2013

Bisexuality And Identity Formation

Jessica Fuoss
University of Central Florida

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BISEXUALITY AND IDENTITY FORMATION

by

JESSICA FUOSS
M.A. University of Central Florida, 2013

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Clinical Psychology in the Department of Psychology in the College of Sciences at the University of Central Florida Orlando, Florida

Summer Term
2013

Major Professor: Steven L. Berman
ABSTRACT

This study explores the identity development and psychological adjustment of bisexual individuals ($n = 138$) as compared to homosexual ($n = 45$) and heterosexual participants ($n = 558$). Undergraduate students recruited from psychology classes at a large metropolitan university in Florida (67% female, 65% Caucasian) took an online survey for course extra credit. Bisexual and homosexual participants scored higher in identity exploration than the heterosexual participants. Bisexual participants scored significantly higher in psychological symptom severity than heterosexual participants. The three groups were not significantly different in identity commitment nor in identity distress. Female bisexual participants scored more similar to the homosexual participants in identity exploration, while the male bisexual participants were more similar to the heterosexual participants. Among males, bisexual and homosexual participants reported greater psychological symptom severity than heterosexual participants. There were no differences between groups for female participants in regard to symptom severity. This study highlights the need for more research into the psychological correlates of bisexuality as a distinct group from homosexuality, as well as the need to focus on gender as a significant moderator of these relationships.
ACKNOWLEDGMENTS

Thank you, Dr. Rosaria Upchurch and Dr. Ed Fouty for offering guidance and suggestions as well as being available for my unending questions. A special thank you to Dr. Steven Berman for spending countless hours assisting me and for being available to me any time I needed your support, for our weekly meetings, and for your undivided attention. It is a privilege to have worked with all of you, and I value your input immensely.
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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>Analyses Of Variance</td>
</tr>
<tr>
<td>BSI</td>
<td>Brief Symptom Inventory</td>
</tr>
<tr>
<td>DSM-III-R</td>
<td>Diagnostic and Statistical Manual of Mental Disorders III Revised</td>
</tr>
<tr>
<td>EIPQ</td>
<td>The Ego Identity Processing Questionnaire</td>
</tr>
<tr>
<td>IDS</td>
<td>Identity Distress Survey</td>
</tr>
<tr>
<td>LGB</td>
<td>Lesbian, Gay, and Bisexual</td>
</tr>
<tr>
<td>LSD post hoc analysis</td>
<td>Fisher's Least Significant Difference</td>
</tr>
<tr>
<td>MANOVA</td>
<td>Multivariate Analyses Of Variance</td>
</tr>
<tr>
<td>SOQ</td>
<td>Sexual Orientation Questionnaire</td>
</tr>
</tbody>
</table>
CHAPTER ONE: INTRODUCTION

Though research on sexual minorities has been increasing, bisexuality specifically has been greatly under researched (Balsam, Beauchaine, Mickey, & Rothblum, 2005). Sexuality research tends to focus on gay, lesbian, or heterosexual participants and research questions, leaving the subject of bisexuality relatively ignored. Bisexuality has been somewhat troublesome to define in the research literature. Perhaps this issue, the confusion on what exactly it is, and the less-accepted nature of bisexuality is why it has been neglected in the literature. Bisexuality, according to Diamond (2008), should be considered a “third orientation” due to her findings that “bisexual women’s patterns of sexual attraction are stable over time and notably distinct from those of lesbian women” (Diamond, 2008, p. 12). Perhaps if more research is conducted on this “third orientation,” it would be more concretely defined and therefore more easily studied. One of the major issues in the current sexual minority research is that bisexuality, as an orientation, is being incorporated into homosexuality instead of being studied as a separate entity (Balsam, Beauchaine, Mickey, & Rothblum, 2005).

This introduction of research literature examines the current fields of study that are relevant to bisexuality and how they can be tied to identity formation. Research presented includes: identity formation, ethnic identity, identification with a sexual minority community, mental health, sexual exploration milestones, sexual identity, as well as others. Also addressed are implications for subsequent research. This review of current literature seeks to establish the need for this research which examines identity formation in bisexual individuals and its implications for identifying gaps in the existing research and present the current findings that support the hypothesis of the proposed study.
CHAPTER TWO: LITERATURE REVIEW

Ego Identity

Erikson (1956, 1968) developed a life-stage model that identified eight stages, each with a psychosocial crisis that is encountered in each of these stages and that must be resolved as a part of normal development. The crises involve changes in psychological, biological, and social processes. The crisis in adolescence is that of identity formation versus role confusion.

Erikson (1968) asserted that identity formation occurred in one of two ways, actively or passively. He considered active identity formation to be healthy while passive identity formation unhealthy, due to either conformity to other’s choices established for the individual, or the resulting role confusion. If an individual moves through the identity versus role confusion stage in a healthy manner, he or she gains a unique sense of self, feelings of self-continuity, a knowledge and incorporation of societal roles, and fidelity. If an individual moves through this stage in an unhealthy manner, he or she is said to be unable to identify with appropriate and societal norms in life. The ultimate feature of moving through this stage is an exploration phase in which one is seeking for commitments in identity. This identity commitment and exploration leads directly into Marcia’s model of identity development (Marcia, 1966).

