

The Dissertation Committee for Markus Miller Provence  
certifies that this is the approved version of the following dissertation:

**Construction and Validation of a Self-Report Measure  
of Gay Male Heterophobia**

**Committee:**

---

Aaron B Rochlen, Supervisor

---

Susan N Beretvas

---

Diane L Schallert

---

Ricardo C Ainslie

---

Douglas C Haldeman

**Construction and Validation of a Self-Report Measure  
of Gay Male Heterophobia**

by

**Markus Miller Provence, B.A.**

**Dissertation**

Presented to the Faculty of the Graduate School  
of the University of Texas at Austin  
in Partial Fulfillment  
of the Requirements  
for the Degree of

**Doctor of Philosophy**

The University of Texas at Austin  
August 2016

## **Acknowledgements**

This project would not have been possible without the generous support of mentors, family, and friends. Specifically, I would like to thank Dr. Aaron Rochlen for taking me on as an advisee more than six years ago; nurturing my research ideas through many iterations; and providing thoughtful, clear, and consistent guidance through the dissertation process. In addition, I'm grateful to Dr. Tasha Beretvas for fielding numerous statistics questions; to Dr. Diane Schallert and Dr. Rico Ainslie for providing encouraging and incisive feedback on my proposal; and to Dr. Doug Haldeman for providing invaluable expertise, even from several time zones away.

For their camaraderie, warmth, and vegetarian dinners, I thank Janna Miller and Samantha Gaies. What a gift it was to complete this long journey together with both of you. For motivating me to "get my ducks in a row" and apply to grad school in the first place, I thank Meg Peck. For their unflagging love, financial support, and perspective-bringing, I thank my parents, Kristin and Mike Huffman. Finally, for his kindness, optimism, wit, patience, and willingness to sing to me over the phone, I thank Elliott Powell.

# **Construction and Validation of a Self-Report Measure of Gay Male Heterophobia**

by

Markus Miller Provence, PhD

The University of Texas at Austin, 2016

SUPERVISOR: Aaron B Rochlen

Research has shown that the risk of mental health problems among gay men is disproportionately high, and may be linked to decreased social connectedness. The phenomenon of gay male heterophobia (gay men's fear and avoidance of heterosexual men), may partially contribute to this social disconnection. The theoretical basis for heterophobia stems from prior research on sexual stigma, minority stress, male gender role socialization, gay identity development, and trauma in gay men. The following study presents initial validation efforts towards a much-needed heterophobia scale. A mixed methodology, including focus groups, pilot tests, and online survey administration, was used to develop a 20-item self-report measure. Using exploratory factor analysis, three factors of heterophobia (disconnectedness, expected rejection, and unease/avoidance) were identified and described. Each of these factors was found to be valid and reliable within accepted ranges. Implications for future research and clinical practice, along with limitations, are provided.

## Contents

<b>Introduction.....</b>	<b>1</b>
Gay Men’s Mental Health Disparities .....	1
The Problem of Social Isolation .....	2
Gay Men and Straight Men: An Overlooked Social Dynamic .....	3
Theoretical Basis of Heterophobia.....	5
<b>Method .....</b>	<b>9</b>
Phase 1 – Focus Groups and Item Writing .....	9
Phase 2 – Pilot Testing.....	12
Phase 3 – Factor Analysis and Validity Assessment .....	13
<b>Results .....</b>	<b>22</b>
Factor Extraction.....	22
Item Selection .....	24
Reliability Estimates .....	27
Validity Estimates.....	28
<b>Discussion and Limitations .....</b>	<b>33</b>
<b>Extended Literature Review .....</b>	<b>44</b>
A Note on Definitions.....	44
Sexual Stigma .....	45
Prior Research on Heterophobia .....	46
Defining Heterophobia.....	47
Distinction from Psychopathology .....	48
Minority Fear of Majority Groups .....	49
Trauma in Gay Men .....	51
Heterophobia and Male Gender Role Socialization.....	54
Relationship Quality in Gay Men .....	56
Heterophobia and Gay Identity Development .....	57
Heterophobia Across Life Domains.....	58
Conclusion .....	60
<b>Appendices.....</b>	<b>61</b>
A. Informed Consent.....	61
B. Focus Group Interview Protocol .....	64
C. Survey Instructions and Demographic Questionnaire .....	65
D. Forty-Item Heterophobia Scale.....	67
E. Heterosexist Harassment, Rejection, and Discrimination Scale .....	69

F. Gay-Related Rejection Sensitivity Scale .....	71
G. Multigroup Ethnic Identity Measure – LGB Adaptation .....	73
H. Modern Homonegativity Scale .....	74
I. Social Desirability Scale.....	75
J. Factor Loadings for Forty Item Scale.....	76
K. Descriptive Statistics for Individual Items.....	78
L. Scree Plot.....	79
M. Heterophobia Scale – Final Version.....	80
<b>References .....</b>	<b>81</b>

## **Introduction**

### *Gay Men's Mental Health Disparities*

Research has consistently shown that the risk of mental health problems among gay men is alarmingly high. For example, depression and anxiety rates among gay men are estimated to be significantly higher than among heterosexual men (Fischgrund, Halkitis, & Carroll, 2012; Herek & Garnets, 2007; Lewis, 2009; Pachankis, Hatzenbuehler, Rendina, Safren & Parsons, 2015) and sexual minority women (Bostwick, Boyd, Hughes, & McCabe, 2010). Specifically, rates of depression for gay men are estimated at 8-13% versus 3-6% for heterosexual men (Lewis, 2009). Gay men also face an elevated risk of suicide. Estimates of suicidal ideation range from 40% to 55% among gay men versus 18% to 30% among heterosexual men (Lewis, 2009), while recent research suggests that sexual minority individuals, including gay men, are 2-3 times more likely to contemplate suicide than heterosexuals (Livingston et al., 2015). Further research estimates that 25% of men's self-harm behaviors are associated with same-sex attraction (McAndrew & Warne, 2010). Moreover, gay men have also been shown to engage in more risk-taking health behaviors than straight men, including higher rates of illegal drug use (Hamilton & Mahalik, 2009) and sexual compulsivity (Groves, Mustanski, & Parsons, 2010). Finally, an Institute of Medicine (2011) study suggested that sexual minority individuals have an increased risk of physical health concerns relative to heterosexuals.

### *The Problem of Social Isolation*

Sexual minority men also have commonly reported higher rates of isolation and loneliness, often the strongest predictors of depression and suicidality (Fenaughty & Harre, 2003; Joiner et al., 2009; McAndrew & Warne, 2012; Paul et al., 2002; Westefeld, Maples, Buford & Taylor, 2001). These risks are particularly pronounced among adolescents (Mudrey & Medina-Adams, 2006; Radkowsky & Siegel, 1997) and older individuals (Addis, Davies, Greene, MacBride-Stewart, & Shepherd, 2009). Studies have suggested that gay and lesbian adolescents are at increased risk for social isolation in high school settings (Mudrey & Medina-Adams, 2006), experiencing lower social status and less social support than their heterosexual peers (Hatzenbuehler, McLaughlin, & Xuan, 2012). Moreover, young gay males “may be particularly vulnerable to isolation ... in their interpersonal relationships” (Hatzenbuehler et al., 2012, p. 1189). Gay male undergraduates are more likely to be socially anxious and anticipate negative evaluation than heterosexual undergraduates, especially in situations in which stereotypically masculine behavior is valued (e.g. athletic competition, fraternity events) (Pachankis, Goldfried & Ramrattan, 2008). Further, gay men tend to perceive overall lower social support than lesbians, which is associated with lower resilience and greater impact of negative discrimination (Potoczniak, Aldea & DeBlaere, 2007). Conversely, research suggests that social support may serve as a powerful protective factor against mental distress in this population (Fenaughty & Harre, 2003; Paul et al., 2002).

The relationship between social support and mental wellbeing is well documented. For example, Relational Cultural Theory posits that people are naturally

driven to seek interpersonal connections, which in turn foster psychological health. Correspondingly, interpersonal *disconnection*, and especially experiences of oppression from others, tends to have damaging psychological effects (Jordan, 2009). Sexual minority individuals are especially vulnerable to feelings of disconnection in a number of domains. Mereish and Poteat (2015) argue that “[f]eelings of loneliness are particularly deleterious for sexual minorities because not only might they feel lonely in their overall heterosexist context, but they also may feel isolated from their peers and the LGBT community, a typical source of coping and resilience” (p. 434). Ultimately, dissatisfaction with social support in gay youths is associated with higher depression, generalized and social anxiety (Kuyper & Fokkema, 2011; Safren and Pantalone, 2006).

#### *Gay Men and Straight Men: An Overlooked Social Dynamic*

Given the importance of close relationships and the adverse effects of isolation, numerous studies have investigated potential sources of social support in gay men’s lives. Among these studies, a key trend is that gay men tend to have relatively few same-gender friendships (Diamond & Dube, 2002; Galupo, 2009; Ueno, 2010). Specifically, research suggests that gay men may have the lowest percentage of same-gender friendships (49%) compared to heterosexual men (76%), heterosexual women (80%) and lesbians (84%) (Schneider & Witherspoon, 2000). In addition, gay men are the least likely to have a best friend of the same gender (Diamond & Dube, 2002).

This persistent dynamic is often attributed to social taboos about sexual minorities. A dominant theory holds that heterosexual men may avoid forming

friendships with sexual minorities due to their own sexual stigma (Hatzenbuehler et al., 2012; Herek, 2000; Herek, Gillis, & Cogan, 2009; Jewell & Morrison, 2012).

Homonegative attitudes may be particularly pronounced among men who adhere to rigid, traditional gender norms (Levant, 2011) and may manifest in anger and acts of violence against gay men (Hudepohl, Parrott, & Zeichner, 2010). Further research has suggested that heterosexual men may simply have less knowledge about homosexuality (Mudrey & Medina-Adams, 2006). Thus, considering the problem of gay men's isolation, it is reasonable to suggest that heteronegative attitudes may play an important causal role.

A second possible explanation is that gay men may avoid or withdraw from friendships with heterosexuals due to their own fears or concerns about this sub-group. Haldeman (2006) has used the term *gay male heterophobia* to describe this phenomenon. In general, gay male heterophobia comprises a constellation of negative feelings and behaviors in gay men regarding straight men, particularly avoidance and anxiety. Haldeman further noted that heterophobia often arises from past experiences of prejudice and may serve an adaptive function. [Note: For the purpose of the current study, I focus specifically on *male-specific heterophobia*, that is, heterophobia experienced by gay men in relation to straight men. Further uses of the word "heterophobia" assume this definition. For a more in-depth discussion of theoretical bases for heterophobia, please see the Extended Literature Review.]

Importantly, while a useful framework, there is currently no well-established means for measuring heterophobia for research and or clinical uses. The proposed instrument development project intends to address this shortcoming in the literature.

### *Theoretical Basis of Heterophobia*

My understanding of heterophobia draws from several research domains. These include Meyer's (2003) Minority Stress Model, studies of gay men's trauma and interpersonal rejection experiences, and research on gay-related rejection sensitivity and internalized homonegativity. Each of these models is outlined in greater detail in the Literature Review and briefly described here. First, Meyer's (2003) model suggests that sexual minorities experience added life stressors as a result of their sexual minority status. These stressors come in two primary forms: distal (environmental) stressors such as interpersonal rejection and violence, and proximal (internal) stressors such as rejection sensitivity and internalized homonegativity (Meyer, 2003). Additional researchers have closely examined the relationship between these factors, proposing that *internal* stressors arise as a result of negative *environmental* events (Landolt, Bartholemew, Saffrey, Oram, & Perlman, 2004; Rivers, 2004; Pachankis et al., 2008) and may be associated with higher rates of depression and anxiety (Feinstein et al., 2012). A wide range of research demonstrates that sexual minorities experience negative environmental events at higher rates than heterosexuals, including increased risk of violence (FBI, 2002; Herek, 2009; Roberts et al., 2010) and interpersonal rejection (Mays & Cochran, 2001; Pachankis et al., 2008).

Drawing from the above research, I hypothesized that heterophobia is an overlooked *internal* stressor developed in gay men via exposure to adverse *external* events. In this sense, it shares some conceptual similarity with rejection sensitivity and internalized homonegativity. Further, following Meyer's Minority Stress Model (2003), I

theorized that heterophobia may contribute to gay men's overall stress, predicting adverse mental health outcomes such as depression and anxiety.

Research on sexual attitudes provides the theoretical basis for a hypothesized three-factor model of heterophobia. Herek et al. (2009) posit that most sexual attitudes have emotional, behavioral, and cognitive dimensions. To cite another example, Pachankis et al.'s (2008) research on Gay-Related Rejection Sensitivity repeatedly outlines the cognitive, affective, and behavioral dimensions of this construct. Similarly, Cass's model of Homosexual Identity Formation (1979; 1984) describes the identity formation process in cognitive, behavioral, and affective terms. The construct of heterophobia may be understood on a similar level. That is, it may be predicted through a person's thoughts ("That guy would never be my friend"), feelings (intense anxiety or panic when surrounded by heterosexual men), or behaviors (avoiding groups or settings where heterosexual men will be predominant). This three-factor framework was used to guide the development of potential survey items, which were then tested via standard instrument development processes.

In sum, an empirical study of heterophobia is critically needed as a means of better understanding a psychologically vulnerable and underserved population. Gay men are at particular risk for isolation, loneliness, rejection, and violence, which may in turn contribute to negative internal schemas (e.g., internalized homonegativity) associated with depression and anxiety. I theorize that heterophobia is a distinct and thus far overlooked conceptual lens, which promises to shed much-needed light on gay men's

relationships with straight men. Results from this study may provide fresh directions for future research and offer compelling possibilities for new interventions.

## **Method**

### *Phase 1 –Focus Groups and Item Writing*

#### **Participants:**

For the initial phase of the study, 16 gay male participants were recruited from the adult population in a large southwestern city. Recruitment occurred primarily through the use of convenience sampling and email requests to adult gay males within the local community. As an incentive to participation, participants were provided a free meal during the focus group session.

Of the 16 total focus group participants, 13 identified as White, one as African American, one as Asian, and one as Latino. Based on self-reports, one had completed a high school diploma, five were currently in college, three had completed undergraduate degrees, three were currently in graduate school, and four had obtained master's degrees.

#### **Procedures:**

Three separate focus groups were conducted, comprised of five, four, and seven members. Each of the focus group sessions lasted for approximately one hour, during which the researchers conducted an informal conversation related to heterophobia.

