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**OUTNESS AS A PROTECTIVE FACTOR AGAINST  
RISKY SEX IN GAY MALES**

by

Margaret Levicoff

A Thesis

Submitted to the  
Department of Psychology  
College of Science and Mathematics  
In partial fulfillment of the requirement  
For the degree of  
Masters of Arts in Clinical Mental Health Counseling  
at  
Rowan University  
May 11, 2015

Thesis Chair: Alison Gary, MA, LPC



## **Dedication**

*I would like to dedicate this manuscript to everyone who stood by me and supported me through this challenging, yet wonderfully rewarding, time in my life.*

## **Acknowledgements**

I would like to express my gratefulness and gratitude to my advisor, Alison Gary, my second reader, Dr. Meredith Joppa, my fellow classmates in the 2015 Clinical Mental Health Counseling program, my loving and supportive boyfriend, Joe, and my crazy, yet awesome family. I thank each of you for being so patient, kind, and helpful throughout this experience. This thesis and this degree would not be possible without you.

## **Abstract**

Margaret Levicoff  
OUTNESS AS A PROTECTIVE FACTOR AGAINST  
RISKY SEX IN GAY MALES  
2014-2015  
Alison Gary, MA, LPC  
Masters of Arts in Clinical Mental Health Counseling

Homosexual men between the ages of 15 and 25 constitute a disproportionate majority of new sexually transmitted infections (STIs), including HIV/AIDS, worldwide (Harper, 2007). Men who have sex with men (MSM) more frequently engage in riskier health behaviors, such as drinking, substance use, and risky sexual practices than their heterosexual counterparts (Hamilton & Mahalik, 2009). The current study sampled 150 self-identified homosexual men between the ages of 18 through 30 to assess whether or not level of outness influenced the likelihood of an individual to engage in risky sexual behaviors. Participants completed an online survey that measured each individual's level of outness, mental health symptoms, likelihood to engage in risky sexual behavior, and likelihood to suffer from alcohol and drug abuse. A linear regression did not yield a significant relationship between outness and risky sexual behavior. Linear regressions and Pearson's  $r$  correlations highlighted a significant relationship between both positive and negative mental health symptoms in relation to outness. Lastly, an ANOVA showed a significant relationship between level of outness and alcohol abuse issues. Implications for the findings discuss limitations such as measurement selection and inclusion criteria, and possible directions for future research.

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## **Chapter 1**

### **Introduction**

Risky sexual behavior is defined as any sexual behavior that can produce an adverse outcome (Marcus, Fulton, & Turchik, 2011; Chandra, et.al, 2003). These behaviors include having sex with multiple partners, having sex while high on drugs and/or alcohol, and having sex with inconsistent condom use (Marcus, Fulton, & Turchik, 2011). The consequences of risky sexual behavior are abundant. We see the penalties of risky sex in unwanted pregnancies and sexually transmitted infections (STIs), including HIV/AIDS. Within the population, 50% of all STI infections are between the ages of 15 to 25 years old (Bryan & Schmiege, 2012). In 2010, the Centers for Disease Control and Prevention revealed that there were an estimated 47,500 new STI infections with nearly two-thirds of these new infections occurring in homosexual and bisexual men between the ages of 20 to 24 years old (Centers for Disease Control and Prevention, 2010).

#### **Risky Sexual Behavior**

Aside from its reproductive purposes, sex can be seen as pleasurable and fun. In the U.S., this meaning of sex started to become more prevalent throughout the 1960s and 1980s when sexual liberation occurred. “The Sexual Revolution” was defined as the rejection of typical gender roles as well as sexual norms (Garton, 2004; Crooks & Baur, 2008). Increasing acceptance of intercourse outside of a heterosexual, monogamous marriage gave individuals more freedom. Such freedom resulted in the development of the oral contraceptive pill, introduced in the 1960s, which gave women newfound security in pursuing sexual pleasure with the reduced fear of an unwanted pregnancy

(Crooks & Baur, 2008). Consequently, there was also a steady increase in viral sexually transmitted infections (STIs) including HIV/AIDS infection rates (Aral, Fenton, & Holmes, 2007). During this time, there was a dearth in research regarding such issues; therefore, individuals were unaware of the detrimental outcomes to unsafe, risky sexual behavior. Since then, an awareness of the potentially deadly nature of STIs, including HIV/AIDS has been identified. This resulted in the advancement of medical options, most notably the condom, as a method to reduce the infection of STIs and HIV/AIDS (Centers for Disease Control and Prevention, 2014). Despite such advancements, STI rates are continuously on the rise across the U.S. (Centers for Disease Control and Prevention, 2014). Thus, risky sexual behavior is still a major concern across the population, specifically amongst young adults.

Young adults between the ages of 18 to 25 constitute half of all sexually transmitted infections worldwide with less than one-third of undergraduate college students reporting regularly using condoms during both vaginal and anal sexual intercourse (Voisin, King, & Schneider, 2012; Dermen & Thomas, 2011). The consequences of such actions include the possibility of an adverse outcome such as STI infection and unwanted pregnancy. The likelihood of such risks rises when having sex while high on drugs, sex with high-risk partners, as well as having multiple sex partners whose sexual histories is unknown (Marcus, Fulton, & Turchik, 2011). Such behaviors can have various negative consequences, including damage to romantic relationships, financial concerns, family conflicts, damage to social reputation, health problems, legal disputes, unintended pregnancy, and infection of sexually transmitted infections (Turchik & Garske, 2008).

## **Heterosexual Risky Sexual Behavior**

An abundance of research exists regarding heterosexual risky sexual behavior (Bryan & Schmiege, 2012; Dermen & Thomas, 2011; Harper, 2007; Quinn & Fromme, 2010; Voisin, King, & Schneider, 2012). In 2009, adolescents and young adults between the ages 15 to 25 constituted half of all new sexually transmitted infections worldwide (Voisin, King, & Schneider, 2012). Less than one third of sexually active undergraduate students reported consistent condom use during intercourse, with only about four out of ten students always using condoms during vaginal sex, and even fewer used one during anal sex (Dermen & Thomas, 2011). Furthermore, college students are more likely to have multiple sex partners than other populations, with less than thirty percent regularly using condoms (Dermen & Thoman, 2011; Quinn & Fromme, 2010; Voisin, King, & Schneider, 2012). Thus, college students are even more vulnerable to the aforementioned consequences of risky sexual behaviors than other populations. Information regarding protective factors that shield heterosexual individuals from engaging in these behaviors is readily available.

Although the rates of risky sex are high among young adults, protective factors exist that aid in preventing the likelihood to engage in such behaviors. Those who have higher self-esteem, greater psychological well-being, and are more connected to their religiosity are less likely to engage in risky sexual behaviors (Saewyc, Homma, & Skay, 2009). Relational factors such as strong connectedness to family and school are also shown to reduce the likelihood of engaging in behaviors that compromise health. For adolescents, if there is the presence of a caring adult role model outside of the family and

community involvement, one is less likely to seek out risky sexual activity (Saewyc, Homma, Skay, 2009).