Marcia (1966) operationalized Erikson’s concepts of identity exploration and commitment inherent in Erikson’s model and separates them into four identity statuses. Exploration is the process in which an individual actively searches for resolution in goals, roles, and beliefs about the world that provide an individual’s life with purpose and direction. Commitment, in this theory, represents resolution of identity issues such as religion, occupation,
relationship, group membership, etc. Marcia’s four categories of identity statuses are diffusion, foreclosure, moratorium, and achievement (Schidel & Marcia, 1985).

The diffusion status (low in exploration and commitment) is characterized by individuals that are not committed to any specific roles, goals, or beliefs about the world and are not actively searching for any particular identity. The foreclosure status (low in exploration, but high in commitment) is used to describe individuals who have not engaged in a period of exploration, but remain high in commitment. These commitments, generally, are suggested by others, most often parental figures, and are assumed without questioning or being examined. It is assumed that commitments, or goals, roles, and beliefs about the world are acquired through a modeling process rather than through a period of self-exploration. The moratorium status (high in exploration, low in commitment) is indicative of those individuals that are actively exploring alternatives, but have not yet committed. This often precedes identity achievement. Those individuals who move beyond the moratorium status and commit to certain goals, roles, and beliefs about the world are said to be in the achievement status (high in exploration and commitment).

**Definition of Bisexuality**

One of the major difficulties in bisexuality research is in defining bisexuality. Bisexuality has been defined in many different ways in the literature, and the problem arises when attempting to form a definition that is parsimonious while remaining measurable. Halpern (2009) identified thirteen different definitions of bisexuality and pointed out the general disagreement and difficulty in defining this construct. Rust (2000) conducted a qualitative study in which he
Ethnic Identity

One important aspect of identity for members of minority groups is ethnic identity (Phinney & Ong, 2007). Ghavami, Fingerhut, Peplau, Grant, and Wittig (2011) assessed identity achievement, identity affirmation, and psychological well-being in both ethnic minority and
sexual minority individuals. These researchers found that examining the history and impacts of one’s minority group in conjunction with understanding the bearings of the meaning of a minority identity has on one’s personal life contribute to a greater sense of group attachment and positive feelings toward the group in general. Though this research focused on the similarities of these two groups, the researchers noted several areas in which they differed, including likelihood to conceal group membership and degree of social stigma. Those belonging to ethnic minorities tend to have familial support of their ethnic identity, whereas sexual minorities are often challenged to reveal their identity to family members who may disapprove. Though these differences exist, these groups are discriminated against in much the same way with likely much of the same consequences; what is lacking is the support of research in the realm of sexual minorities. Phinney (1990) asserted that ethnic identity is a crucial part of psychological functioning and the self-concept of members of ethnic groups. Phinney (1992) declared the importance of identity affirmation in regards to ethnic identity and that pride in one’s ethnicity, positive feelings about one’s background, and being happy in one’s group membership, in addition to attachment and feeling like one belongs to the group are important to psychological functioning. Identifying with one’s group is not only beneficial for establishing greater psychological well-being in ethnic minorities, but it has been shown to be beneficial for sexual minorities as well (Balsam & Mohr, 2007).

Identifying with a Sexual Minority Community

Identifying with the lesbian, gay, bisexual (LGB) community seems to be an important factor in combating marginalization for gay, lesbian, and bisexual individuals. Balsam and Mohr
(2007) conducted one of the very few studies comparing bisexual and lesbian/gay adults in “community connection, identity, and outness.” These researchers asserted that identification with sexual minority communities is integral in order to buffer against the impact of discrimination. They also state that another way to reduce stigmatization is to develop a positive identity of their stigmatized group. These researchers found that bisexuals report a lower connection with sexual minority communities than their gay and lesbian counterparts. In addition, they found that feeling connected to LGB communities is not associated with feelings of well-being or social support. It seems that identifying with these kinds of groups would create a greater sense of well-being, and it would be interesting to see why this is not the case. Perhaps bisexual individuals also feel like outsiders in these communities as they are not entirely homosexual, and also feel left out of heterosexual communities because they are not completely heterosexual. These feelings of isolation could have great mental health implications and is an issue that needs to be addressed further.

