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Internalized Heterosexism, Social Support, and Career Development in Lesbian, Gay, and Bisexual Undergraduate and Graduate Students: An Application of Social Cognitive Career Theory

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Internalized Heterosexism, Social Support, and Career Development in Lesbian, Gay, and Bisexual Undergraduate and Graduate Students: An Application of Social Cognitive Career Theory

A Thesis Presented for the
Master of Arts
Degree
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James Edward Arnett
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Abstract

Using the framework of Social Cognitive Career Theory (Lent, Brown, & Hackett, 1994), we examined the relationships between one potential career-related barrier, internalized heterosexism (IH), and social support on career decision-making self-efficacy (CDMSE) and vocational outcome expectations in lesbian, gay, and bisexual undergraduate and graduate students. Specifically, we predicted that internalized heterosexism would be negatively related to CDMSE and vocational outcome expectations, and that social support would serve as a buffer that moderates these relationships. Results indicated that IH and social support were both unique predictors of outcome expectations. There was also a significant interaction effect between IH and social support in relation to vocational outcome expectations, such that for those with lower levels of social support, there was a significant, positive relationship between IH and outcome expectations, whereas for those with higher levels of social support, there was no significant relationship between IH and outcome expectations. Social support was also significantly related to CDMSE, but neither IH, nor the interaction of social support and IH were significantly related to CDMSE. The implications are discussed within the context of the bottleneck hypothesis and competing psychological demands (e.g., Hetherington, 1991).
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CHAPTER 1
INTRODUCTION AND LITERATURE REVIEW

Choosing a course of study and planning for future a career is a major developmental task facing most undergraduate and graduate students. In the United States, this task may be particularly complex for sexual minority (i.e., lesbian, gay, and bisexual) students, who negotiate it in the context of a heterosexist society, or a society characterized by “an ideological system that denies, denigrates, or stigmatizes any nonheterosexual form of behavior, identity, relationship, or community” (Herek, 1990, p. 316). Like other forms of oppression (e.g., classism, racism, sexism), heterosexism exists in many forms (c.f. Bohan, 1996) and is pervasive in the lives of lesbian, gay, and bisexual (LGB) individuals. For example, heterosexism may involve explicit verbal or physical violence against LGB individuals (e.g., Herek, 1990); or subtle, even unintentional microaggressions (e.g., the assumption that all students are heterosexual by counselors or teachers; Smith, Shin, & Officer, 2012; Sue, 2010). Sexual minorities may also be marginalized or invalidated through heterosexist institutional (e.g., college or university) policies and practices, for example, the exclusion of LGB material in curricula or a lack of resources and support for LGB students on campus. Underscoring the pervasiveness of heterosexism in the lives of LGB students, a recent nation-wide study of over 3,000 undergraduate and graduate students found that more than twice as many LGB and queer-identified students as heterosexual students reported being targets of derogatory remarks, stared at, or singled out as the authority on LGB issues (Rankin, Weber, Blumenfeld, & Frzaer, 2010).

Heterosexism and LGB Career Development

There is growing evidence to show that heterosexism impacts the vocational development and careers of LGB individuals. For example, sexual minority individuals may expect or
experience harassment or discrimination in the workplace on the basis of their sexual orientation (e.g., Chung, 2001; Heintz, 2012; Parnell, Lease, & Green, 2012; Schneider & Dimito, 2012). Sexual minorities must also negotiate work-related identity management issues, like deciding whether to come out in a potentially heterosexist workplace (e.g., Heintz, 2012; Ragins, Singh, & Cornwell, 2007). In a recent study, LGB college students who reported that their sexual identity had a high impact on their career choices reported greater experiences with homophobia and heterosexism, and were most likely to gravitate toward LGB and transgender affirming academic and career settings (Scheinder & Dimito, 2010). Research also shows that perceptions of discrimination based on one’s sexual orientation, and of campus climate can also impact the career development of LGB college students. Specifically, Tomlinson and Fassinger (2003) found that perceptions of campus climate predicted vocational purpose (i.e., vocational competence, commitment, and organization) and psychological vocational development (e.g., career certainty, career decision-making self-efficacy) in lesbian women. Schmidt, Miles, and Welsh (2011) also found that perceived sexual orientation discrimination and social support interacted to impact career development of LGB students. Interestingly, they found that those who reported both high levels of perceived discrimination and social support also reported lower levels of career indecision. Schmidt et al. hypothesized that negotiating experiences of discrimination in the context of high levels of social support may help individuals develop competencies in weathering challenges, a concept referred to in previous literature as “crisis competence” (e.g., Friend, 1990, 1990a; Kimmel, 1978).

Several authors have suggested that the process of negotiating sexual identity development in the context of a heterosexist society may leave fewer resources for focusing on other developmental processes, including career development (e.g., Hetherington, 1991; Mobley
& Slaney, 1996; Schmidt & Nilsson, 2006). Recent research lends support to this “bottleneck hypothesis” (Hetherington, 1991). For example, Schmidt and Nilsson (2006) found that LGB youth who reported greater sexual identity conflict and lower levels of social support also reported lower levels of career maturity and higher levels of career indecision. Lyons, Brenner, and Lipman (2010) also examined the effects of co-occurring sexual and vocational identity development. Using cluster analysis, they identified three groups of LGB young adults: (1) those who prioritized career development over sexual identity development, (2) those who prioritized sexual identity development over career development, and (3) and those who reported little conflict between career development and sexual identity development. They then compared these groups on the basis of social cognitive variables, including career decision-making barriers, supports, decidedness, interest, outcome expectations, and self-efficacy. They found that those in the two groups that experienced a form of conflict between sexual identity development and career development (i.e., those who prioritized one developmental task over the other) reported lower levels of career decision-making self-efficacy and lower levels of career decision-making supports. In addition, they found that LGB individuals in the group that reported little conflict between sexual identity development and career development reported a lower level of career decision-making barriers than individuals in either of the two conflict-experiencing groups. Interestingly, however, Lyons et al. did not find differences between three groups with regard to outcome expectations. These results support the assertion that for some LGB individuals, sexual identity development and career development may compete for psychological resources, thus requiring a prioritization of one developmental task over the other. They also suggest that conflict between developmental tasks may be particularly salient when considering career decision-making self-efficacy and perceived supports, rather than outcome expectations. Lyons
et al. also suggest that the prioritization of career development may reflect a devaluation of one’s career decision-making abilities, or the sense that one has fewer supports available to her or him. Alternatively, it may be that prioritization of sexual identity development over career development reflects a devaluation of one’s LGB identity, or internalized heterosexism. Unfortunately, Lyons et al. did not address the role of internalized heterosexism in LGB career development.

**Internalized Heterosexism**

For LGB individuals, constant and repeated exposure to heterosexism may lead to *internalized heterosexism* (IH) (e.g., Herek, 2007; Szymanski, Kashubeck-West, Meyer, 2008). Internalized heterosexism arises when negative societal, familial, or peer messages about homosexuality or bisexuality become part of how an LGB individual feels about her- or himself. Because of the pervasiveness of heterosexist messages in society, an LGB person may internalize these negative and invalidating messages whether or not she or he has experienced overt discrimination, and whether or not she or he is “out.” Having one’s sexual orientation negatively viewed or invalidated by others may arouse shame about oneself, or lead to resentment, which is directed inward. As a person continues her or his sexual identity development (e.g., by “coming out;” embracing the positive aspects of an LGB identity), there may be a decrease in IH (Chow & Cheng, 2010). However, covert forms of these negative messages may remain, even in “out” individuals, functioning as a form of *minority stress*, which can have detrimental effects on the physical and mental health of LGB persons (Meyers, 2003).

