Identity Development and Sexual Orientation Prejudice

2016

Cassandra Smith

University of Central Florida

Find similar works at: https://stars.library.ucf.edu/honorstheses

University of Central Florida Libraries http://library.ucf.edu

Part of the Developmental Psychology Commons

Recommended Citation


This Open Access is brought to you for free and open access by the UCF Theses and Dissertations at STARS. It has been accepted for inclusion in Honors Undergraduate Theses by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.
IDENTITY DEVELOPMENT AND SEXUAL ORIENTATION PREJUDICE

by

CASSANDRA R. SMITH

A thesis submitted in partial fulfillment of the requirements for the Honors in the Major Program in Psychology in the College of Sciences and in the Burnett Honors College at the University of Central Florida Orlando, Florida

Summer Term, 2016

Thesis Chair: Dr. Steven L. Berman
This study examined the relationships among psychological variables of sexual prejudice, psychological adjustment, and identity development. It was hypothesized that sexual orientation prejudice would be negatively related to psychological adjustment. It was further hypothesized that identity formation would moderate the relationship between sexual orientation prejudice and psychological adjustment. Participants were 200 college students, ages ranged from 18-48 (M = 21.96, SD = 4.87). Sexual orientation for the participants included self-identified labels of Heterosexual (88.5%), Homosexual (6.5%), Bisexual (3.5%), Pansexual (1%), and Demisexual (0.5%). Survey data were collected through a Psychology Research Experience website (SONA). Results revealed a negative correlation between Heterophobia, and Life Satisfaction. However, no statistically significant correlation was found between Homophobia and Life Satisfaction. Heterophobia (but not Homophobia) was significantly correlated with identity Exploration in Depth and Identification with Commitment. The measure of sexual adjustment revealed both Heterophobia and Homophobia positively correlated with Sexual Anxiety and Sexual Fear. The identity variables (Sexual Exploration and Sexual Commitment) were found to be related to sexual orientation prejudice. The moderator hypothesis was partially supported in that two moderator variables significantly interacted with sexual orientation prejudice (Heterophobia) and psychological adjustment (Sexual Anxiety and Sexual Fear). However, more research is needed to further elucidate the intricate relationships among psychological variables of sexual orientation prejudice, psychological adjustment, and identity development.
DEDICATIONS

I would like to dedicate this thesis to my mother, Janice Smith; my father, Mike Smith; my sister, Kayla Burke; and my late grandmother, Helen Smith. Each of you have always been supportive of my goals, even if you have never understood what I was doing. With all of the love and support you all have given me, I truly feel like I can accomplish anything. I am an incredibly grateful daughter, granddaughter, and sister to have had each of you in my life.
ACKNOWLEDGEMENTS

I would like to thank Dr. Ed Fouty and Dr. Christopher Blackwell for offering guidance and valuable insight regarding my thesis, thank you for being a part of my committee it was truly a wonderful experience working with each of you. A special thank you to Dr. Steven Berman for the unending support and dedication it took to work on this thesis, I have learned so much in working under your guidance, and I am very appreciative to have worked with such a great instructor and advisor.
# TABLE OF CONTENTS

List of Figures ......................................................................................................................... viii

List of Tables ............................................................................................................................ ix

Chapter One: Introduction .......................................................................................................... 1

  Rationale ............................................................................................................................... 6

  Hypothesis One ..................................................................................................................... 7

  Hypothesis Two .................................................................................................................... 7

Chapter Two: Method ............................................................................................................... 8

  Participants ........................................................................................................................... 8

  Materials ............................................................................................................................... 8

    Demographics Questionnaire ......................................................................................... 8

    Sexual Orientation Questionnaire ................................................................................... 9

    The Brief Symptom Inventory - 18 ................................................................................ 9

    The Dimension of Identity Development Scale ............................................................ 9

    The Sexual Identity Survey ........................................................................................... 10

    The Multidimensional Sexuality Questionnaire .............................................................. 10

    Homophobia and Heterophobia Questionnaire ............................................................. 11

  Procedure ........................................................................................................................... 12

Chapter Three: Results ............................................................................................................. 13
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive/Preliminary Analyses</td>
<td>13</td>
</tr>
<tr>
<td>Main Hypotheses</td>
<td>13</td>
</tr>
<tr>
<td>Chapter Four: Discussion</td>
<td>17</td>
</tr>
<tr>
<td>Implications</td>
<td>17</td>
</tr>
<tr>
<td>Limitations</td>
<td>19</td>
</tr>
<tr>
<td>Future Research</td>
<td>21</td>
</tr>
<tr>
<td>Appendix A: Figures</td>
<td>22</td>
</tr>
<tr>
<td>Appendix B: Tables</td>
<td>24</td>
</tr>
<tr>
<td>Appendix C: IRB Approval letter</td>
<td>31</td>
</tr>
<tr>
<td>Appendix D: Survey</td>
<td>33</td>
</tr>
<tr>
<td>Demographics</td>
<td>34</td>
</tr>
<tr>
<td>SOQ</td>
<td>35</td>
</tr>
<tr>
<td>IDS</td>
<td>37</td>
</tr>
<tr>
<td>BSI - 18</td>
<td>38</td>
</tr>
<tr>
<td>DIDS</td>
<td>39</td>
</tr>
<tr>
<td>SIS</td>
<td>40</td>
</tr>
<tr>
<td>MSQ</td>
<td>41</td>
</tr>
<tr>
<td>HHQ</td>
<td>43</td>
</tr>
<tr>
<td>ESWLS</td>
<td>44</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1 Mean Difference of Homophobia by Ethnicity ......................................................... 23
LIST OF TABLES

Table 1 Crosstabulation Frequencies (number of participants) for Each Category of Same and Opposite Sex Attractions ......................................................... 25

Table 2 Descriptive Statistics of Measures ................................................................................. 26

Table 3 Correlation Matrix of Study Variables .............................................................................. 27

Table 4 Multiple Regression Analysis to Predict Psychological Adjustment (Life Satisfaction) 28

Table 5 Multiple Regression Analysis to Predict Psychological Adjustment (Sexual Anxiety).. 29

Table 6 Multiple Regression Analysis to Predict Psychological Adjustment (Sexual Fear)....... 30
CHAPTER ONE: INTRODUCTION

Erikson (1959) is credited for developing a psychosocial perspective on identity formation. Marcia (1966) later operationalized Erikson’s theories and created statuses in which one could categorize people’s identities based on their degree of identity exploration and identity commitment. These two dimensions were combined to derive four identity statuses: (1) diffusion, defined as a lack of commitment coupled with little systematic exploration; (2) foreclosure, defined as a commitment adopted without much prior exploration; (3) moratorium, defined as ongoing exploration with little commitment; and (4) achievement, defined as a commitment made following exploration (Rogow, Marcia, & Slugoski, 1983).

Despite the passage of time and numerous empirical research studies since their initial work, researchers still utilize Erikson’s and Marcia’s developmental theories of identity formation (e.g., Hardy et al., 2013). For instance, Luyckx, Goossens, Soenens, & Beyers (2006) sought to understand the work of Marcia’s status model and developed a four-dimensional identity formation model: Commitment Making entails the actual process of making choices, Identification with Commitment is viewed as the degree of deeper identification with those choices, Exploration in Breath involves the process of gathering information about alternative identity options in order to guide the formation of commitments; and Exploration in Depth is the process of re-examining current choices to insure that these are the most appropriate. In later years, Luyckx and colleagues (2008) added Ruminative Exploration to the four dimensional model which expands both Exploration in Depth and Exploration in Breadth to encompass the negative aspects of exploration regarding psychosocial functioning. It refers to anxiety ridden and unproductive exploration processes. The exploration of identity formation has prompted
researchers to investigate the study of sexual orientation and sexual identity development (e.g. Eliason, 1995; Morgan, 2012; Sell, 1997).