Numerous studies have attempted to understand why risky sexual behavior occurs in young adulthood (Bryan & Schmiege, 2012; Dermen & Thomas, 2011; Quinn & Fromme, 2010). A major contributing factor appears to be the use of substances in relation to youth sexual behavior. Rates of alcohol use are shown to increase after high school, especially among those who attend college. For individuals who use alcohol more frequently, they are also less likely to be consistent with their condom use (Bryan & Schmiege, 2012). Additionally, college students who engage in heavy levels of alcohol consumption are shown to have an increase in the likelihood of having multiple sex partners and more casual sex partners (Dermen & Thomas, 2011). In common with alcohol use, higher rates of drug use also contribute to risky sexual behavior (Quinn & Fromme, 2010). Some research indicates that higher marijuana use is associated with more risky sexual behavior, defined as a higher likelihood of being sexually active, nonuse of condoms with casual partners, and having a higher number of sexual partner (Bryan & Schmiege, 2012). Marijuana use has the potential to increase sexual desire and negatively impact cognitive functioning including decreased memory performance and increased disinhibition, which affects judgment and negotiation abilities. Thus, marijuana and various other substances may increase the risk of engaging in risky sexual behavior (Bryan & Schmiege, 2012).

### **Homosexual Risky Sexual Behavior**

Although majority of research focuses on heterosexual youth, homosexual men, on average, engage in riskier health behaviors than their heterosexual counterparts

(Hamilton & Mahalik, 2009). Men who have sex with men (MSM) bear a disproportionate burden of HIV infection and AIDS (Harper, 2007). Between 1999 and 2003 the number of new HIV infection rates among adolescents decreased among females but increased among males, with the primary mode of transmission being through sexual activity with other males (Harper, 2007). More recently, the spread of HIV/AIDS was predominantly transmitted through male-to-male sexual contact (Centers for Disease Control and Prevention, 2012). Sexual minority status is also associated with risky sexual behavior, higher rates of sex before 13 years old, and STI infection (Martin-Storey & Crosnoe, 2014). Research also shows that men who engage in unprotected anal intercourse are younger and have less education than their safer counterparts, which is potentially related to their propensity to visit gay bars more frequently (Kelly et al., 1995).

Consistent with these explanations, research demonstrates that men who engage in any unprotected anal intercourse with their sexual partners also have almost twice as many different male sex partners in the past two months as men who do not engage in high-risk sex (Sánchez, Bocklandt, & Vilain, 2009). In addition, high-risk men have lower intentions to use a condom in their next intercourse interaction. Contributing to this research, certain gender role conflicts, extent of interest in casual sex, and relationship satisfaction may also impact the likelihood of an individual to engage in risky sexual behavior (Sánchez, Bocklandt, & Vilain, 2009). Single homosexual men report greater interest in casual sex compared to partnered men and restricted intimacy is a significant predictor of interest in casual sex. Single homosexual men also report more concern over being affectionate with other men compared to partnered men. Research indicates

homosexual single men lack and may even fear intimacy, and thus are more likely to engage in casual sex than partnered homosexual men (Sánchez, Bocklandt, & Vilain, 2009).

Aside from sexual encounters and gender role conflicts, there is also research indicating that level of drug and alcohol consumption may be linked to an individual's probability of engaging in risky sexual behavior. Data suggests that drug use is more prevalent among homosexual men than among the general population, with the highest rates among young homosexual and bisexual men between the ages of 18 to 25 years old (Winters, Remafedi, & Chan, 1996). Homosexual men have higher rates of smoking cigarettes and marijuana, illicit drug use, and have higher prevalence rates of substance abuse and dependence compared to heterosexual men (Hamilton & Mahalik, 2009). Associated with substance use are high-risk sexual practices in homosexual men. Alcohol is positively correlated with sex with new and casual partners while other drugs are associated with sexual risk across a broader range of relationships (Kalichman, Tannenbaum, & Nachimson, 1998). The use of drugs is shown to be positively correlated with HIV transmission and suicide across homosexual populations (Winters, Remafedi, & Chan, 1996). Sexual minority youth also have higher rates of drinking, drug use, risky sexual behavior, smoking cigarettes and marijuana, and delinquency than heterosexual adolescents (Martin-Storey & Crosnoe, 2014). Therefore, it follows that with higher level of drug and alcohol use, homosexual men may be more likely to engage in risky sexual behaviors.

Level of outness of an individual may also influence homosexual risky sexual behaviors. Outness is defined as embracing oneself and disclosing to others one's sexual

orientation (Mohr & Fassinger, 2003). The act of coming out is generally understood as an important part of identity development in many self-identified homosexual men. Coming out allows individuals to develop an authentic and stable sense of self, and cultivate a positive sexual minority identity (Legate, Ryan, & Weinstein, 2012). Coming out is not merely a one-time self-disclosure of sexual orientation. In fact, it is an ongoing process in which many homosexual individuals and couples can express their values and identities, manage their social interactions, create and maintain interpersonal connections, and define boundaries for their relationships (Knoble & Linville, 2012).

Aside from the positive outcomes to coming out, there are also negative outcomes to nondisclosure of sexual orientation. Concealment of sexual orientation is a common coping strategy among many homosexual men. Homophobia can contribute to individuals feeling negatively about their own sexuality and developing low self-esteem or even self-loathing (McDermott, Roen, & Scourfield, 2008). These emotions can trigger self-destructive cycles of behavior such as drug taking, drinking, and unsafe sexual practices and self-harm which lead to risky sexual behaviors (McDermott, Roen, & Scourfield, 2008). Sexual identity concealment can also produce negative consequences such as lower relationship satisfaction in same-sex couples, faster HIV infection progression, as well as distress and suicidality, along with higher levels of depression, anxiety, and stigmatization among individuals who conceal their sexual orientation (Legate, Ryan, & Weinstein, 2012; Morris, Waldo, & Rothblum, 2001). Risk factors such as these may therefore lead to higher risky sexual behaviors.

On average, disclosing sexual identity yields wellness benefits for homosexual individuals (Legate, Ryan & Weinstein, 2012). Individuals vary both in how much they

disclose their sexual orientation in different social settings and in the experiences that follow from disclosure (Legate, Ryan, & Weinstein, 2012). Degree of outness has been found to correlate positively with subjective well-being and can be seen as an important factor in physical health (King & Smith, 2004). Research shows that the more out an individual is, the higher their self-esteem is and the less angry and depressed they are (Legate, Ryan, & Weinstein, 2012). Individuals who disclose more tend to experience greater wellness when they are given autonomy support, which is a nurturing and motivational support (Legate, Ryan, & Weinstein, 2012). The ability to be open about one's sexual orientation and identity is associated with integration of personality, psychological health, and authenticity in interpersonal relationships as well as decreased psychological distress (Morris, Waldo, & Rothblum, 2001). Therefore, with lower psychological distress, there may be a decrease in risky sexual behaviors since higher level of outness is seen to be positively correlated with overall well-being (Morris, Waldo, & Rothblum, 2001).

While disclosing one's sexual orientation generally has positive psychological effects, disclosures made to family may augment the benefits. When sexual orientation is disclosed to family members, acceptance of an individual's sexual orientation predicts greater self-esteem, social support, and general health status (Ryan, Russell, & Huebner, 2010). Family acceptance of sexual orientation is also seen to protect against depression, substance abuse, and suicidal ideation and such behaviors (Ryan, Russell, & Huebner, 2010). Individuals who are relatively open about their sexual orientation in their everyday lives tend to report having low levels of avoidance and high levels of sexual orientation

support from their fathers (Mohr & Fassinger, 2003). These positive psychological gains may decrease the likelihood of an individual engaging in risky sexual behaviors.