A growing body of research has examined the relationships between IH and psychosocial outcomes in LGB individuals (e.g., Szymanski & Gupta, 2009; Wiseman & Moradi, 2010). For example, IH has been found to negatively correlate with self-esteem and social support; and
positively correlate with depression, body dissatisfaction, and physical health (see Szymanski et al., 2008, for a review). A recent meta-analysis of IH and internalizing of mental health problems also found an overall small to moderate effect size for IH and internalizing of mental health problems (Newcomb & Mustanski, 2011). Additionally, IH had a stronger relationship with internalizing of depression than anxiety, suggesting IH may be “more likely to engage cognitive processes that negatively affect one's self-view, and therefore would be more likely to result in depressive symptomatology,” versus anxious symptomatology (p. 1027, Newcomb & Mustanski, 2011). This may have implications for social cognitive career variables, such as career decision-making self-efficacy.

**Internalized heterosexism and career development.** While research has drawn strong connections between IH the psychosocial health and functioning of LGB individuals, little research has examined the relationship between IH and career development (Szymanski et al., 2008). In their review of the literature on IH, Szymanski et al. (2008) found only two studies on the relationship between IH and the career development of LGB individuals. These studies, both qualitative, examined whether and how lesbian women perceived their sexual orientation to effect their career development. In the first, Boatwright, Gilbert, Forrest, and Ketzenberger (1996) found that IH lowered women’s self-esteem and confidence levels, which was reflected in apprehension in seeking promotions and coming out to coworkers. These women also noted a fear of being identified as lesbian, often keeping themselves at a distance from coworkers to reduce this risk. In the other study, House (2004) asked lesbian women to discuss the career-related barriers they experienced during their career development in each of the five stages of Super’s Life Span, Life Space model (1990). In the exploration and establishment stages, some women cited low self-esteem related to their sexual orientation as a barrier to their career
development. For example, one woman regarded herself as “a terrible person,” (p. 251) stating she would never be accepted by society, and that she changed jobs every couple of years in order to keep her sexual orientation concealed. Some of the women also cited shame and guilt over their sexual orientation, which forced them to carefully conceal their identity in the workplace. These studies highlight the processes through which IH may relate to the career development in lesbian women. Specifically, internalized negative messages about LGB identities may relate to low self-esteem, shame, and/or guilt about one’s own sexual orientation (and thus, herself), which may, in turn, lead to behaviors such as changing jobs, or to expending energy to remain closeted that may have otherwise been used on the job or career development. This is consistent with the research described above suggesting that LGB individuals may experience a “bottleneck effect” (Hetherington, 1991; Lyons et al., 2010; Schmidt & Nilsson, 2006) as psychological and emotional resources spent focusing on issues related to sexual orientation and identity development leave fewer resources for the career development process. Both the Boatwright et al. (1996) and House (2004) studies suggest that IH impacts the career development of lesbian women, potentially by slowing down the process, or by serving as a barrier to finding and retaining a satisfactory career. Neither of these studies, however, examined the impact of IH on the career development of gay men, or bisexual men and women. Additional research is also needed to better understand the processes by which IH operates, including examining potential moderators of the relationships between IH and important career-related variables (e.g., self-efficacy, outcome expectation).

**Social Cognitive Career Theory**

In their review of the literature on IH, Szymanski et al. (2008) recommended that future research should attend to potential mediators and moderators of the relationships between IH and
psychosocial outcomes. Social Cognitive Career Theory (SCCT) (Lent, Brown, & Hackett, 1994) may offer a useful theoretical framework from which to select potential mediators and moderators. Social Cognitive Career Theory posits that a variety of “person” variables (e.g., social identities like gender, race, and sexual orientation), contextual variables (e.g., systems of support and barriers), and experiential variables (e.g., opportunities for social learning) impact the development of vocational interests by interacting with the learning experiences from which self-efficacy, outcome expectations, and goals are shaped. Self-efficacy refers to a person's belief that she or he is able to accomplish a task, and develops as the result of learning experiences (e.g., performance on a previous task, observing others, and verbal persuasion). Whereas self-efficacy is a person's perceived ability to perform a task, outcome expectations are personal beliefs about probable outcomes. That is, outcome expectations are the perceived consequences of certain behaviors. Finally, career goals refer to observable or measurable end results that require certain activities and behaviors to achieve an outcome. Given its attention to social identity and contextual factors, including perceived supports and barriers, SCCT may provide a particularly useful framework in which to consider the career development of LGB undergraduate and graduate students (e.g., Bieschke, Eberz, Bard, & Croteau, 1998; Morrow, Gore, & Campbell, 1996). Specifically, in an SCCT framework, heterosexism and internalized heterosexism may be considered barriers, and thus have an impact on career development.

In terms of perceived supports, research looking at the career development of women and racial and ethnic minority populations from an SCCT perspective has highlighted the importance of social support. Social support has been found to have direct, positive effects on high school students from a variety of demographic background. These positive effects include increased self-efficacy in Mexican American adolescents (Navarro, Flores, & Worthington, 2007); better
attitudes toward work and school in rural high school students (Wettersten, et al., 2005); and increased aspirations for school success, higher expectations of meeting career goals, higher importance placed on the importance of work in high school, and increased perceptions of opportunities in urban adolescent samples (Kenny, Blustein, Chaves, Grossman, Gallagher, 2003; Kenny, Gauldron, Scanlon, Sparks, Blustein, 2007; Wall, Covell, MacIntyre, 1999). Research on the career development of LGB individuals has also highlighted the importance of role models and social support (e.g., Nauta, Saucier, Woodard, 2001; Schmidt, Miles, & Welsh, 2011), however no research to date has examined whether social support moderates the relationship between IH and career development of LGB individuals.

Social support has generally been found to be an important variable in the lives of LGB individuals. For example, Goode-Cross and Good (2008) found that, for sexual and ethnic minority college students, social support increased the likelihood that they would stay enrolled in the next semester, lessened the experience of social anxiety, helped them to be more open about their sexual orientation, and helped them to feel safer on campus. Additionally, general social support and sexuality-specific social support (i.e., support from others who are available to LGB individuals to discuss sexuality-related topics) have been found to play an important role in the psychological well-being of bisexual men (Sheets & Mohr, 2009; Chow & Cheng, 2010). Sheets and Mohr also reported that those with higher levels of sexuality-specific social support reported significantly lower levels of internalized bi-negativity (i.e., internalized negative attitudes toward one’s bisexual identity). Interestingly, however, while the studies cited above suggest that there are positive effects of social support on the lives of LGB individuals, Szymanski (2009) found that social support did not have a moderating role between experiencing heterosexist events and psychological distress for African American men who identified as gay. As such, further
research is needed to determine whether social support is a moderator in the relationship between IH and LGB career development.