It is important to distinguish between sexual orientation and sexual identity. While both are crucial aspects in developing an identity, however these terms are different in meaning. According to Frankel (2004), sexual identity “is an organized set of perceptions that an individual has about the meaning of his/her sexual attraction and desires, directed toward forming a sense of self within existing social categories.” (p. 2) whereas, sexual orientation refers to “one’s sexual attraction and/or behavioral predispositions toward one or both sexes.” (Morgan, 2012, p. 80). A person’s sexual orientation is not the sole component of developing a sexual identity, influences such as biological, microsocial, gender norms, cultural norms, and religious influences may factor in to an individual who is developing their sense of sexual identity (Worthington, Savoy, Dillon, & Vernaglia, 2002).

The development of a sexual identity and an in depth understanding about one’s sexual orientation is an important task for emerging adulthood (Morgan, 2013). Hardy and colleagues (2012) posited that people who have made salient identity commitments and who have a better understanding of their identity are considered well-adjusted in regard to their overall sense of self. They further stated that people who have made identity commitments through exploration have the tendency to engage in less risk behavior, experience less mental health problems, and have a better sense of psychological well-being (Hardy et al., 2012). In terms of the development of a sexual identity, there is variations across different sexual orientation groups. For instance, heterosexual males and females’ sexual identities are considered normative (Eliason, 1995). Previous studies have stated that despite the amalgamation of research regarding sexual identity;
heterosexual identity development has frequently been ignored (Morgan & Thompson, 2011). Moreover, heteronormative sexual identity standards do not allow for the active process of exploration and commitment to a heterosexual identity (Morgan, 2012). The presence of homonegative attitudes results in heterosexuality becoming identified by what it is not (e.g. lesbian, gay, or bisexual), thus the resulting identification leads to an absence of a true understanding of sexual identity for many heterosexual individuals (Worthington et al., 2002). Moreover, when studying lesbian, gay, bisexual, transgender, and queer/questioning individuals (LGBTQ), sexual identity formation theories are also employed (e.g., Kosciw, Palmer, & Kull, 2015). Though LGBTQ individuals are presented with the same developmental milestones as heterosexual individuals, more often than not, LGBTQ individuals do not experience these milestones in the same way as their heterosexual counterparts (Spencer & Patrick, 2009). Additionally, despite recent political gains in the LGBTQ community, victimization in terms of sexual orientation prejudice is still an everyday occurrence for sexual minorities, and identity exploration and commitment occurs in the context of risk (Kosciw et al., 2015).

For the purpose of this study, the term sexual orientation prejudice will be used interchangeably with homophobia or heterophobia. Sexual orientation prejudice can be substituted with the term homophobia to encompass discrimination against sexual orientations other than homosexuality (i.e. LGBTQ individuals). This term entails that internalized stigma is manifested as negative attitudes towards sexual minority individuals, and can be used in exchange with homophobia, homonegativity, and heterosexism (Herek, Gillis, & Cogan, 2015). The term heterophobia will also be used interchangeably with sexual orientation prejudice to refer to the range of negative feelings that people have towards a heterosexual orientation (White
& Franzini, 1999). In its simplest of forms homophobia expresses itself through violence and crude language towards nonheterosexual individuals; however, on a subtler level, homophobia validates many insidious practices that tends to degrade sexual minorities (Swank, Fahs, & Frost, 2013). Heterophobia encompasses hate, dislike, or fear towards heterosexuals (White & Franzini, 1999). Of all orientations, heterosexual males are most known for engaging in sexual orientation prejudice behaviors, this is typically to confirm their heterosexual masculinity by rejecting nonheterosexual individuals (Hall & LaFrance, 2012). Despite this finding, sexual orientation prejudice is a phenomenon that affects all heterosexual and nonheterosexual members of society (Herek, Gillis, & Cogan, 2015).

People from each sexual orientation experience prejudice and discrimination in different ways. For instance, Bostwick, Boyd, Hughes, West, and McCabe (2014) reported that bisexuals have a unique position to experience prejudice and discrimination from both heterosexuals and homosexuals who both question the legitimacy of a bisexual identity. This can negatively affect their overall well-being because they are not as connected with either community (Boswick et al., 2014). Previous studies have concluded that LGBTQ individuals report less positive adjustment in terms of satisfaction with current life situations and self-esteem because of their sexual orientation (e.g., Snapp, Watson, Russell, Diaz, & Ryan, 2015). LGBTQ individuals are often viewed in a negative light in today’s society, and the extent of these negative attitudes varies considerably depending upon the characteristics of the attitude holder and target (Blashill & Powlishta, 2012).

Prejudice against a sexual orientation other than one’s own, such as that shown against individuals that are outside of a certain group in society, are often a result of the stereotypes a
group imparts upon them (Swan & Habibi, 2015). Bostwick et al. (2014) reported that prejudice experienced by those who identify as LGBTQ is associated with poor mental health outcomes because of the deleterious effects prejudice has on LGBTQ individuals’ everyday lives. The psychological well-being of an individual that experiences prejudice will depend on whether that individual belongs to a group that is disadvantaged or to one that is privileged (Schmitt & Branscombe, 2002). Even if those who identify as LGBTQ do not face overt rejection or hostility in the form of prejudice, they have to cope with the possibility that prejudice may occur in the future (Sheets & Mohr, 2009). The risk for victimization comes at a greater risk for those who openly disclose their non-heterosexual orientation, simply because they become more identifiable (Waldo, Hesson-McInnis, & D’Augelli, 1998). Similarly, it is the hostility in the mainstream cultural world that sets the context for identity formation in LGBTQ individuals (Spencer & Patrick, 2009).

Luyckx and Robitschek (2014) reported that people who have made salient decisions in regard to commitment with their sexual identity can lead positively to higher self-esteem and negatively to depressive symptoms. However, Kosciw and colleagues (2015) suggested that the stigma against LGBTQ individuals explains the relationship between openly expressing their sexual orientation and the negative psychosocial outcomes that some LGBTQ individuals experience, which can reveal complex associations between sexual orientation and psychosocial health. This research proposed that LGBTQ individuals experience a plethora of problems when making definitive decisions regarding their sexual identities (Kosciw et al., 2013). Kelly (2013) has suggested that although sexual orientation prejudice can inhibit the identity development of LGBTQ individuals, much of the prejudice comes from the individuals who themselves, are
struggling with sexual identity issues. Those that attribute greater importance to their sexual identity, particularly heterosexuals, may engage in more homophobic or sexual orientation prejudice behaviors (Poteat, DiGiovanni, & Scheer, 2013). Pitoňák and Spilková (2015) reported that having sexual orientation prejudice is related to less healthy psychological adjustment. The concept of sexual orientation prejudice suggests it lies not with homosexuals or any non-heterosexual counterpart, but instead with the individuals that have negative reactions to other sexual orientations (Bryant & Vidal-Ortiz, 2008).