There were two primary purposes for this phase of the study. The first was to assess whether gay men identified with the construct of heterophobia, that is, whether the concept made sense and had relevance to their experiences and worldviews. As such, the focus group questions emphasized the participants' personal histories and experiences with straight men. For example, the researchers asked participants to reflect on the

quality of their relationships with straight male family members and friends. A second purpose of this phase was to gain more detailed data about the specific language that gay men use when talking about experiences with straight men. For example, the researchers found that some participants tended to favor the word “discomfort” or “unease” rather than “phobia” to describe their negative experiences with straight men. Given this preference, I carefully weighed whether or not the term “heterophobia” should be retained as the label for this construct. After consultation and deliberation, I decided to retain the term as a means of capturing more intense, debilitating manifestations of this construct described by certain group members. As discussed elsewhere in the study, the term is not intended to convey pathology or signify a diagnosis, and should be applied carefully when working with this vulnerable population. In particular, the term should not be confused with *homophobia*, which (as discussed in the literature review) captures a more pernicious set of attitudes held by a powerful majority population and tied to historical oppression.

Each focus group session was digitally recorded and transcribed, and a team of three researchers (one professor of counseling psychology, identifying as a straight male, and two graduate students in counseling psychology, both identifying as gay males) reviewed the transcripts. Based on these transcripts, and on a review of literature for similar attitude scales, I hypothesized three underlying factors of heterophobia: negative cognitions, negative emotions, and avoidant behaviors related to straight men. This team generated an initial list of approximately 40 items, with each researcher contributing and refining items. While most of these 40 items stemmed directly from the focus group

themes, a number of supplementary items were added in order to diversify the scale content.

Each item was written in a 7-point Likert-scale format, including “anchor” categories of “strongly disagree” (1) and “strongly agree” (7), with 4 representing “neutral.” DeVellis (2003) has noted that six options plus a neutral middle value is a good rule of thumb for designing Likert scales (p. 79). In order to encourage participants’ active reading of the items, the questionnaire comprised a roughly equal number of positively and negatively worded statements. Further, certain items were written to express moderate to strong opinions in order to create more differentiation between scores (DeVellis, 2003, p. 79). For example, the item “I don’t talk about dating with straight men” was worded in absolute rather than ambivalent terms (e.g. “On certain occasions, I prefer not to talk about dating with straight men”) so that it would elicit a broader range of responses from test-takers.

Most item content reflected themes emerging from focus groups. For example, several focus group members reflected that they are wary about interactions with straight men at the gym. This theme was captured in an item stating “The idea of going to a predominantly straight gym makes me anxious.” Focus group members also voiced a range of perspectives regarding their sense of relatedness with straight men, with several members expressing the belief that straight men would not understand them. This theme was represented in the item “I think most straight men could easily relate to me,” designed as a reverse-scored item on the final heterophobia scale.

## *Phase 2 – Pilot Testing*

### **Participants:**

For phase two of the study, a new group of 11 participants was recruited using the same inclusion criteria as in phase one, again using convenience sampling. Eight participants identified as White, two as Latino, and one as Asian. All participants had received at least some college education, two had completed PhDs in counseling psychology, and one was a current graduate student in counseling psychology.

### **Procedures:**

There were two key goals for this phase of the study: 1) to gain feedback regarding items' clarity, brevity, and flow, and 2) to ensure the content validity of the items, i.e. to confirm their relevance to the targeted construct. Electronic copies of the initial 45 items were distributed to the 11 pilot test participants, who were asked to evaluate each item on the above criteria. Several items flagged as problematic by multiple participants were to be revised or removed from the questionnaire, resulting in an initial Heterophobia Scale comprised of 40 vetted items (see Appendix B).

During pilot testing, several participants expressed confusion about the hypothetical scenarios presented in the items, which require test-takers to imagine themselves interacting with “straight men” in various settings. Participants disclosed that they sometimes do not know the sexual identity of the men they interact with, especially in unfamiliar social situations. While real-world social interactions, and even relationships, may indeed carry this sort of ambiguity, it was important to clarify the

exact type of interaction being tested. In order incorporate feedback and illuminate this point, a caveat was added to the survey directions, as follows: “When the term ‘straight men’ is used, I am referring to men you either *know to be* or *perceive to be* heterosexual.” The phrase “perceive to be” was added to capture situations in which gay men think, feel, and act as if they are interacting with a straight man, whether that man’s sexual identity is explicitly known.

In general, pilot test participants confirmed that scale items appeared relevant to the construct of heterophobia. However, several participants suggested that items be rephrased so that they could apply more generally to all gay men – for example, any item that assumed the subject had been in a relationship or visited a gym was revised to be more inclusive. It was also suggested that the scale be clearly defined as measuring “male-specific heterophobia” given that both the subjects and objects of this construct are men.

### *Phase 3 – Factor Analysis and Validity Assessment*

#### **Participants:**

In the third phase, a large nationwide sample was recruited via a combination of methods, including email requests, online advertisements, and compensated subject pools. Specifically, participants were recruited through Amazon’s Mechanical Turk (AMT), an emerging online service connecting researchers and paid survey participants. In a recent study, Bartneck, Duenser, Moltchanova, and Zawieska (2015) identified AMT as a “viable and economical” recruitment method for social science research, finding no

significant difference in survey responses between AMT participants and those recruited through more traditional online methods. However, Fleischer, Mead, and Huang argue that participants using AMT may answer items inattentively, and urge caution for researchers using this method (2015). Therefore, additional recruitment methods were used. As a supplement to AMT, targeted Facebook advertisements were used to promote the study to men who identified romantic interest in other men. As an incentive to participation, Facebook and convenience sampling recruits were entered into a raffle to earn three \$100 Amazon gift certificates. Participants entered this raffle by sending an email to a specially designated Gmail account, which was kept separate from the anonymously coded questionnaires. Three raffle winners were then chosen via a random number generator.

A total of 451 participants completed this phase of the study. After inspecting the data, thirteen cases were found to be incomplete. There was no clear pattern in missing responses, suggesting that the missing items occurred at random. The 13 incomplete cases were deleted, leaving a final total of 438 participants (see **Table 1** below). Of these, 59.4% identified as White, 20.5% as Asian, 8.4% as Hispanic or Latino, 5.9% as Black or African American, 3% as biracial or multiracial, 1.8% as American Indian or Alaska Native, and .5 % as Other. In terms of age, 52.6% were under 30 years old, 31.9% were between 30 and 39, 11.2% were between 40 and 49, 4.2% between 50 and 59, and 1% were 60 and older. Members were also asked to identify their highest educational level completed, with 32% completing high school, an additional 44.3% receiving at least a bachelor's degree, and a further 23.5% obtaining a graduate degree. Finally, participants

represented a range of geographic locations, with Texas (23.3%), New York (8%), California and Florida (5.9% each) containing the highest percentages of participants. An additional 7.5% of participants identified as currently living outside of the United States.

**Procedures:**

A set of six surveys was distributed to participants via Qualtrics, a survey-hosting website. First, participants read and acknowledged an Informed Consent document outlining potential risks and benefits of participation (see Appendix A). They were then asked to complete a Demographic Questionnaire, which included the aforementioned questions along with several questions addressing relationship history, childhood rejection experiences, and level of openness about their sexuality (see Appendix C). Participants then answered the question, “Do you self-identify as a gay male?” Any person who selected “no” was prevented from continuing with the survey. (Therefore, 100% of participants who completed the survey positively identified as gay men.) Following demographics, participants completed the 40-item, pilot-tested Heterophobia Scale.

Finally, five measures were administered to assess constructs that should be related or unrelated to heterophobia. These data were gathered to test for convergent and discriminant validity for the heterophobia scale. Relevant data for each of these measures, including inclusion criteria, hypothesized relationships, sample items, and validity/reliability information, is included below.

Table 1: Demographic Characteristics of Participants (N=438)

Demographic Characteristic	Percentage
<b>Race/Ethnicity</b>	
White	59.4
Asian	20.5
Hispanic / Latino	8.4
Black / African American	5.9
Biracial / Multiracial	3
American Indian / Alaska Native	1.8
Other (add your own)	.5
<b>Age Range (years)</b>	
18 to 30	52.6
30 to 39	31.9
40 to 49	11.2
50 to 59	4.2
60 and older	1
<b>Highest Education Completed</b>	
High School	32
Bachelor's Degree	44.3
Graduate Degree	23.5
<b>Geographic Location</b>	
Texas	23.3
New York	8
California	5.9
Florida	5.9
Other states	50.6
Non-U.S.	7.5

a. The **Heterosexist Harassment, Rejection, and Discrimination Scale (HHRD)** measures the extent to which an individual has experienced discrimination related to sexual minority status (Szymanski, 2006). The scale has been adapted for use with lesbians and gay men (Feinstein et al., 2012). Sample items from this scale include “How many times have you been treated unfairly by your family because you are gay?” and “How many times have you been verbally insulted because you are gay?” Each of the 14

items is rated on a 6-point Likert scale from 1 (never happened to you) to 6 (happened often, e.g. over 70% of the time). Overall scores for this scale are generated by averaging the score for each item, creating a final score range of 1-6. Higher mean scores signify a higher occurrence of heterosexist harassment, rejection and discrimination during the past year. Internal consistency (alpha) for the HHRD is reported at .9, whereas validity is supported through significant positive correlations with indices of psychological distress ( $r=.35$ ,  $p<.05$ ), anxiety ( $r=.37$ ,  $p<.05$ ) and depression ( $r=.25$ ,  $p<.05$ ) (Szymanski, 2006). [Note: Within the actual sample, Cronbach's alpha for this scale was estimated at .96.]

In theory, gay men with a higher number of negative past experiences with heterosexuals will be more likely to develop heterophobic attitudes. As discussed earlier, these attitudes can be conceptualized as a form of coping with painful past experiences. For example, if a gay man had experienced social shunning from straight men in high school as a result of his sexual identity, he may then experience unease, desire for avoidance, and expectations of future rejection. One would therefore expect to see strong positive correlation between the HHRD Scale scores and heterophobia scores.

b. The **Gay-Related Rejection Scale (RS)** assesses an individual's sensitivity to social rejection based on his or her sexual orientation (Pachankis et al., 2008). The scale consists of 14 items that describe potential social rejection scenarios. A sample scenario is as follows: "You and your partner are on a road trip and decide to check into a hotel in a rural town. The sign out front says there are vacancies. The two of you go inside, and the woman at the front desk says there are no rooms left." After reading the items, a

participant then evaluates the scenario on two levels: first, how *anxious/concerned* he would be if this scenario happened to him, and second, how *likely* it is that the event occurred because of his sexual orientation (Pachankis et al, 2008). Each item is rated on a 6-point Likert scale from 1 (very unconcerned / very unlikely) to 6 (very concerned / very likely). Overall RS scores are derived by summing the products of each item pairing (anxiety score x likelihood score), then dividing by 14 to create an “average product” ranging between 1 and 36. Higher RS scores signify a higher sensitivity to gay-related rejection. Internal consistency (alpha) for the RS is reported at .91, whereas validity is supported through significant positive correlations with indices of Fear of Negative Evaluation ( $r=.39, p<.01$ ), Perceived Gay Discrimination ( $r=.34, p<.01$ ) and Interpersonal Sensitivity ( $r=.42, p<.01$ ) (Pachankis et al., 2008). [Note: Within the actual sample, Cronbach’s alpha for this scale was estimated at .947.]

I anticipated that scores on the RS scale would correlate positively with Heterophobia scores. While the Rejection Sensitivity items are designed to capture a person’s sensitivity to all forms of gay-related rejection, regardless of the source, I expected men with high heterophobia scores to score highly here. That is, I anticipated that one’s sensitivity to rejection from straight men would also manifest in a measure of general sensitivity, and vice versa.

c. The **Multigroup Ethnic Identity Measure – LGB Version (MEIM - LGB)** assesses an individual’s level of identification with his/her particular ethnic group, as well as his or her level of acceptance/rejection of outside groups (Phinney, 1992). This

scale has been adapted for use with LGB group identification (Mohr & Kendra, 2011). Each of the 20 items is rated on a 4-point Likert scale from 1 (strongly disagree) to 4 (strongly agree), with 14 items measuring same-group orientation (SGO; e.g. “I have a strong sense of belonging to the LGB community”) and six items measuring other-group orientation (OGO; e.g. “I often spend time with straight people”). The overall scale score is derived by adding the 1-4 score for each item, representing a range from 20-80 (OGO items are reverse-scored). Higher MEIM-LGB scores signify a higher identification with the LGB community. Within an undergraduate sample, internal consistency (alpha) for the MEIM is reported at .9, with an alpha of .71 for the “other group orientation” scale. [Note: Within the actual sample, alpha for the overall scale was estimated at .777.] Validity for the MEIM is supported through significant positive correlation with the Rosenberg Self Esteem Scale ( $r=.25$ ,  $p<.01$ ) (Phinney, 1992).

I hypothesized that identification with the gay community would correlate positively with heterophobia subscales. As discussed in the literature review, men at certain stages of their gay identity development may identify strongly with the gay community while rejecting mainstream heterosexual culture, including straight men.

d. The **Modern Homonegativity Scale (MHS)** is designed to measure an individual’s negative attitudes toward sexual minorities (Morrison & Morrison, 2002). The MHS is sometimes used as an alternative to the Hudson and Ricketts (1980) Index of Homophobia because it captures a broader range of homonegative attitudes, uses a more modern vernacular, and contains 10 rather than 20 items (Rye & Meaney, 2010). Sample

items include “Gay men have become far too confrontational in their demand for equal rights” and “The notion of universities providing students with undergraduate degrees in Gay and Lesbian Studies is ridiculous.” Each of the 10 items is rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree); overall scale scores are represented by the sum of the items, ranging from 10 to 50. Higher MHS scores signify higher levels of homonegativity. Internal consistency (alpha) for the MHS is reported at .93. [Note: Within the actual sample, alpha for this scale was estimated at .913.] Within a male sample, validity for the MHS is supported through significant positive correlation with the Attitudes Towards Women Scale ( $r=.41$ ,  $p<.01$ ) and the Neosexism Scale ( $r=.59$ ,  $p<.01$ ) (Morrison & Morrison, 2002).