**Current Study**

Heterosexism is pervasive in our society, and may lead to the development of IH (e.g., Szymanski & Ikizler, 2012). Internalized heterosexism has been found to relate to a wide array of psychosocial outcomes (e.g., Szymanski et al., 2008), but little research has examined the relationships between IH and LGB individuals’ career development. In the two qualitative studies that have examined sexual orientation and career development of lesbian women, respondents described how IH affected their career development, or was impacting their current careers, as reflected in low self-esteem, shame, or guilt about their sexual orientation, which, in turn, led to behaviors such as leaving one’s job or expending efforts to remain closeted (Boatwright et al., 1996; House, 2004). However, no research has examined IH and career development in gay men, or bisexual women and men. Therefore, an aim of the current study is to examine the relationship between IH and career development in LGB undergraduate and graduate students. Specifically, using SCCT (Lent et al., 1994) as a theoretical framework, we were interested in the relationships between IH, a potential barrier, and career decision-making self-efficacy and outcome expectations. Based on the growing body of research highlighting the potential negative psychosocial outcomes related to IH (e.g., Szymanski et al., 2008), and the Boatwright et al. (1996) and House (2004) studies, we hypothesized that IH would be negatively related to career decision-making self-efficacy and outcome expectations.

In addition, given SCCT’s (Lent et al., 1994) focus on both barriers and supports in vocational development, and the need for research on mediating and moderating variables in the relationships between IH and psychosocial outcomes in the lives of LGB individuals (e.g.,
Szymanski et al., 2008), social support was also included as a potential moderator variable between IH and the sociocognitive career variables of career decision-making self-efficacy and outcome expectations. Social support has been found to relate to a variety of positive outcomes in the lives of LGB individuals (e.g., Sheets & Mohr, 2009; Ka-Yee Chow & Cheng, 2010), including career development of LGB individuals (e.g., Schmidt, Miles, & Welsh, 2011). Therefore, we hypothesized that social support would attenuate the effects of IH on self-efficacy and vocational outcome expectations. That is, we hypothesized that, there would be a significant interaction between IH and social support such that, for individuals with higher levels of social support, the potential relationships between IH and self-efficacy and vocational outcome expectations would be reduced.
CHAPTER 2
METHODS

Participants

Aiken and West (1991) provided a table indicating the sample size needed to achieve a power of .80 in a multiple regression interaction analysis for various combinations of parameters. Previous research (e.g., Sheets & Mohr, 2009; McGregor et al., 2001; Szymanski, Chung, & Balsam, 2001; Shindlo, 1994; Nungesser, 1984) reporting bivariate correlations suggested that we should expect a low to medium $R^2$ (10 to 25% of the variance) for our main effects and a small to medium correlation between the two variables in the interaction. Previous research has found the measure of IH used in the current study to have a reliability of .83 gay and bisexual men (Herek, Cogan, Gillis, & Glunt, 1998), and the measure of social support used in the current study to have a reliability of .92 for the entire scale (Cutrona & Russell, 1987). Thus, of the parameters shown by Aiken and West (p. 194, 1991), we chose an $R^2 = .20$ for main effects, $r = .50$ for correlation between the interaction variables, and measurement reliability of .80 as most similar to our expected values. With a two-tailed alpha of .05 at these parameters, a sample of $N = 108$ was needed to achieve power of .80 for a medium interaction effect (i.e., $R^2 = .13$).

Meyer and Wilson (2009) suggested that the use of web-based sampling and surveying techniques in LGB research has the advantage of being able to reach otherwise hard to reach populations, or those who have been overlooked in LGB research (e.g., those in rural areas, those who may not be “out” in public spaces). Therefore, two forms of web-based sampling were used to recruit participants for the current study. First, emails containing an invitation to participate and a link to the Internet-based survey were sent to leaders of lesbian, gay, bisexual, and transgender (LGBT) campus organizations listed in an online, nationwide directory.
professional organizations with an LGBT-interest or focus (e.g., Division 44 of the American Psychological Association: The Society for the Psychological Study of Lesbian, Gay, Bisexual, and Transgender Issues); and a national non-profit organization focused on LGBT career development (OutforWork.org). Leaders of these organizations were asked to share the email invitation and link to the survey with members of their organization via their electronic mailing list (See Appendix B). Because web-based sampling is a form of non-probability, or convenience, sampling (Meyer & Wilson, 2009), efforts were made to reduce bias in the sample by recruiting from universities and colleges from across the United States. In this way, we hoped to obtain a sample that was geographically diverse and represented individuals from a variety of social climates, ranging from socially conservative to more socially liberal.

In addition, ads were posted on a popular social media website (www.facebook.com), inviting LGB individuals age 18 and over to participate in an “LGB College Student Study” focusing on LGB individuals’ careers and well-being (See Appendix C for Informed Consent). Three separate ads were placed, one each targeting individuals who indicated on their profiles that they were women “interested in women,” that they were men “interested in men,” or that they “like” #LGBT (See Appendix L).

From these two recruitment strategies, 223 participants started the survey. Forty-four either exited the survey early on, providing little or no data; or were directed out because they indicated that they were university staff or faculty ($n=12$), they indicated “N/A” for school year ($n=9$), or they indicated their gender identity as genderqueer/other ($n=7$; this was due to an error in the survey construction). After these participants were removed, the rest of the dataset was examined for missing data. A maximum criterion of 10% of data missing was allowed, and 59 additional cases (27% of the total number of participants) were removed.
After participants with incomplete surveys were eliminated, the final sample consisted of 120 undergraduate (n = 102) and graduate (n = 18) students. Of these participants, 53.3% identified as female (n = 64), 45.8% identified as male (n = 55), and .8% identified as transgender (female-to-male; n = 1). In addition, 36.7% (n = 44) identified as gay men, 29.2% (n = 35) identified as lesbian women, 25.0% (n = 30) identified as bisexual women, and 9.2% (n = 11) identified as bisexual men. In terms of race/ethnicity, 84.2% (n = 101) of the participants identified as White or European American, 7.5% (n = 9) identified as African American or Black, 3.3% (n = 4) identified as American Indian or Alaskan Native, 2.5% (n = 3) identified as Asian or Asian American, 9.2% (n = 11) identified as “Multiracial,” and 4.2% (n = 5) identified as “other.” In addition, 9.2% (n = 11) of the sample identified as Hispanic or Latino. Ages in the current sample ranged from 18 to 68 years (M = 22.36, SD = 7.00).

**Measures**

**Career decision-making self-efficacy.** The Career Decision-Making Self-Efficacy Scale (CDMSES; Taylor & Betz, 1983) is a 50-item scale designed to assess an individual’s confidence that she or he can successfully engage in tasks related to their career decisions, such as appraisal of one’s ability or goal selection. Those completing the measure are asked to rate their confidence on a 5-point, Likert-type scale, ranging from 0 (no confidence) to 5 (complete confidence). The reported alpha for the total score with a sample of 346 college students was .97 (Taylor & Betz, 1983). Factor analyses have supported the use of the CDMSES as a general measure of career decision-making self-efficacy (Taylor & Popma 1990). The reliability of the CDMSES in the current sample was good, with a Cronbach’s alpha of .95 (Appendix J).