Mental Health Implications

Because of stigmatization, and perhaps feelings of rejection, the mental health of LGB individuals is very likely to be affected. According to Fischgrund, Halkitis, and Carroll (2012), bisexual individuals can be more susceptible to mental health issues. Gay and bisexual men show higher levels of anxiety, depression, and/or hostility when they more strongly endorse masculinity as social and sexual behaviors. Approximately half of gay and bisexual men have been found to endorse these hypermasculine norms. This is thought to be, according to the Social Stress Model, due to psychological distress from one’s external messages differing from one’s
identity. In general, members of the LGB community have a higher prevalence of mental disorders when compared to their heterosexual counterparts (Meyer, 2003). It has been found that, as a whole, members of the LGB community show a higher prevalence for mood, anxiety, and substance abuse disorders when compared with heterosexuals, and are three or four times more likely to experience comorbid disorders (Cochran, Sullivan, & Mays, 2003). Gay and bisexual men show a higher prevalence for major depression and panic disorder. Further, lesbians and bisexual women show a higher prevalence for generalized anxiety disorder. In addition, gay and bisexual men show higher rates of psychological distress. Meyer (2003) found that members of the LGB community are two-and-a-half times more likely to have a mental disorder at some time in their lives than heterosexual men and women. These higher rates of mental illness are thought to be brought about due to stress caused by being stigmatized. Members of the LGB community show a significant elevation in suicidal ideation, suicide attempts, and self-injurious behavior (Balsam, Beauchaine, Mickey, & Rothblum, 2005). In addition, bisexual individuals engaged in significantly more self-injurious behavior than heterosexual, gay, and lesbian groups. Male teenagers who have a perceived or overt homosexual identity “have a rate of suicidal behavior that is between two and eight times greater than in others” (p. 115) and bisexual men had suicide attempt rates 13.9 times higher than men who did not identify themselves as gay or bisexual (Bagley & Tremblay, 2000). Since this research is somewhat dated, it cannot be assumed that it holds true currently. One would speculate that because of the changing political climate and increasing societal acceptance of the LGB community that these rates are decreasing, but current research has not yet shown this trend. More research is needed in the area of the mental health of bisexual individuals and what kind of
effect their experience of being between heterosexual and homosexual communities has on their mental health.

**Sexual Exploration**

An area of interest in regards to bisexual individuals is that of their sexual exploration and its comparison to heterosexual and homosexual sexual development. According to Calzo, Antonucci, Mays, and Cochran (2011), in general, gay, lesbian, and bisexual individuals identify as a sexual minority an average of one year before their first experience with a same sex partner. This was found not only in young adults, as is usually sampled, but also in a middle-aged and older population of sexual minorities. In general, bisexual individuals have been found to experience sexual exploration milestones on average of one year later than gay and lesbian individuals; gay and lesbian individuals follow similar sexuality-related milestones as their heterosexual peers. It has been shown that “sexual minority status develops in conjunction with general patterns of sexual identity development” (Calzo, Antonucci, Mays, & Cochran, 2011, p. 1667).

**Sexual Identity**

Identity development of bisexual individuals has a limited amount of research and is mostly conducted in the context of homosexuals as a whole. Since a case is being made for bisexuality to be considered a “third orientation,” it would follow that bisexual identity formation be a research area in its own right. An interesting finding is that bisexual individuals have higher levels of identity confusion when compared with lesbian and gay individuals in regards to a scale measuring dimensions of sexual minority identity (Balsam & Mohr, 2007). Those who identify
themselves as bisexual are found to identify as sexual minorities at a later age than those who describe themselves as gay or lesbian (Calzo, Antonucci, Mays, & Cochran, 2011). In regards to identifying as a sexual minority, females are found to do so later than their male counterparts. Individuals who identify themselves as bisexual report greater variability in sexual identity than gay men or lesbians (Balsam & Mohr, 2007). Bisexual individuals are more likely to change their identity; however, this variability is between bisexual or unlabeled identities (Diamond, 2008). Bisexual women in the Diamond (2008) study “showed no evidence of progressive changes in their ratio of same-sex to other-sex attractions over the 10 years of the study” (p. 12). Perhaps one of the reasons for their variable identity and identity confusion results from lack of overtly stating their sexual minority status or “coming out” (Balsam & Mohr, 2007). A study of bisexual women shows that their bisexuality is fluid. This fluidity flows between more same-sex attraction or more other-sex attraction and is overall a relatively stable attraction to both sexes that varies due to interpersonal and situational factors (Diamond, 2008). It is often thought that once individuals “come out” as gay/lesbian/bisexual, that sexuality questioning is resolved; however, Diamond (2008) found that “identity change is more common than identity stability” (p. 13). Research in this area has a wealth of possibilities, and the field is relatively unexplored in regards to bisexuality specifically.

Bisexuality, being relatively ignored or combined with homosexual research, leaves this specific group of individuals wide open for exploration and many interesting research questions exist for this group. Some specifically compelling research implications are that of bisexuality and mental health, feelings of belonging, psychological well-being, and identity formation and
the effects of these on mental health. This study aims at examining the identity formation of these individuals and its implications on mental health functioning.
Rationale

Due to the relative dearth of research regarding bisexual identity development, this study seeks to add to the understanding of this understudied group and their mental health functioning. There has been virtually no research on overall identity development of bisexual individuals, but the reported delay in identity development within the domain of sexuality (Calzo, Antonucci, Mays, & Cochran, 2011) raises the question as to whether they show similar delays in other areas of identity formation. The lack of resolution in regard to one’s sexual identity could interfere with the resolution of other identity domains such as career goals, relationship choices, thoughts about whether or not to have children, groups with which one affiliates, religious values, political views, etc.

Bisexual individuals have also been reported to be more susceptible to mental health problems (Cochran, Sullivan, & Mays, 2003; Fischgrund, Halkitis, & Carroll, 2012; Meyer, 2003); however, this could be due, at least partly, to their lack of identity resolution and tendency not to affiliate with the sexual minority community (Balsam & Mohr, 2007). Group membership is part of establishing an identity. Identity confusion can interfere with the ability to affiliate with and feel comfortable within a group.