When individuals disclose their sexual orientation, there is always the chance that others will not be accepting. In cases such as these, negative psychological consequences tend to increase for the homosexual individual. For example, there is more suicidality and verbal/physical aggression in homosexual youth who come out to family than those who had not, with suicide attempts four times greater than those of their heterosexual counterparts (Legate, Ryan, & Weinstein, 2012; McDermott, Roen, & Scourfield, 2008). Since adolescence is a developmental stage that is fraught with emotions, these adverse consequences may be due to perceived negative attitudes from an individual's family that may be displayed through questioning an adolescent's disclosure of their sexual orientation. There are greater levels of victimization that are associated with mental health problems when an individual discloses their sexual orientation and are not accepted (D'Aguelli & Grossman, 2001). For some who disclose, there is shame and distress behind their disclosure (McDermott, Roen, & Scourfield, 2008). As previously mentioned, higher psychological distress can lead to adverse outcomes, which may include an increase in engaging in risky sexual behavior (Knoble & Linville, 2012; Legate, Ryan, & Weinstein, 2012; Mohr & Fassinger, 2003).

Research indicates that disclosure of sexual orientation is a constant decision-making process because there is an ongoing fear of negative consequences (Knoble & Linville, 2012). Coming out is seen as an aspect of role modeling or outreach for others. Many individuals feel that their partner was a source of support for their coming out. When partners disclose their sexual orientation to each other, relationship satisfaction,

intimacy, shared values, and relationship quality all increase. When the disclosure of an individual's sexual orientation is not accepted with autonomy support, there are negative reactions, which include an increase in family and work related stress. When one partner is more out than the other, there may be challenges that ultimately result in the relationship ending (Knoble & Linville, 2012). Since there are both positive and negative aspects to disclosing sexual orientation, it is important to understand what disclosure means in regards to engaging in risky sexual behavior.

However, little is known regarding homosexual protective factors against risky sex. According to The Centers for Disease Control and Prevention (CDC) some gender groups are far more affected by HIV infection than others. Bisexual, and other men who have sex with men, account for the majority of new HIV infections despite making up only 2% of the population. In 2010, the CDC revealed that there were an estimated 47,500 new HIV infections. Nearly two-thirds of these new infections occurred in homosexual and bisexual men between the ages of 20 and 24 years old (Centers for Disease Control and Prevention, 2010). Given these statistics, it is in the interest of public health to determine what protective factors exist for the homosexual population against engaging in risky sexual behaviors, as there is a dearth of information currently available.

### **Purpose and Hypotheses**

The positive outcomes of increased disclosure, or outness of sexual orientation, have shown to be extremely beneficial in terms of mental health as well as overall life satisfaction. Research shows that the more out an individual is to a supportive community, family, and significant other, the more psychologically healthy a person is as a result of better relationship satisfaction as well as total well-being satisfaction and less

risky sexual behavior (Knoble & Linville, 2012; Legate, Ryan, & Weinstein, 2012; Mohr & Fassinger, 2003). Those who choose not to disclose their sexual orientation risk increased psychological distress, such as higher rates of depression and anger, which are positively correlated with risky sexual behavior (Knoble & Linville, 2012; Legate, Ryan, & Weinstein, 2012; Mohr & Fassinger, 2003; Morris, Waldo, & Rothblum, 2001). Thus, disclosures of outness may have an influence upon whether or not a homosexual man engages in risky sexual behavior. This research aims to investigate whether the level of outness in homosexual males between the ages of 18 to 30 serves as a protective factor against risky sexual behavior in this population. It is hypothesized that the more out, or the more an individual discloses their sexual orientation and identity, the less likely they will be to engage in risky sexual behavior. Additionally, it is hypothesized that the more out an individual is, the less mental health symptoms they will display. Finally, it is hypothesized that the more out an individual is, the less likely they will endorse alcohol and drug/substance abuse.

## **Chapter 2**

### **Methods**

#### **Participants**

Participants included 150 self-identified homosexual men. The mean age of the participants at the time they completed the study was 22.55 (SD= 3.3, range 18-30). The majority of individuals identified themselves as Caucasian/Non-Hispanic (82.7%,  $N= 124$ ) and the remaining identified as nonwhite (17.3%,  $N= 26$ ). The majority of participants had some college experience (37.3%,  $N= 56$ ) or graduated from a 2 or 4-year college (26%,  $N= 39$ ). Most participants identified as middle class (46%,  $N= 69$ ), followed by middle-upper class (28%,  $N= 42$ ). Recruitment materials contained the name of the study, “The Coming Out Survey,” as well as an anonymous online questionnaire administered via Qualtrics. Multiple means of recruitment were utilized. In order to broadcast survey information, social networking sites such as Facebook, Instagram, Twitter, and Reddit were used. Additionally, flyers were posted on Rowan University’s campus.

#### **Measures**

Participants completed a battery of self-report measures to assess their overall psychological well-being, attitudes toward and likelihood to engage in risky sexual behaviors, total level of outness, and alcohol and drug abuse concerns. A short demographic survey assessing age, gender, race, education, socioeconomic status, marital status, and sexual orientation was also completed.

**Demographic information.** Information was requested in regards to basic demographic information and social variables. Participants were asked to enter their age in years, gender, race or ethnicity, highest level of education, socio-economic class, marital status, and their sexual orientation. Participants were also provided with the selection of “other” regarding gender, ethnicity, and sexual orientation but were not asked to specify.

**Psychological well-being.** The Mental Health Inventory (MHI-38) (Veit & Ware, 1983) is a 38-item self-report inventory that yields a global summary score (Mental Health Index) and two subscale scores: Psychological Distress (PD) and Psychological Well-Being (PWB). Questions range from 1 (none of the time/least frequent) to 6 (all the time/most frequent) except for questions 9 and 28, which are on a 1-5 scale. Higher scores indicate greater symptomology. In order to score this scale it is required to sum the score for each of the following subscales: anxiety, depression, loss of behavioral/emotional control, general positive affect, emotional ties, life satisfaction, psychological distress, psychological well-being, and a general overall global mental health score, which is the sum of all the items (high scores=greater well-being and less distress). All the negative items (anxiety, depression, and loss of behavioral/emotional control) are recoded, along with item number 22.

The MHI-38 has been used in primary care settings to measure the frequency and severity of symptoms of depression and anxiety. Reliability coefficients, using Cronbach’s alpha, were .90 for both PD and PWB. As found in the original study, the subscales were negatively correlated ( $r = -.56, p < .001$ ). This measure was used to assess basic mental health per participant.

**Risky sexual behavior.** The Student Sexual Risks Scale (DeHart & Birkimer, 1997) is a 38-item questionnaire which screens for the likelihood of an individual engaging in risky sexual activities, such as have multiple sex partners and failing to use condoms during sex. The Student Sexual Risks Scale is a Likert scale that ranges from 1 (agree) to 3 (disagree). The scale possesses internal reliability and both predictive and construct validity. Reliabilities for the subscales are as follows: attitudinal  $\alpha = .88$ , intention to try  $\alpha = .80$ , susceptibility  $\alpha = .84$ , and substance use  $\alpha = .76$ . The final 38-item scale had an  $\alpha = .86$ . In order to score this scale, each individual receives an original 80 points. The instrument then requires the subtraction of one point for every undecided response. Two points are subtracted every time a participant disagrees with an odd-numbered item or to item number 38. Lastly, two points are subtracted every time a participant agrees with even-numbered items 2 through 36. This scale assesses for attitudes toward safer sex (higher score = more positive attitude), peer norms toward safer sex (higher score = greater peer norm), perceived susceptibility to HIV (high score = lower perceived susceptibility), substance use (higher score = lower substance abuse), intention to practice safer sex (higher score = greater intention), and expectation to practice safer sex (higher score = greater expectation).