**Internalized heterosexism.** Martin and Dean (1987) developed the Internalized Homophobia Scale (IHS), a nine-item scale for gay males based on the criteria for ego-dystonic
homosexuality in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1980). Sample items include, “I wish I weren’t gay,” and “If someone offered me the chance to be completely heterosexual, I would accept the chance.” Each statement is rated on a five-point, Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores on the IHS are obtained by averaging the responses to each of the items, and higher scores reflect greater amounts of IH. Validity of IHS scores has been supported in research demonstrating that higher scores on the IHS were significantly related to lower collective self-esteem, less disclosure or “outness” to heterosexual friends, higher dissatisfaction with the local gay and bisexual community, and a greater tendency to attribute personal setbacks to antigay prejudice (Herek & Glunt, 1995). A later study by Herek, Cogan, Gillis, and Glunt (1998) modified the IHS for use with a sexual minority female and male sample. The reported alpha with the gay and bisexual male community sample was .83, and was .71 for the female sample. In the current study, participants who identified themselves as gay men were given the original IHS. Participants who identified as lesbian or bisexual were given a minimally reworded version of the IHS (i.e., “I wish I weren't gay” was reworded as, “I wish I weren't lesbian,” or “I wish I weren’t bisexual,” respectively) to ensure an appropriate fit. Chronbach’s alphas for lesbian women, gay men, bisexual women, and bisexual men in the current sample were .71, .83, .84, and .80, respectively; and .82 for the combined sample (Appendix E-H).

**Outcome expectations.** The Vocational Outcome Expectations scale (VOE; McWhirter, Rasheed, & Crothers, 2000) is a six-item measure that assesses beliefs about the success of current career planning and its impact on future career success. Sample items include, “My career planning will lead to a satisfying career for me,” and “I will be successful in my chosen
career/occupation.” Each item is rated on a four-point, Likert-type scale with four options, ranging from 1 (strongly agree) to 4 (strongly disagree). Scores are obtained by summing the items, with a possible range of six to 24. Test-retest reliability over a nine-week period with a group of high school sophomores enrolled in a health class yielded a coefficient $r$ of .59, and a Cronbach’s alpha of .83 (McWhirter et al., 2000). McWhirter et al. obtained a concurrent validity estimate of $r = .54$ using a five-item measure of outcome expectations developed by Fouad and Smith (1996). The VOE showed good reliability in the current study, with a Cronbach’s alpha of .94 (Appendix I).

**Social support.** The 24-item Social Provisions Scale (SPS) was designed to measure perceived social support (Cutrona & Russell, 1987, 1990) along six dimensions: Attachment, Social Integration, Reassurance of Worth, Reliable Alliance, Guidance, and Opportunity for Nurturance. Four items correspond to each of the six dimensions. Respondents use a four-point, Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). Scores on the SPS were obtained by summing the responses to all of the items. Validity of the six subscales has been supported in previous research by a confirmatory factor analysis indicated a goodness-of-fit index of .86 for the six-factor model (Russell & Cutrona, 1984). Cronbach’s alpha for the present sample was .93 (See Appendix J).

**Procedure**

We followed several procedures (most of which were suggested by Schmidt, 1997) to increase the validity of the data acquired from the Internet-based survey. First, three validity check items were included in the survey to screen out those participants who were either inattentive or randomly responding to items. These items appeared in the demographic section of the survey. The first question asked participants to indicate which of the four terms best describe their position at the university or college: undergraduate, graduate, faculty, or staff.
The next question asked participants to indicate their year in school. Their choices were *freshman, sophomore, junior, senior, graduate student,* or N/A. The last question asked participants to indicate which of six terms best describe their sexual orientation and gender identity: *bisexual women, bisexual man, lesbian woman, gay man, heterosexual woman,* or *heterosexual man.* Individuals who indicated that their position at their college or university was anything other than an undergraduate or graduate student; that their identity was anything other than lesbian, gay, or bisexual; or who indicated N/A for year in school were thanked for their participation and directed automatically to a separate web page that explained that the researchers were currently interested in surveying only those individuals who identified as LGB and as undergraduate or graduate students (See Appendix D for demographics).

Emails were sent to leaders of LGB campus organizations, professional organizations, and a national non-profit organization focused on LGBT career development, with a request that they post an invitation to participate in our Internet-based survey on the career development of LGB students. The invitation included a link to the survey (including the informed consent statement) so that interested participants could access the survey from any Internet-accessible computer. The invitation also told participants that, if they chose, they could be entered into a raffle for one of four $25 gift cards to a well-known online retailer (See Appendix M). Ads were also placed on the social media website, and interested participants could click on the ad and be taken directly to the survey, which included a statement of informed consent. Participants who were recruited to participate in the survey via the social media site also had the option of entering into the raffle.
CHAPTER 3
RESULTS

Means for all variables were compared for participants recruited via email announcements and participants recruited via the social media website. Means for internalized heterosexism, career decision-making self-efficacy, and vocational outcome expectations did not differ significantly by recruitment strategy. Social support, however, did differ significantly between participants recruited via email ($n = 56; M = 3.14, SD = .48$) and participants recruited via the social media website ($n = 64; M = 3.32, SD = .48$); $t(118) = -2.10, p < .05$. (Potential implications of this significant difference are discussed in the Strengths and Limitations section of the Discussion).

Prior to conducting our analyses, we examined our data to determine if multicollinearity was present between our two predictor variables, internalized homophobia and social support. The correlation between the predictor variables ($r = -.15, p = .09$), and the variance inflation factor (range VIF = 1.03 – 1.05) were examined, and multicollinearity was deemed unproblematic.
Regression Analyses.

To determine the relationships between IH and social support, and vocational outcome expectations and career decision making self-efficacy, we conducted two multiple regression analyses (one for each of our dependent variables: vocational outcome expectations and career decision-making self-efficacy), following the steps outlined by Frazier, Tix, and Barron (2004) for conducting a moderation analysis. First, we examined several demographic variables (i.e., gender, year in school, position at the university, age) to determine the presence of covariates. No significant correlations between demographic variables and the dependent variables were found (range $r < .01$ to $r = .167$, all $p > .05$), and so no covariates were entered in the regression analyses. Means, standard deviations, and bivariate correlations are listed in Table 1 (in Appendix A). Next, Z-scores were created for our independent variable, IH, and moderator, social support. An interaction term was then calculated by multiplying the Z-scores for these variables.

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
<th>Gender***</th>
<th>Age</th>
<th>Year in School</th>
<th>SSS</th>
<th>CDMSE</th>
<th>VOE</th>
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</thead>
<tbody>
<tr>
<td>SSS</td>
<td>3.23</td>
<td>.49</td>
<td>-.10</td>
<td>-.02</td>
<td>-.07</td>
<td>.41**</td>
<td>.44**</td>
<td></td>
</tr>
<tr>
<td>CDMSE</td>
<td>4.00</td>
<td>.68</td>
<td>.04</td>
<td>.08</td>
<td>-.04</td>
<td>.41**</td>
<td>.75**</td>
<td></td>
</tr>
<tr>
<td>VOE</td>
<td>3.27</td>
<td>.58</td>
<td>.12</td>
<td>-.02</td>
<td>-.17</td>
<td>.44**</td>
<td>.75**</td>
<td></td>
</tr>
<tr>
<td>IH</td>
<td>1.81</td>
<td>.70</td>
<td>.13</td>
<td>-.07</td>
<td>-.09</td>
<td>-.154*</td>
<td>&lt;.01</td>
<td>.12</td>
</tr>
</tbody>
</table>

* $p < .10$, ** $p < .01$; SSS = Social Support Scale; CDMSE = Career Decision-Making Self-Efficacy; VOE = Vocational Outcome Expectations; IH = Internalized Homophobia.
For each analysis, the Z-score for the predictor variable (IH) and the Z-score for the moderator variable (social support) were entered in the first step, followed the interaction between IH and social support in the next step. Unstandardized betas were examined in the output as an interaction term was present, making standardized scores not interpretable (Frazier et al., 2004).