This research has practical implications as it has the potential to establish a need for clinicians to assess identity development and the subsequent distress a delay in this development might cause within bisexual clients. Knowing the effects identity development may be having on bisexual clients’ mental health functioning might put practitioners in a better position to develop more effective prevention and intervention programs.
Hypotheses

It is hypothesized that bisexual individuals will be higher in identity exploration, identity distress, and internalizing symptoms. It is hypothesized that these individuals will be lower in identity commitment. The third hypothesis is that when identity exploration, identity commitment, and identity distress are controlled for, no difference will exist between the bisexual, homosexual, and heterosexual groups in psychological functioning.
CHAPTER THREE: METHODOLOGY

Participants

Participants were recruited from courses offered through the University of Central Florida (UCF), and the survey was administered online via UCF’s Sona system. A total of 655 individuals participated in this study. Participation was limited to people between the ages of 18 and 64, and the age range for this sample was 18 to 52, with a mean of 21.15 and a standard deviation of 4.64. The participant pool for this study was 67.2% (n = 437) female and 64.4% (n = 420) White, with 15.0% (n=98) being Hispanic, 7.2% (n = 47) African American, 5.5% (n = 36) Asian or Pacific Islander, 5.5% (n = 36) Bi-ethnic, .3% (n=2) Native American, and 2% (n = 13) other. For this study, 5.8% (n = 38) identified as homosexual, 18.8% (n = 122) identified as bisexual, and 75.4% (n = 490) identified as heterosexual.

Measures

Demographic Questionnaire. A demographic questionnaire was utilized to ascertain ethnicity, age, gender, year in college, etc. A short questionnaire was administered regarding the participant’s sexual orientation, attraction, fantasies, and engagement in sexual activities. A questionnaire was included that assesses who is aware of the participant’s orientation and his or her comfort level with that orientation.

The Ego Identity Processing Questionnaire (EIPQ; Balistreri, Busch-Rossnagel, & Geisinger, 1995) is a 32-item survey designed to assess identity status in eight different domains (politics, religion, occupation, values, friendships, dating, gender roles, and family). Participants are asked to rate responses to these different domains on a six-point Likert scale from strongly
disagree to strongly agree. This measure utilizes continuous commitment and exploration scores to assess the participant’s commitment and exploration level in each domain and overall exploration and commitment. Cronbach’s alpha level for this measure was .86 with the test-retest reliability at .76 for the exploration subscale and .80 with .90 test-retest reliability for the commitment subscale. In the current study, Cronbach’s alpha for the exploration subscale was .72 and for the commitment subscale was .79.

The Identity Distress Survey (IDS; Berman, Montgomery, & Kurtines, 2004) is a ten-item survey used to measure distress associated with identity development. This survey is modeled on the Identity Disorder criteria described in the DSM-III-R, and asks participants to rate on a scale from 1, associated with the answer “not at all,” to 5, associated with the answer “very severely.” The survey examines the following seven factors: long-term goals, career choice, friendship, sexual orientation and behavior, religion, values and beliefs, and group loyalties. The survey asks, “To what degrees have you recently been upset, distressed, or worried over the following issues in your life” for each of the seven factors and proceeds with three follow-up questions in regards to discomfort, the length of time that this discomfort has been occurring, and how much it has interfered with his or her life. The internal consistency of this measure is reported as .84 and test-retest reliability at .82 (Berman, Montgomery, & Kurtines, 2004). In the current study, Cronbach’s alpha for the identity distress rating scale was .80.

The Brief Symptom Inventory-18 (BSI-18; Derogatis, 2000) is designed as an assessment for common psychiatric symptoms (anxiety, depression, and somatization). Participants are asked to evaluate their symptom frequency on a Likert scale based on the last seven days. This measure is a short form of Derogatis’ (1994) Symptom Checklist-90-Revised (SCL-90-R) that
focusses on the three scales listed above. In regards to internal consistency, the overall global symptom severity index has been reported to be .89 (Derogatis, 2000). In the current study, Cronbach’s alpha for this measure was .92.

**Procedure**

Participants were recruited from the University of Central Florida. The participants utilized UCF’s Sona system for administration of the surveys used in this study. These surveys conducted through the Sona system were anonymous and participants were given instructions on how to complete the measures. Upon entering the site, students that decided to participate in the study read and accepted the Explanation of Research. Following their acceptance and agreement to participate, participants will complete a survey which included demographics as well as The Identity Distress Survey, The Ego Identity Process Questionnaire, and Brief Symptom Inventory – 18.
CHAPTER FOUR: FINDINGS

Results

Preliminary and Descriptive Analyses

The possible range, actual range, mean, and standard deviation for each construct measured in this study is reported in Table 1. A Man-Whitney U analysis revealed no statistically significant difference between genders on identity exploration and identity distress. There was a significant difference on identity commitment whereby females tended to score higher than males ($p < .001$), and females also scored higher on symptom severity ($p = .003$). The Spearman inter-correlations between these measures are reported in Table 2. As can be seen in this table, both identity exploration increases with age ($\rho = .11, p = .005$). Identity distress is associated with a lack of identity commitment ($\rho = -.37, p < .001$), and greater identity exploration ($\rho = .12, p = .006$). Psychological symptom severity is associated positively with identity exploration ($\rho = .12, p = .002$) and negatively with identity commitment ($\rho = -.29, p < .001$) and identity distress ($\rho = .48, p < .001$).