**Rationale**

The purpose of this study was to further explore the complex relationships among the psychological variables of sexual prejudice, psychological adjustment, and identity development. There has been a paucity of empirical studies documenting the relationship between sexual orientation prejudice and psychological adjustment and whether that relationship is moderated by the status of identity exploration and identity commitment. Two previous studies have addressed the relationship that identity formation has on prejudice (Kelly, 2013) and the role prejudice has on psychological adjustment (Pitoňák & Spilková, 2015). This study anticipated to address the gap between the two studies by addressing the role identity formation has on both sexual orientation prejudice and psychological adjustment. It is further necessary that data be collected to fully understand the moderating roles identity commitment and identity exploration might have on sexual orientation prejudice attitudes and the effect those attitudes have on psychological adjustment.

Recent research has focused on the psychological ramifications of being LGBTQ as well as the adversities that come with identifying as LGBTQ. The goals of this study were to
understand the psychological adjustment and the status of identity formation - in terms of
commitment and exploration - of those who are prejudiced towards other sexual orientations.
This study has the potential to add to the mounting literature on sexual identity formation and
psychological adjustment.

Hypothesis One

It was hypothesized that sexual orientation prejudice in terms of heterophobia and
homophobia is negatively related to psychological adjustment.

Hypothesis Two

It was hypothesized that the relationship between sexual orientation prejudice and
psychological adjustment would be especially strong among those with less developed identity
formation. That is, identity formation would moderate the relationship between sexual
orientation prejudice and psychological adjustment.
CHAPTER TWO: METHOD

Participants

Participants were recruited through the University of Central Florida’s (UCF) SONA system, this is a Psychology Research Experience website for students that are looking to serve as participants in an array of psychological studies (typically in exchange for course credit). A total of 200 individuals participated in this study. The sample included \( n = 131 \) females, \( n = 65 \) males, and \( n = 4 \) those who did not specify their gender. The age range for this sample was 18 to 48, with a mean of 21.96 and a standard deviation of 4.87. The ethnic breakdown of the participants was White/non-Hispanic \( n = 102, 51\% \), Hispanic or Latin American \( n = 48, 24\% \), African-American \( n = 31, 15.5\% \), Asian or Pacific Islander \( n = 9, 4.5\% \), and Bi-ethnic, \( n = 9, 4.5\% \). Education level of the participants was comprised of, freshman \( n = 54, 27\% \), sophomore \( n = 23, 11.5\% \), junior \( n = 42, 21\% \), senior \( n = 80, 40\% \), and Non-Degree seeking \( n = 1, 0.5\% \). The self-identified sexual orientation breakdown of the participants included, Heterosexual \( n = 177, 88.5\% \), Homosexual \( n = 13, 6.5\% \), Bisexual \( n = 7, 3.5\% \), Pansexual \( n = 2, 1\% \), and Demisexual \( n = 1, 0.5\% \). In addition to the categorical labels regarding sexual orientation, reported frequencies of opposite and same sex attraction from 0 (not at all) to 4 (extremely) for each participant based off of the Sexual Orientation Questionnaire (SOQ) can be seen in Table 1.

Materials

Demographics Questionnaire. A demographic questionnaire was administered to ascertain information regarding the participants’ gender, education level, age, ethnicity, and sexual orientation.
**Sexual Orientation Questionnaire.** Based on the literature, the Kinsey Scale is widely recognized as a means of assessing sexual orientation (Klein, Sepekoff, & Wolf, 1985; Morgan, 2013). This measure is incomplete with regard to assessing sexual orientation across all domains of sexuality. For instance, this scale measures homosexuality and heterosexuality on the same continuum, implying that these sexualities are polar opposites and denying the possibility of asexuality (Sell, 1997). For the purpose of this study, a questionnaire was created that addressed questions regarding sexual orientation in several ways. First, participants were asked to self-label their orientation (open ended). Then they were asked on a Likert type scale from 0 (not at all) to 4 (extremely) “how sexually attracted are you to people of the same sex” and then, “people of the opposite sex”.

*The Brief Symptom Inventory - 18* (BSI-18; Derogatis, 2000) is a short form of Derogatis’ (1994) Symptom Checklist-90-Revised (SCL-90-R). This measure assessed for common psychiatric symptoms (e.g. depression, anxiety, and somatization). Participants were asked to evaluate the severity of each symptom within the past seven days on a Likert scale from 0 (not at all) to 4 (extremely). For this measure, the Global Severity Index (GSI) was used which is an average of the severity ratings for the psychiatric symptoms listed previously. The overall internal consistency for this measure has been reported as .89 (Derogatis, 2000). For this study, the internal consistency was $\alpha = .94$.

*The Dimension of Identity Development Scale* (DIDS; Luyckx et al., 2008) was a survey that assessed the five-dimensional identity processes (Commitment Making, Identification with Commitment, Exploration in Depth, Exploration in Breadth, and Ruminative Exploration) with respect to future plans and possible life paths. Participants were presented with a series of
statements such as “I have decided on the direction I am going to follow in my life”. The questions were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Across different samples, Cronbach’s alpha ranged between .83 and .93 for commitment and .76 and .87 for exploration (Luyckx et al., 2008). For this study, the internal consistency ranged from $\alpha = .70$ (Exploration in Breadth) to $\alpha = .96$ (Commitment Making).

The Sexual Identity Survey (SIS; Lewis, 2008) was based on Marcia’s (1966) identity status paradigm, it was also modeled after Balisteri and colleagues (1995) Ego Identity Process Questionnaire (EIPQ). Participants were asked to rate on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree) whether they have explored and made commitments in seven sexual identity domains (e.g. experience, motivation, orientation, desire, relationships, knowledge, and values). The internal consistency for this survey was .89, alpha coefficients for exploration and commitment were .81 and .86 respectively (Lewis, 2008). For this study, the internal consistency for exploration was $\alpha = .80$, and $\alpha = .90$ for commitment.

The Multidimensional Sexuality Questionnaire (MSQ; Snell et al., 1993) was a self-report survey rated on a 5-point Likert scale ranging from 1 (not at all characteristic of me) to 5 (very characteristic of me). This survey measures sexual esteem, sexual preoccupation, internal sexual control, sexual consciousness, sexual motivation, sexual anxiety, sexual assertiveness, sexual depression, external locus of control, self-monitoring, fear of sex, and sexual satisfaction. For the purpose of this study the subscales utilized were Sexual Esteem, Sexual Motivation, Sexual Anxiety, Sexual Assertiveness, Fear of Sex, and Sexual Satisfaction. They were chosen because they most clearly appeared to measure sexual adjustment and to help shorten the survey length. The overall internal consistency for the MSQ was $\alpha = .84$ (Snell et al., 1993). For this study, the
internal consistency from each subscale ranged from $\alpha = .78$ (Sexual Assertiveness) to $\alpha = .91$ (Sexual Satisfaction, Sexual Esteem, and Sexual Motivation).

*Homophobia and Heterophobia Questionnaire* (HHQ; Klamen, Grossman, & Kopacz, 1999) is a 14-item self-report measure asked participants to rate statements such as “I enjoy the company of LGBTQ individuals” on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The questionnaire initially assessed homophobia; however, the heterophobia measure was constructed by adapting the items on the homophobia scale (e.g. substituting the word “heterosexual” for “homosexuals”) where appropriate. The term “homosexual” was replaced with LGBTQ to encompass more than just a homosexual orientation. The original questions demonstrated good internal consistency at .90 (Klamen et al., 1999). For this study, the internal consistency for Heterophobia was $\alpha = .77$, and $\alpha = .86$ for Homophobia.