**Vocational Outcome Expectations**

The results of both multiple regression analyses can be found in Table 2 (Appendix A). For the multiple regression analysis with vocational outcome expectations as the dependent variable, \( R^2 = .27, F(3, 116) = 14.01, p < .001 \), there were significant main effects of both IH (\( B = .17 \)), and social support (\( B = .47 \)), and a significant interaction between IH and social support (\( B = -.19 \)). As a statistically significant interaction was detected, we conducted two additional regressions to test the simple slopes at high and low levels of the moderator, social support (see Frazier et al., 2004) at one SD above and below the mean for social support. IH was significantly and positively related to vocational outcome expectations for those with low social support, \( B = .29, t(116) = 3.383, p < .01 \); but it was unrelated to vocational outcome expectations for those with high social support, \( B = -.017, t(116) = -.176, p = .861 \). The interaction is plotted in Figure 1 (Appendix A).

**Career Decision Making Self-Efficacy**

Again, predictor variables were entered in Step 1, and the interaction term was entered in Step 2. The result of the regression were significant, \( R^2 = .176, F(3,116) = 8.284, p < .001 \). Social support, \( B = .41, p < .001 \) was a significant predictor of career decision-making self-efficacy, but IH and the interaction between IH and social support were not.
### Table 2. Hierarchical Multiple Regression Results

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>B</th>
<th>SE B</th>
<th>R²</th>
<th>R² Change</th>
</tr>
</thead>
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<tr>
<td><strong>Dependent variable: vocational outcome expectations (z-score)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.03</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalized Homophobia (z-score)</td>
<td>.17*</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Support (z-score)</td>
<td>.47**</td>
<td>.08</td>
<td>.23</td>
<td></td>
</tr>
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<td>Step 3</td>
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<tr>
<td>Internalized Homophobia × Social Support</td>
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<td>.08</td>
<td>.27</td>
<td>.04</td>
</tr>
<tr>
<td><strong>Dependent Variable: career decision-making self-efficacy (z-score)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>Social Support (z-score)</td>
<td>.41**</td>
<td>.08</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalized Homophobia × Social Support</td>
<td>-.05</td>
<td>.08</td>
<td>.17</td>
<td>.00</td>
</tr>
</tbody>
</table>

* p < .05  
** p < .01
Figure 1. Moderation Analysis
CHAPTER 4
DISCUSSION

The results of this study have significant implications for LGB individuals navigating the career development process. First, with regard to social support, we found a significant, negative bivariate correlation between social support and IH. This is consistent with previous research, which shows a negative relationship between IH and social support (e.g., Chow & Cheng, 2010; Sheets and Mohr, 2009). For example, Sheets and Mohr (2009) found that sexuality-specific social support from friends and family, and general social support from friends related negatively to bi-negativity in bisexual men in college. Several other studies on sexual minority women and men have shown yielded a similar relationship between IH and social support (Shindlo, 1994; Szymanski, 2001). It may be that, those with negative internal views of their sexual orientation perceive less social support because they actively do not reach out for support due to a fear of rejection, or perhaps the reality of their situation is that people have rejected them for their LGB identity. Within the LGB population, social support is an important factor in positive sexual identity development.

As expected, we also found that social support predicted both career decision-making self-efficacy and vocational outcome expectations. This mirrors previous research on women, racial/ethnic minorities, and adolescents from low SES backgrounds that showed that social support acts as positive influence on a person’s career development (e.g., Ali, McWhirter, & Chronister, 2005; Navarro, Flores, & Worthington, 2007). More importantly, this adds to the growing literature that social support is beneficial to LGB students, and replicating the findings from Schmidt et al. (2011) who found that having social support was related to lower levels of career indecision among LGB college students. Further research in this area should continue to
look at the importance of social support in the lives of non-student LGB persons, such as those already in the work force. Research could also examine the specific types of social support that are most important to LGB people, since previous findings show that sexual minorities often create families of choice within the LGB community to create a positive environment for themselves away from a culture that is still heterosexist (e.g., Riggle, Whitman, Olson, Rostosky, & Strong, 2008).

Contrary to our hypothesis, however, IH was not a significant predictor of career decision-making self-efficacy, and neither was the interaction between IH and social support. It may be that IH plays a role earlier in life, during critical learning experiences that shape self-efficacy beliefs in the future. Developmentally, self-efficacy beliefs generally form in early childhood (Lent, Brown, & Hackett, 1994), while sexual orientation emerges later during adolescence. Thus, previously held self-efficacy beliefs may be resilient to the internalization of negative messages one hears about being LGB. This is consistent with research showing that positive orientation towards one’s ethnic/racial identity was not predictive of academic or career-related self-efficacy. Previous researchers have hypothesized that, instead of a direct relationship between positive identity factors and self-efficacy, identity may have a direct relationship with sources of efficacy information (i.e. learning experiences) that lead to self-efficacy and outcome expectations (Byars-Winston, Estrada, Howard, Davis, & Zalapa, 2010). Internalized heterosexism, then, may play a role earlier in life during critical learning experiences that shape self-efficacy beliefs in the future. Additionally, Navarro, Flores, & Worthington (2007) found that, for Mexican-American adolescents, generation status and acculturation were related to math/science self-efficacy through social class. Examining the intersection of LGB identity and social class and career development could reveal a clearer picture. Because the relationship
between IH and self-efficacy beliefs has rarely been studied in LGB individuals, we suggest that researchers continue to investigate the effects via mediating and moderating variables (Szymanski, 2008).

Interestingly, we also found a perhaps counterintuitive interaction between IH and social support, in relation to outcome expectations. That is, for those with lower levels of social support, there was a significant, positive relationship between IH and outcome expectations, but for students with higher levels of social support, the relationship between IH and outcome expectations was not significant. These results may be consistent with research on the "bottleneck" hypothesis (e.g., Hetherington, 1991; Lyons, Brenner, Lipman, 2010; Schmidt & Nilsson, 2006), which suggests that developmental tasks like sexual identity development and career development compete for individuals’ limited psychological resources. For example, Lyons et al. found three clusters of LGB individuals: those who prioritize sexual identity development, those who prioritize career development, and those who do not experience these two developmental tasks as conflicting. Social support may offset the need to prioritize one developmental task, resulting in the non-significant relationship between IH and vocational outcome expectations in those with higher levels of social support. This would be consistent with the cluster of LGB individuals who experienced no conflict between career development and sexual identity development in the Lyons et al study. In contrast, those with lower levels of social support may need to prioritize one developmental task over the other. In the current study, these individuals may have prioritized career development over sexual identity exploration, as reflected in the positive relationship between IH and outcome expectations. This group would be consistent with the cluster of LGB individuals in the Lyons et al. study who prioritized career development. Unfortunately, in the current study, we did not examine the extent to which
individuals feel “conflict” between developmental areas, as in the Lyons et al. study. Future research may examine the extent to which social support allows LGB individuals to manage conflict between developmental tasks. Another explanation may be that because those with lower levels of IH have typically disclosed their sexual identity more often (Frost & Meyer, 2009; Chow and Cheng, 2010), they may be less optimistic about vocational outcomes due to the fear or experience of discrimination in the workplace of LGB people (e.g., Chung, 2001; Heintz, 2012; Parnell, Lease, & Green, 2012; Schneider & Dimito, 2012). Clearly, more research is needed to understand the relationship between IH, social support, and vocational outcome expectations. The bottleneck hypothesis, and the competition for psychological resources and conflict between developmental tasks is one possible direction for future research. A longitudinal study with LGB examining sociocognitive career variables, sexual identity development, and IH could also be help illucidate these relationships.