For the purposes of this study, the five-point orientation scale was collapsed to create three orientations: homosexual, bisexual, and heterosexual (see Table 3 for a frequency breakdown of the original five sexual orientation categories.). Those that identified as predominately attracted to the same sex with some opposite-sex attraction and predominately attracted to the opposite sex with some same-sex attraction were incorporated with those who identified as bisexual. A Kruskal-Wallis Test found no significant difference between sexual orientation groups in regard to age. A Chi-Square analysis found no significant difference in
reference to ethnicity. A significant difference was found for gender in relation to sexual orientation ($\chi^2(2) = 18.34; p < .001$). For males, 8% identified as gay, 10% as bisexual, and 81% as straight. For females, 5% identified as gay, 23% as bisexual, and 72% as straight.

Main Hypotheses

To test the hypothesis that bisexual individuals would report higher levels of identity distress, identity exploration, and psychological symptoms and lower levels of identity commitment, a 2 by 3 (gender by sexual orientation) Multivariate Analyses Of Variance (MANOVA) was conducted. No significant main effect was found for gender. There was a significant main effect for sexual orientation (Roy’s Largest Root = .04, $F(4, 636) = 6.32, p = .001$) with differences between groups noted for identity exploration ($F(2, 638) = 5.62, p = .004$) and psychological symptom score ($F(2, 638) = 3.22, p < .001$). Fischer’s LSD post-hoc analyses revealed that the homosexual and bisexual groups did not score significantly different on identity exploration; however, both groups scored significantly higher ($p < .001$) than the heterosexual group on this dimension. The bisexual group scored significantly higher in psychological symptom severity ($p = .003$) than the heterosexual group; however, the homosexual group scored between the other two groups and not significantly different from either. An interaction effect between gender and sexual orientation was also noted (Roy’s Largest Root = .02, $F(4, 636) = 2.74, p = .020$) in regard to identity exploration ($F(2, 638) = 3.59, p = .028$). As can be viewed in Figure 1, the largest difference between males and females in exploration appears to be among the bisexual sample, with the female bisexuals engaging in much greater identity exploration than the male bisexuals.
In order to test the hypothesis that when identity exploration, identity commitment, and identity distress are controlled for, no difference will exist between the bisexual, homosexual, and heterosexual groups in psychological functioning, another 2 X 3 (sex by orientation) ANOVA was conducted with identity exploration, commitment, and distress as covariates, and psychological symptom severity score as the dependent variable. The corrected model was significant \( F(8, 681) = 15.05, p < .001, R^2 = .15, \text{ adjusted } R^2 = .14 \) with the main effect for orientation remaining significant \( F(2, 681) = 3.12, p = .045 \). Thus it would appear that controlling for identity commitment the latter. Figure 2 presents the mean differences in identity distress severity scores by sexual orientation and gender. It would appear from this figure that bisexual females experience greater identity distress than all other groups. and distress reduced but did not eliminate the significant difference between groups, with the \( p \)-value changing from .005 in the former analysis to .045 in

Because the data is ordinal (Likert scales), rather than interval or ratio, a Kruskal-Wallis test was conducted for non-parametric samples. Differences between sexual orientation groups were found in identity exploration \( (p < .001) \), commitment \( (p = .010) \), distress \( (p = .022) \), and symptom severity \( (p < .001) \).
### Table 1 Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Possible Range</th>
<th>Actual Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
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<tbody>
<tr>
<td>Identity Exploration</td>
<td>16 – 96</td>
<td>36 – 93</td>
<td>62.03</td>
<td>9.60</td>
</tr>
<tr>
<td>Identity Commitment</td>
<td>16 – 96</td>
<td>35 – 96</td>
<td>60.88</td>
<td>10.59</td>
</tr>
<tr>
<td>Identity Distress</td>
<td>1 – 5</td>
<td>1 – 5</td>
<td>2.25</td>
<td>.71</td>
</tr>
<tr>
<td>Psychological Symptom</td>
<td>0 – 4</td>
<td>0 – 3.44</td>
<td>0.74</td>
<td>.64</td>
</tr>
</tbody>
</table>

### Table 2 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Identity Exploration</th>
<th>Identity Commitment</th>
<th>Identity Distress</th>
<th>Psychological Symptom Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Exploration</td>
<td>.1**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Commitment</td>
<td>.04</td>
<td>-.06</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity Distress</td>
<td>.03</td>
<td>.11**</td>
<td>-.37***</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Psychological Symptom</td>
<td>.00</td>
<td>.12**</td>
<td>-.29***</td>
<td>.48***</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the $p < .05$ level
** Correlation is significant at the $p < .01$ level
*** Correlation is significant at the $p < .001$ level

### Table 3 Frequency Distribution across Sexual Orientation Categories

<table>
<thead>
<tr>
<th>Predominately Attracted to your same sex with some opposite-sex attraction</th>
<th>Predominately Attracted to the opposite sex with some opposite-sex attraction</th>
<th>Predominately Attracted to the opposite sex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominately Attracted to the opposite sex with some opposite-sex attraction</td>
<td>Predominately Attracted to the opposite sex</td>
<td>Predominately Attracted to the opposite sex</td>
<td>Total</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>19</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>22</td>
<td>14</td>
</tr>
</tbody>
</table>
Figure 1: Identity Exploration by Gender and Sexual Orientation