For this sample (gay-identified adult men), I conceptualized high scores on this scale as indicators of *internalized* homonegativity – that is, feelings of shame and discomfort with one’s gay identity, or rejection of one’s own value as a gay man. Though relatively little is known about how internalized homonegativity might impact gay men’s relationships with straight men, I speculated that highly homonegative gay men may have difficulty in such relationships due to fear of discovery. In theory, gay men who are less comfortable in their sexual identity may experience more unease or expectations of rejection from others, given their own ambivalence about being gay.

e. The **Social Desirability Scale – Short Form (SDS)** is designed to measure the extent to which a person presents him- or herself positively on self-report surveys (Strahan & Gerbasi, 1972). The short form was adapted from the original Social

Desirability Scale (Marlowe & Crowne, 1960) to facilitate shorter test-taking time. Each of the ten short-form items is rated true or false, and half are reverse-scored. Sample items include “You are always willing to admit it when you make a mistake” and “At times you have really insisted on having things your own way.” Higher SDS scores signify stronger desire to present oneself in a positive light. Internal consistency (alpha) for the SDS short form is reported at .70. [Note: For the actual sample, alpha for this scale was estimated less highly, at .573. Conclusions about discriminant validity should therefore be interpreted with some caution.] Validity for the short form of the SDS is supported through significant positive correlation with the original 20-item scale ( $r=.90$ ) (Fraboni & Cooper, 1989). I anticipated that social desirability would have no correlation with heterophobia scores.

## Results

### *Factor Extraction*

Following data collection, Bartlett's Test of Sphericity was used to provide evidence for sampling adequacy. This procedure tests the null hypothesis that the correlation matrix is an identity matrix (that is, a matrix in which all diagonal values are one and all other values are zero). For this sample, the Chi-square result for Bartlett's Test was 9923.98, meaning the null hypothesis should be rejected. In short, results of this test suggested that sampling adequacy had been reached and principal components analysis (PCA) was an appropriate statistical method for this study.

SPSS was used to conduct PCA for the complete data set (N = 438) of the 40-item Heterophobia Scale. The factors were then rotated using a Promax rotation. Netemeyer et al. (2003) argue that oblique rotation methods (e.g., Promax and oblimin) are more appropriate when factors appear to be correlated with one another, and may uncover more significant factors than non-oblique methods. A number of criteria were used to select an appropriate number of underlying factors for this scale, using an iterative process of testing various factor solutions. First, using the "eigenvalue-greater-than-1" rule, I identified six potential components above this cutoff. An inspection of the scree plot (Cattell, 1966), however, suggested that a three- or four-factor solution may be more appropriate, as the fourth, fifth and sixth factors accounted for relatively little additional variance after the first three (see **Appendix J**).

A four-factor solution was then tested, including analysis of individual item loadings on each factor. Item loadings above .5 were initially favored, with three factors

comprising the vast majority of these loadings. Factors one, two, and three were associated with high loadings ( $>.5$ ) on 38 of 40 items, whereas factor four was associated with only two highly loaded items. Therefore, a three-factor solution (as initially hypothesized) was tested; in this case, high item loadings were now distributed representatively between the three factors.

Grouped by their associated factor, items suggested clearly interpretable thematic categories. In order to determine these categories, individual items within each factor were inspected and labeled with a summary word or phrase. These phrases were then analyzed and compared until common themes emerged. The themes were then cross-referenced with relevant theory and research on heterophobia, and various factor labels were considered. Interestingly, the ultimate categories did not correspond to the hypothesized factors of negative cognitions, negative emotions, and avoidant behaviors. Instead, the items cohered into unexpected, but nonetheless meaningful, themes of Unease/Avoidance, Disconnectedness, and Expected Rejection. Correlations between each factor were examined and found to be within acceptable ranges. The correlation between Unease/Avoidance and Expected Rejection fell in the relatively high range (Pearson's  $r=.616$ ) but was low enough to suggest that these factors are still meaningfully distinct. This is corroborated by an inspection of the items themselves, which seemed conceptually related but also differentiated enough to warrant separate subscales. The full list of interfactor correlations is included in **Table 2** below.

Table 2: Correlations Between Factors

	Unease/Avoidance	Disconnectedness	Expected Rejection
Unease/Avoidance	1	.305	.616
Disconnectedness	.305	1	.303
Expected Rejection	.616	.303	1

### *Item Selection*

After factor extraction, I used several criteria to reduce the overall item count without losing high reliability. In considering the appropriate number of items, I followed Netemeyer et al.'s (2003) suggestion that shorter scales may minimize test-taker fatigue and guard against item redundancy. First, items were evaluated with regard to content validity within a given factor – that is, I deleted items that did not appear to be interpretable within the factor's conceptual theme. Further, items were examined for redundancy using the interitem correlation matrix. Items with very high correlations with one another (e.g. items 30 and 34,  $r=.769$ ) were flagged as candidates for deletion. A further criterion for selecting / deleting items was changes in certain key statistics when items were deleted, including percent of total variance explained, Cronbach's alpha. As a final guideline for selecting items, I examined item-to-total correlations and removed the lowest-scoring items.

A final list of 20 items was generated based on the above criteria. Pattern coefficients for each item were all substantial, ranging between .591 and .897. (See **Table 3** for a list of factor loadings on the revised 20-item scale. A full list of factor loadings for the 40 original items is provided in Appendix J. Items marked R are reverse-scored.) In

order to gauge each scale's internal consistency, the researchers calculated the Cronbach's alpha coefficient for each factor subscale. A brief description and rationale for each factor is included below.

*Table 3: Item Loadings and Factors for Revised Heterophobia Scale*

Item Content	F1	F2	F3
<b>Factor 1: Unease / Avoidance</b>			
7 When I'm the only gay man in a social setting, I feel unsafe.	<b>.799</b>	.021	.029
9 I become uneasy making small talk with straight men.	<b>.831</b>	.086	-.036
10 The idea of going to a predominantly straight gym makes me anxious.	<b>.828</b>	-.086	.011
12 I feel tense in my interactions with most straight men.	<b>.880</b>	-.017	-.009
14 I believe that a straight man may behave violently toward me if he knew that I was gay.	<b>.717</b>	-.067	-.147
34 I tend to avoid straight men.	<b>.862</b>	.019	-.048
40 When using a restroom, I am careful to keep my distance from straight men.	<b>.621</b>	.012	.096
<b>Factor 2: Disconnectedness</b>			
1 In social situations, I'm just as comfortable being with straight men as gay men. (R)	.101	<b>.774</b>	-.063
4 I feel equally free to be myself among gay men and straight men. (R)	-.054	<b>.709</b>	.031
13 It is easy for me to enjoy myself when spending time with straight men. (R)	.238	<b>.734</b>	-.120
15 Straight men share my basic values. (R)	-.152	<b>.742</b>	.070
17 I think most straight men could easily relate to me. (R)	-.304	<b>.712</b>	.323
29 I would readily join a group or club that included mostly straight men. (R)	.048	<b>.759</b>	-.055
31 I am equally likely to interact with gay or straight men at social gatherings. (R)	.087	<b>.759</b>	-.140
<b>Factor 3: Expected Rejection</b>			
19 When interacting with a straight man, I tend to wonder whether he will accept me.	.289	-.017	<b>.591</b>
21 Straight men wouldn't want to hear about my coming out experience.	.146	.010	<b>.689</b>
23 I think some straight men might feel uncomfortable if they know I'm gay.	.088	.018	<b>.709</b>
26 Straight men would judge me if they found out about my sexual orientation.	.197	.035	<b>.683</b>
27 Straight men would be put off by hearing the details of my sexual life.	-.221	-.097	<b>.897</b>
38 I don't talk about dating with straight men.	.074	.057	<b>.692</b>

(R) = Reverse Scored Item

*Factor 1: Unease/Avoidance.* The seven items in this subscale seemed to relate to negative affective states (anxiety, unease, tension) and desire for avoidance of straight men. Conceptually, this subscale might be said to capture gay men's more "visceral" or emotional reactions to straight men and attempts to cope with these emotions through physical separation. The mean score for this subscale is 3.43 and Cronbach's Alpha is .911. The most strongly endorsed item on this subscale was "When using the restroom, I am careful to keep my distance from straight men" at 3.82. The least strongly endorsed item was "I tend to avoid straight men" at 3.04.

*Factor 2: Disconnectedness.* The seven items in this subscale address gay men's feelings of closeness or estrangement in relation to straight men. Themes addressed in these items included gay men's sense of shared values with straight men and their openness to interacting with straight men socially. Items on this subscale were reverse-scored, with higher scores indicating less agreement with the item (and therefore higher disconnectedness from straight men). While it is interesting to note that all reverse-scored items loaded onto the same factor, they do appear to be thematically coherent, meriting their inclusion together under the Disconnectedness label. The mean score for this subscale is 3.23, suggesting that it is the least endorsed of the three factors. That is, participants in this sample were slightly less likely to identify disconnectedness to straight men than unease/avoidance or expectations of rejection. Therefore, disconnectedness seems to be a marginally less relevant concern. The most strongly endorsed item on this subscale (again, indicating *disagreement* with the statement) is "I think most straight men could easily relate to me" at 3.72, whereas the least strongly

endorsed item is “It is easy for me to enjoy myself when spending time with straight men” at 2.95. Finally, Cronbach’s alpha was estimated at .864.

*Factor 3: Expected Rejection.* This subscale measures the extent to which gay men anticipate straight men reacting negatively to their sexuality. These six items tend to capture negative appraisals about how straight men might respond to them when discussing sexuality or dating, or simply revealing that they are gay. Although this subscale has some conceptual similarity with Unease/Avoidance, a key difference is that the items here described cognitions about what *might* happen, whereas the unease/avoidance subscale primarily describes emotions and behaviors. The mean score for this subscale is 4.66, indicating that this subscale had the highest overall mean scores. Stated another way, respondents were overall more likely to endorse anticipating rejection from straight men than to endorse unease/avoidance or disconnectedness. Cronbach’s Alpha is for this subscale is .860. The most strongly endorsed item on this subscale is “Straight men would be put off by hearing the details of my sexual life” at 5.29, whereas the least strongly endorsed item is “Straight men wouldn’t want to hear about my coming out experience” at 4.39.

### *Reliability Estimates*

Alpha was calculated for each factor at various points in the iterative factor-analysis and item removal process. During this process, I remained mindful that a higher item count may artificially inflate internal consistency (Netemeyer et al., 2003), so I carefully tracked this statistic as each subscale became shorter. The final alpha

calculation for each subscale is provided in **Table 4**. These numbers provide evidence that each subscale demonstrated adequate levels of internal consistency and may be used independently.

*Table 4: List of Factors and Relevant Statistics*

Factor Name	Cronbach's Alpha	Factor Mean	# Items in Factor
1. Unease and Avoidance	.911	3.43	7
2. Disconnectedness	.864	3.23	7
3. Expected Rejection	.860	4.66	6

*Validity Estimates*

Finally, data were assembled into an intercorrelation matrix containing eight measures, including the three subscales and five additional measures. I calculated correlations based on factors rather than the overall heterophobia scale because each factor was judged to be relatively distinct. The correlational data (see **Table 5**) provides support for the convergent and discriminant validity for the three subscales. Individual correlations were tested for significance at  $p < .01$ .

*Convergent Validity*

a. As mentioned earlier, I expected Heterosexist Harassment, Rejection and Discrimination Scale scores to correlate positively with heterophobia scores. Within this sample, the correlations between HHRDS and Unease/Avoidance, Disconnectedness, and Expected Rejection were .664, -.049, and .391, respectively. Both of the positive correlations are significant at the .01 level and consistent with expectations. However, HHRDS scores did not significantly correlate with Disconnectedness scores, suggesting

that prior experiences of harassment, rejection, and discrimination do not necessarily relate to gay men's feelings of disconnection from straight men.

*Table 5: Intercorrelation Matrix including Subscales and Additional Measures*

	a) U/A	b) DIS	c) ER	HHRD	RS	LGBIM	MHS	SDS
a) U/A	1							
b) DIS	.305*	1						
c) ER	.616*	.303*	1					
HHRD	.664*	-.049	.391*	1				
RS	.495*	.076	.505*	.493*	1			
LGBIM	.171*	.095*	.115*	.236*	.328*	1		
MHS	.450*	-.224*	.202*	.562*	.229*	-.146*	1	
SDS	-.140*	.091	-.004	-.105*	-.072	-.053	-.186	1

\*= significant at 0.01 level (2-tailed). U/A = Unease/Avoidance; DIS = Disconnectedness; ER = Expected Rejection; HHRD = Heterosexist Harassment and Discrimination; RS = Rejection Sensitivity; LGBIM = Lesbian, Gay and Bisexual Identity Measure; MHS = Modern Homonegativity Scale; SDS = Social Desirability Scale.

b. As predicted, the Rejection Sensitivity scale showed a significant positive correlation with the Unease/Avoidance subscale ( $r=.495$ ) and the Expected Rejection subscale ( $r=.505$ ). As with the HHRDS, Rejection Sensitivity did not significantly correlate with the Disconnectedness subscale ( $r=.076$ ). These results suggest that gay men who tend to anticipate general rejection are also more likely to experience unease/avoidance around straight men and to expect rejection from straight men. However, generalized rejection sensitivity does not seem related to gay men's feelings of disconnection from straight men.

c. As mentioned in the Method section, I initially hypothesized that internalized homonegativity would correlate strongly with heterophobia. Indeed, scores on the Modern Homonegativity Scale had a statistically significant positive correlation with Unease/Avoidance ( $r=.450$ ) and Expected Rejection ( $r=.202$ ). Perhaps surprisingly, MHS scores had a statistically significant negative correlation with Disconnectedness ( $r=-.224$ ), suggesting that gay men with homonegative attitudes are more likely to endorse feelings of connectedness with straight men, even as they endorse unease/avoidance and expectations of rejection from this same group.

#### *Discriminant Validity*

d. I initially hypothesized that identification with the gay community (based on the MEIM-LGB scale) would positively correlate with heterophobia scores. In fact, there were weak but statistically significant correlations ( $p<.01$ ) between LGB group identification and Unease/Avoidance (.171), Disconnectedness (.095), and Expected Rejection (.115). Given the weakness of these correlations, this finding may provide tentative evidence for the *discriminant* validity of each factor. That is, one would expect the heterophobia subscales to measure clearly different constructs than identification with the gay community. Thus, very low correlations between the subscales and this measure help to establish that these differences do indeed exist.

e. Finally, I expected that the Social Desirability Scale would have no correlation with the heterophobia subscales. Strong positive correlations between SDS measures and psychological scales may be associated with questionable construct validity (Fraboni & Cooper, 1989). In this study, the SDS had no significant correlation with the Disconnectedness subscale ( $r=.091$ ) and the Expected Rejection subscale ( $r=-.004$ ). Further, the SDS had a statistically significant negative correlation with the Unease/Avoidance subscale ( $r=-.140$ ), suggesting that participants who are most likely to report unease and avoidance around straight men may be less concerned with presenting themselves in a socially desirable light. Finally, as mentioned earlier, I estimated Cronbach's alpha for this scale at  $.577$  within this sample, which means that this measure was less internally consistent than the other scales. Therefore, the above results should be interpreted with some caution.