Future research might also measure the importance of career success or an avoidant coping style to see if high outcome expectations are the result of intentional focusing on career success as a compensenatory strategy to buffer against societal heterosexism and their own rejection of their sexual orientation. On the other hand, it may be useful to conceptualize the research question that in spite of IH, LGB students are still hopeful about the future.

**Strengths and Limitations**

A strength of our study was that our sampling of individuals who identified as lesbian, gay, or bisexual allowed us to generalize our results to men and women sexual minorities, rather than just one group. However, this also introduces a limitation in the form of possibly glossing over within-group differences with lesbian women, gay men, bisexual women, and bisexual men. The exact mechanism in which internalized heterosexism and social support operate through may
be different for men and women, or between those who identify as bisexual and those who identify as gay or lesbian. For example, women may identify different types of social support as more helpful than men, and also have encountered sexism within the workplace. In addition, sexism, conceptualized as a barrier in the SCCT framework, could interact with barriers related to sexual orientation. Future research should be directed at exploring how groups within the LGB community navigate their career and barriers related to sexual identity development.

Another limitation of the study is that, though we made efforts to recruit from multiple online sources, LGB people of color were not adequately represented in our sample. Future research should continue to purposely recruit participants who are LGB people of color. Along with recruiting online, we also found significant differences between participants recruited from LGB listservs and groups and from Facebook, and though the difference was small, the implications that different online recruiting sources yield different clusters of participants should not be overlooked in future research where online recruitment strategies are used. Finally, the use of convenience sampling means we only have a "snapshot" of feelings and beliefs, collected at one period of time. To better understand important developmental tasks, longitudinal studies provide a better understanding of different identities development over time.

Implications

The results of this study have several implications for practitioners. College counselors working with LGB students should be aware that the importance that preparing for a future career that colleges place on students affects the development of other identities. An optimistic way to interpret the results of this study is that IH did not negatively impact self-efficacy or outcome expectations. However, IH has been found in previous research to unequivocally, negatively relate to a wide range of psychosocial outcomes (Szymanski, 2009). Career
counselors could refer LGB individuals to appropriate services if they believe the client could benefit from traditional psychotherapy. Therapists and counselors working with LGB clients who struggle with IH, on the other hand, might benefit their clients by taking a resiliency approach should their clients express hopeful aspirations for their career. For example, therapists could explore why and what makes them hopeful. Therapists could also intervene if clients reveal any perceptions of barriers in the workplace by normalizing their experiences and helping them find resources available to LGB workers.

Conclusion

College is an important time in the career development of young adults, both in terms of finding a career and building relationships. For LGB students, the co-occurring tasks of navigating a heterosexist culture and choosing a career path may compete for psychological resources (e.g., Lyons et al., 2010). The results of this study may point towards a bottleneck effect, where some LGB students choose to, or feel they must, focus on career development while putting aside sexual orientation identity development. An optimistic view is that, despite the challenges such as IH, LGB students may still be confident in their abilities and in their chances for a future career. However, attention should still be given to the effects of IH on other areas of LGB people's lives, such as relationship satisfaction and well-being. Thriving in a society that values work and success means making sacrifices, and for these students. The sacrifice may be putting off or never being comfortable with an LGB identity. Psychologists should strive to help their LGB clients understand the developmental process of both career and sexual orientation, providing support and information that will foster confidence in both their ability and queer identity.
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APPENDICES
Appendix A: Recruitment Email

Adjusting to college or graduate school, choosing a course of study, and planning for a future career are major developmental processes facing most students. These processes may be different for lesbian, gay, and bisexual students than it is for their heterosexual counterparts, as those with sexual minority identities face unique challenges and possess unique strengths. As such, we invite undergraduate and graduate students who identify as lesbian, gay, or bisexual, and are at least 18 years of age to participate in a study that seeks to better understand the unique factors that contribute to the well-being and career development in sexual minority students.

Below, you will find a link to our study that will take you to a separate web page that will inform you more about the study and confidentiality. If you do decide to take part in the study, you will have a chance to enter a raffle to win [insert dollar amount here]. The raffle and survey are separate and not connected or linked in any way, and any information you provide about how to contact you for the raffle, including email, will be deleted upon completion of the raffle. We also ask that you fill out the surveys in a quiet area and give yourself 15-20 minutes to complete the survey. If you have any other questions about the study, feel free to email me at jarnett3@utk.edu. If you have any questions or concerns about confidentiality and participant rights', please contact the University of Tennessee Institutional Review Board at blawson@utk.edu or (865) 974-7697.

Sincerely,

James Arnett
Doctoral Student
Department of Psychology
University of Tennessee

Jon Bourn
Doctoral Student
Department of Psychology
University of Tennessee

Joseph Miles
Assistant Professor
Department of Psychology
University of Tennessee
Appendix B: Informed Consent Form

Career Development and Well-Being in Lesbian, Gay, and Bisexual Young Adults: Risk and Protective Factors

INTRODUCTION

If you identify as a gay, bisexual, or lesbian (LGB), are an undergraduate or graduate student, and are at least 18 years of age, you are invited to participate in a research project examining the unique factors related to the well-being and career development of LGB students. This research is being conducted by James Arnett and Jon Bourn, graduate students in counseling psychology at the University of Tennessee, and Joseph Miles, Assistant Professor in the Department of Psychology at the University of Tennessee.

INFORMATION ABOUT PARTICIPANTS’ INVOLVEMENT IN THE STUDY

If you provide consent to participate in this study, you will be directed to a brief survey that will ask you to provide demographic information, and to answer questions regarding your experiences as a sexual minority person, your career development process, and your relationships. The survey should take approximately 20-25 minutes to complete.

RISKS

The risks in this study are minimal and may include discomfort in answering questions about your experiences as a sexual minority individual, your career development process, and/or your relationships. You are able to withdraw your consent and discontinue your participation at any time in the course of the study, without penalty (i.e., you may still be entered in the raffle should you withdraw your consent). At the conclusion of the study, you will be directed to a list of LGBT resources, including the availability of suicide hotlines and possible counseling services, if you believe you would benefit from these resources.