Figure 2: Identity Distress by Gender and Sexual Orientation
CHAPTER FIVE: CONCLUSION

Discussion

In regard to sexual orientation, based on norm studies in the general public (Savin-Williams, Joyner, & Rieger, 2012), it was expected that approximately 93% of males and 80% of females would report being 100% heterosexual. In the present research, 81% of males and 72% of females identified as totally heterosexual. This increase in the willingness of participants to endorse non-exclusive heterosexuality may be a reflection of the specific sample drawn for this study (college undergraduates in a large metropolitan university), or it might be a reflection of rapidly changing cultural acceptance of non-heterosexuality which seems to be sweeping the country (Russell, Clarke, & Clary, 2009). These changes in cultural acceptance are also likely to have effects on the anxiety and distress that has been previously noted in regard to having a non-heterosexual orientation (Cochran, Sullivan & Mays, 2003; Fischgrund, Halkitis & Carroll, 2012; Meyer, 2003).

As predicted, bisexual individuals reported significantly higher rates of identity exploration and psychological symptoms. The hypothesis that bisexuels would report more identity distress and lower levels of identity commitment was not supported. When controlling for identity exploration, commitment, and distress, psychological symptom severity remained significant.

This research revealed that both bisexuels and homosexuals are significantly higher in overall identity exploration. Perhaps this is due to living in a heterosexist society. Adolescence and young adulthood is a normative period for engaging in identity exploration in regard to such
domains as career choice, relationships, moral and religious values, etc. These decisions may become more complex when one is not heterosexual. Questions in regard to how embracing one’s sexual orientation may affect one’s occupational choice, one’s relationships, and one’s values may complicate and intensify this normative psychosocial struggle of identity exploration. Perhaps this adds further support to Calzo, Antonucci, Mays, and Cochran’s (2011) finding that bisexual individual’s experience sexual exploration milestones approximately one year later than their heterosexual or homosexual peers, but again, can be theorized that this longer period of exploration applies to overall identity as well. Bisexuals endorsing higher levels of identity exploration are also supported by Diamond’s (2008) finding that variations in sexual identity are more common than identity stability, and this may be supported for overall identity with the findings from this research.

The hypothesis that bisexuals would experience more identity distress was not supported. It would seem that bisexuals are indeed engaging in more exploration of their identity, but this uncertainty in their overall identity does not cause them distress, according to the findings in this current research. This may be due to the changing times in regard to increasing societal acceptance of non-heterosexuality. Although the non-heterosexuals in this sample are asking and exploring more identity questions and issues than their heterosexual peers, it does not appear to be causing them increased distress. The more open and accepting atmosphere may be granting them more freedom to explore these issues without the same degree of fear of discrimination and social isolation that previous generations of non-heterosexuals have faced in this country. The acceptance of female homosexuality seems to be growing faster than the acceptance of male homosexuality, and this could possibly account for the interaction affect found in this data.
whereby bisexual females were engaging in significantly more identity exploration than bisexual males. These gender differences warrant greater study in regard to their causes and effects on psychosocial functioning. Bisexuals were found to be significantly higher in psychological symptom severity than their heterosexual but not homosexual peers. Perhaps this distress could be attributed to them being pressured to reveal their identity to family members who may disapprove and the general lack of familial support as Ghavami, Fingerhut, Peplau, Grant, and Wittig (2011) found. Phinney (1990) stated that ethnic identity was a crucial part of psychological functioning and Balsam and Mohr (2007) found connecting to one’s group to be an important factor in psychological functioning as well. With these two findings, it is possible that one reason for bisexuals’ greater endorsement of psychological symptoms is due to their lack of identification with the sexual minority community. This statement is further supported by Balsam and Mohr’s (2007) finding that bisexual individuals report a lower level of connectivity with the sexual minority community than their gay and lesbian peers. An implication for further research would be to examine level of connectedness to the sexual minority community, its correlation to overall identity development, and if this is connected to psychological functioning.

The issue of psychological adjustment is also affected by gender. Although there was an overall difference between sexual orientation groups in regard to psychological symptom severity, when analyzed separately for each gender, it only held true for the males. Again this may be due to greater societal acceptance of non-heterosexuality among females. The greater marginalization faced by male homosexual and bisexual individuals may result in more anxiety, depression, and somatization. However, this is only conjecture and future studies should be conducted to further elucidate these findings and their implications.
Therapeutic Implications

Several therapeutic implications can be inferred from the findings of this research, the first of which is the therapist will want to examine to what extent the client is currently exploring his or her identity and if this is something that is currently causing discomfort. Due to the findings from the administration of the BSI (BSI-18; Derogatis, 2000), it was noted that bisexuals indicated higher rates of anxiety, depression, and somatization based on the GSI which was utilized for this study. The therapist will also want to consider the increased rates of psychological symptomology endorsed by bisexual individuals as found by this current research and assess appropriately. It was noted that bisexual females endorsed greater amounts of identity distress and exploration than all other groups and this may contribute to their mental health functioning though this was not shown to be statistically significant. Therapists may want to discuss with the, in this case, female client, to what extent she is exploring her sexual identity, if this is causing distress, and what impact this may be having on her overall functioning. Though this was not specifically addressed in this research, assessing the client’s level of connectedness to the sexual minority community is important as pointed out in Balsam and Mohr’s (2007) research and the client’s overall social support. Though this research provides support for drawing conclusions about the bisexual population, much more information is yet to be obtained about this group and it is important to allow the client to provide information about his or her own experience with his or her sexuality.
Limitations