#### *Demographic Variables and Additional Correlations*

As mentioned earlier, participants were asked to complete a Demographic Questionnaire including basic personal information and two questions about past experience, rated on a 1-7 Likert scale: 1) "I have been satisfied with my dating/relationship experiences with other men" and 2) "Growing up, I experienced rejection from straight men." Finally, respondents were asked to describe their level of openness about being gay ("Outness"), also on a 1-7 scale, from 1 ("Completely hidden from others") to 7 ("Completely open with others").

First, there was no significant correlation between age and disconnectedness or expected rejection. However, there was a weak but statistically significant negative correlation ( $r=-.101$ ) between age and Unease/Avoidance, suggesting that older men in this sample were slightly less likely to report anxiety or desire to avoid straight men.

Additional correlations between heterophobia and other items portray an interesting and conceptually meaningful set of patterns. As expected, there was a statistically significant positive correlation between all three subscales and childhood experiences of rejection from straight men. Conversely, men who reported higher levels of satisfaction in dating relationships with other men were significantly *less* likely to experience disconnection from straight men ( $r=-.249$ ). Finally, men described themselves as more open about their sexuality were less likely to score highly on all three subscales.

*Table 6: Intercorrelations Between Heterophobia, Subscales, and Additional Variables*

	a) U/A	b) DIS	c) ER	Rel. Satis.	Child. Rej.	Outness	Age
a) U/A	1						
b) DIS	.305*	1					
c) ER	.616*	.303*	1				
Relationship Satisfaction	-.013	-.259*	.017	1			
Childhood Rejection	.394*	.129*	.349*	.064	1		
Outness	-.104*	-.238*	-.134	.343*	.141*	1	
Age	-.101*	-.006	-.054*	.005	-.095*	.077	1

\*= significant at 0.01 level (2-tailed)

Correlations between subscale scores, and the above variables are provided in **Table 6** above. It should be noted that this data is based on relationships between scale scores and single items, rather than previously validated scales, and therefore should be interpreted with caution.

## Discussion

Overall, the results of this study provided tentative evidence for the reliability and validity of the Heterophobia Scale. The factor analysis results also suggested three underlying components of heterophobia, described as unease/avoidance, disconnectedness, and expected rejection. Internal consistency results for the subscales were all well within acceptable range (i.e., between .860 and .911). Intercorrelations between the factors were all significant, showing a positive relationship between each component, yet low enough to suggest that they were meaningfully distinct constructs. In the sections that follow, I provide evidence for the factors' convergent validity with other related scales. Further, I propose next steps for correlational and experimental research and suggest a number of clinical uses for the heterophobia subscales.

The most-endorsed subscale was Expected Rejection (mean score=4.66 on a 1 to 7 scale), indicating that concerns about straight men's judgment or lack of acceptance were the strongest component of heterophobia within this sample. Unease/Avoidance and Disconnectedness both had more moderate mean scores (3.43 and 3.23, respectively) and were both below the midrange "neutral" score of four, suggesting these factors were less concerning, though nonetheless present, for men in this sample.

The above neutral scores for Expected Rejection suggest that many gay men anticipate sexual stigma from straight men. That is, gay men may become more alert to the possibility of negative treatment in the presence of straight men. As discussed in the literature review, expected rejection may naturally stem from past experiences of judgment or exclusion, and may initially serve an adaptive function. A wide range of

research suggests that gay men are likely to have experienced rejection and violence as a result of being gay, beginning as early as childhood (Goldfried & Goldfried, 2001; Koblin et al., 2006; Lloyd & Operario, 2012; Mays & Cochran, 2001; Rivers, 2004; Roberts et al., 2012). Importantly, higher rejection sensitivity (including expected rejection from straight men) is associated with adverse outcomes including poorer relationship quality (Doyle & Molix, 2014; Peplau & Fingerhut, 2007; van Eeden-Moorefield & Benson, 2014) and increased depression and anxiety (Feinstein, Goldfried, & Davila, 2012). Thus, this particular factor is especially salient in the current discussion of gay men's mental health.

Results from the study provide convincing support for convergent and discriminant validity. For one, recent rejection experiences (captured by the HHRDS) were positively related to unease/avoidance and expected rejection. That is, gay men with more recent rejection experiences were also more likely to feel uneasy and avoidant around straight men. Surprisingly, I observed no significant correlation between HHRD and Disconnectedness, suggesting that negative past experiences with straight men may not relate to one's feelings of relatedness or estrangement from this group. One possible explanation for the lack of correlation may be the timeline given in the instructions of the HHRD Scale, which asks respondents to reflect on experiences *only within the past year*. It may be that Unease/Avoidance and Expected Rejection can form relatively quickly in response to recent harassment, whereas feelings of broader disconnection take longer to develop. This hypothesis is further bolstered by the observation that *childhood* rejection experiences (captured in the demographics section) correlated positively with all three

factors, including disconnectedness. That is, early rejection from straight men may harm one's sense of connectedness in a way that recent rejection does not. For example, gay males whose fathers are rejecting of their sexuality have a harder time attaching securely in adult relationships with other men (Landolt et al., 2004).

There was also evidence for convergent validity between heterophobia and identification with the gay community, captured by the MEIM-LGB scale. Specifically, I observed that gay men's level of identification with the gay community appears to have a mild positive relationship with the heterophobia factors. One possible explanation for this pattern is that identifying strongly "within-group" often means rejecting or ignoring a corresponding "other-group." In this case, gay men who interact more exclusively with other sexual minorities are less likely to have contact with straight men, which may maintain feelings of unease or disconnectedness. It is important to note that they may have legitimate reasons for doing so; that is, preferring contact with a demographically similar minority group can be seen as a healthy means of coping with mainstream marginalization. A similar phenomenon has been observed in ethnic minority individuals who, having experienced racial discrimination from White individuals and institutions, choose to associate primarily with other ethnic minorities (Mendoza-Denton, 2002).

Higher levels of unease, disconnectedness, and expected rejection may also be a function of one's stage of gay identity development. As illustrated in Cass's classic study (1984), and reaffirmed by White and Franzini (1999), gay men may consider their sexual identity, and membership within the gay community, more salient during the early stages of coming out. During this period, gay men may be more likely to reject or avoid

associations with an oppressive heterosexual majority. A corollary observation is that participants' level of "outness" (defined as their level of openness to others about being gay) was negatively correlated with all three subscales. That is, a gay man who is more public about his sexual orientation is less likely to avoid, feel disconnected from, or expect rejection from straight men. In this case, level of outness may correspond to a later stage of gay identity development, which often involves positive reevaluations of heterosexuals based on new interactions and experiences (Cass, 1984; White & Franzini, 1999).

Interestingly, there was little evidence of correlation between relationship quality and heterophobia factors. In fact, relationship quality had no correlation with unease/avoidance or expected rejection. However, relationship quality did negatively correlate with feelings of disconnection from straight men. In other words, gay men who had better relationships with *sexual minority* men were also more likely to feel connected with *straight* men. It is plausible that these participants simply have an easier time attaching to *all* men, regardless of sexual orientation. Indeed, research suggests that gay men with higher-quality romantic partnerships anticipate less gay-related rejection from others (Doyle & Molix, 2014; Peplau & Fingerhut, 2007; van Eeden-Moorefield & Benson, 2014). Given this finding, it is surprising to find no correlation between relationship satisfaction and expected rejection from straight men.

A number of important implications for future research and clinical practice can be noted. The clear next step for heterophobia research is a confirmatory factor analysis study to verify the three-factor structure of this scale. Following this step, researchers

may use the heterophobia subscales to investigate new questions about gay men's lives and relationships.

A crucial research direction would be to test hypothesized relationships between heterophobia factors and other relevant constructs. For example, it is important to determine the extent to which unease/avoidance of straight men contributes to overall feelings of loneliness/isolation in gay men's lives. Researchers might also test whether heterophobia factors serve as mediators between rejection experiences and key outcomes such as suicidality, depression, anxiety, stress, and life satisfaction. I would also like to see further investigation of the relationship between heterophobia factors and related constructs cited in this study, such as internalized heteronegativity (Greene & Britton, 2015) and rejection sensitivity (Feinstein, Goldfried & Davila, 2012). Finally, it would be useful to test for potential moderators of the relationship between rejection experiences and heterophobia factors. Moderators to be tested might include stage of gay identity development (Cass, 1984), level of trauma history (Roberts et al., 2010) and adherence to masculine norms (Levant, 2011). It may also be interesting to investigate relationships between heterophobia scores and other demographic factors such as income level or number of straight male friends.

Further, a number of experimental studies might be developed using validated heterophobia measures. For example, researchers could test whether one's level of disconnectedness responds to a certain type of treatment, such as increased positive contact with straight men. In this scenario, gay men might take a pre-test measuring disconnectedness, then participate in a twelve-week mixed-orientation men's therapy

group, followed by a post-test using the same measure. A significant decrease in disconnectedness scores might then provide tentative evidence for the effectiveness of this treatment. Other treatments might include participation in outdoor adventure therapy with straight men or engaging in interpersonal therapy with a straight-identified individual therapist.

A number of other compelling experimental studies may be developed using these subscales. First, given the increasing popularity of “third-wave” cognitive therapy approaches, it might be interesting to test whether therapeutic approaches such as Acceptance and Commitment Therapy (Villatte et al., 2016), mindfulness meditation (Shearer, Hunt, Chowdhury, & Nicol, 2015) and guided imagery (Jennings & Jennings, 2013) might impact unease/avoidance scores over time. From an educational perspective, researchers might test whether heterophobia factors predict academic performance in different kinds of learning environments. For example, a study could be designed to investigate whether expected rejection impacts test scores for gay students in classes with straight male teachers. While these ideas provide some initial suggestions for future research directions, it is hoped that this measure will be used in innovative ways.

This instrument development project also has preliminary implications for clinicians. Counselors working with gay men may use the construct of heterophobia to better understand their clients’ concerns in a number of major life domains, including work, school, family, and social relationships. In theory, counselors may even choose to use the heterophobia subscales as therapeutic assessment tools to help gay male clients gain greater insight into potential sources of anxiety and stress. For example, it may be

helpful to administer the measure to gay male clients who want to better understand their relationships with men, or who experience negative feelings in male-dominated environments but are not sure why. Further, counselors might review clients' responses on individual items to develop a clearer picture of how they experience specific situations. Counselors might also use the measures as part of a therapeutic assessment process, providing feedback to clients about areas of strength or difficulty. Such feedback could be used collaboratively to help establish or reevaluate goals for counseling. It is important to note that not all clients will score in the high range on this measure; indeed, results from this sample show that mean scores for two subscales (Unease/Avoidance and Disconnectedness) were below the "neutral" value of four. In certain cases, the scale might even be used positively to help clients notice areas of resiliency, openness, and connectedness to straight men.

Counselors might also use heterophobia research to develop interventions for clients who identify relationships with straight men as problematic in their lives. Promising techniques might be drawn from cognitive-behavioral, interpersonal, and mindfulness-based approaches to help clients gain greater awareness of heterophobic thoughts and feelings and move closer to their personal goals. Counseling with heterosexual therapists may be especially helpful in helping heterophobic clients face their fears in a safe environment. This theory echoes Gordon Allport's (1954) "contact hypothesis," which states that given the right set of conditions, personal contact between diverse groups can increase rapport and minimize bias (see also Pettigrew & Tropp, 2006). Extending this idea, Feinstein et al. (2002) succinctly describe how therapists can

create this kind of therapeutic change with gay clients: “[H]eterosexual mental health professionals who are affirmative of diverse sexual orientations have the potential to provide sexual minority clients with corrective learning experiences that counteract their expectations of rejection based on their sexual orientation” (p. 924). Straight male therapists who use a nurturing and gay-affirming style may have the most to offer heterophobic male clients in this regard. In developing trusting relationships with members of a previously feared group, gay men may develop “schemas of acceptance” that enhance their cross-orientation friendships and even their same-sex partnerships (Pachankis et al., 2008).

Heterophobia research may inform a number of diverse treatment modalities. In addition to individual counselors, group facilitators and couples counselors may also benefit from a better understanding of heterophobia factors in their gay male clients. Supportive contact with straight men in group counseling has been suggested as a potential “corrective experience” for gay men experiencing heterophobia (Provence et al., 2014). Further, counselors working with gay male couples might look to heterophobia research to gain more insight into potential sources of relationship strain. Given that higher stigma consciousness is associated with poorer relationship outcomes in gay men (Doyle & Molix, 2014; Peplau & Fingerhut, 2007; van Eeden-Moorefield & Benson, 2014), couples counselors working with this population may want to address signs of expected rejection from straight men.

Finally, it is hoped that this study and subsequent research on heterophobia will increase awareness of, and compassion for, gay men’s unique experiences among a more

powerful majority of straight men. Given the strong connections between heterophobia and both childhood and adult rejection experiences, there is clearly more work to be done in the domain of gay-affirmative advocacy and social justice. Social workers, teachers, school counselors, parents, employers, religious leaders and policy-makers would do well to better understand how these painful experiences go on to shape the worldview and wellbeing of gay men and boys in their midst.

### *Limitations*

Despite its strengths, the current study has several key limitations. First, the sample demographics disproportionately represent educated White men under 40, and do not capture a representative population of American gay men. Further, I did not collect income data for this sample and thus do not know how socio-economically diverse this sample may be. As such, the results from this study may not be fully generalizable to the population of interest and should be interpreted with caution.

A second study limitation has to do with methodology – that is, the primary source of data collection was through self-report questionnaires conducted online. Although the initial focus groups provide some methodological diversity, the third phase of the study is uniformly based on survey data. My interpretation of these data rests on the assumption that all participants were acting in good faith, both in their demographic self-identification and in their responses to survey questions. Because researchers were not present while participants completed the surveys, participants are more likely to have been distracted or rushed during this process. Further, this study design precluded using

behavioral observations or innovative empirical measures used in other multimethod studies, such as using skin conductance to measure anxiety (Tomash & Reed, 2015; Wagner & Abaied, 2016).

Third, although internal consistency of the scale and subscales was high, further reliability measures should ideally be taken to provide further statistical support for this scale. In particular, a measure of test-retest reliability would offer much-needed information regarding the scale's psychometric properties over time. Such a measure, while not within the scope of the current study, would also provide helpful information for clinicians and researchers who would like to reuse this scale with participants, for example before and after an intervention.