*The Extended Satisfaction with Life Scale* (ESWLS; Alfonso, Allison, Rader, & Gorman, 1996) is a 50-item measure that assesses a person’s satisfaction with life and well-being across different domains such as general life, self, marital, family, social, physical appearance, sex, school, and job satisfaction and may be utilized with a variety of populations. This assessment is ranged on a seven-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores represent greater satisfaction. For the purpose of this study, and to shorten the length of the survey, this questions were reduced from 50-items to 9-items (one question from each subscale of life satisfaction). The internal consistency for each subscale ranged from 0.81 to 0.96 (Alfonso et al., 1996). For this study, the overall internal consistency for life satisfaction was $\alpha = .86$. 

11
Procedure

The study was approved by the UCF Institutional Review Board (IRB). The study utilized UCF’s online SONA system to administer the survey. The survey was anonymous with computer generated ID numbers used to maintain anonymity. Each participant received course credit for completing the survey; the amount of credit was determined by the professor of the class from which they were recruited. For students who did not wish to participate for credit, they were given an alternative assignment per the professor’s instruction. Those that decided to participate in the online SONA survey read and accepted the Explanation of Research, which implied informed consent. Following the participants’ acceptance and agreement, they were prompted to complete a survey battery that included the measures listed.
CHAPTER THREE: RESULTS

Descriptive/Preliminary Analyses

The minimum, maximum, mean, standard deviation, skewness, and kurtosis for each subscale that was utilized for this study is reported in Table 2. An independent samples t-test revealed no significant gender difference on any of the measures utilized except for Homophobia, \( t(194) = 3.49, p = .001 \), and Heterophobia, \( t(194) = 2.41, p = .017 \). On both of these measures, males scored higher than females. However, when a Bonferroni Correction was employed for multiple t-test analyses, the cut off for statistical significance was reduced to \( p = .005 \) (significance level of .05 divided by nine analyses equals .005). Using this standard, Heterophobia would no longer be significant. A Pearson Correlation revealed that none of the measures were significantly correlated with age. Using a one-way ANOVA to determine if there was a difference on any of the measures by grade, no statistically significant differences were found. Additionally, a one-way ANOVA was utilized to determine a statistical difference between the measures and ethnicity. None of the measures varied by ethnicity, except for Homophobia, \( F(4, 195) = 4.41, p = .002 \). A Least Squares Difference (LSD) post hoc analysis revealed that African Americans scored significantly higher in homophobia than any other ethnic group. Figure 1 displays the mean difference of homophobia by ethnicity.

Main Hypotheses

To test the first hypothesis that sexual orientation prejudice in terms of heterophobia and homophobia would be negatively related to psychological adjustment, a Pearson product-moment correlation matrix was constructed (see Table 3). The hypothesis was partially supported with regard to sexual orientation prejudice being negatively related to psychological
adjustment. Heterophobia was negatively correlated to the Life Satisfaction subscale that was utilized to measure well-being in the study, $r = -0.27, p < 0.001$. Whereas, there was no statistically significant correlation with Homophobia and Life Satisfaction, $r = -0.01, p = 0.864$. The measure of sexual adjustment (MSQ) revealed that Sexual Anxiety was significantly correlated with both Heterophobia, $r = 0.25, p < 0.001$, and Homophobia, $r = 0.20, p = 0.005$. Sexual Fear also reached statistical significance with Heterophobia, $r = 0.17, p = 0.016$, and Homophobia $r = 0.18, p = 0.013$. However, when assessing Sexual Assertiveness, only Heterophobia was significant, $r = -0.17, p = 0.015$. In regard to the psychological symptom scores (BSI-18), there was no statistically significant relationship between the GSI of the BSI-18 and Heterophobia, $r = 0.11, p = 0.130$, or Homophobia, $r = -0.08, p = 0.288$.

Several measures of identity development were utilized in this study. A Pearson product-moment correlation matrix was used to assess the relationship between the various subscales of identity formation with Homophobia and Heterophobia. As can be seen in Table 3, Heterophobia reached statistical significance with regard to Sexual Exploration, $r = -0.28, p < 0.001$, and Sexual Commitment, $r = -0.32, p < 0.001$. Homophobia also reached statistical significance with Sexual Exploration, $r = -0.37, p < 0.001$, and Sexual Commitment, $r = -0.21, p = 0.002$. When assessing identity formation delineated by Luyckx and colleagues (2008), only Heterophobia was statistically significant with the identity measures of Exploration in Depth, $r = -0.21, p = 0.003$, and Identification with Commitment, $r = -0.17, p = 0.014$.

To test the second hypothesis, a Multiple Regression Analysis procedure was utilized as outlined by Holmbeck (1997) to assess the moderation effect identity formation might have on sexual orientation prejudice and psychological adjustment. Life Satisfaction was entered as the
dependent variable, age and gender were entered on step one of the regression analysis, commitment making, exploration in depth, and heterophobia were entered in step two, and Moderator 1 (Heterophobia × Exploration) and Moderator 2 (Heterophobia × Commitment Making) were entered in step three. Results indicate that the overall model was significant [$R^2 = .34$, Adjusted $R^2 = .31$, $F(7, 189) = 13.68, p < .001$] with the beta weights reaching statistical significance for Heterophobia ($t = -2.96, p = .003$) and Commitment Making ($t = 7.35, p < .001$). However, neither of the moderator variables were significant (see Table 4).

A similar Multiple Regression Analysis procedure was utilized to determine the moderation effect that identity formation might have on sexual orientation prejudice and psychological adjustment. For this analysis, Sexual Anxiety was entered as the dependent variable, age and gender were entered on step one, Sexual Commitment, Sexual Exploration, Homophobia, and Heterophobia were entered in step two, Moderator 3 (Homophobia × Sexual Exploration), Moderator 4 (Homophobia × Sexual Commitment), Moderator 5 (Heterophobia × Sexual Exploration), and Moderator 6 (Heterophobia × Sexual Commitment) were entered in step three. Results indicate that the overall model was significant [$R^2 = .22$, Adjusted $R^2 = .18$, $F(10, 186) = 5.20, p < .001$] with the beta weights reaching statistical significance for Sexual Exploration ($t = 2.06, p = .041$) and Sexual Commitment ($t = -5.24, p < .001$). None of the moderator variables were significant, except the moderator variable Heterophobia × Sexual Exploration, $t = -2.12, p = .035$ (see Table 5).