**Level of outness.** The Outness Inventory (OI; Mohr, 2005) is an 11-item scale designed to assess the degree to which lesbian, gay, and bisexual (LGB) individuals are open about their sexual orientation. Responses on the OI items indicate the degree to which the respondent's sexual orientation is known by and openly discussed with various types of individuals (e.g., mother, work peers). Previous research conducted factor analyses that indicated that the OI could be used to provide information about levels of

outness in three different life domains: family, everyday life, and religion. Analyses suggested that the OI can also be used to provide an index of overall outness. The scores on the subscales are as follows: (a) Out to World  $\alpha = .79$ , (b) Out to Family ( $\alpha = .74$ ), and (c) Out to Religion ( $\alpha = .97$ ). The OI is a scale that ranges from 1= person definitely does not know about your sexual orientation to 7= person definitely knows about sexual orientation status and it is openly talked about. There is also the option of 0= not applicable to your situation; there is no such person or group of people in your life. This scale assesses for outness to family (average of 1,2,3,4), outness to world, (average of 5,6,7,10) and outness to religion (average of 8 and 9). This scale also screens for total outness, which is the average of the three subscales above.

**Alcohol and drug abuse.** The CAGE (Ewing, 1984) is an acronym questionnaire that assesses alcohol abuse. The questions include having ever felt the need to cut down drinking, having ever been criticized because of drinking, having ever felt guilty about drinking, and having to use a drink first thing in the morning to steady nerves or to get rid of a hangover. The CAGE-AID (Brown & Rounds, 1994) consists of the CAGE questions that have been altered by expanding the scope of the questions to include drug and substance use. CAGE has an accuracy of 0.91 and a kappa value of 0.75. The questions focus on the last three months. There are a total of 8 items. CAGE and CAGE-AID are both commonly used assessments in many counseling and therapeutic settings that help counselors understand and better gauge alcohol and drug use per client. All questions are yes (1)/no (2). The score for each measure is summed. If there are a total of two or more “yes” answers, then this means this individual is “clinically significant” for

either alcohol use (CAGE) or other drug/substance use (CAGE-AID). These are both dichotomous (categorical) variables.

## **Procedure**

Approval to conduct the study was obtained from the Rowan University Institutional Review Board. The survey was completed via Qualtrics, a survey generator computer program that allows researchers to create surveys, distribute surveys to the public, and collect and export data. An address for the online survey was included in the recruitment materials. First, participants were presented with a consent form. This consent form asked the participants to provide their initials along with four random numbers to ensure confidentiality. After providing electronic consent, participants were then directed to the survey. Participants responded to a total of 95 items, comprised of the scales mentioned above. Measures in order included demographics, The Mental Health Inventory, Student Sexual Risks Scale, Outness Inventory, CAGE, and CAGE-AID. Survey completion was projected to take up to 15 minutes. Participants were reminded throughout the survey that participation is voluntary and completion was not required. After surveys were completed, participants were thanked for their participation, provided with the survey link in electronic format, and asked to disseminate information to other potential participants should they feel comfortable. Individuals were also provided with a debriefing form that listed several organizations, individuals, and counseling settings should the survey bring up any unwanted emotions. The debriefing form explained the benefits of the current study as well as contact information that could be used if participants had any further questions.

## Chapter 3

### Results

#### Preliminary Analyses

Data were collected from 150 self-identified homosexual men from November 2014 through January 2015. An independent samples t-test was conducted in order to see if the group means differed by race (white vs. non-white). The t-test indicated the groups did not differ statistically on any variables except the CAGE. Those who identified as white ( $N= 124$ ) were more likely than non-white participants ( $N= 26$ ) to endorse answers regarding clinically significant alcohol abuse ( $t = -1.48, df = 148, p < .01$ , one-tailed). The magnitude of the difference in the means was large (Mean Difference =  $-.35$ , 95% CI  $[-.71, -.01]$ ).

A series of ANOVA tests were conducted to assess whether the primary variables of interest (Total Outness, Global Mental Health Well-Being, Risky Sexual Behavior, and alcohol and other substance abuse) differed by demographic variables (education level, socioeconomic status (SES), and marital status). Beginning with education level, a one-way between-subjects ANOVA test yielded no significant differences between any continuous variable except Total Outness: individuals who endorsed having a higher level of education also endorsed higher overall level of disclosure of sexual orientation to others,  $F(6, 143) = 4.50, p < .001$ .

A series of one-way between-subjects ANOVAs were conducted in order to assess socioeconomic status and marital status in regards to Total Outness, Global Mental Health index score, Total Sexual Risk, CAGE, and CAGE-AID. When the data was analyzed regarding SES, no statistical relationships were significant. Marital status was

dichotomized into two categories: in a committed relationship and not in a committed relationship. The ANOVA results for marital status did not yield any significant relationships.

Table 1.

*ANOVA Between Total Outness and Education Level*

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Between Groups	69.64	6	11.61	4.50	.000
Within Groups	369.22	143	2.58		
Total	438.86	149			

### **Descriptive Analyses**

Regarding total level of outness, most participants endorsed scores between a three (person probably knows about your sexual orientation status, but it is never talked about) and a four (person probably knows about your sexual orientation status, but it is rarely talked about),  $M= 3.5$ ,  $SD= 1.72$ . With regard to the outness subscales (out to family, out to world, out to religion), the majority of individuals endorsed being most openly out with their siblings (32%,  $N= 48$ ), followed by their mothers (24%,  $N= 36$ ). Participants disclosed their sexual orientation to their fathers but were least likely to discuss it with them (23.3%,  $N= 25$ ) and were entirely hidden from their extended family (34.7%,  $N= 52$ ). In regards to outness to world ( $M= 3.36$ ,  $SD= 1.94$ ), individuals endorsed that the majority of the world knows about their sexual orientation but it is never talked about. Participants were most likely to disclose their sexual orientation to

new (22%,  $N= 33$ ) and old (31.3%,  $N= 47$ ) heterosexual friends, and least likely to disclose and discuss their sexual orientation with their work peers (12%,  $N= 18$ ) and work supervisors (8%,  $N= 12$ ). Lastly, outness to religion subscales showed as slightly skewed and kurtotic due to restricted range and missing data (65.3% missing,  $N= 98$ ). Of the 52 participants who completed this measure, the majority endorsed that they were entirely closeted to both the members of their religious community (27.3%,  $N= 41$ ) and their religious leaders (27.3%,  $N= 41$ ).