Fourth, the construct addressed in this study is restricted to a narrow range of attitudes – those experienced by gay men in relation to straight men. While this dynamic is undoubtedly an important one, it is by definition quite limited. For example, I exclude the experiences of lesbian, bisexual, and other sexual minority individuals who may also experience heterophobia. Further, the current study does not address gay men's feelings towards heterosexual *women*, which may be an important corollary to male-specific heterophobia. It is hoped that future studies broaden the current findings to include these overlooked populations and relationships.

It should be noted that the factor analysis in this study is merely exploratory, and more steps will need to be taken to confirm the proposed three-factor model. While the exploratory results are promising in terms of the validity and reliability of this scale, they are only preliminary. The clinical and academic utility of this scale and its factors will

therefore be limited until confirmatory factor analysis is accomplished. Finalizing this scale will require recruitment of a new large sample and subsequent analysis using a statistical modeling software, which unfortunately was not within the scope of this study.

## Extended Literature Review

### *A Note on Definitions*

A number of terms relevant to heterophobia have been used, sometimes interchangeably, in research literature. To provide clarity and consistency, a number of these terms are defined here. **Sexual minority** refers to a person who identifies their sexual orientation outside of heterosexuality (Meyer, 2003). This category has typically encompassed LGBTQ (lesbian, gay, bisexual, transgender, queer and questioning) individuals, but may also be extended to those identifying as pansexual, asexual, androgynous, or intersex. Outside of direct quotations, “sexual minority” will be used in place of “LGBTQ individual.” **Sexual identity** and **sexual orientation** will be used interchangeably here to refer to a person’s identified feelings of sexual attraction and romantic affection towards a given gender.

**Homonegativity, homophobia, heterosexism, and sexual stigma** all refer to negative feelings towards sexual minorities, and may each be preceded by the word “**internalized**” to denote feelings towards oneself. The terms homonegativity and sexual stigma will be used most often in this study, as they tend to be the terms most commonly used in recent research literature (Feinstein, Goldfried, & Davila, 2012; Herek et al, 2009; Jewell & Morrison, 2012; Rye & Meaney, 2010). Finally, **rejection sensitivity** (Feinstein et al., 2012) and **stigma consciousness** (Doyle & Molix, 2014) have both been applied to minority individuals to describe expectations of discrimination, stigma, and rejection from the majority group. Conceptually, the development and maintenance of

these attitudes may have much in common with the development and maintenance of heterophobia.

### *Sexual Stigma*

In order to develop a clear theoretical understanding of heterophobia, it is helpful to place the construct within a wider context of social attitudes related to sexuality. Herek et al. (2009) propose a unified model of sexual stigma (negative attitudes towards sexual minorities), which distinguishes *structural* sexual stigma (heterosexism) from *individual* stigma. According to this model, individual stigma exists in three primary forms, and may exist within heterosexuals and sexual minorities alike. *Enacted stigma* includes individual acts of rejection or aggression against sexual minorities. *Internalized stigma* includes adopting sexual stigma as part of one's own beliefs. In a heterosexual person, this form of stigma takes the form of *homophobia* or *homonegativity* (discussed above). Finally, *felt stigma* refers to an individual's awareness of the *potential* for stigma in various situations (Herek et al., 2009). For example, a gay person may experience anxiety about attending a church that has been unwelcoming to gay people in the past. Importantly, Herek et al. (2009) note that the experience of felt stigma can lead sexual minorities to enact "self-preservation strategies" to minimize the risk of rejection, including self-isolation and avoiding intimate friendships with same-gender peers.

Although there is some evidence to suggest that sexual stigma is on the decline in the United States (Pew, 2011), homonegative attitudes still persist with some frequency (Feinstein, Goldfried, & Davila, 2012; Jewell & Morrison, 2012; Szymanski, 2006).

Recent research on homonegativity has suggested a shift in the basis of these attitudes from “old-fashioned” religious and moral concerns to more “modern” objections to homosexuality (Morrison & Morrison, 2002). These include beliefs that sexual minorities are too strident in their attempts to change the status quo, or that they inflate the importance of their sexual orientation in order to gain attention (Morrison & Morrison, 2002). The Modern Homonegativity Scale (MHS) reflects this shift in thinking about the construct, including such items as “Gay men should stop shoving their lifestyle down other people’s throats” and “Many gay men use their sexual orientation so that they can obtain special privileges” (Morrison & Morrison, 2002; Morrison et al., 2005). The construct captured in these items is clearly distinguishable from the more traditional version of “homophobia” captured in the Hudson & Ricketts (1980) scale, which contains items such as “I would feel that I had failed as a parent if I learned my child was gay.”

Old-fashioned homophobia and modern homonegativity both diverge greatly from heterophobia. As seen in the literature, heterophobia captures a unique set of phenomena, including fear, distrust, and avoidance, experienced by a sexual minority group in the midst of a powerful majority. For this reason, a new and unique heterophobia scale is strongly needed.

#### *Prior Research on Heterophobia*

Past studies of heterophobia have addressed the construct without benefit of a validated measure. Most notably, White and Franzini (1999) conducted an exploratory survey of “heteronegative” attitudes in sexual minorities. In order to assess the

prevalence of such attitudes, the authors adapted the Hudson and Ricketts Index of Homophobia (IHP), reversing language of the scale items. For example, “I would feel comfortable working closely with a male homosexual” was translated to “I would feel comfortable working closely with a male heterosexual” (White & Franzini, 1999). Unfortunately, such a translation may not fully capture this distinct construct. Based on a review of relevant literature, I propose several theoretical underpinnings for heterophobia that clearly distinguish it from “reverse homophobia.”

### *Defining Heterophobia*

While a basic definition of heterophobia is provided in the introduction section of this dissertation, a more detailed description is given here. First, I proposed that heterophobia is a relatively stable trait, consistent across a number of life domains. For example, a person with elevated heterophobia would likely experience this phenomenon in several settings, including school/work, family relationships, and social life. It is hypothesized that heterophobia scores are unlikely to change without intervention. Therefore, one’s scores on a heterophobia measure should demonstrate high test-retest reliability, assuming the scale exhibits sound psychometric properties. Further, I argue that heterophobia exists along a spectrum; there is no threshold for being “heterophobic” or “not heterophobic.” Rather, a heterophobia scale score is meant to suggest the *intensity* of this construct for a given individual.

In addition, I anticipate that heterophobia scores may respond to intervention. Haldeman (2006) has noted that individual treatment may be helpful in reducing

unnecessary fear and avoidance of heterosexual men. In a clinical case study, Haldeman outlined a course of treatment for heterophobia that included discussion of its origin in the client's life, analysis of its current usefulness/necessity, and desensitization and coping strategies. Haldeman further noted that a crucial factor in the client's treatment was the "corrective experience" of a warm relationship with a male therapist. A recent study of gay men in men's group therapy also illustrates the theme of corrective experiences. That is, participants noted that the experience of connecting intimately to heterosexual men (often for the first time) was helpful in reducing their heterophobia (Provence, Rochlen, Chester, & Smith, 2014). Half of respondents noted that their heterophobia decreased from the start to the end of group therapy.

#### *Distinction from Psychopathology*

Although interventions for heterophobia may indeed be useful for certain men, it is important to distinguish heterophobia from genuine clinical psychopathology. Diagnostically, the term "phobia" has often been used to convey an irrational or excessive fear of a given stimulus. For example, the Diagnostic and Statistical Manual 5 criteria for a "Specific Phobia" stipulates that diagnosable phobias "must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning" (APA, 2003, p. 199). Examples given of "impairment" include turning down job opportunities due to a feared stimulus associated with a certain job, such as flying. The DSM 5 further states that such fears must be "'out of proportion' to the actual danger that the object or situation poses" (p. 199).

In the case of heterophobia, the line between “rational” and “irrational” may not be as clear-cut. In some cases, heterophobia may prevent gay men from pursuing potentially fulfilling relationships or life opportunities – for example, befriending an accepting heterosexual coworker, or working in a service organization that it is primarily composed of heterosexual men. However, as discussed below, the adoption and maintenance of heterophobia may in fact be adaptive at other times – for example, in the U.S. military under “Don’t Ask, Don’t Tell.” Gay men enlisted in the military during this period faced expulsion if they risked revealed their gay identity to an entirely straight-presenting community (Wilder & Wilder, 2012). Therefore, this term should not be used to pathologize or diagnose individuals, but rather to suggest a specific set of psychological events and experiences.

### *Minority Fear of Majority Groups*

The phenomenon of sexual minorities *anticipating* prejudice from a dominant majority group is well documented in research literature. As noted earlier, Meyer’s (1995) Minority Stress Model includes *perceived* stigma (“expectations of rejection or discrimination”) as a primary stressor among minority groups. He notes that historically oppressed groups may adopt an attitude of fear and suspicion in their dealings with a powerful majority. Further, in his classic study of prejudice, Allport (1954) notes that “vigilance” may be a key trait among minority individuals, adding that this cautionary stance may be adaptive in many situations.

The concept of “racial discrimination fear,” also known as “race-related rejection sensitivity” has also been proposed in recent literature to describe a key experience among racial and ethnic minorities (Herda, 2016; Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002). Specifically, Herda (2015) reported that a majority of Black and Hispanic participants endorsed experiencing racial discrimination fear (i.e. fear of prejudice from White individuals or groups) in the past year. Herda also proposed that such fear develops primarily through *direct personal experience*, *indirect/vicarious experience* (especially through one’s parents), and *environmental signals* such as hostile signs or slogans. He further noted that past experiences of racial discrimination are associated with diminished self-concept and decreased trust in justice and educational systems (2015). A further consequence of racial discrimination fear is that minority individuals may choose to limit contact with the White majority (Mendoza-Denton, 2002).

Although research on marginalized individuals’ fear of the powerful majority is well established, there are no empirical studies of gay men’s attitudes toward heterosexual men. It may be that such attitudes serve as a mediating variable between experiences of sexual stigma and feelings of depression and anxiety. Prior research has suggested that similar attitudes such as gay-related rejection sensitivity and internalized homonegativity play a similar role in connecting discrimination experiences and mental health problems (Feinstein et al., 2012; Pachankis et al., 2014; Rivers, 2004). Rivers has shown that internalized homonegativity stems from rejecting societal messages about nonheterosexual identities, provoking feelings of worthlessness and shame, which are

then linked to higher rates of depression (2004). Further research has suggested that sexual minorities with more discrimination experiences are more likely to feel negatively about their sexual identities (internalized homonegativity) and to anticipate continued future discrimination (rejection sensitivity) (Feinstein et al., 2012). Importantly, internalized homonegativity has been directly linked to increased depression and anxiety (D'Augelli, Grossman, Hershberger, & O'Connell, 2001).

### *Trauma in Gay Men*

Heterophobia may develop, in part, from past events of rejection and violence. A recent study estimates the lifetime prevalence of trauma exposure (including sexual and physical abuse and physical/verbal attacks from strangers) at 85.20% for gay men in a large (N=34653) national sample (Roberts et al., 2010). Such events may cause profound and lasting changes in the survivor's belief systems. In her classic study of trauma, Judith Herman (1992) proposed that trauma survivors often experience altered beliefs about themselves, others, and the world. When the perpetrators of trauma are heterosexual men, gay survivors may notice a posttraumatic shift in feelings of emotional or physical safety around this group – in short, heterophobia. For the purposes of this study, gay-related traumas may be roughly grouped into *experiences of rejection* and *experiences of violence/abuse*.

#### *Experiences of Rejection*

Experiences of rejection from a heterosexual minority may sometimes fall short of the diagnostic threshold for qualifying traumatic events in the DSM-5 (APA, 2013).

However, I propose that such experiences may have a cumulative negative affect over time, and may still have a potent impact on gay men's attitudes toward heterosexuals. Indeed, sexual minorities tend to endorse higher rates of daily discrimination, including being treated as substandard and receiving chronic messages of "mistrust, fear, and disrespect" (Mays & Cochran, 2001).

For many gay men, the first experience of gay-related rejection comes from one's parents. Children who endorse feeling disapproval from their parents about themselves, rather than their actions, are more likely to see themselves as shameful and unworthy of love (Rohner, 2004). Even well-intentioned parents may still communicate disapproval of a child's sexual identity through displays of sadness, shame and anger during the child's coming out (Goldfried & Goldfried, 2001; Henderson, 1998). In a 2008 study, parental approval moderated gay-related stressors and negative mental health outcomes such as depression and anxiety in a sexual minority sample. Further, parental rejection had significant positive correlation with internalized homophobia and rejection sensitivity, and a significant negative correlation with assertiveness (Pachankis et al., 2008).

Rejection experiences from fathers may be particularly impactful for young gay males. In a study of attachment styles among adult gay men, Landolt et al. (2004) found that paternal, but not maternal, rejection independently predicted attachment anxiety in adulthood. That is, gay males who experience disapproval from fathers about their sexual identity may be more prone to insecurity in adult relationships with other men.

According to Bowlby's (1969) seminal research on human attachment, children develop "internal working models" about future relationships based on early connections

with caregivers. Children who do not attach securely with caregivers may develop two primary attachment styles: anxious (e.g. increased vigilance and rejection sensitivity) and avoidant (e.g. pulling away from intimacy in relationships to manage anxiety) (Bartholemew, 1990). Gay men may be particularly vulnerable to early rejection from fathers, which may contribute to insecure adult attachments with other men (Isay, 1990).

As young gay males enter school and move through adolescence, they are also likely to experience rejection from peers. In a study of peer relationships among sexual minority youths, Rivers (2004) found that 53% of participants contemplated self-harm or suicide as a result of bullying and alienation from peers. Further, 26% of adult participants endorsed continued psychological distress from gay-related bullying experienced in high school (Rivers, 2004).

#### *Experiences of Violence / Abuse*

In addition to interpersonal rejection, gay men are more likely to experience trauma in the form of physical abuse and violent attacks (Herek, 2009; Koblin et al., 2006). Rates of physical violence (e.g. domestic violence or being beaten up, mugged, or stalked) are estimated at 50.69% for gay men versus 24.95% for heterosexual men (Roberts et al., 2012). The same study found that gay men and lesbians tended to experience their worst traumatic event an average of five years earlier than their heterosexual counterparts. Further, sexual minorities in this study were twice as likely to have experienced childhood maltreatment than the reference group (Roberts et al., 2012). Finally, in a sample of men who have sex with men (MSM), more than one out of four reported experiencing childhood sexual abuse (Lloyd & Operario, 2012).