To further analyze the moderation effect that identity formation might have on sexual orientation prejudice and psychological adjustment a third Multiple Regression Analysis procedure was utilized. Sexual Fear was entered as the dependent variable, age and gender were
entered in step two, Sexual Commitment, Sexual Exploration, Homophobia, and Heterophobia were entered in step two, Moderator 3 (Homophobia × Sexual Exploration), Moderator 4 (Homophobia × Sexual Commitment), Moderator 5 (Heterophobia × Sexual Exploration), and Moderator 6 (Heterophobia × Sexual Commitment) were entered in step three. The results revealed that the overall model was significant \( R^2 = .30, \) Adjusted \( R^2 = .27, F(10, 186) = 8.13, p < .001 \]. The beta weights were statistically significant for gender \( (t = 3.44, p = .001) \) and Sexual Commitment \( (t = -4.91, p < .001) \). Two moderator variables reached statistical significance, Heterophobia × Sexual Exploration, \( t = -1.97, p = .050 \), and Heterophobia × Sexual Commitment, \( t = 2.44, p = .016 \) (see Table 6). Thus, hypothesis two was partially confirmed, in that the moderator variables; Heterophobia × Sexual Exploration and Heterophobia × Sexual Commitment moderated sexual orientation prejudice (Heterophobia) and psychological adjustment (Sexual Anxiety and Sexual Fear).
CHAPTER FOUR: DISCUSSION

Implications

The purpose of the present study was to investigate the relationship sexual orientation prejudice has on psychological adjustment. It was hypothesized that those who have sexual orientation prejudice in terms of homophobia or heterophobia would be lower in psychological adjustment. It was further hypothesized that the degree of identity formation would moderate the relationship between sexual orientation prejudice and psychological adjustment. The data partially supported the first hypothesis, it was found that heterophobia and homophobia were significantly correlated to the sexual adjustment measures of sexual anxiety and sexual fear. Moreover, heterophobia (but not homophobia) was negatively related to the psychological adjustment measure, Life Satisfaction; however, heterophobia was not correlated to overall distress with regard to psychological symptoms (GSI). Based on the data, those that display heterophobic attitudes have the tendency to feel less satisfaction with life and have more sexual anxiety and fear. A potential reason for this partial finding is the context of LGBTQ individuals living in heterosexist societies wherein the negative societal attitudes may, in part, pose a risk for negative psychological outcomes (Spencer & Patrick, 2009). This may promote negative, hateful, or fearful emotions and reactions towards heterosexual individuals (White & Franzini, 1999)

Surprisingly, there was very little significance between any of the psychological adjustment measures and homophobia, wherein only sexual fear and sexual anxiety were significantly correlated with homophobia. A reason for this finding may be due to the fact that homophobia is saturated in many environments and is accepted and endorsed by certain social
groups (Hall & LaFrance, 2012). For instance, those who are male, less educated, evangelical or “born again” Christians, authoritarian, ethnicities such as African American or Hispanic have been found to exhibit greater homophobic behavior on average (Lance, 2008). This may lead to the fear and anxiety that comes with actively exploring a sexual orientation other than heterosexuality. A juxtaposition of why homophobic individuals experience less psychological adjustment issues may be due to the privileges certain sexual orientations have over others. These individuals may not be as affected by acts of sexual orientation prejudice because these occurrences are few and far between, whereas, sexual minorities view sexual orientation prejudice encounters as pervasive and uncontrollable (Schmitt & Branscombe, 2002).

The second hypothesis that identity formation would moderate the relationship between psychological adjustment and sexual orientation prejudice was partially supported. The sexual orientation prejudice measure; Heterophobia, and the psychological adjustment measures of Sexual Anxiety and Sexual Fear were moderated by Sexual Exploration and Sexual Commitment. This finding may be due to the pervasiveness of a heterosexist society (Spencer & Patrick, 2009). Because of the societal implications, sexual anxiety and sexual fear may develop in non-heterosexuals which may promote heterophobia in these individuals, and in turn hinder the exploration and commitment of a sexual identity. Despite the current moderation effect that identity formation has on sexual orientation prejudice and psychological adjustment, Holmbeck (1997) maintained that the strongest moderation effect occurs when there is not an association between the independent variables and the dependent variables (i.e. there is no main effect present). In keeping with this notion, several independent measures (e.g. Sexual Commitment and Sexual Exploration) reached statistical significance with the dependent measures which
indicates that there was not a pure moderation effect with the predictors. Thus, the moderation effects found should be taken tentatively. The study did find that those who have lower levels of identity exploration and identity commitment are more likely to be heterophobic; however, their contribution to psychological adjustment appears to be independent rather than multiplicative. The finding that those who are heterophobic tend to have a less committed identity stands in contrast to a study conducted on the correlates of low phobia scores and the degree of identity commitment or degree of “outness” with a homosexual identity (White & Franzini, 1999). The authors initially hypothesized that higher levels of heterophobia would be related to a less developed homosexual identity; however, this was not supported. White and Franzini (1999) speculated that those whose discomfort level with heterosexuals may in fact be more pronounced with a more developed homosexual identity. The opposing findings in this study may be due to the different samplings for each study, or the use of different assessments to measure heterophobia and homophobia. Despite the significant findings of this study, more research is required to further explain the relationships among psychological variables of sexual orientation prejudice, psychological adjustment, and identity development.

**Limitations**

It is important to note several limitations in this study. The sample was a convenience sample of college students in an urban university setting. This limits the generalizability of the current findings to only the populations that are similar in nature to the sample that was utilized. Because of the homogeneous sample (college educated students) moderator effects may be difficult to reach statistical significance (Holmbeck, 1997). This, in part, may explain why only two moderator variables (Heterophobia × Sexual Exploration and Heterophobia × Sexual
Commitment) were significant. Another limitation of this study was the method in which sexual orientation was assessed. Traditional measures of sexual orientation fail to represent the variety and fluidity of different sexual orientation groups (Galupo, Davis, Gryniewicz, & Mitchell, 2014). The measures that were used may not have been all encompassing with regard to assessing sexual orientation and identification with a sexual orientation. However, an attempt was made to avoid the use of traditional sexual orientation measures by letting the participant’s self-identify and insert what they believed to be their sexual orientation. Participants were prompted to rate their sexual attraction on a Likert-type scale which forces the participant to label their orientation on a continuum that does not fluctuate or incorporate the variety of options there are with regard to sexual orientation. The use of the measure; Life Satisfaction, from the Extended Satisfaction with Life Scale (ESWLS) and its relationship with heterophobia should be taken tentatively. Though the questionnaire can measure well-being, a more robust finding would have resulted if there was a negative relationship between both forms of sexual orientation prejudice and the GSI of the BSI-18 which determines psychological symptom severity within an individual. Moreover, the internal consistency of the Heterophobia measure was modest but not incredibly high, this should be taken in to consideration when interpreting the present findings. Another limitation to the findings were the skewness and the kurtosis of the psychological symptom scores (as can be seen in Table 2). The high positive numbers indicate that there is a non-normal distribution within this measure which could potentially have affected the outcome regarding the lack of significance with the GSI and Heterophobia, as well as the GSI and Homophobia. Finally, it should be stressed that this study was correlational in design and thus no causal relationship should be inferred.
**Future Research**

An implication for future research would be to assess sexual orientation prejudice and psychological adjustment longitudinally. This study was limited with regard to the cross-sectional design, future studies may have a better outcome of understanding sexual orientation prejudice and its origins if individuals are studied throughout the identity development process. Previous studies have documented that there are changes in psychological well-being over the course of a person’s life, this notion can also be applicable to the psychological determinants of a person’s sexual orientation and identity across the life span (e.g. Becker, Cortina, Tsia, & Eccles, 2014). It would be beneficial for future studies to focus on the societal influences (e.g. exposure to other sexual orientations versus no exposure to sexual orientations) of sexual orientation prejudice and whether there are any psychological ramifications of these influences on identity development. A study conducted by Swank, Fahs, and Frost (2013) posited that geographical and locational factors are related to the amount of experienced discrimination that LGBTQ individuals face. In the same thread, future research should focus on the impact geographical and locational factors have with regard to sexual orientation prejudice and the psychological well-being of individuals who display prejudice towards other sexual orientations.
APPENDIX A: FIGURES
Figure 1 Mean Homophobia Scores by Ethnicity
APPENDIX B: TABLES
Table 1 Crosstabulation Frequencies (number of participants) for Each Category of Same and Opposite Sex Attractions