A significant barrier and an indication for further research in sexuality research is in the lack of adequate sexuality measures. What is generally used in sexuality research and has been the established measure for a significant period of time is the Kinsey Scale (Kinsey, Pomeroy, & Martin, 1948). As the Kinsey Scale is arguably the accepted method for participants to self-identify their sexuality, this measure was utilized in this current research. Being that Diamond (2008) established that sexuality is fluid rather than stable, having participants rate themselves on a fixed scaled does not seem to accurately encapsulate this construct. It can offer a “pinpoint” of how that individual defines themselves at that particular moment in their lives, but it does not take into account those factors pointed out by Rust (2000), such as history, past relationships, and openness to same-sex or opposite sex relationships. Epstein’s (2012) research offers support to a fluid-continuum model of sexual orientation which takes into account attraction, fantasy, behavior and timeframe, both past and present (Epstein, McKinney, Fox, & Garcia, 2012). An implication for future research is the establishment of a measure that takes into account the aforementioned variables: measuring sexuality on a continuum, considering both past and present sexual behavior, attraction, and fantasies as this is a more accurate portrayal of sexuality.

One of the integral limitations of this research is the relatively small homosexual sample size. The heterosexual sample size was large in comparison. The heterosexual sample might be more indicative of the population in general. Respondents have the option of choosing which studies in which to participate, which might have resulted in a skewed sample that had a particular interest in sexuality studies or identity development. Low levels of ethnic minorities in this sample are another limitation of this research. As college students are not inherently
indicative of the population, future research should incorporate a wider and more varied population sample. Another limitation is the fact that this data is completely self-report. Self-report data may be influenced by certain response biases such as social desirability and varying degrees of insight and self-perception accuracy. Given the personal nature of these constructs, other methodologies such as direct observation and parent/peer reports are likely precluded. These analyses are all correlational so no causal assumptions can be made nor should be inferred. Because sexual orientation and identity variables cannot be experimentally manipulated, this limitation is not easily overcome; however, longitudinal studies might yield greater evidence toward evaluating causal hypotheses.

Future Research

An implication for future research would be to investigate the level of connectivity with the sexual minority community to assess if this has an effect on identity and in any way helps to mediate levels of psychological symptoms. Bisexual individuals are often not as connected with the sexual minority community, so it would be important to assess if this affects their self-esteem and if this, in turn, affects their subsequent mental health functioning. Also mentioned, but not specifically investigated in this research is the degree that societal acceptance or discrimination may be influencing the links between identity and adjustment. It is also clear from the findings in this study that gender differences need to be carefully tracked and studied for their moderating effects. Since little research has been conducted with bisexual individuals, any information gleaned through research contributes to this growing field.
IRB Approval Letter

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2501 or 407-822-2276
www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: UCF Institutional Review Board #1
FWA0000351, IRB0000138

To: Jessica Fauss

Date: October 02, 2012

Dear Researcher:

On 10/02/2012, the IRB approved the following activity as human participant research that is exempt from regulation:

<table>
<thead>
<tr>
<th>Type of Review</th>
<th>Exempt Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title</td>
<td>Sexuality and Identity Development</td>
</tr>
<tr>
<td>Investigator</td>
<td>Jessica Fauss</td>
</tr>
<tr>
<td>IRB Number</td>
<td>SBE-12-06676</td>
</tr>
<tr>
<td>Funding Agency</td>
<td></td>
</tr>
<tr>
<td>Grant Title</td>
<td></td>
</tr>
<tr>
<td>Research ID</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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 to IRB 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: Patrin Davis  on 10/02/2012 03:34:52 PM EDT

IRB Coordinator
Survey

Demographics

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

1. Gender: Male or Female

2. Classification:

   Freshman  Sophomore  Junior  Senior
   A         B         C       D

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. If you answered "bi-ethnic" or "other" to the previous question, please specify here:
   __________________

6. What is your sexual orientation?
   __________________
SOQ

7. Define your primary sexual attraction
   A. Predominantly attracted to your same sex
   B. Predominately attracted to your same sex, with some opposite-sex attraction
   C. Equally attracted to both sexes
   D. Predominately attracted to the opposite sex, with some same-sex attraction
   E. Predominantly attracted to the opposite sex

8. How certain are you of the answer you just gave?
   A. Very certain
   B. Pretty sure, but I occasionally question if this is REALLY “it” for me or if it might be “just a phase”
   C. Not sure either way; still exploring how I feel
   D. Pretty unsure, but I occasionally question if I might really know the answer deep down
   E. Very uncertain

INSTRUCTIONS: Please answer the following three items using the scale below.

<table>
<thead>
<tr>
<th>No one</th>
<th>A few people</th>
<th>About half the people</th>
<th>Most people</th>
<th>Everyone</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

9. Who of your family knows of your sexual orientation?

10. Who of your friends knows of your sexual orientation?

11. Who of your acquaintances know of your sexual orientation?
INSTRUCTIONS: For the next items, please indicate your comfort level using a five-point scale.