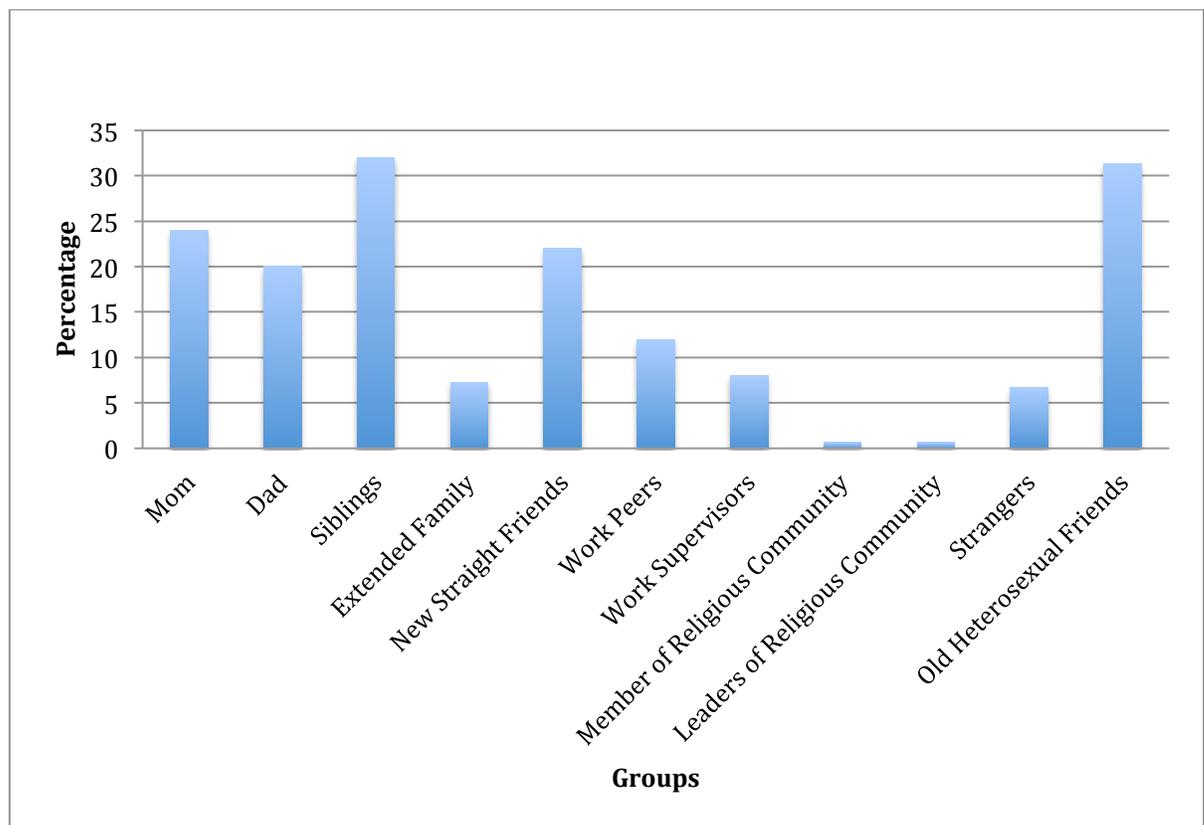


Figure 1. Percentage of Participants Open & Willing to Discuss Orientation.

## Primary Analyses

Pearson's  $r$  correlations were conducted to assess for significant relationships between the primary continuous variables of interest. Correlational analyses revealed that the more likely an individual was to use significant amounts of alcohol, the more likely they were to use a significant amount of drugs,  $r(148) = .203, p < .05$ . Also, the relationship between Total Outness and the CAGE was approaching statistical significance. Thus, the more an individual disclosed their sexual orientation, or the more out an individual is, then the more likely they were to endorse clinically significant alcohol abuse,  $r(148) = .158, p = .054$ . No other correlations were found among the primary continuous variables.

Although there was no statistical significance with the continuous overall MHI-38 scores, when using a Pearson's  $r$  correlation to assess the subscales in the Mental Health Inventory in relation to Total Outness, significant associations were found. These correlations yielded results that demonstrated the more closeted an individual is, the more likely they are to be affected by depression/depressive symptoms,  $r(148) = -.301, p < .01$ , loss of behavioral and emotional control,  $r(148) = -.227, p < .05$ , anxiety/anxiety symptoms,  $r(148) = -.200, p < .01$ , and psychological distress,  $r(148) = -.269, p < .01$ .

Pearson's  $r$  correlations also revealed that the more out an individual is overall, the more likely they were to have general positive affect,  $r(148) = .324, p < .01$ , stronger emotional ties,  $r(148) = .395, p < .005$ , higher overall life satisfaction,  $r(148) = .381, p < .01$ , and higher psychological well-being,  $r(148) = .362, p < .01$ .

Table 2.

*Correlations Between Outness & MHI-38 Subscales*

	(1)	(2)	(3)	(4)
1.) Total Outness	-			
2.) Depression	-.30**	-		
3.) Loss of Behavioral & Emotional Control	-.28**	.85**	-	
4.) Anxiety	-.20*	.64**	.66**	-
5.) Psychological Distress	-.27**	.88**	.91**	.89**

*Note.* \*  $p < .05$ , two-tailed. \*\*  $p < .01$ , two-tailed.

Table 3.

*Correlations Between Low Levels of Outness & MHI-38 Subscales*

	(1)	(2)	(3)	(4)
1) Total Outness	-			
2.) Positive Affect	.32**	-		
3) Emotional Ties	.40**	.65**	-	
4.) Life Satisfaction	.38**	.66**	.69**	-
5.) Psychological Well-Being	.36**	.98**	.79**	.74**

*Note.* \*\*  $p < .01$ , two-tailed.

**Hypothesis 1: Outness and risky sex.** It was hypothesized that the more out an individual is, the less likely they are to engage in risky sexual behavior. A linear regression was conducted in order to see if level of total outness predicted an individual's likelihood to engage in risky sexual behavior. No significance was found to support a relationship between outness and the likelihood to engage in risky sexual behavior,  $F(1,148) = .106, p > .50$ .

**Hypothesis 2: Outness and mental health.** It was hypothesized that the more out an individual is, or the more an individual discloses their sexual orientation to a variety of people, the more likely they are to have better overall mental health well-being. A linear regression showed no statistical significance. Linear regressions were then conducted using total outness as the predictor for each subscale in the Mental Health Inventory. The results showed that the more closeted an individual is, the more likely they were to endorse higher levels of depression,  $F(1,148) = 14.711, p < .005$ , loss of behavioral and emotional control,  $F(1, 148) = 8.01, p < .01$ , higher levels of anxiety,  $F(1,148) = 6.14, p < .05$ , and greater psychological distress,  $F(1,148) = 11.518, p < .01$ . Results also yielded statistical significance that supported the more out an individual is, the more likely they will experience higher positive affect,  $F(1,148) = 17.334, p < .001$ , stronger emotional ties,  $F(1,148) = 27.322, p < .001$ , higher overall life satisfaction,  $F(1,148) = 25.152, p < .001$ , and greater psychological well-being,  $F(1,148) = 22.316, p < .001$ .

**Hypothesis 3: Outness and drug and alcohol abuse.** A series of linear regression analyses were conducted in order to assess if outness predicted likelihood to endorse drinking/drug abuse problems. Results yielded that an individual of lower SES was more likely to have increased problems with alcohol,  $F(1,148) = 8.140, p < .01$ .

Also, higher level of outness displayed a trend towards higher level of problematic drinking,  $F(1,148) = 3.775, p = .054$ .

Table 4.

*ANOVA Between Total Outness and CAGE*

Model	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Regression	1	10.91	10.91	3.775	.054
Residual	148	472.94	2.90		
Total	149	438.86			

## **Chapter 4**

### **Discussion**

#### **Summary**

The aim of this study was to examine the extent to which level of outness impacted the likelihood that an individual engage in risky sexual behavior. To date, the majority of studies on protective factors have observed risky sexual behavior in heterosexuals. However, given that STI rates are increasing and most abundant amongst homosexual males (Centers for Disease Control and Prevention, 2014) and decreasing among females (Harper, 2007), examining the factors that contribute to homosexual male risky sexual behavior is crucial to preventing a public health crisis. This study was novel in that it sought to capture multiple factors that may contribute to homosexual male risky sexual behavior. This study assessed numerous demographic variables, attitudes, and perceived norms regarding risky sexual behavior, overall psychological well-being, and drug and alcohol abuse, all of which may be related to level of outness and contribute to the likelihood of engaging in such behaviors.

