations in your life or something that just affects this type of event?

To summarize, we want you to:

1. Read each situation and vividly imagine it happening to you.
2. Decide what you feel would be the one major cause of the situation if it happened to you.
3. Type the cause in the blank provided.
4. Answer three questions about the cause.

1. You have been looking for a job unsuccessfully for some time.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

2. A friend comes to you with a problem, and you don't try to help.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

3. You give an important talk in front of a group, and the audience reacts negatively.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

4. You meet a friend who acts hostilely to you.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

5. You can't get all the work done that others expect of you.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

6. You go out on a date, and it goes badly.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

7. Your steady romantic relationship ends.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

8. You experience a major personal injury.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

9. You are found guilty of a minor violation of the law.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

10. You and your family have a serious argument.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

11. You are fired from your job.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

12. After your first term at school, you are on academic probation.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

13. Your best friend tells you that you are not to be trusted.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

14. You have a lot of trouble understand what your new employer requires of you.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

15. You cannot sleep soundly.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

16. You experience sexual difficulties.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

17. You confront a serious conflict in your values.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

18. Your roommate tells you he/she is switching to a room down the hall.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

19. There are few recreational activities in which you are interested.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

20. Your winter vacation plans are canceled.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

21. You have trouble with one of your instructors.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

22. You experience financial difficulties.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

23. Your attempt to capture the romantic interest of a specific person is a failure.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

24. You feel sick and tired all of the time.

a. Type the one major cause:

b. Is the cause of this due to something about you or something about other people or circumstances?

totally due to others	1	2	3	4	5	6	7	totally due to me
--------------------------	---	---	---	---	---	---	---	----------------------

c. In the future, will this cause again be present?

never present	1	2	3	4	5	6	7	always present
------------------	---	---	---	---	---	---	---	-------------------

d. Is this cause something that affects just this type of situation, or does it also influence other areas of your life?

just this situation	1	2	3	4	5	6	7	all situations
------------------------	---	---	---	---	---	---	---	-------------------

Appendix D
Modified Beck Depression Inventory - II

Please select the statement that best describes the way you have been feeling during the past two weeks.

1. Sadness

- 0. I do not feel sad.
- 1. I feel sad much of the time.
- 2. I am sad all the time.
- 3. I am so sad or unhappy that I can't stand it.

2. Pessimism

- 0. I am not discouraged about my future.
- 1. I feel more discouraged about my future than I used to be.
- 2. I do not expect things to work out for me.
- 3. I feel my future is hopeless and will only get worse.

3. Past Failure

- 0. I do not feel like a failure.
- 1. I have failed more than I should have.
- 2. As I look back, I see a lot of failures.
- 3. I feel I am a total failure as a person.

4. Loss of Pleasure

- 0. I get as much pleasure as I ever did from the things I enjoy.
- 1. I don't enjoy things as much as I used to.
- 2. I get very little pleasure from things I used to enjoy.
- 3. I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

- 0. I don't feel particularly guilty.
- 1. I feel guilty over many things I have done or should have done.
- 2. I feel quite guilty most of the time.
- 3. I feel guilty all the time.

6. Punishment Feelings

- 0. I don't feel like I'm being punished.
- 1. I feel I may be punished.
- 2. I expect to be punished.
- 3. I feel I am being punished.

7. Self-Dislike

- 0. I feel the same about myself as ever.
- 1. I have lost confidence in myself.
- 2. I am disappointed in myself.
- 3. I dislike myself.

8. Self-Criticalness

- 0. I don't criticize or blame myself more than usual.
- 1. I am more critical of myself than I used to be.
- 2. I criticize myself for all of my faults.
- 3. I blame myself for everything bad that happens.

9. Crying

- 0. I don't cry anymore than I used to.
- 1. I cry more than I used to.
- 2. I cry over every little thing.
- 3. I feel like crying, but I can't

10. Agitation

- 0. I am no more restless or wound up than usual.
- 1. I feel more restless or wound up than usual.
- 2. I am so restless or agitated that it's hard to stay still.
- 3. I am so restless or agitated that I have to keep moving or doing something.

11. Loss of Interest

- 0. I have not lost interest in other people or activities
- 1. I am less invested in other people or things than before.
- 2. I have lost most of my interest in other people or things.
- 3. It's hard to get interested in anything.

12. Indecisiveness

- 0. I make decisions about as well as ever.
- 1. I find it more difficult to make decisions than usual.
- 2. I have much greater difficulty in making decisions than I used to.
- 3. I have trouble making any decisions.

13. Worthlessness

- 0. I do not feel I am worthless
- 1. I don't consider myself as worthwhile and useful as I used to.
- 2. I feel more worthless as compared to other people.
- 3. I feel utterly worthless.