Gay men are also targeted for hate crimes at disproportionately high rates. A 2002 report by the Federal Bureau of Investigation reported that 16.4% of all “single-bias” hate crimes were focused on sexual minorities. Out of these incidents, approximately two-thirds were directed specifically at gay-identified men (FBI, 2002). Importantly, hate crime victims are more likely to develop negative beliefs about themselves and the world (Herek et al., 2009), and sexual minorities who experience hate crimes are at a higher risk for internalized heteronegativity (Noelle, 2002). In sum, gay men not only experience trauma at disproportionately high rates, but also experience a unique set of adverse psychological outcomes from these events.

#### *Heterophobia and Male Gender Role Socialization*

The experience of heterophobia in gay men may be tied, in part, to the phenomenon of male gender role socialization. Research on men’s psychology has shown that a dominant masculine ethos, while showing some signs of decline, still holds powerful sway over male attitudes and behaviors (Levant, 2011) on gay and straight men alike. Scholars have developed a Male Role Norms Inventory (MRNI-R) to assess a person’s adherence to these norms (Levant, 2011). Subscales of this inventory include Self-Reliance, Restrictive Emotionality, Avoidance of Femininity, and Negativity toward Sexual Minorities (Levant, 2011). Studies have suggested that adherence to traditional masculinity may impact the quality of male-male social relationships, limiting intimacy and emotional expressiveness between male friends (Levant, 2011; Migliaccio, 2009).

An additional subset of research has shown that traditional masculine norms powerfully impact gay men. It is proposed that gay men are likely to experience especially pronounced “gender role strain” due to the tension between their gay identities and the expectations placed on them as men (Levant, 2011). Other studies have illustrated the adverse effects of traditional masculine norms on gay men, including negative effects on self-image (Sanchez, Greenberg, Liu, & Vilain, 2009). More specifically, gay men may experience devaluation from heterosexuals – and even other gay men – if their behavior is deemed insufficiently masculine (Sanchez et al., 2009; Sanchez & Vilain, 2012). In some cases, pressure to be masculine is associated with negative feelings about being gay (Sanchez & Vilain, 2012). Interestingly, adherence to traditional masculinity predicts low relationship quality for both gay and straight men, though gay men tend to identify less strongly with traditional masculine norms (Wade & Donis, 2007).

Generally speaking, most men, regardless of orientation, are brought up under the same male gender socialization process, which places a taboo against closeness between men (Levant, 2011; Wade & Donis, 2007). For gay men, whose sexual feelings hinge on this very closeness, this taboo may particularly distressing (Levant, 2011; Sanchez et al., 2009). In fact, studies have shown that gay men may avoid pursuing friendships with straight men due to fear that their efforts will be misconstrued as sexual advances (Provence et al., 2014). Such a situation may be merely awkward, or may even incite feelings of anger/violence in the recipient (Hudepohl et al., 2010). For gay men, heterophobia may be one defense against this negative outcome.

This study suggests that heterophobic attitudes may emerge from two complementary sources: first, gay men are socialized under a general taboo against male-male intimacy, which inhibits forming close relationships; and second, they learn to proceed cautiously in social settings due to the threat of sexual stigma, particularly from heterosexual men. Therefore, high levels of heterophobia may be predicted by strong adherence to traditional masculine norms and frequent past experiences of sexual stigma.

### *Relationship Quality in Gay Men*

A number of researchers have investigated similarities and differences between same-sex and cross-sex couples. In general, these studies have suggested that dynamics in both types of couples are largely the same, with some noted differences depending on the construct being addressed (Gottman et al., 2003; Houts & Horne, 2008; Kurdek, 2004). For example, financial investments in a partnership are less likely to predict long-term commitment in gay men versus straight men (Greene & Britton, 2015). Another key finding is that relationship satisfaction in gay couples is less dependent on affection or agreement about financial decisions, and more dependent on low negative affectivity, compared to straight couples (Houts & Horne, 2008).

Significant recent research has been conducted on the specific factors underlying relationship quality in gay men. For example, relationship quality has also been positively associated with key variables such as income level, social connectedness, and self-acceptance (Elizur & Mintzer, 2003). Another key finding is that gay men with lower stigma consciousness are more likely to perceive their romantic partnerships as satisfying

and stable, and tend to predict their relationships lasting longer (Doyle & Molix, 2014; Peplau & Fingerhut, 2007; van Eeden-Moorefield & Benson, 2014). That is, men who anticipate less gay-related rejection are more likely to feel securely attached to their partners. Internalized homonegativity has been identified as another key factor in gay male relationships, associated with poor relationship quality (Frost & Meyer, 2009), insecure attachment (Sherry, 2007), and decreased expectations of relationship longevity (Otis, Rostosky, Riggle, & Hamrin, 2006). Based on these results, I hypothesize that high levels of heterophobia may also diminish relationship quality in gay couples.

#### *Heterophobia and Gay Identity Development*

One's level of sexual identity development may be another important factor in understanding the construct of heterophobia. Cass's (1979) Homosexual Identity Formation Model, while widely adapted and tested (Cass 1984; Marszalek, Caswell, Dunn, & Jones, 2004) remains the standard theoretical model for understanding the sexual identity development process. Cass (1979; 1984) theorizes that there are roughly six stages to this process: 1) identity confusion, 2) identity comparison, 3) identity tolerance, 4) identity acceptance, 5) identity pride, and 6) identity synthesis. She notes that the fifth stage, identity pride, includes an increasing awareness of stigma and victimization from a heterosexual majority. This stage often involves splitting the world into homosexuals, seen as "important and creditable," and heterosexuals, now "discredited and devalued" (Cass, 1984, p. 152). [This stage of identity development is captured in Mohr & Kendra's LGB adaptation of the Multiethnic Multiple Identity Scale,

described in the Goals and Hypotheses Section (Mohr & Kendra, 2011; Phinney, 1992).] In the sixth and final stage, identity synthesis, the developing person reevaluates this dichotomy based on positive feedback from heterosexuals. Further, his or her sexuality becomes an important, but no longer necessarily central, facet of his/her identity (Cass, 1984).

Additional scholars have proposed that a gay person's attitudes towards heterosexuals may evolve depending on his or her stage of gay identity development. For example, White and Franzini (1999) theorize that individuals at earlier stages of identity development may have more negative attitudes toward heterosexuals, because their sense of membership in an oppressed minority is more salient to their identity at that time.

#### *Heterophobia Across Various Life Domains*

In developing a heterophobia scale, it was important for us to consider how this construct might manifest itself in various life domains. Prior literature has provided some evidence for the appearance of gay male heterophobia in one's family of origin, in the workplace, and in other organizational/team settings.

Although limited in scope, some research has suggested that gay men may experience heterophobia among male family members. For example, gay males may be less likely to come out to their fathers than to their mothers, partly due to fear of negative reactions (D'Augelli, Hershberger, & Pilkington, 1998; Savin-Williams & Ream, 2003). Some literature has indicated that fathers are in fact more likely to react negatively to a son's disclosure of homosexuality: in a study of gay adolescents' coming out

experiences, a quarter of fathers' responses were rated "rejecting" – over twice as many as mothers' responses (D'Augelli et al., 1998). After coming out, gay sons tend to perceive their fathers as less supportive than mothers (Savin-Williams & Ream, 2003), though there is some evidence that this trend is changing. Indeed, several recent studies report a mix of positive/affirming and negative/rejecting interactions between gay sons and heterosexual fathers (Horn & Wong, 2014). Nonetheless, it is clear that heterophobia may manifest itself in father-son relationships prior to adulthood.

The workplace is another key domain in which gay men experience heterophobia. In particular, gay men working in "masculinized" industries, such as law enforcement or firefighting, may feel increased stress and diminished safety (Collins, 2013). Studies suggest that gay men in these industries are likely to experience rejection due to a hegemonic masculinity that discourages the expression of gay identity (Collins, 2013; Embrick, Walther, & Wickens, 2007). Continuing this point, Rumens (2010) argues that gay men may hide their sexuality at work when the workplace culture is one of "normative heterosexual masculinity" (p. 1546), increasing the potential for heterophobic feelings.

Some gay men also appear to exhibit heterophobia in organizational/team settings. A growing subset of research focuses on gay men's experience on athletic teams. For example, gay athletes may face feelings of conflict and fear related to the discovery of their sexuality (Cavalier, 2011; Zamboni, Crawford, & Carrico, 2008). In particular, gay men may experience particular anxiety in the locker room because of their intimate proximity to heterosexual men (Cavalier, 2011). Indeed, several authors have

noted that male athletes may endorse more negative attitudes towards sexual minorities (Roper & Halloran, 2007; Worthen, 2014). However, Cavalier notes that the experiences of gay men in athletics tend increasingly to be positive or at least neutral; she argues that the popular *perception* of sexual stigma in sports settings, while powerful, may not always capture the lived experiences of gay men (Cavalier, 2011). Anderson (2011) has also observed that the hegemonic masculinity typically associated with sports has (in certain settings) given way to an “inclusive masculinity” that allows for a broader expression of sexuality, including a greater openness to gay athletes.

### *Conclusion*

In summary, gay male heterophobia is a multidimensional set of negative responses to heterosexual men. Theoretically, the construct is expected to be stable over time for a given individual, but may be amenable to individual or group treatment. It is distinct from other sexual attitudes such as internalized homonegativity, and may be adaptive in certain environments. A person who receives a high score on the heterophobia scales would be expected to exhibit this trait across a variety of life domains, which may include (but are not limited to) family life, social organizations/teams, and academic/work settings.

## **Appendix A:**

### **Informed Consent Form**

This study is conducted by:

Mark Provence, BA; Matt Chester, BS; and Aaron Rochlen, PhD

The University of Texas at Austin

*Counseling Psychology, Sanchez Bldg 262*

Email: mark.provence@utexas.edu

You are being asked to participate in a research study. This form provides you with information about the study. Your participation is entirely voluntary. You can refuse to participate or stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time and your refusal will not impact current or future relationships with UT Austin or participating sites. By navigating forward from this page, you are consenting to participation in the study.

**The purpose of this study is to learn about gay men's attitudes and experiences. Specifically, we are interested in understanding gay men's relationships with heterosexual men.**

**If you agree to be in this study, we will ask you to do the following things:**

Read this form and provide informed consent. Answer a demographic /brief historical questionnaire. Complete a series of seven short surveys. The total estimated time to complete these surveys is approx. 20-30 minutes. Participation in the study, although voluntary, consists of all activities described. Participants who do not complete all components will have their data removed from the study and securely destroyed.

**Total estimated time to participate** in study is 20-30 mins.

**Risks of being in the study**

Potential risks for the study include possible emotional response to the material and possible loss of confidentiality. This study may involve risks that are currently unforeseeable. If you wish to discuss the information above or any other risks you may experience, you may ask questions now or call the Principal Investigator listed on the front page of this form.

**Benefits of being in the study**

The study does not provide direct benefit to participants. Potential benefits to this academic field include new information related to gay men's mental health outcomes.

**Compensation:**

Subjects may receive direct compensation for participation in one of two forms: 1) \$1 disbursement through completing the survey on Mechanical Turk or 2) \$100 gift card awarded to 3 randomly chosen subjects completing the survey on Qualtrics.

**Confidentiality and Privacy Protections:**

The data resulting from your participation will be carefully coded with a pseudonym during analysis to avoid association with your identity. All hard copies of data will be stored in a locked file, and all electronic copies will be stored in a password-protected computer file. The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin and members of the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a

subject. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

**Contacts and Questions:**

If you have any questions about the study please email the principal investigator at [mark.provence@utexas.com](mailto:mark.provence@utexas.com). If you have questions later, want additional information, or wish to withdraw your participation email the researchers conducting the study. Their names and e-mail addresses are at the top of this page.

This study has been reviewed and approved by The University Institutional Review Board and the study number is 2015-05-0063. For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512) 471-8871 or email at [orsc@uts.cc.utexas.edu](mailto:orsc@uts.cc.utexas.edu).

## **Appendix B:**

### **Focus Group Interview Protocol**

(Note: questions varied slightly due to time limitations and flow of group conversation)

1. What are your general impressions of straight men? How would you describe them?
2. What are some thoughts or feelings that come up for you when interacting with straight men?
3. How does the setting or context impact your interactions with straight men?
4. What are some early experiences that shaped your expectations of interactions with straight men?
5. How have your impressions of straight men changed over time?
6. What signs do you look for when deciding whether or not to open up to a straight man?
7. [After explaining heterophobia concept.] To what extent do you relate to the concept of heterophobia?
8. What language or terminology might you use to describe this concept?

## **Appendix C:**

### **Survey Instructions and Demographic Questionnaire**

#### **Thank you for participating in this survey!**

- You will be asked a number of questions relating to your experiences as a gay man.
- There are **seven short blocks** of questions, each with its own scale and set of directions.
- You can track your progress using the **progress bar** at the bottom of the screen.
- Information on **entry into lottery** is provided at the end of the survey.

1. What is your age? \_\_\_\_\_

2. How do you identify your race/ethnicity?

American Indian or Alaska Native

Asian

Black or African American

Hispanic or Latino

Native Hawaiian or other Pacific Islander

White

Biracial or Multiracial

Other \_\_\_\_\_ (add your own)

3. In what state do you currently reside? \_\_\_\_\_

4. What is the highest educational level you have completed?

Did not finish high school

High school degree or GED

Associate's Degree

Some college

Bachelor's Degree

Some graduate school

Graduate Degree

5. Do you self-identify as a gay male?      Yes                  No

6. Which rating best describes your level of openness about being gay?

<b>Not at all open</b>		<b>Somewhat open, somewhat hidden</b>			<b>Completely Open</b>	
1	2	3	4	5	6	7

7. I have been satisfied with my dating/relationship experiences with other men.

<b>Strongly Disagree</b>			<b>Neutral</b>		<b>Strongly Agree</b>	
1	2	3	4	5	6	7

8. Growing up, I experienced rejection from straight men.

<b>Strongly Disagree</b>			<b>Neutral</b>		<b>Strongly Agree</b>	
1	2	3	4	5	6	7

## Appendix D:

### Forty-Item Heterophobia Scale

**Directions:** Please answer each question using the following 1-7 scale.

Strongly Disagree		Neutral			Strongly Agree	
1	2	3	4	5	6	7

Some questions will ask you to imagine yourself in hypothetical situations. When the term "straight men" is used, we are referring to men you either *know to be* or *perceive to be* heterosexual.

1. In social situations, I'm just as comfortable being with straight men as gay men.
2. I would enjoy myself more at a gay bar than a straight one.
3. I find myself more relaxed when talking about everyday activities with other gay men.
4. I feel equally free to be myself among gay men and straight men.
5. I feel uncomfortable changing in locker rooms with primarily straight men.
6. I tend to feel "on guard" when interacting with unfamiliar straight men.
7. When I'm the only gay man in a social setting, I feel unsafe.
8. I would be just as comfortable discussing my sexual relationships with a straight man as I would with a gay man.
9. I become uneasy making small talk with straight men.
10. The idea of going to a predominantly straight gym makes me anxious.
11. I am comfortable showing physical affection in front of straight men.
12. I feel tense in my interactions with most straight men.
13. It is easy for me to enjoy myself when spending time with straight men.
14. I believe that a straight man may behave violently toward me if he knew that I was gay.