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

<table>
<thead>
<tr>
<th>Not at all comfortable</th>
<th>Slightly uncomfortable</th>
<th>Somewhat comfortable</th>
<th>Very comfortable</th>
<th>Extremely comfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

13. Would you change your sexual orientation if you could?

<table>
<thead>
<tr>
<th>Absolutely not</th>
<th>Probably not</th>
<th>Perhaps</th>
<th>Probably</th>
<th>Definitely</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

14. How important is it for the people in your family to know about your sexual orientation?

<table>
<thead>
<tr>
<th>Not at all important</th>
<th>Somewhat important</th>
<th>Slightly important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

15. How important is it for your co-workers to know about your sexual orientation?

<table>
<thead>
<tr>
<th>Not at all important</th>
<th>Somewhat important</th>
<th>Slightly important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

INSTRUCTIONS: For the next items, please indicate your answers using a five-point scale.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Often</th>
<th>All the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
</tbody>
</table>

16. How often do you have homosexual fantasies?

17. How often do you have heterosexual fantasies?

18. How often do you have homosexual dreams while you are sleeping?

19. How often do you have heterosexual dreams while you are sleeping?

20. How often do you engage in sex with a member of the same gender?
21. How often do you engage in sex with a member of the opposite gender?

22. During pre-adolescence (before puberty), how often did you engage in homosexual activities?

23. During pre-adolescence (before puberty), how often did you engage in heterosexual activities?

24. Throughout early adolescence (11-14 yrs of age), how often did you engage in homosexual activities?

25. Throughout early adolescence (11-14 yrs of age), how often did you engage in heterosexual activities?

26. During later adolescence (15-17 yrs of age), how often did you engage in homosexual activities?

27. During later adolescence (15-17 yrs of age), how often did you engage in heterosexual activities?

EIPQ

For the following 32 statements, please decide how much you agree or disagree with each, using the following scale.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly 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>
</tr>
</tbody>
</table>

28. I have definitely decided on the occupation I want to pursue.

29. I don’t expect to change my political principles and ideals.

30. I have considered adopting different kinds of religious beliefs.
31. There has never been a need to question my values.
32. I am very confident about which kinds of friends are best for me.
33. My ideas about men’s and women’s roles have never changed as I became older.
34. I will always vote for the same political party.
35. I have firmly held views concerning my role in my family.
36. I have engaged in several discussions concerning behaviors involved in dating relationships.
37. I have considered different political views thoughtfully.
38. I have never questioned my views concerning what kind of friend is best for me.
39. My values are likely to change in the future.
40. When I talk to people about religion, I make sure to voice my opinion.
41. I am not sure about what type of dating relationship is best for me.
42. I have not felt the need to reflect on the importance I place on my family.
43. Regarding religion, my views are likely to change in the near future.
44. I have definite views regarding the ways in which men and women should behave.
45. I have tried to learn about different occupational fields to find the one best for me.
46. I have undergone several experiences that made me change my views on men’s and women’s roles.
47. I have re-examined many different values in order to find the ones which are best for me.
48. I think that what I look for in a friend could change in the future.
49. I have questioned what kind of date is right for me.
50. I am unlikely to alter my vocational goals.
51. I have evaluated many ways in which I fit into my family structure.
52. My ideas about men’s and women’s roles will never change.
53. I have never questioned my political beliefs.
54. I have had many experiences that led me to review the qualities that I would like my friends to have.
55. I have discussed religious matters with a number of people who believe differently than I do.
56. I am not sure that the values I hold are right for me.
57. I have never questioned my occupational aspirations.
58. The extent to which I value my family is likely to change in the future.
59. My beliefs about dating are firmly held.

IDS

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).

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

60. Long-term goals? (e.g., finding a good job, being in a romantic relationship, etc.)
61. Career choice? (e.g., deciding on a trade or profession, etc.)
62. Friendships? (e.g., experiencing a loss of friends, change in friends, etc.)
63. Sexual orientation and behavior? (e.g., feeling confused about sexual preferences, intensity of sexual needs, etc.)
64. Religion? (e.g., stopped believing, changed your belief in God/religion, etc.)
65. Values or beliefs? (e.g., feeling confused about what is right or wrong, etc.)
66. Group loyalties? (e.g., belonging to a club, school group, gang, etc.)

67. Please rate your overall level of discomfort (how bad they made you feel) about all the above issues as a whole.

68. 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)

69. How long (if at all) have you felt upset, distressed, or worried over these issues as a whole? (Use rating scale above)

BSI 18

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.

<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>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

70. Faintness or dizziness

71. Feeling no interest in things

72. Nervousness or shakiness inside

73. Pains in heart or chest

74. Feeling lonely

75. Feeling tense or keyed up

76. Nausea or upset stomach

77. Feeling blue
78. Suddenly scared for no reason

79. Trouble getting your breath

80. Feelings of worthlessness

81. Spells of terror or panic

82. Numbness or tingling in parts of your body

83. Feeling hopeless about the future

84. Feeling so restless you couldn’t sit still

85. Feeling weak in parts of your body

86. Thoughts of ending your life

87. Feeling fearful
LIST OF REFERENCES