14. Loss of Energy

- 0. I have as much energy as ever.
- 1. I have less energy than I used to have.
- 2. I don't have enough energy to do very much.
- 3. I don't have enough energy to do anything.

15. Changes in Sleep Patterns

- 0. I have not experienced any change in my sleep pattern.
- 1a. I sleep somewhat more than usual.
- 1b. I sleep somewhat less than usual.
- 2a. I sleep a lot more than usual.
- 2b. I sleep a lot less than usual.
- 3a. I sleep most of the day
- 3b. I wake up 1-2 hours early and can't fall back to sleep

16. Irritability

- 0. I am no more irritable than usual.
- 1. I am more irritable than usual.
- 2. I am much more irritable than usual.
- 3. I am irritable all the time.

17. Changes in Appetite

- 0. I have not experienced any change in my appetite.
- 1a. My appetite is somewhat less than usual.
- 1b. My appetite is somewhat greater than usual.
- 2a. My appetite is much less than before.
- 2b. My appetite is much greater than usual.
- 3a. I have no appetite at all.
- 3b. I crave food all the time.

18. Concentration Difficulty

- 0. I can concentrate as well as ever.
- 1. I can't concentrate as well as usual.
- 2. It's hard to keep my mind on anything for very long.
- 3. I find I can't concentrate on anything.

19. Tiredness or Fatigue

- 0. I am no more tired or fatigued than usual.
- 1. I get more tired or fatigued more easily than usual.
- 2. I am too tired or fatigued to do a lot of the times I used to do.
- 3. I am too tired or fatigued to do most of the things I used to do.

20. Loss of Interest in Sex

0. I have not noticed any recent change in my interest in sex.
1. I am less interested in sex than I used to be.
2. I am much less interested in sex now.
3. I have lost interest in sex completely.

Appendix E
Childhood Trauma Questionnaire Short Form

Family Environment Questionnaire

These questions ask about some of your experiences growing up as a child and a teenager. For each question, circle the number that best describes how you feel. Although some of the questions are of a personal nature, please try to answer as honestly as you can. Your answers will be kept confidential.

When I was growing up...	Never true	Rarely true	Sometimes true	Often true	Very often true
1. I didn't have enough to eat.	1	2	3	4	5
2. I knew that there was someone to take care of me and protect me.	1	2	3	4	5
3. People in my family called me things like "stupid," "lazy," or "ugly."	1	2	3	4	5
4. My parents were too drunk or high to take care of the family.	1	2	3	4	5
5. There was someone in my family who helped me to feel important or special.	1	2	3	4	5
6. I had to wear dirty clothes.	1	2	3	4	5
7. I felt loved.	1	2	3	4	5
8. I thought that my parents wished I had never been born.	1	2	3	4	5
9. I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.	1	2	3	4	5
10. There was nothing I wanted to change about my family.	1	2	3	4	5
11. People in my family hit me so hard that it left me with bruises or marks.	1	2	3	4	5
12. I was punished with a belt, a board, a cord, or some other hard object.	1	2	3	4	5
13. People in my family looked out for each other.	1	2	3	4	5
14. People in my family said hurtful or insulting things to me.	1	2	3	4	5
15. I believe that I was physically abused.	1	2	3	4	5
16. I had the perfect childhood.	1	2	3	4	5
17. I got hit or beaten so badly that it was noticed by someone like a teacher, neighbor, or doctor.	1	2	3	4	5
18. I felt that someone in my family hated me.	1	2	3	4	5
19. People in my family felt close to each other.	1	2	3	4	5
20. Someone tried to touch me in a sexual way, or tried to make me touch them.	1	2	3	4	5
21. Someone threatened to hurt me or tell lies about me unless I did something sexual with them.	1	2	3	4	5
22. I had the best family in the world.	1	2	3	4	5
23. Someone tried to make me do sexual things or watch sexual things.	1	2	3	4	5
24. Someone molested me.	1	2	3	4	5
25. I believe that I was emotionally abused.	1	2	3	4	5
26. There was someone to take me to the doctor if I needed it.	1	2	3	4	5
27. I believe that I was sexually abused.	1	2	3	4	5

Appendix F
Demographics Form

1. Gender
 - a. Male
 - b. Female
 - c. Transgender (Male to Female)
 - d. Transgender (Female to Male)
 - e. Other

2. Age _____

3. How would you best describe your ethnic or racial background?
 - a. African American/Black
 - b. American Indian/Native American
 - c. Hispanic/Chicano/Mexican American
 - d. Asian American
 - e. Caucasian/European American
 - f. Other