15. Straight men share my basic values.
16. A straight man would not want to hear about my dating life.
17. I think most straight men could easily relate to me.
18. If he knew about my sexual orientation, a straight man would not want to be my friend.
19. When interacting with a straight man, I tend to wonder whether he will accept me.
20. Many straight men are allies for the gay community.
21. Straight men wouldn't want to hear about my coming out experience.
22. Straight men wouldn't want to talk about their interests with me.
23. I think some straight men might feel uncomfortable if they know I'm gay.
24. Most straight men wouldn't enjoy going to a gay wedding.
25. Most straight men would vote for a gay man in a political election.
26. Straight men would judge me if they found out about my sexual orientation.
27. Straight men would be put off by hearing the details of my sexual life.
28. I have relatively few straight male friends.
29. I would readily join a group or club that included mostly straight men.
30. I tend to avoid situations in which I could be alone with straight men.
31. I am equally likely to interact with gay or straight men at social gatherings.
32. If I were joining a gym, I would have no preference on whether the clients are gay or straight men.
33. I wouldn't initiate a casual conversation with a man I think is straight.
34. I tend to avoid straight men.
35. Sexual orientation is not a factor in whether I will befriend someone.
36. If I were in a locker room, I would intentionally avoid interacting with other men so as not to appear gay.
37. I tend to downplay my sexual orientation in predominantly straight environments.
38. I don't talk about dating with straight men.
39. In professional settings with straight men, I'm open about the fact that I'm gay.
40. When using a restroom, I am careful to keep my distance from straight men.

**Appendix E:**

**Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS)**

(Szymanski, 2006; Feinstein et al, 2012)

**Directions:** For each question, please circle a number that best reflects your experience in the last year. The rating scale is as follows:

*Never happened to you*

*Happened often  
(over 70% of time)*

1            2            3            4            5            6

1. How many times have you been treated unfairly by teachers or professors because you are gay?
2. How many times have you been treated unfairly by your employer, boss, or supervisors because you are gay?
3. How many times have you been treated unfairly by your co-workers, fellow students, or colleagues because you are gay?
4. How many times have you been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, bank tellers, mechanics, and others) because you are gay?
5. How many times have you been treated unfairly by strangers because you are gay?
6. How many times have you been treated unfairly by people in helping jobs (by doctors, nurses, psychiatrists, caseworkers, dentists, school counselors, therapists, pediatricians, school principals, and others) because you are gay?
7. How many times were you denied a raise, a promotion, tenure, a good assignment, a job, or other such thing at work that you deserved because you are gay?

8. How many times have you been treated unfairly by your family because you are gay?
9. How many times have you been called a heterosexual name like faggot, fairy, or other names?
10. How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because you are gay?
11. How many times have you been rejected by family members because you are gay?
12. How many times have you been rejected by friends because you are gay?
13. How many times have you heard anti-gay remarks from family members?
14. How many times have you been verbally insulted because you are gay?

**Appendix F:**

**Gay-Related Rejection Sensitivity Scale (RS)**

(Pachankis et al., 2008)

**Directions: For each item below, please answer these two questions using the following scale.**

A. How *anxious/concerned* would you be if this situation occurred due to your sexual orientation?

*Very unconcerned* 1                      2                      3                      4                      5                      6 *Very concerned*

B. How *likely* is it that this event occurred due to your sexual orientation?

*Very unlikely* 1                      2                      3                      4                      5                      6 *Very likely*

1. You bring a male partner to a family reunion. Two of your old-fashioned aunts don't come talk to you even though they see you.
2. A 3-year old child of a distant relative is crawling on your lap. His mom comes to take him away.
3. You've been dating someone for a few years now, and you receive a wedding invitation to a straight friend's wedding. The invite was addressed only to you, not you and a guest.
4. You go to a job interview and the interviewer asks if you are married. You say that you and your partner have been together for 5 years. You later find out that you don't get the job.
5. You are going to have surgery, and the doctor tells you that he would like to give you an HIV test.
6. You go to donate blood and the person who is supposed to draw your blood turns to her co-worker and says, "Why don't you take this one?"

7. You go get an STD check-up, and the man taking your sexual history is rude towards you.
8. You bring a guy you are dating to a fancy restaurant of straight patrons, and you are seated away from everyone else in a back corner of the restaurant.
9. Only you and a group of macho men are on a subway train late at night. They look in your direction and laugh.
10. You and your partner are on a road trip and decide to check into a hotel in a rural town. The sign out front says there are vacancies. The two of you go inside, and the woman at the front desk says that there are no rooms left.
11. You go to a party and you and your partner are the only gay people there. No one seems interested in talking to you.
12. You are in a locker room in a straight gym. One guy nearby moves to another area to change clothes.
13. Some straight colleagues are talking about baseball. You force yourself to join the conversation, and they dismiss your input.
14. Your colleagues are celebrating a co-worker's birthday at a restaurant. You are not invited.



**Appendix H:**

**Modern Homonegativity Scale (MHS)**

(Morrison & Morrison, 2002; Morrison et al, 2005)

**Directions: Please rate each item on the following scale.**

**Strongly Disagree**

**Strongly Agree**

1

2

3

4

5

1. Many gay men (lesbian women) use their sexual orientation so that they can obtain special privileges.
2. Gay men (Lesbian women) seem to focus on the ways in which they differ from heterosexuals and ignore the ways in which they are the same.
3. Gay men (Lesbian women) do NOT have all the rights they need.\* [Reverse scored]
4. The notion of universities providing students with undergraduate degrees in Gay and Lesbian studies is ridiculous.
5. Celebrations such as “gay pride day” are ridiculous because they assume an individual’s sexual orientation should constitute a source of pride.
6. Gay men (Lesbian women) should stop shoving their lifestyle down other people’s throats.
7. Gay men (Lesbian women) should stop complaining about the way they are treated in society and simply get on with their lives.
8. Gay men (Lesbian women) have become far too confrontational in their demand for equal rights.
9. In today’s tough economic times, tax payers’ money should not be used to support gay (lesbian) organizations.
10. If gay men (lesbian women) want to be treated like everyone else then they need to stop making such a fuss about their sexuality or culture.

**Appendix I:**

**Social Desirability Scale**

(Strahan & Gerbasi, 1972)

**Directions: Please answer True or False to the following questions.**

1. You are always willing to admit it when you make a mistake.
2. You always try to practice what you preach.
3. You never resent being asked to return a favor.
4. You have never been annoyed when people expressed ideas very different from your own.
5. You have never deliberately said something that hurt someone's feelings.
6. You like to gossip at times.
7. There have been occasions when you took advantage of someone.
8. You sometimes try to get even rather than forgive and forget.
9. At times you have really insisted on having things your own way.
10. There have been occasions when you felt like smashing things.

**Appendix J:****Factor Loadings for 40-Item Heterophobia Scale**

Item	F1	F2	F3
1. In social situations, I'm just as comfortable being with straight men as gay men. (R)	.203	.719	-.127
2. I would enjoy myself more at a gay bar than a straight one.	.209	-.064	.278
3. I find myself more relaxed when talking about everyday activities with other gay men.	.305	-.016	.246
4. I feel equally free to be myself among gay men and straight men. (R)	.022	.684	-.040
5. I feel uncomfortable changing in locker rooms with primarily straight men.	.573	-.111	-.086
6. I tend to feel "on guard" when interacting with unfamiliar straight men.	.521	.094	.187
7. When I'm the only gay man in a social setting, I feel unsafe.	.777	.030	.043
8. I would be just as comfortable discussing my sexual relationships with a straight man as I would with a gay man. (R)	-.330	.639	.348
9. I become uneasy making small talk with straight men.	.794	.083	.005
10. The idea of going to a predominantly straight gym makes me anxious.	.783	-.056	.042
11. I am comfortable showing physical affection in front of straight men. (R)	-.298	.501	.280
12. I feel tense in my interactions with most straight men.	.825	.000	.044
13. It is easy for me to enjoy myself when spending time with straight men. (R)	.277	.712	-.140
14. I believe that a straight man may behave violently toward me if he knew that I was gay.	.668	-.015	.182
15. Straight men share my basic values. (R)	-.049	.706	.025
16. A straight man would not want to hear about my dating life.	.132	-.004	.708
17. I think most straight men could easily relate to me. (R)	-.142	.658	.251
18. If he knew about my sexual orientation, a straight man would not want to be my friend.	.638	.023	.327
19. When interacting with a straight man, I tend to wonder whether he will accept me.	.357	.003	.556
20. Many straight men are allies for the gay community. (R)	-.113	.560	.175
21. Straight men wouldn't want to hear about my coming out experience.	.271	.022	.607
22. Straight men wouldn't want to talk about their interests with me.	.692	-.049	.206
23. I think some straight men might feel uncomfortable if they know I'm gay.	.259	.009	.556

24. Most straight men wouldn't enjoy going to a gay wedding.	.315	-.086	.519
25. Most straight men would vote for a gay man in a political election. (R)	-.459	.604	.275
26. Straight men would judge me if they found out about my sexual orientation.	.322	.044	.608
27. Straight men would be put off by hearing the details of my sexual life.	-.056	-.105	.772
28. I have relatively few straight male friends.	.544	.123	.187
29. I would readily join a group or club that included mostly straight men. (R)	.152	.737	-.103
30. I tend to avoid situations in which I could be alone with straight men.	.812	.124	.044
31. I am equally likely to interact with gay or straight men at social gatherings. (R)	.189	.724	-.218
32. If I were joining a gym, I would have no preference on whether the clients are gay or straight men. (R)	.204	.633	-.256
33. I wouldn't initiate a casual conversation with a man I think is straight.	.610	-.078	.102
34. I tend to avoid straight men.	.864	.024	-.028
35. Sexual orientation is not a factor in whether I will befriend someone. (R)	.318	.595	-.401
36. If I were in a locker room, I would intentionally avoid interacting with other men so as not to appear gay.	.479	-.029	.325
37. I tend to downplay my sexual orientation in predominantly straight environments.	.203	-.051	.548
38. I don't talk about dating with straight men.	.191	.033	.657
39. In professional settings with straight men, I'm open about the fact that I'm gay. (R)	-.302	.344	.377
40. When using a restroom, I am careful to keep my distance from straight men.	.583	.030	.135

(R) = Reverse-scored item.

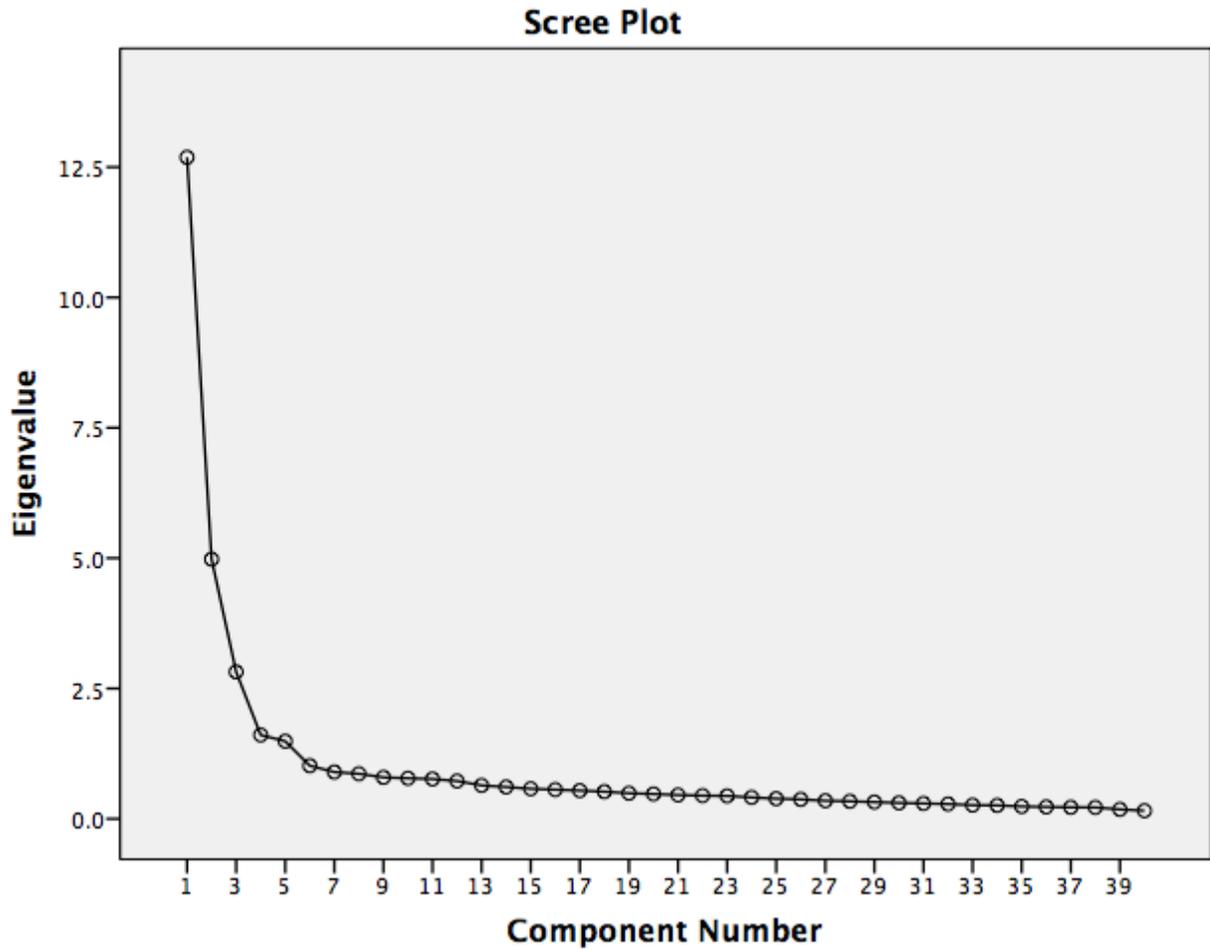
**Appendix K:  
Descriptive Statistics for Individual Items**

<b>Item Content</b>	<b>Mean</b>	<b>Std. Dev.</b>
<b>Factor 1: Unease/Avoidance</b>		
7 When I'm the only gay man in a social setting, I feel unsafe.	3.38	1.90
9 I become uneasy making small talk with straight men.	3.53	1.87
10 The idea of going to a predominantly straight gym makes me anxious.	3.38	1.96
12 I feel tense in my interactions with most straight men.	3.41	1.83
14 I believe that a straight man may behave violently toward me if he knew that I was gay.	3.51	1.86
34 I tend to avoid straight men.	3.04	1.97
40 When using a restroom, I am careful to keep my distance from straight men.	3.82	1.97
<b>Factor 2: Disconnectedness</b>		
1 In social situations, I'm just as comfortable being with straight men as gay men. (R)	2.97	1.70
4 I feel equally free to be myself among gay men and straight men. (R)	3.23	1.72
13 It is easy for me to enjoy myself when spending time with straight men (R)	2.95	1.55
15 Straight men share my basic values. (R)	3.44	1.59
17 I think most straight men could easily relate to me. (R)	3.72	1.71
29 I would readily join a group or club that included mostly straight men. (R)	3.20	1.67
31 I am equally likely to interact with gay or straight men at social gatherings. (R)	3.10	1.67
<b>Factor 3: Expected Rejection</b>		
19 When interacting with a straight man, I tend to wonder whether he will accept me.	4.54	1.70
21 Straight men wouldn't want to hear about my coming out experience.	4.39	1.67
23 I think some straight men might feel uncomfortable if they know I'm gay.	4.83	1.60
26 Straight men would judge me if they found out about my sexual orientation.	4.45	1.57
27 Straight men would be put off by hearing the details of my sexual life.	5.29	1.42
38 I don't talk about dating with straight men.	4.43	1.80

(R) = Reverse-scored item.