#### **Findings**

This study indicated that individuals who endorsed higher outness also endorsed higher levels of education. There are a plethora of factors that may take part in this finding. Firstly, education level may be related to an individual learning more about sexual orientation throughout their education, perhaps in sex education classes. Also, individuals who are more educated may have more access to resources in order to consult with others regarding disclosing their sexual orientation. An example of this may be

through on-line databases, such as blogs and forums, where an individual can discuss with others information regarding experiences of disclosing their sexual orientation. Level of education may also be related to self-esteem; individuals with a higher level of education may feel more respected and confident in their ability to disclose their sexual orientation. Lastly, individuals who are educated may have a large social network of individuals who are also educated and more accepting of sexual orientation status.

The current study also examined the extent to which level of outness influenced psychological symptomology including drug and alcohol abuse issues. In accord with previous research, it was anticipated that higher level of outness would correlate with higher psychological well-being (Legate, Ryan, & Weinstein, 2012). Research also shows that the ability to be open about one's sexual orientation and identity is associated with integration of personality, psychological health, and authenticity in interpersonal relationships as well as decreased psychological distress (Morris, Waldo, & Rothblum, 2001). Although there was not a significant correlation between outness and psychological well-being, there were significant correlations between outness and specific aspects of psychological well-being. The results display a relationship between higher level of outness and greater overall psychological well-being

Since greater levels of outness correlates with higher psychological well-being, it was hypothesized that individuals with higher levels of outness would be less likely to engage in risky sexual behaviors (King & Smith, 2004; Legate, Ryan, & Weinstein, 2012). Contrariwise, outness and the likelihood to engage in risky sexual behaviors did not show a significant relationship. Although the null hypothesis was accepted, this could be seen as an encouraging finding due to the fact that neither a positive nor negative

relationship was found. Level of outness may not predict nor prevent an individual from engaging in risky sexual behavior. This could be interpreted as level of outness is not a risk factor, though further research is needed to confirm this interpretation. Level of outness may not play a pivotal role in regards to influencing an individual's likelihood to engage in risky sexual behavior. This could be understood as a positive finding because an individual can choose to either disclose or conceal their sexual orientation without it affecting the likelihood to engage in future risky sexual behavior.

When delving further into level of outness, descriptive results highlighted that individuals are most openly out with their families. Based on attachment theory and research on adolescent development and parenting, secure attachment to parental figures—the sense that the child is understood, validated, cared for and protected by his or her parents—has been associated with a range of positive psychosocial manifestations, including better mental health, greater self-esteem, and better problem-solving skills (Diamond & Shpigel, 2014). Since attachment and support of parental figures is vastly important to an adolescent's growth and development, feeling securely attached may aid an individual in disclosing their sexual orientation. Coinciding with attachment theory and mental health, research indicates that higher levels of outness correlates with higher psychological well-being, thus secure attachment may result in more disclosure of sexual orientation to family, yielding in healthier psychological symptomology (Diamond & Shpigel, 2014).

Another finding of the current study is that individuals who were more likely to endorse clinically significant alcohol abuse were also more likely to endorse clinically significant substance abuse. This outcome is anticipated, due to the fact that alcohol and

substance use are frequently used in tandem. This study also showcased a trend in increased alcohol abuse for individuals who were more out. As previously mentioned, homosexual men, on average, engage in riskier health behaviors than heterosexual men (Hamilton & Mahalik, 2009). Also, higher level of outness may be related to an individual being more social, open, and likely to experience the phenomenon of gay culture by attending gay bars and meeting new people. Therefore, results indicating a relationship between higher levels of outness and higher levels of alcohol abuse may be indicative of homosexual men who are out have a larger social network and more likely to attend social gatherings where alcohol is consumed.

When understanding the population of this study, it is imperative to realize that the mean age of the participants was college-aged and the majority of the sample endorsed having some college experience. This may suggest that large portions of the participants are still enrolled in college. When examining previous research, rates of alcohol use are shown to increase after high school, especially among those who attend college (Chiauzzi, DasMahapatra, & Black, 2013). Literature has shown that the transition to college is an exceptionally high-risk time for individuals to engage in substance abuse. Research suggests that students tend to increase their drug and alcohol use within their first year of college (Chiauzzi, DasMahapatra, & Black, 2013). In accord with the above-mentioned findings, there are recommendations and limitations to the current study.

### **Recommendations and Limitations**

In regards to the current study and its findings, there are several recommendations for future research as well as limitations. Firstly, as previously mentioned, the current

study highlighted that the majority of participants were most out with their family members. Future researchers may benefit from assessing attachment styles among the sample of participants. This would aid researchers by addressing whether or not attachment style is related to the likelihood of an individual to disclose their sexual orientation. It may also be beneficial to know if individual attachment style changes throughout the lifetime and across different groups of people in an individual's life. For instance, if an individual changes their attachment style in relation to their parents, siblings, friends, coworkers, etc., this research may be able to assess if attachment style relates to the likelihood of disclosing sexual orientation to different groups of people.

The current study also displayed a trend towards a significant relationship between outness and alcohol abuse. Future research may want to ask specific questions regarding college status. Since research has shown that college-aged individuals tend to consume more alcohol and/or substances during their first years of college (Chiauzzi, DasMahapatra, & Black, 2013), researchers may benefit from understanding if this approach in significance is due to outness as a whole, or because the vast majority of the sample is college students. Future research may also benefit from utilizing a measure of outness that assesses an individual's perceived experience of disclosing their sexual orientation, and whether or not the disclosure was a positive or negative experience. This information may be imperative to know because individuals' perceived experience of their disclosure could be linked to a more positive or negative outcome. For instance, a positive experience of disclosure may be linked to more social acceptance, and therefore more positive psychological and behavioral antecedents. A more negative experience of

disclosing may be linked to more negative risk behaviors such as risky sexual behavior or alcohol and/or substance use.

Aside from the aforementioned recommendations, this study also had a number of limitations. One limitation of this study was the measures used to assess a number of the variables. In regards to the mental health measure, it incorporated both positive and negative symptomology in one assessment, making it difficult to screen for overall well-being. In order to eliminate the need to assess subscales of a measure, future researchers may want to find scales that are more comprehensive or specific. Recommendations for future research include utilizing separate measures that assess depression, anxiety, self-esteem, etc. Utilizing separate measures may enhance future researchers' ability to find true significance as well as more valid and reliable results. The screening tool for alcohol and substance abused posed another limitation such that the measures provided dichotomous answer choices and only assess for clinically significant alcohol and substance abuse, not use. A more comprehensive alcohol and drug screening measure that also assesses severity, frequency, and duration may be able to more accurately portray the influence that drugs and alcohol has on risky sexual behavior as well as level of outness and likelihood to disclose sexual orientation.

This study also struggles with a selection bias, meaning that the research over represents men who are out and does not include a proportion of individuals who do not wish to disclose information or their sexual orientation. Also, this study assumes that individuals are willing and open to discussing their sexual experiences, and relies on the honesty of each individual. The scale used to assess risky sexual behavior appeared to have high face validity, and a lie scale was not incorporated. Because of this, it was

difficult to determine if the sexual experiences each individual endorsed was true or overestimated. Also, the scale is focused solely on college students and/or students in general. Not all of the participants in this study were students.