<table>
<thead>
<tr>
<th>How sexually attracted are you to people of the same sex?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>117</td>
</tr>
<tr>
<td>A little bit</td>
<td>40</td>
</tr>
<tr>
<td>Moderately</td>
<td>12</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>15</td>
</tr>
<tr>
<td>Extremely</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How sexually attracted are you to people of the opposite sex?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>1</td>
</tr>
<tr>
<td>A little bit</td>
<td>0</td>
</tr>
<tr>
<td>Moderately</td>
<td>3</td>
</tr>
<tr>
<td>Quite a bit</td>
<td>20</td>
</tr>
<tr>
<td>Extremely</td>
<td>93</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>93</td>
<td>30</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>140</td>
</tr>
<tr>
<td>117</td>
<td>40</td>
<td>12</td>
<td>15</td>
<td>16</td>
<td>200</td>
</tr>
<tr>
<td>Measure</td>
<td>Minimum</td>
<td>Maximum</td>
<td>Mean</td>
<td>SD</td>
<td>Skewness</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>-------</td>
<td>------</td>
<td>----------</td>
</tr>
<tr>
<td>Homophobia</td>
<td>1.00</td>
<td>4.25</td>
<td>1.77</td>
<td>.72</td>
<td>.88</td>
</tr>
<tr>
<td>Heterophobia</td>
<td>1.00</td>
<td>3.50</td>
<td>1.79</td>
<td>.63</td>
<td>.58</td>
</tr>
<tr>
<td>Psychological Symptoms</td>
<td>0.00</td>
<td>3.11</td>
<td>.62</td>
<td>.64</td>
<td>1.60</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>1.00</td>
<td>5.00</td>
<td>3.68</td>
<td>.70</td>
<td>-0.81</td>
</tr>
<tr>
<td>Identity Commitment making</td>
<td>1.00</td>
<td>5.00</td>
<td>3.74</td>
<td>.88</td>
<td>-0.84</td>
</tr>
<tr>
<td>Identity Exploration in Breadth</td>
<td>1.00</td>
<td>5.00</td>
<td>3.61</td>
<td>.74</td>
<td>-0.71</td>
</tr>
<tr>
<td>Ruminative Identity Exploration</td>
<td>1.00</td>
<td>5.00</td>
<td>2.90</td>
<td>.93</td>
<td>-0.09</td>
</tr>
<tr>
<td>Identification with Commitment</td>
<td>1.00</td>
<td>5.00</td>
<td>3.62</td>
<td>.83</td>
<td>-0.76</td>
</tr>
<tr>
<td>Identity Exploration in Depth</td>
<td>1.00</td>
<td>5.00</td>
<td>3.54</td>
<td>.64</td>
<td>-0.83</td>
</tr>
</tbody>
</table>
### Table 3 Correlation Matrix of Study Variables

<table>
<thead>
<tr>
<th></th>
<th>Psychological Adjustment</th>
<th>Life Satisfaction</th>
<th>Sexual Esteem</th>
<th>Sexual Motivation</th>
<th>Sexual Anxiety</th>
<th>Sexual Assertiveness</th>
<th>Sexual Fear</th>
<th>Sexual Satisfaction</th>
<th>Sexual Identity Exploration</th>
<th>Sexual Identity Commitment</th>
<th>Identity Commitment Making</th>
<th>Identity Exploration in Breadth</th>
<th>Ruminative Identity Exploration</th>
<th>Identification with Commitment</th>
<th>Identity Exploration in Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heterophobia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI-18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.107 (.130)</td>
<td>-.076 (.288)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESWLS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.269** (.000)</td>
<td>-.012 (.864)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.086 (.228)</td>
<td>-.024 (.740)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.119 (.095)</td>
<td>-.122 (.085)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.251** (.000)</td>
<td>.196** (.005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.172* (.015)</td>
<td>-.105 (.139)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.170* (.016)</td>
<td>.176* (.013)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.121 (.087)</td>
<td>-.080 (.262)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.283** (.000)</td>
<td>-.366** (.000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.320** (.000)</td>
<td>-.214** (.002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.105 (.140)</td>
<td>.012 (.871)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.065 (.362)</td>
<td>-.089 (.210)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.051 (.473)</td>
<td>-.123 (.081)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.173* (.014)</td>
<td>-.016 (.827)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.212** (.003)</td>
<td>-.080 (.263)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
Table 4 Multiple Regression Analysis to Predict Psychological Adjustment (Life Satisfaction)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.02</td>
<td>-.24</td>
<td>.809</td>
</tr>
<tr>
<td>Age</td>
<td>.02</td>
<td>.31</td>
<td>.755</td>
</tr>
<tr>
<td>Heterophobia</td>
<td>-.18</td>
<td>-2.88</td>
<td>.004**</td>
</tr>
<tr>
<td>Identity Commitment Making</td>
<td>.46</td>
<td>7.25</td>
<td>.000**</td>
</tr>
<tr>
<td>Identity Exploration in Depth</td>
<td>.12</td>
<td>1.86</td>
<td>.065</td>
</tr>
<tr>
<td>Heterophobia × Commitment Making</td>
<td>-.01</td>
<td>-.19</td>
<td>.843</td>
</tr>
<tr>
<td>Heterophobia × Exploration in Depth</td>
<td>.05</td>
<td>.75</td>
<td>.455</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
### Table 5: Multiple Regression Analysis to Predict Psychological Adjustment (Sexual Anxiety)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Standardized Coefficients</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.11</td>
<td>1.45</td>
<td>.149</td>
</tr>
<tr>
<td>Age</td>
<td>.20</td>
<td>.283</td>
<td>.777</td>
</tr>
<tr>
<td>Homophobia</td>
<td>.17</td>
<td>1.97</td>
<td>.050*</td>
</tr>
<tr>
<td>Heterophobia</td>
<td>.09</td>
<td>1.06</td>
<td>.289</td>
</tr>
<tr>
<td>Sexual Exploration</td>
<td>.20</td>
<td>2.19</td>
<td>.030*</td>
</tr>
<tr>
<td>Sexual Commitment</td>
<td>-.47</td>
<td>-5.18</td>
<td>.000**</td>
</tr>
<tr>
<td>Homophobia × Sexual Exploration</td>
<td>.21</td>
<td>1.86</td>
<td>.065</td>
</tr>
<tr>
<td>Homophobia × Sexual Commitment</td>
<td>-.12</td>
<td>-1.03</td>
<td>.304</td>
</tr>
<tr>
<td>Heterophobia × Sexual Exploration</td>
<td>-.22</td>
<td>-2.12</td>
<td>.035*</td>
</tr>
<tr>
<td>Heterophobia × Sexual Commitment</td>
<td>.21</td>
<td>1.75</td>
<td>.082</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).  
**Correlation is significant at the 0.01 level (2-tailed).
Table 6 Multiple Regression Analysis to Predict Psychological Adjustment (Sexual Fear)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.27</td>
<td>3.93</td>
<td>.000**</td>
</tr>
<tr>
<td>Age</td>
<td>-.12</td>
<td>-1.93</td>
<td>.055</td>
</tr>
<tr>
<td>Homophobia</td>
<td>.18</td>
<td>2.19</td>
<td>.030*</td>
</tr>
<tr>
<td>Heterophobia</td>
<td>-.08</td>
<td>-1.02</td>
<td>.311</td>
</tr>
<tr>
<td>Sexual Exploration</td>
<td>-.09</td>
<td>-1.03</td>
<td>.307</td>
</tr>
<tr>
<td>Sexual Commitment</td>
<td>-.43</td>
<td>-4.99</td>
<td>.000**</td>
</tr>
<tr>
<td>Homophobia × Sexual Exploration</td>
<td>.17</td>
<td>1.62</td>
<td>.106</td>
</tr>
<tr>
<td>Homophobia × Sexual Commitment</td>
<td>-.16</td>
<td>-1.38</td>
<td>.168</td>
</tr>
<tr>
<td>Heterophobia × Sexual Exploration</td>
<td>-.20</td>
<td>-1.97</td>
<td>.050*</td>
</tr>
<tr>
<td>Heterophobia × Sexual Commitment</td>
<td>.28</td>
<td>2.44</td>
<td>.016*</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).
**Correlation is significant at the 0.01 level (2-tailed).
APPENDIX C: IRB APPROVAL LETTER
Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA00000351, IRB00001138
To: Steven L. Berman and Co-PI: Cassandra Renee Smith
Date: February 04, 2016