You will not be asked to provide your name or other unique identifying information at any point on the survey measures, with the exception of your email address should you wish to be entered into the raffle. All data will be stored in password protected files on a computer in the laboratory of the Co-PI and that the key matching unique identifying participant code numbers to participant names will be stored separately from the data.

BENEFITS

There are no direct benefits to you specifically for participating in the research. Potential benefits to society, however, include a better understanding of the unique factors that relate to the well-being and career development process in lesbian, gay, and bisexual students.

CONFIDENTIALITY
Your name and other identifying information will not be collected on any of the survey measures. However, should you choose to be entered into the raffle, you will be asked to provide an email address that will be entered in the raffle and through which you can be contacted, should you be selected. Your email address will be used solely for the purpose of contacting you. Email addresses collected will be stored separately from the data in a separate computer. The raffle entries and survey are separate and not connected or linked in any way, and no attempts will be made to find a relationship between the entries and the questionnaire responses or IP addresses. Additionally, email information will be deleted upon completion of the raffle drawing.

Data will be stored securely and will be made available only to the researchers. Data will be used for aggregate (i.e., group-level) analyses only, and individuals will not be individually identifiable. No reference will be made in oral or written reports that could link participants to the study.

COMPENSATION

If you participate in the study, you will be asked at the end of the survey if you would like to be entered into a raffle for a chance to win a $XX.XX [amount to be determined pending funding; but no more than $50] gift card to [a popular online retailer, e.g., Amazon.com]. If you choose to be entered in the raffle, you will be asked to provide an email address by which you can be contacted. Your email address will be stored separately from your data, and will only be used to contact you in the event that you win the raffle. No additional identifying information will be collected in the course of the study.

CONTACT INFORMATION

If you have questions at any time about the study or the procedures, would like to receive a copy of this informed consent form for your records, (or you experience adverse effects as a result of participating in this study,) you may contact the researcher, Joseph Miles (joemiles@utk.edu), at 410C Austin Peay, and (865) 974-4183, James Arnett (jarnett3@utk.edu), or Jon Bourn (jbourn@utk.edu). If you have questions about your rights as a participant, contact the Office of Research Compliance Officer (blawson@utk.edu) at (865) 974-3466.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled.

CONSENT

I have read the above information. I have received a copy of this form. I agree to participate in this study.

Participant’s signature ______________________________ Date __________
Investigator’s signature ___________________________ Date __________

<<Note: This consent form, and all measures will be in electronic format and participants will indicate consent electronically>>

(Page 2 of 2)
Appendix C: Demographics

1. **Gender (Please check one):**

   _____ Male
   _____ Female
   _____ Transgender Male-To-Female
   _____ Transgender Female-To-Male
   _____ Other (Please specify): ____________________________________________

2. **Sexual Orientation (Please check one):**

   _____ Gay
   _____ Bisexual
   _____ Lesbian
   _____ Heterosexual
   _____ Other (Please specify): ____________________________________________

3. **Age:** _______

4. **Year in School (Please check one):**

   _____ Freshman
   _____ Sophomore
   _____ Junior
   _____ Senior
   _____ Graduate student
   _____ N/A

5. **University Position (Please check one):**
6. **Race/Ethnicity:**

Do you consider yourself to be Hispanic/Latino?

- Yes
- No

In addition, select one or more of the following racial categories to describe yourself:

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Pacific Islander
- White or European American
- Multiracial
- Other
Appendix D: IH Scale for Gay Men

Internalized Homophobia Scale

In the following survey, you will be asked to reflect on your feelings towards your sexual orientation identity. Use the following scale to answer the questions.

<table>
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<tr>
<th></th>
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<th>2</th>
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<th>4</th>
<th>5</th>
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<tr>
<td></td>
<td>Strongly disagree</td>
<td>disagree</td>
<td>neither disagree nor agree</td>
<td>agree</td>
<td>strongly agree</td>
</tr>
</tbody>
</table>

1. I often feel it best to avoid personal or social involvement with other gay men. ___
2. I have tried to stop being attracted to men in general. ___
3. If someone offered me the chance to be completely heterosexual, I would accept the chance. ___
4. I wish I weren’t gay. ___
5. I feel alienated from myself because of being gay. ___
6. I wish that I could develop more erotic feelings about women. ___
7. I feel that being gay is a personal shortcoming for me. ___
8. I would like to get professional help in order to change my sexual orientation from gay to straight. ___
9. I have tried to become more sexually attracted to women. ___
Appendix E: IH Scale for Lesbian Women

**Internalized Homophobia Scale**

In the following survey, you will be asked to reflect on your feelings towards your sexual orientation identity. Use the following scale to answer the questions.

<p>| | | | | | |</p>
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<td>1</td>
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<td>3</td>
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<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>disagree</td>
<td>neither disagree nor agree</td>
<td>agree</td>
<td>strongly agree</td>
<td></td>
</tr>
</tbody>
</table>

1. I often feel it best to avoid personal or social involvement with other lesbian women. ____
2. I have tried to stop being attracted to women in general. ____
3. If someone offered me the chance to be completely heterosexual, I would accept the chance. ____
4. I wish I weren’t lesbian. ____
5. I feel alienated from myself because of being lesbian. ____
6. I wish that I could develop more erotic feelings about men. ____
7. I feel that being lesbian is a personal shortcoming for me. ____
8. I would like to get professional help in order to change my sexual orientation from lesbian to straight. ____
9. I have tried to become more sexually attracted to men. ____
Appendix F: IH Scale for Bisexual Men

Internalized Homophobia Scale

In the following survey, you will be asked to reflect on your feelings towards your sexual orientation identity. Use the following scale to answer the questions.

1  2  3  4  5
Strongly disagree  disagree  neither disagree nor agree  agree  strongly agree

1. I often feel it best to avoid personal or social involvement with other gay men. ___
2. I have tried to stop being attracted to men in general. ___
3. If someone offered me the chance to be completely heterosexual, I would accept the chance. ___
4. I wish I weren’t bisexual. ___
5. I feel alienated from myself because of being bisexual. ___
6. I wish that I could develop more erotic feelings about women. ___
7. I feel that being bisexual is a personal shortcoming for me. ___
8. I would like to get professional help in order to change my sexual orientation from bisexual to straight. ___
9. I have tried to become more sexually attracted to women. ___
Appendix G: IH Scale for Bisexual Women

Internalized Homophobia Scale

In the following survey, you will be asked to reflect on your feelings towards your sexual orientation identity. Use the following scale to answer the questions.

1. Strongly disagree  2. disagree  3. neither disagree nor agree  4. agree  5. strongly agree

1. I often feel it best to avoid personal or social involvement with other lesbian and bisexual women. ___
2. I have tried to stop being attracted to women in general. ___
3. If someone offered me the chance to be completely heterosexual, I would accept the chance. ___
4. I wish I weren’t bisexual. ___
5. I feel alienated from myself because of being bisexual. ___
6. I wish that I could develop more erotic feelings about men. ___
7. I feel that being bisexual is a personal shortcoming for me. ___
8. I would like to get professional help in order to change my sexual orientation from bisexual to straight. ___
9. I have tried to become more sexually attracted to men. ___
Appendix H: VOE Scale

Vocational Outcome Expectations Scale-Revised

**Directions:** Please respond to each question by marking your answers along the 4-point scale shown below:

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>My career planning will lead to a satisfying career for me.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I will be successful in my chosen career/occupation.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>The future looks bright for me.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>My talents and skills will be used in my career/occupation.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I have control over my career decisions.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I can make my future a happy one.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I will get the job I want in my chosen career.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>My career/occupation choice will provide the income I need.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I will have a career/occupation that is respected in our society.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I will achieve my career/occupational goals.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>My family will approve of my career/occupation choice.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>My career/occupation choice will allow me to have the lifestyle that I want.</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix I: SPS

Social Provisions Scale

In answering the next set of questions think about your current relationships with friends, family members, co-workers, community members, and so on. To what extent do you agree that each statement describes your current relationships with other people? Use the following scale to give your opinion.