Another limitation to the study is in regards to participant inclusion criteria. Future researchers may benefit from narrowing down inclusion criteria for participants. For instance, conducting research on only college students would eliminate such a large discrepancy in terms of diversity, by creating a more specific participant pool. Moreover, researchers may want to broaden their survey dissemination tactics instead of using one college campus and social media, reaching out to multiple college campuses may yield better results. Keeping the survey out to the public for more than two months may also result in more participant responses.

Expanding upon the limitations of the study, the population was lacking in diversity. There were 124 individuals who identified as white and 26 who identified as nonwhite. Results indicated that individuals who identified as white were more likely than individuals who identified as non-white to endorse clinically significant alcohol abuse. This could be indicative of the fact that the study was skewed in regards to ethnicity and race. Perhaps if the study were more diverse, the results would reflect that. Also, there was an overrepresentation of educated middle and/or upper class. In regards to marital status, only one participant was married, with the vast majority of individuals identifying as single. Also, the demographic variable of marital status had selections that were unclear to define. For example, a few of the responses for marital status included: dating, in a committed relationship, and unmarried but living with partner. These choices could be interpreted in many different ways, or may even represent the same choice.

Despite the aforementioned limitations, this study was the first to examine the influence of outness on the likelihood of homosexual men to engage in risky sexual behavior. This study was also innovative in the fact that multiple factors were assessed in order to determine what influences an individual's level of outness, such as mental health well-being, alcohol and drug/substance abuse, and risky sexual behavior. Because the prevalence of STIs are highest amongst the homosexual male population, it is necessary to research the factors that may protect these individuals from engaging in risky sexual behavior in order to educate the public and perhaps create a safety plan as well as better informed sex education programs. Further research on level of outness and more comprehensive forms of measurement assessing outness, mental health, risky sexual behavior, and alcohol and drug/substance abuse can help inform necessary educational programs as well as future researchers.

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## Appendix A

### Demographics

1. Age: \_\_\_\_\_
2. What is your gender?
  - a. Male
  - b. Female
  - c. Other
3. Race or Ethnicity
  - a. African-American/Black
  - b. Asian/Pacific Islander
  - c. Hispanic/Latino/Latina
  - d. Native American
  - e. White/Non-Hispanic
  - f. Multi-facial
  - g. Other
4. What is your level of education?
  - a. High School
  - b. Some College
  - c. Graduated 2 year College
  - d. Graduated 4 year College
  - e. Some Graduate School
  - f. Graduate Degree
  - g. Post-Graduate
5. What socio-economic class do you fit into?
  - a. Lower class
  - b. Lower-middle class
  - c. Middle class
  - d. Middle-upper class
  - e. Upper class
6. What is your marital status?
  - a. Married/civil union
  - b. Single
  - c. Dating
  - d. Unmarried but living with partner
  - e. Divorced
  - f. Widowed
  - g. Separated
  - h. Never been married
  - i. In a committed relationship

7. What is your sexual orientation?
  - a. Gay (homosexual) Male
  - b. Straight (heterosexual) Male
  - c. Gay (homosexual) Female
  - d. Straight (heterosexual) Female
  - e. Bisexual Male
  - f. Bisexual Female
  - g. Other

## Appendix B

### The Mental Health Inventory (MHI-38)

**INSTRUCTIONS:** Please read each question and tick the box by the ONE statement that best describes how things have been FOR YOU during the past month. There are no right or wrong answers.

1. How happy, satisfied, or pleased have you been with your personal life during the past month? (*Tick one*)

- 1" Extremely happy, could not have been more satisfied or pleased
- 2" Very happy most of the time
- 3" Generally, satisfied, pleased
- 4" Sometimes fairly satisfied, sometimes fairly unhappy
- 5" Generally dissatisfied, unhappy
- 6" Very dissatisfied, unhappy most of the time

2. How much of the time have you felt lonely during the past month? (*Tick one*)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

3. How often did you become nervous or jumpy when faced with excitement or unexpected situations during the past month? (*Tick one*)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

4. During the past month, how much of the time have you felt that the future looks hopeful and promising? **(Tick one)**

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

5. How much of the time, during the past month, has your daily life been full of things that were interesting to you? **(Tick one)**

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

6. How much of the time, during the past month, did you feel relaxed and free from tension?

**(Tick one)**

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

7. During the past month, how much of the time have you generally enjoyed the things you

do? **(Tick one)**

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time

- 4" Some of the time
- 5" A little of the time
- 6" None of the time

8. During the past month, have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory? (**Tick one**)

- 1" No, not at all
- 2" Maybe a little
- 3" Yes, but not enough to be concerned or worried about
- 4" Yes, and I have been a little concerned
- 5" Yes, and I am quite concerned
- 6" Yes, I am very much concerned about it

9. Did you feel depressed during the past month? (**Tick one**)

- 1" Yes, to the point that I did not care about anything for days at a time
- 2" Yes, very depressed almost every day
- 3" Yes, quite depressed several times
- 4" Yes, a little depressed now and then
- 5" No, never felt depressed at all

10. During the past month, how much of the time have you felt loved and wanted? (**Tick one**)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

11. How much of the time, during the past month, have you been a very nervous person? (**Tick one**)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time

- 4" Some of the time
- 5" A little of the time
- 6" None of the time

12. When you have got up in the morning, this past month, about how often did you expect to have an interesting day? (*Tick one*)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

13. During the past month, how much of the time have you felt tense or "high-strung"? (*Tick one*)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

14. During the past month, have you been in firm control of your behaviour, thoughts, emotions or feelings? (*Tick one*)

- 1" Yes, very definitely
- 2" Yes, for the most part
- 3" Yes, I guess so
- 4" No, not too well
- 5" No, and I am somewhat disturbed
- 6" No, and I am very disturbed

15. During the past month, how often did your hands shake when you tried to do something? (*Tick one*)

- 1" Always
- 2" Very often

- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

16. During the past month, how often did you feel that you had nothing to look forward to? (**Tick one**)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

17. How much of the time, during the past month, have you felt calm and peaceful? (**Tick one**)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

18. How much of the time, during the past month, have you felt emotionally stable? (**Tick one**)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

19. How much of the time, during the past month, have you felt downhearted and blue? (**Tick one**)

- 1" All of the time

- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

20. How often have you felt like crying, during the past month? (***Tick one***)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

21. During the past month, how often have you felt that others would be better off if you were dead? (***Tick one***)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

22. How much of the time, during the past month, were you able to relax without difficulty? (***Tick one***)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

23. How much of the time, during the past month, did you feel that your love relationships, loving and being loved, were full and complete? (***Tick one***)

- 1" All of the time

- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

24. How often, during the past month, did you feel that nothing turned out for you the way you wanted it to? (*Tick one*)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

25. How much have you been bothered by nervousness, or your "nerves", during the past month? (*Tick one*)

- 1" Extremely so, to the point where I could not take care of things
- 2" Very much bothered
- 3" Bothered quite a bit by nerves
- 4" Bothered some, enough to notice
- 5" Bothered just a little by nerves
- 6" Not bothered at all by this

26. During the past month, how much of the time has living been a wonderful adventure for you? (*Tick one*)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

27. How often, during the past month, have you felt so down in the dumps that nothing could cheer you up? (*Tick one*)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

28. During the past month, did you think about taking your own life? (***Tick one***)

- 1" Yes, very often
- 2" Yes, fairly often
- 3" Yes, a couple of times
- 4" Yes, at one time
- 5" No, never