Dear Researcher:

On 02/04/2016, the IRB approved the following activity as human participant research that is exempt from regulation:

- **Type of Review:** Exempt Determination
- **Project Title:** Sexual Orientation and Identity Formation
- **Investigator:** Steven L. Berman
- **IRB Number:** SBE-16-11962
- **Funding Agency:** 
- **Grant Title:** 
- **Research ID:** N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori  on 02/04/2016 11:06:04 AM EST

IRB Manager
APPENDIX D: SURVEY
Demographics

INSTRUCTIONS: For the following questions, please select the appropriate answer.

1. Gender: ☐ Male or ☐ Female or ☐ Transgender

2. Classification:

<table>
<thead>
<tr>
<th></th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
<th>Non-Degree Seeking</th>
<th>Graduate Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Age ________

4. Choose the ethnic group you belong to:
   A. African-American
   B. Hispanic or Latin American
   C. White non-Hispanic
   D. Asian or Pacific Islander
   E. Native American
   F. Bi-ethnic (both parents are of different ethnic background)
      Please identify: __________________ and __________________
   G. Other (please identify): __________________________

5. What is your sexual orientation?
   __________________

THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE
SOQ

INSTRUCTIONS: Please answer the following two items using the scale below. Please be open and honest in your answers.

6. How sexually attracted are you to people of the opposite sex?

7. How sexually attracted are you to people of the same sex?

INSTRUCTIONS: Please answer the following item using the scale below. Please be open and honest in your answers.

8. Who of your family, friends, and acquaintances knows of your sexual orientation?

INSTRUCTIONS: For the next items, please indicate your comfort level using a five-point scale. Please be open and honest in your answers.

9. How comfortable / satisfied are you with your sexual orientation?

10. Would you change your sexual orientation if you could?
INSTRUCTIONS: For the next items, please indicate your answers using a five-point scale.

Never  Rarely  Occasionally  Often  All the time
A      B       C         D         E

11. How often do you have homosexual fantasies?
12. How often do you have heterosexual fantasies?
13. How often do you have homosexual dreams while you are sleeping?
14. How often do you have heterosexual dreams while you are sleeping?
15. How often do you engage in sex with a member of the same gender?
16. How often do you engage in sex with a member of the opposite gender?
17. During pre-adolescence (before puberty), how often did you engage in homosexual activities?
18. During pre-adolescence (before puberty), how often did you engage in heterosexual activities?
19. Throughout early adolescence (11-14 yrs of age), how often did you engage in homosexual activities?
20. Throughout early adolescence (11-14 yrs of age), how often did you engage in heterosexual activities?
21. During later adolescence (15-17 yrs of age), how often did you engage in homosexual activities?
22. During later adolescence (15-17 yrs of age), how often did you engage in heterosexual activities?

THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE
**IDS**

**INSTRUCTIONS:** To what degree have you recently been upset, distressed, or worried over any of the following issues in your life? (Please select the appropriate response, using the following scale). Please be open and honest in your answers.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Mildly</td>
<td>Moderately</td>
<td>Severely</td>
<td>Very Severely</td>
</tr>
</tbody>
</table>

23. Long-term goals? (e.g., finding a good job, being in a romantic relationship, etc.)
24. Career choice? (e.g., deciding on a trade or profession, etc.)
25. Friendships? (e.g., experiencing a loss of friends, change in friends, etc.)
26. Sexual orientation and behavior? (e.g., feeling confused about sexual preferences, intensity of sexual needs, etc.)
27. Religion? (e.g., stopped believing, changed your belief in God/religion, etc.)
28. Values or beliefs? (e.g., feeling confused about what is right or wrong, etc.)
29. Group loyalties? (e.g., belonging to a club, school group, gang, etc.)
30. Please rate your overall level of discomfort (how bad they made you feel) about all the above issues as a whole.
31. Please rate how much uncertainty over these issues as a whole has interfered with your life (for example, stopped you from doing things you wanted to do, or being happy)
32. How long (if at all) have you felt upset, distressed, or worried over these issues as a whole? (Use rating scale above)

**THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE**
**INSTRUCTIONS:** Below is a list of problems people sometimes have. Read each one carefully and fill in the circle that best describes how much that problem has distressed or bothered you during the past 7 days, including today. Please be open and honest in your answers.

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A little bit</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

33. Faintness or dizziness  
34. Feeling no interest in things  
35. Nervousness or shakiness inside  
36. Pains in heart or chest  
37. Feeling lonely  
38. Feeling tense or keyed up  
39. Nausea or upset stomach  
40. Feeling blue  
41. Suddenly scared for no reason  
42. Trouble getting your breath  
43. Feelings of worthlessness  
44. Spells of terror or panic  
45. Numbness or tingling in parts of your body  
46. Feeling hopeless about the future  
47. Feeling so restless you couldn’t sit still  
48. Feeling weak in parts of your body  
49. Thoughts of ending your life  
50. Feeling fearful

**THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE**
DIDS

INSTRUCTIONS: The following is a list of statements that many people use to describe themselves. Using the following scale, please rate the degree to which you agree or disagree with these statements. Please be open and honest in your answers.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

51. I have decided on the direction I am going to follow in my life.
52. I have plans for what I am going to do in the future.
53. I know which direction I am going to follow in my life.
54. I have an image about what I am going to do in the future.
55. I have made a choice on what I am going to do with my life.
56. I think actively about different directions I might take in my life.
57. I think about different things I might do in the future.
58. I am considering a number of different lifestyles that might suit me.
59. I think about different goals that I might pursue.
60. I am thinking about different lifestyles that might be good for me.
61. I keep looking for the direction I want to take in my life.
62. I keep wondering which direction my life has to take.
63. It is hard for me to stop thinking about the direction I want to follow in my life.
64. My plans for the future match my true interests and values.
65. I am sure that my plans for the future are the right ones for me.
66. I think about the future plans I already made.
67. I talk with other people about my plans for the future.
68. I try to find out what other people think about the specific direction I decided to take in my life.
69. I think about whether the aims I already have for life really suit me.
70. I think about whether my future plans match what I really want.

THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE
INSTRUCTIONS: For the following 28 statements, please decide how much you agree or disagree with each, using the following scale. Please be open and honest in your answers.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

76. I know what I like sexually.
77. I know what I want from a sexual relationship
78. I have asked other about sex.
79. I know who I am sexually and who I am attracted to.
80. I know my sexual morals.
81. I have never thought about how often I want sex.
82. I know nothing about sex.
83. I have examined many different sexual values.
84. I have not explored my sexual orientation.
85. I am uncertain what my sexual morals are.
86. I do not know what I want from a sexual relationship.
87. I have not explored new sexual ideas.
88. I have thought about what turns me on.
89. I have not thought about my sexual morals.
90. I know what turns me on.
91. I do not know what I want from a sexual encounter.
92. I know exactly what type of sexual stimulation I like and what I do not like.
93. I know when I want to have sex.
94. I have never explored what I like sexually.
95. What I want from a sexual relationship has been explored.
96. I have not thought about what I need from a sexual relationship.
97. I have engaged in both homosexual and heterosexual sex.
98. I have thought a lot about when and how often I want sex.
99. I have had many different types of sexual experiences.
100. I feel quite knowledgeable about sex.
101. I do not know when I want to have sex.
102. I have sought out information on sex from books, TV, movies.
103. I do not know who I am sexually and who I like.

THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE
INSTRUCTIONS: Listed below are several statements that concern the topic of sexual relationships. Please read each item carefully and decide to what extent it is characteristic of you. Some of the items refer to a specific sexual relationship. Whenever possible, answer the questions with your current partner in mind. If you are not currently dating anyone, answer the questions with your most recent partner in mind. If you have never had a sexual relationship, answer in terms of what you think your responses would most likely be. Then, for each statement fill in the response that indicates how much it applies to you by using the following scale. Please be open and honest in your answers.

<table>
<thead>
<tr>
<th>Not at all characteristic of me</th>
<th>Slightly characteristic of me</th>
<th>Somewhat characteristic of me</th>
<th>Moderately characteristic of me</th>
<th>Very characteristic of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

104. I am confident about myself as a sexual partner.
105. I am very motivated to be sexually active.
106. I feel anxious when I think about the sexual aspects of my life.
107. I am very assertive about the sexual aspects of my life.
108. I am somewhat afraid of becoming sexually involved with another person.
109. I am very satisfied with the way my sexual needs are currently being met.
110. I am a pretty good sexual partner.
111. I am strongly motivated to devote time and effort to sex.
112. I am worried about the sexual aspects of my life.
113. I am not very direct about voicing my sexual preferences.
114. I sometimes have a fear of sexual relationships.
115. I am very satisfied with my sexual relationship.
116. I am better at sex than most other people.
117. I have a strong desire to be sexually active.
118. Thinking about the sexual aspects of my life leaves me with an uneasy feeling.
119. I am somewhat passive about expressing my sexual desires.
120. I sometimes am fearful of sexual activity.
121. My sexual relationship meets my original expectations.
122. I would rate myself pretty favorably as a sexual partner.
123. It is really important to me that I involve myself in sexual activity.
124. I usually worry about the sexual aspects of my life.
125. I do not hesitate to ask for what I want in a sexual relationship.
126. I do not have very much fear about engaging in sex.
127. My sexual relationship is very good compared to most.
128. I would be very confident in a sexual encounter.
129. I strive to keep myself sexually active.
130. I feel nervous when I think about the sexual aspects of my life.
131. When it comes to sex, I usually ask for what I want.
132. I am **not** very afraid of becoming sexually active.
133. I am very satisfied with the sexual aspects of my life.

THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE
HHQ

INSTRUCTIONS: For the following items, please decide how much you agree or disagree with each statement using the following scale. Please be open and honest in your answers.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Not sure</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

134. I enjoy the company of LGBTQ+ individuals.
135. LGBTQ+ individuals should not be allowed to work with children.
136. LGBTQ+ sexualities are immoral.
137. Being LGBTQ+ is considered a mental disorder.
138. I would feel comfortable working with someone who is LGBTQ+.
139. LGBTQ+ individuals with AIDS deserve their fate.
140. LGBTQ+ individuals should have equal opportunity employment.
141. LGBTQ+ sexualities endanger the institution of the family.
142. Those in favor of LGBTQ+ sexualities tend to be LGBTQ+ individuals themselves.
143. I avoid LGBTQ+ individuals whenever possible.
144. I feel more negative about LGBTQ+ sexualities since AIDS.
145. LGBTQ+ individuals could be turned into a heterosexual by a heterosexual man or woman with enough skill.
146. I enjoy the company of heterosexuals.
147. I have many heterosexual friends.
148. I avoid heterosexuals whenever possible.
149. Heterosexuals are uptight.
150. Heterosexuals are close minded.
151. A heterosexual man or women could be turned into LGBTQ+ by LGBTQ+ individuals with enough skill.

THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE
**INSTRUCTIONS**: Below are some statements with which you may agree or disagree. Use the scale below to show your agreement with each item. Please be open and honest in your answers.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly agree</th>
<th>Neither agree nor disagree</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

152. I am satisfied with my life.
153. I am satisfied with my social life.
154. I am satisfied with my sex life.
155. I am satisfied with my person or self as an individual.
156. I am satisfied with my physical appearance.

**INSTRUCTIONS**: The question below pertains to your current “immediate” family not your “extending” family.

157. I am satisfied with my family life.

**INSTRUCTIONS**: The question below pertains to your school life.

158. I am satisfied with my classes.

**INSTRUCTIONS**: The questions below pertain to your occupation or job. (If you do not currently have a job, select option 8.)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly agree</th>
<th>Neither agree nor disagree</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>I do not have a job</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

159. I am satisfied with my job.

**INSTRUCTIONS**: The questions below pertain to your romantic relationship. (If you are not currently in a romantic relationship, select option 8.)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly agree</th>
<th>Neither agree nor disagree</th>
<th>Slightly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>I am not in a romantic relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>
160. I am generally pleased with the quality of my relationship/marriage.

THANK YOU, PLEASE CONTINUE TO THE NEXT PAGE
INSTRUCTIONS: The questions that you are about to answer were originally written to cater to those of a sexual minority. Many of the questions below have been modified so all people can respond to them regardless of your orientation. For the next items, please be open and honest in your answers.

Not at all  A little bit  Somewhat  Quite a bit  Very much so
A       B       C       D       E

161. Has the possibility of harassment or unequal treatment ever lead you to hide your sexual orientation?
162. Have you ever been treated unfairly because of your sexual orientation?

INSTRUCTIONS: For the following items, please indicate the frequency of occurrence using the scale below. Please be open and honest in your answers.

Never  Occasionally  Frequently  Often  All the time
A       B       C       D       E

163. How often have you heard other people make disparaging remarks about LGBTQ+ individuals?
164. How often have you made disparaging remarks about LGBTQ+ individuals?
165. How often have you feared for your safety because of your sexual orientation?

INSTRUCTIONS: For the following items, please indicate the likelihood of occurrence using the scale below. Please be open and honest in your answer.

Not at all likely  Somewhat likely  Not sure  Fairly likely  Very likely
A       B       C       D       E

166. In your opinion, what are the chances that an average LGBTQ+ individual at UCF will be the target of discrimination or unfair treatment?
167. In your opinion, what are the chances that an average heterosexual at UCF will be the target of discrimination or unfair treatment?

THANK YOU FOR COMPLETING THE SURVEY
CHAPTER FIVE: REFERENCES