1  2  3  4
strongly disagree disagree agree strongly agree

___1. There are people I can depend on to help me if I really need it.
___2. I feel that I do not have close personal relationships with other people.
___3. There is no one I can turn to for guidance in times of stress.
___4. There are people who depend on me for help.
___5. There are people who enjoy the same social activities I do.
___6. Other people do not view me as competent.
___7. I feel personally responsible for the well-being of another person.
___8. I feel part of a group of people who share my attitudes and beliefs.
___9. I do not think other people respect my skills and abilities.
___10. If something went wrong, no one would come to my assistance.
___11. I have close relationships that provide me with a sense of emotional security and well-being.
___12. There is someone I could talk to about important decisions in my life.
___13. I have relationships where my competence and skills are recognized.
___14. There is no one who shares my interests and concerns.
___15. There is no one who really relies on me for their well-being.
___16. There is a trustworthy person I could turn to for advice if I were having problems.
___17. I feel a strong emotional bond with at least one other person.
___18. There is no one I can depend on for aid if I really need it.
___19. There is no one I feel comfortable talking about problems with.
20. There are people who admire my talents and abilities.
21. I lack a feeling of intimacy with another person.
22. There is no one who likes to do the things I do.
23. There are people I can count on in an emergency.
24. No one needs me to care for them.
Appendix J: CDMSES

Career Decision Making Self-Efficacy Scale-Short Form

Please circle one answer to the following statements based on this scale:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Confidence</td>
<td>Very Little</td>
<td>Moderate</td>
<td>Much</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td>At All Confidence</td>
<td>Confidence</td>
<td>Confidence</td>
<td>Confidence</td>
<td>Confidence</td>
</tr>
</tbody>
</table>

HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD:

1. Find information in the library about occupations you are interested in. 1 2 3 4 5
2. Select one major from a list of potential majors you are considering. 1 2 3 4 5
3. Make a plan of your goals for the next five years. 1 2 3 4 5
4. Determine the steps to take if you are having academic trouble with an aspect of your chosen major. 1 2 3 4 5
5. Accurately assess your abilities. 1 2 3 4 5
6. Select one occupation from a list of potential occupations you are considering. 1 2 3 4 5
7. Determine the steps you need to take to successfully complete your chosen major. 1 2 3 4 5
8. Persistently work at your major or career goal even when you get frustrated. 1 2 3 4 5
9. Determine what your ideal job would be. 1 2 3 4 5
10. Find out the employment trends for an occupation over the next ten years. 1 2 3 4 5
11. Choose a career that will fit your preferred lifestyle. 1 2 3 4 5
12. Prepare a good resume.  
13. Change majors if you did not like your first choice.  
15. Find out about the average yearly earnings of people in an occupation.  
16. Make a career decision and then not worry whether it was right or wrong.  
17. Change occupations if you are not satisfied with the one you enter.  
18. Figure out what you are and are not ready to sacrifice to achieve your career goals.  
19. Talk with a person already employed in a field you are interested in.  
20. Choose a major or career that will fit your interests.  
21. Identify employers, firms, and institutions relevant to your career possibilities.  
22. Define the type of lifestyle you would like to live.  
23. Find information about graduate or professional schools.  
24. Successfully manage the job interview process.  
25. Identify some reasonable major or career alternatives if you are unable to get your first choice.
Appendix K: Facebook Ad

<table>
<thead>
<tr>
<th>Ad Preview</th>
<th>Edit</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Ad Preview" /></td>
<td><img src="image" alt="Edit" /></td>
</tr>
</tbody>
</table>

**Targeting**
- This ad targets 103,820 users:
  - who live in the United States
  - age 18 and older
  - who like #LGBT
  - who are in college
- Suggested Bid: $0.11 – 0.27 USD

*Two other ads were used, substituting "who like #LGBT" with "Men interested in men" and "Women interested in women"*
Appendix L: Raffle Page

29. Thank you for completing the survey! Now that you are done, you may, if you choose, enter a raffle for a $25 Amazon gift card. If you choose to participate in the raffle, you will be asked to enter your email address, which will be used to contact you should you win the raffle.

As a reminder, email addresses will be collected separately from the survey, and will be stored separately from survey responses. Emails will not be connected in anyway to the information that you provide in the survey itself. Email addresses will only be used for the purposes of the raffle, and will be deleted upon completion of the raffle.

If you are interested in participating in the raffle, please click choose "Yes." If not, simply choose "No."

- Yes, I wish to participate in the raffle.
- No, I do not wish to participate in the raffle.
VITA

James Edward Arnett is a doctoral student in Counseling Psychology at the University of Tennessee. He currently holds his Bachelor of Arts in Psychology with Honors that he received in 2010 from the University of Memphis. Professionally, his research and practice interests include social justice, multiculturalism and diversity, methodology and statistics, and LGBT issues.

As part of his clinical training, Mr. Arnett practices family therapy and conducts assessment at Cornerstone of Recovery, a substance abuse treatment facility in Alcoa, TN, and interns at the Knoxville Health Department examining the social determinants of health outcomes as part of the Together! Healthy Knox working group. He also spent one-and-a-half years at the UT Counseling Center providing individual therapy, stress management sessions, and performing triage in service of the students of UT. Additionally, Mr. Arnett co-led two intergroup dialogues as part of the Intergroup Relations class offered by the Psychology Department. One dialogue group focused on race relations in America, and was comprised of half White student and half Students of Color, and the other group focused on class issues in America, where half of the students grew up and/or currently lived in lower-middle to poverty level income brackets and the other half identified as middle to upper class either currently or growing up.

Mr. Arnett has presented research on the local, regional, and national level. His most recent presentation was at the annual American Psychological Association's (APA) conference in Chicago, where he discussed his research on career development for lesbian, gay, and bisexual college students. He also presented his meta-analysis project on the g-loadings of subtests on cognitive battery assessments at both the National Conference of Undergraduate Research and the National Association of School Psychologist annual convention. Lastly, he presented psychometric data on the Remote Association Task, a measure of creativity, at a regional conference held at the University of Memphis. He has been a member of several labs, covering areas on psychology such as school psychology, cognitive science, and group dynamics.

Other activities that Mr. Arnett has engaged in include teaching research methods to undergraduate psychology majors; participating in Advancing Equality on the Hill, an event where several organizations sends members to the Nashville Capitol to lobby for and against certain bills; giving a guest lecture on intersecting identities in multicultural psychology classes; and actively participation in several divisions of APA, such as the division on the Psychological Study of Lesbian, Gay, Bisexual, and Transgender issues and APA Graduate Student organization.