4. How many people live or lived in the town or city where you attend/attended or completed high school? If there is more than one city where you attended high school, please refer to the city in which you attended high school for the longest period of time.
 - a. Less than 2,500
 - b. 2,500-4,999
 - c. 5,000-9,999
 - d. 10,000-49,999
 - e. 50,000-250,000
 - f. Over 250,000

5. Sexual Orientation
 - a. Bisexual
 - b. Gay/Lesbian/Homosexual
 - c. Straight/Heterosexual
 - d. Unsure/Questioning
 - e. Other

6. Which of the following best describes the way you view your sexual orientation?
 - a. Exclusively heterosexual
 - b. Predominantly heterosexual, only incidentally homosexual
 - c. Predominantly heterosexual, but more than incidentally homosexual
 - d. Equally heterosexual and homosexual
 - e. Predominantly homosexual, but more than incidentally heterosexual
 - f. Predominantly homosexual, only incidentally heterosexual
 - g. Exclusively homosexual

7. At what age did you first question whether you might be gay/lesbian/bisexual/transgender? (Please enter 0 if this does not apply to you.)_____
8. At what age did you first notice a sexual attraction to someone of the same sex? (Please enter 0 if this does not apply to you.)_____
9. At what age did you first think of yourself as gay/lesbian/bisexual/transgender? (Please enter 0 if this does not apply to you.)_____
10. At what age did you first tell someone that you were gay/lesbian/bisexual/transgender? (Please enter 0 if you never told anyone.)_____
11. At what age did you first have a romantic relationship with someone of the same sex? (Please enter 0 if this does not apply to you.)_____
12. At what age did you first have a sexual relationship with someone of the same sex? (Please enter 0 if this does not apply to you.)_____
13. At what age did you first have consensual sex with a member of the opposite sex? (Please enter 0 if this does not apply to you.)_____
14. At what age did you first have consensual sex with a member of the same sex? (Please enter 0 if this does not apply to you.) _____
15. Did you consider yourself to be “out” to your high school?
 - a. Yes
 - b. No
 - c. Does not apply
16. If you were out in high school, in what year did you come out?
 - a. I came out before I entered high school
 - b. Freshman
 - c. Sophomore
 - d. Junior
 - e. Senior
 - f. Does not apply
17. In the past year, have your sexual partners been:
 - a. Only male
 - b. Only female
 - c. Both male and female
 - d. This question does not apply to me

18. In your lifetime, have your sexual partners been:
- Only male
 - Only female
 - Both male and female
 - This question does not apply to me
19. In the past year, have you found yourself attracted to:
- Only males
 - Only females
 - Both males and females
 - I've not found myself attracted to either males or females
20. In your lifetime, have you found yourself attracted to:
- Only males
 - Only females
 - Both males and females
 - I've not found myself attracted to either males or females
21. Have you ever been forced to engage in an unwanted sexual activity?
- Yes
 - No
22. Who was the first person you told you were gay/lesbian/bisexual/transgender?
- Straight friend
 - Gay/lesbian/bisexual/transgender friend
 - Sister/brother
 - Father
 - Mother
 - Therapist/counselor
 - Teacher
 - Other relative
 - Clergy/chaplain
 - Other
23. How many years of education have you completed (K-12 equals 12 years)? _____
24. What is your current educational and/or occupational status?
- Attending a college or university
 - Attending a community college or vocational/technical institute
 - Employed full time, and not attending a post-secondary institution
 - Employed part-time, and not attending a post-secondary institution
 - Unemployed
25. What state do you currently reside in? _____

26. Please rate the safety of LGBT youth in the community where you attended high school for the longest period of time.
- Extremely safe
 - Somewhat safe
 - Neutral
 - Somewhat unsafe
 - Extremely unsafe
27. Please rate the safety of LGBT youth in the community which you currently live
- Extremely safe
 - Somewhat safe
 - Neutral
 - Somewhat unsafe
 - Extremely unsafe
28. Please rate the acceptance of LGBT youth in the community where you attended high school for the longest period of time.
- Extremely accepting
 - Somewhat accepting
 - Neutral
 - Somewhat unaccepting
 - Extremely unaccepting
29. Please rate the acceptance of LGBT youth in the community which you currently live
- Extremely accepting
 - Somewhat accepting
 - Neutral
 - Somewhat accepting
 - Extremely accepting
30. To your knowledge, is there a history of depression in your family of origin?
- Yes, in my immediate family (e.g. parents and siblings)
 - Yes, in my extended family (e.g. aunts, cousins, grandparents)
 - Not to my knowledge
31. How did you hear about this study?
- Through my college/university gay-straight student alliance
 - Through my local community center for sexual minorities
 - Through a friend/colleague/classmate
 - Through a social networking web site (such as facebook)
 - Other (please specify) _____