29. During the past month, how much of the time have you felt restless, fidgety, or impatient? (***Tick one***)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

30. During the past month, how much of the time have you been moody or brooded about things? (***Tick one***)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

31. How much of the time, during the past month, have you felt cheerful, lighthearted?  
(***Tick one***)

- 1" All of the time

- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

32. During the past month, how often did you get rattled, upset or flustered? (**Tick one**)

- 1" Always
- 2" Very often
- 3" Fairly often
- 4" Sometimes
- 5" Almost never
- 6" Never

33. During the past month, have you been anxious or worried? (**Tick one**)

- 1" Yes, extremely to the point of being sick or almost sick
- 2" Yes, very much so
- 3" Yes, quite a bit
- 4" Yes, some, enough to bother me
- 5" Yes, a little bit
- 6" No, not at all

34. During the past month, how much of the time were you a happy person? (**Tick one**)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

35. How often during the past month did you find yourself trying to calm down? (**Tick one**)

- 1" Always
- 2" Very often
- 3" Fairly often

- 4" Sometimes
- 5" Almost never
- 6" Never

36. During the past month, how much of the time have you been in low or very low spirits? (***Tick one***)

- 1" All of the time
- 2" Most of the time
- 3" A good bit of the time
- 4" Some of the time
- 5" A little of the time
- 6" None of the time

37. How often, during the past month, have you been waking up feeling fresh and rested? (***Tick one***)

- 1" Always, every day
- 2" Almost every day
- 3" Most days
- 4" Some days, but usually not
- 5" Hardly ever
- 6" Never wake up feeling rested

38. During the past month, have you been under or felt you were under any strain, stress or pressure? (***Tick one***)

- 1" Yes, almost more than I could stand or bear
- 2" Yes, quite a bit of pressure
- 3" Yes, some more than usual
- 4" Yes, some, but about normal
- 5" Yes, a little bit
- 6" No, not at all

## Appendix C

### Student Sexual Risks Scale (SSRS)

Safer sex means sexual activity which reduces the risk of AIDS virus transmission. Using condoms is an example of safer sex. Unsafe, risky, or unprotected sex refers to sex without a condom, or to other sexual activity which might increase the risk of AIDS virus transmission. For each of the following items, check the response which best characterizes your opinion.

- 1) If my partner wanted me to have unprotected sex, I would probably "give in."
  - 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
  
- 2) The proper use of a condom could enhance sexual pleasure.
  - 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
  
- 3) I may have had sex with someone who was at risk for HIV/AIDS.
  - 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
  
- 4) If I were going to have sex, I would take precautions to reduce my risk of HIV/AIDS.
  - 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
  
- 5) Condoms ruin the natural sex act.
  - 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
  
- 6) When I think that one of my friends might have sex on a date, I ask them if they have a condom.
  - 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
  
- 7) I am at risk for HIV/AIDS.
  - 1.) Agree
  - 2.) Undecided
  - 3.) Disagree

- 8) I would try to use a condom when I had sex.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 9) Condoms interfere with romance.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 10) My friends talk a lot about "safer" sex.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 11) If my partner wanted me to participate in "risky" sex and I said that we needed to be safer, we would still probably end up having "unsafe" sex.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 12) Generally, I am in favor of using condoms.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 13) I would avoid using condoms if at all possible.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 14) If a friend knew that I might have sex on a date, he/she would ask me if I were carrying a condom.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 15) There is a possibility that I have HIV/AIDS.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 16) If I had a date, I would probably not drink alcohol or use drugs.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree

- 17) "Safer" sex reduces the mental pleasure of sex.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 18) If I thought that one of my friends had sex on a date, I would ask them if they used a condom.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 19) The idea of using a condom doesn't appeal to me.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 20) "Safer" sex is a habit for me.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 21) If a friend knew that I had sex on a date, he/she wouldn't care if I had used a condom or not.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 22) If my partner wanted me to participate in "risky" sex and I suggested a lower-risk alternative, we would have the "safer" sex instead.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 23) The sensory aspects (smell, touch, etc.) of condoms make them unpleasant.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 24) I intend to follow "safer sex" guidelines within the next year.
- 1.) Agree
  - 2.) Undecided
  - 3.) Disagree
- 25) With condoms, you can't really "give yourself over" to your partner.
- 1.) Agree

- 2.) Undecided
- 3.) Disagree

26) I am determined to practice "safer" sex.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

27) If my partner wanted me to have unprotected sex and I made some excuse to use a condom, we would still end up having unprotected sex.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

28) If I had sex and I told my friends that I did not use condoms, they would be angry or disappointed.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

29) I think "safer" sex would get boring fast.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

30) My sexual experiences do not put me at risk for HIV/AIDS.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

31) Condoms are irritating.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

32) My friends and I encourage each other before dates to practice "safer" sex.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

33) When I socialize, I usually drink alcohol or use drugs.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

34) If I were going to have sex in the next year, I would use condoms.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

35) If a sexual partner didn't want to use condoms, we would have sex without using condoms.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

36) People can get the same pleasure from "safer" sex as from unprotected sex.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

37) Using condoms interrupts sex play.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

38) It is a hassle to use condoms.

- 1.) Agree
- 2.) Undecided
- 3.) Disagree

## Appendix D

### The Outness Inventory (OI)

**Use the following rating scale to indicate how open you are about your sexual orientation to the people listed below. Try to respond to all of the items, but leave items blank if they do not apply to you.**

1 = person definitely does NOT know about your sexual orientation status

2 = person might know about your sexual orientation status, but it is NEVER talked about

3 = person probably knows about your sexual orientation status, but it is NEVER talked about

4 = person probably knows about your sexual orientation status, but it is RARELY talked about

5 = person definitely knows about your sexual orientation status, but it is RARELY talked about

6 = person definitely knows about your sexual orientation status, and it is SOMETIMES talked about

7 = person definitely knows about your sexual orientation status, and it is OPENLY talked about

0 = not applicable to your situation; there is no such person or group of people in your life

1. Mother	1	2	3	4	5	6	7	0
2. Father	1	2	3	4	5	6	7	0
3. Siblings (sisters, brothers)	1	2	3	4	5	6	7	0
4. Extended family/relatives	1	2	3	4	5	6	7	0
5. My <u>new</u> straight friends	1	2	3	4	5	6	7	0
6. My work peers	1	2	3	4	5	6	7	0
7. My work supervisor(s)	1	2	3	4	5	6	7	0
8. Members of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
9. Leaders of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
10. Strangers, new acquaintances	1	2	3	4	5	6	7	0
11. My <u>old</u> heterosexual friends	1	2	3	4	5	6	7	0

## Appendix E

### CAGE & CAGE-AID

*Directions:* Choose “yes” or “no” for each of the following questions.

#### **CAGE Questions**

1. Have you ever felt you should cut down on your drinking?  
YES or NO
2. Have people annoyed you by criticizing your drinking?  
YES or NO
3. Have you ever felt bad or guilty about your drinking?  
YES or NO
4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?  
YES or NO

#### **CAGE-AID Questions Adapted to Include Drug Use**

1. Have you ever felt you should cut down on your drug use?  
YES or NO
2. Have people annoyed you by criticizing your drug use?  
YES or NO
3. Have you ever felt bad or guilty about your drug use?  
YES or NO
4. Have you ever used drugs first thing in the morning to steady your nerves or to get rid of a hangover (eye-opener)?  
YES or NO