## Appendix L:

Note: The scree plot reveals percent Eigenvalue accounted for by each factor. An inspection of the scree plot reveals an “elbow” at about the fourth factor, suggesting that additional factors add relatively little additional explanatory power. After weighing the scree plot with a number of other key criteria, three factors were ultimately selected as the best fit for this scale.



**Appendix M:**  
**Heterophobia Scale – Final Version**



## References

- Addis, S., Davies, M., Greene, G., MacBride-Stewart, S., & Shepherd, M. (2009). The health, social care and housing needs of lesbian, gay, bisexual and transgender older people: A review of the literature. *Health & Social Care In The Community*, 17(6), 647-658. doi:10.1111/j.1365-2524.2009.00866.x
- Allport, Gordon W. (1954). *The Nature of Prejudice*. Reading, MA: Addison-Wesley
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Arlington, VA: American Psychiatric Publishing.
- Anderson, E. (2011). Masculinities and sexualities in sport and physical cultures: Three decades of evolving research. *Journal Of Homosexuality*, 58(5), 565-578. doi:10.1080/00918369.2011.563652
- Barber, M. E. (2012). Mental health effects of don't ask don't tell. *Journal Of Gay & Lesbian Mental Health*, 16(4), 346-352. doi:10.1080/19359705.2012.705143
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7, 147-178.
- Bartneck, C., Duenser, A., Moltchanova, E., & Zawieska, K. (2015). Comparing the similarity of responses received from studies in Amazon's Mechanical Turk to studies conducted online and with direct recruitment. *Plos ONE*, 10(4).
- Bostwick, W. B., Boyd, C. J., Hughes, T. L., & McCabe, S. E. (2010). Dimensions of sexual orientation and prevalence of mood and anxiety disorders in the United States. *American Journal of Public Health*, 100, 468e475.
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Bramer, D. R. (2012). Looking back on don't ask don't tell. *Journal Of Gay & Lesbian Mental Health*, 16(4), 341-345. doi:10.1080/19359705.2012.675811
- Cass, V. C. (1979). Homosexual identity formation: A theoretical model. *Journal of Homosexuality*, 4, 219-235.
- Cass, V. C. (1984). Homosexual identity formation: Testing a theoretical model. *The Journal of Sex Research*, 20, 143-167.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Cavalier, E. S. (2011). Men at sport: Gay men's experiences in the sport workplace. *Journal Of Homosexuality*, 58(5), 626-646. doi:10.1080/00918369.2011.563662

- Collins, J. C. (2013). Stress and safety for gay men at work within masculinized industries. *Journal Of Gay & Lesbian Social Services: The Quarterly Journal Of Community & Clinical Practice*, 25(3), 245-268.  
doi:10.1080/10538720.2013.806878
- Crowne, D.P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- D'Augelli, A. R., Grossman, A. H., Hershberger, S. L., & O'Connell, T. S. (2001). Aspects of mental health among older lesbian, gay, and bisexual adults. *Aging & Mental Health*, 5(2), 149-158. doi:10.1080/13607860120038366
- D'Augelli, A. R., Hershberger, S. L., & Pilkington, N. W. (1998). Lesbian, gay, and bisexual youth and their families: Disclosure of sexual orientation and its consequences. *American Journal Of Orthopsychiatry*, 68(3), 361-371.  
doi:10.1037/h0080345
- DeVellis, R. F. (2003). *Scale development: Theory and applications*, Second Edition. Thousand Oaks, CA, US: Sage Publications, Inc.
- Diamond, L. M., & Dubé, E. M. (2002). Friendship and attachment among heterosexual and sexual-minority youths. *Journal of Youth and Adolescence*, 31, 155e166.
- Doyle, D. M., & Molix, L. (2014). How does stigma spoil relationships? Evidence that perceived discrimination harms romantic relationship quality through impaired self-image. *Journal Of Applied Social Psychology*, 44(9), 600-610.  
doi:10.1111/jasp.12252
- Elizur, Y., & Mintzer, A. (2003). Gay males' intimate relationship quality: The roles of attachment security, gay identity, social support, and income. *Personal Relationships*, 10(3), 411-435. doi:10.1111/1475-6811.00057
- Embrick, D. G., Walther, C. S., & Wickens, C. M. (2007). Working class masculinity: Keeping gay men and lesbians out of the workplace. *Sex Roles*, 56(11-12), 757-766. doi:10.1007/s11199-007-9234-0
- Federal Bureau of Investigation (2002). *Crime in the United States*. Available at:  
[http://www.fbi.gov/ucr/cius\\_02/html/web/offreported/02-nhatecrime12.html](http://www.fbi.gov/ucr/cius_02/html/web/offreported/02-nhatecrime12.html). sed March 28, 2016.
- Feinstein, B. A., Goldfried, M. R., & Davila, J. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An

- examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *Journal Of Consulting And Clinical Psychology*, 80(5), 917-927. doi:10.1037/a0029425
- Fenaughty, J., & Harré, N. (2003). Life on the Seesaw: A Qualitative Study of Suicide Resiliency Factors for Young Gay Men. *Journal Of Homosexuality*, 45(1), 1-22. doi:10.1300/J082v45n01\_01
- Fischgrund, B. N., Halkitis, P. N., & Carroll, R. A. (2012). Conceptions of hypermasculinity and mental health states in gay and bisexual men. *Psychology Of Men & Masculinity*, 13(2), 123-135. doi:10.1037/a0024836
- Fleischer, A., Mead, A. D., & Huang, J. (2015). Inattentive responding in MTurk and other online samples. *Industrial And Organizational Psychology: Perspectives On Science And Practice*, 8(2), 196-202. doi:10.1017/iop.2015.25
- Fraboni, M., & Cooper, D. (1989). Further validation of three short forms of the Marlowe-Crowne Scale of Social Desirability. *Psychological Reports*, 65(2), 595-600. doi:10.2466/pr0.1989.65.2.595
- Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals. *Journal Of Counseling Psychology*, 56(1), 97-109. doi:10.1037/a0012844
- Galupo, M. (2009). Cross-category friendship patterns: Comparison of heterosexual and sexual minority adults. *Journal Of Social And Personal Relationships*, 26(6-7), 811-831. doi:10.1177/0265407509345651
- Goldfried, M. R., & Goldfried, A. P. (2001). The importance of parental support in the lives of gay, lesbian and bisexual individuals. *Journal of Clinical Psychology/In Session: Psychotherapy in Practice*, 57, 681-693.
- Gottman, J. M., Levenson, R. W., Swanson, C., Swanson, K., Tyson, R., & Yoshimoto, E. (2003). Observing Gay, Lesbian and Heterosexual Couples' Relationships: Mathematical Modeling of Conflict Interaction. *Journal Of Homosexuality*, 45(1), 65-91. doi:10.1300/J082v45n01\_04
- Greene, D. C., & Britton, P. J. (2015). Predicting relationship commitment in gay men: Contributions of vicarious shame and internalized homophobia to the investment model. *Psychology Of Men & Masculinity*, 16(1), 78-87. doi:10.1037/a0034988
- Grov, C., Golub, S. A., Mustanski, B., & Parsons, J. T. (2010). Sexual compulsivity, state affect, and sexual risk behavior in a daily diary study of gay and bisexual men. *Psychology Of Addictive Behaviors*, 24(3), 487-497. doi:10.1037/a0020527

- Haldeman, D. C. (2006). Queer eye on the straight guy: A case of gay male heterophobia. In M. Englar-Carlson, M. A. Stevens (Eds.) , *In the room with men: A casebook of therapeutic change* (pp. 301-317). Washington, DC, US: American Psychological Association. doi:10.1037/11411-016
- Hamilton, C. J., & Mahalik, J. R. (2009). Minority stress, masculinity, and social norms predicting gay men's health risk behaviors. *Journal Of Counseling Psychology*, 56(1), 132-141. doi:10.1037/a0014440
- Hatzenbuehler, M. L., McLaughlin, K. A., & Xuan, Z. (2012). Social networks and risk for depressive symptoms in a national sample of sexual minority youth. *Social Science & Medicine*, 75(7), 1184-1191. doi:10.1016/j.socscimed.2012.05.030
- Henderson, M. G. (1998). Disclosure of sexual orientation: Comments from a parental perspective. *American Journal of Orthopsychiatry*, 68, 372-375.
- Herda, D. (2016). The specter of discrimination: Fear of interpersonal racial discrimination among adolescents in Chicago. *Social Science Research*, 5548-62. doi:10.1016/j.ssresearch.2015.09.010
- Herek, G. M. (2000). Sexual prejudice and gender: Do heterosexuals' attitudes toward lesbians and gay men differ?. *Journal Of Social Issues*, 56(2), 251-266. doi:10.1111/0022-4537.00164
- Herek, G. M. (2009). Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal Of Interpersonal Violence*, 24(1), 54-74. doi:10.1177/0886260508316477
- Herek, G. M., & Garnets, L. D. (2007). Sexual orientation and mental health. *Annual Review Of Clinical Psychology*, 3353-375. doi:10.1146/annurev.clinpsy.3.022806.091510
- Herek, G. M., Gillis, J., & Cogan, J. C. (2009). Internalized stigma among sexual minority adults: Insights from a social psychological perspective. *Journal Of Counseling Psychology*, 56(1), 32-43. doi:10.1037/a0014672
- Herman, J. L. (1992). *Trauma and recovery*. New York, NY, US: Basic Books.
- Horn, A. J., & Wong, Y. (2014). Fathering gay sons: A typology of fathering concerns and clinical recommendations. *Professional Psychology: Research And Practice*, 45(4), 247-257. doi:10.1037/a0037632

- Houts, C. R., & Horne, S. G. (2008). The role of relationship attributions in relationship satisfaction among cohabiting gay men. *The Family Journal*, 16(3), 240-248. doi:10.1177/1066480708318887
- Hudepohl, A. D., Parrott, D. J., & Zeichner, A. (2010). Heterosexual men's anger in response to male homosexuality: Effects of erotic and non-erotic depictions of male-male intimacy and sexual prejudice. *Journal Of Homosexuality*, 57(8), 1022-1038. doi:10.1080/00918369.2010.503511
- Hudson, W. W., & Ricketts, W. A. (1980). A strategy for the measurement of homophobia. *Journal of Homosexuality*, 5( 4), 357– 372.
- Institute of Medicine (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: National Academies Press.
- Isay, R. A. (1987). Fathers and their homosexually inclined sons in childhood. *The Psychoanalytic Study Of The Child*, 42275-294.
- Jennings, S. J., & Jennings, J. L. (2013). Peer-directed, brief mindfulness training with adolescents: A pilot study. *International Journal Of Behavioral Consultation And Therapy*, 8(2), 23-25. doi:10.1037/h0100972
- Jewell, L., & Morrison, M. (2012). Making sense of homonegativity: Heterosexual men and women's understanding of their own prejudice and discrimination toward gay men. *Qualitative Research In Psychology*, 9(4), 351-370.
- Joiner, T. R., Van Orden, K. A., Witte, T. K., Selby, E. A., Ribeiro, J. D., Lewis, R., & Rudd, M. (2009). Main predictions of the interpersonal–psychological theory of suicidal behavior: Empirical tests in two samples of young adults. *Journal Of Abnormal Psychology*, 118(3), 634-646.
- Jordan, J. V. (2010). *Relational–cultural therapy*. Washington, DC, US: American Psychological Association.
- Koblin, B. A., Torian, L., Xu, G., Guilin, V., Makki, H., MacKellar, D., & Valleroy, L. (2006). Violence and HIV-related risk among young men who have sex with men. *AIDS Care*, 18(8), 961-967. doi:10.1080/09540120500467182
- Kurdek, L. A. (2004). Are gay and lesbian cohabiting couples really different from heterosexual married couples?. *Journal Of Marriage And Family*, 66(4), 880-900. doi:10.1111/j.0022-2445.2004.00060.x

- Kuyper, L., & Fokkema, T. (2011). Minority stress and mental health among Dutch LGBs: Examination of differences between sex and sexual orientation. *Journal Of Counseling Psychology*, 58(2), 222-233. doi:10.1037/a0022688
- Landolt, M. A., Bartholomew, K., Saffrey, C., Oram, D., & Perlman, D. (2004). Gender Nonconformity, Childhood Rejection, and Adult Attachment: A Study of Gay Men. *Archives Of Sexual Behavior*, 33(2), 117-128. doi:10.1023/B:ASEB.0000014326.64934.50
- Lewis, N. M. (2009). Mental health in sexual minorities: Recent indicators, trends, and their relationships to place in North America and Europe. *Health & Place*, 15(4), 1029-1045. doi:10.1016/j.healthplace.2009.05.003
- Levant, R. F. (2011). Research in the psychology of men and masculinity using the gender role strain paradigm as a framework. *American Psychologist*, 66(8), 765-776. doi:10.1037/a0025034
- Livingston, N. A., Heck, N. C., Flentje, A., Gleason, H., Oost, K. M., & Cochran, B. N. (2015). Sexual minority stress and suicide risk: Identifying resilience through personality profile analysis. *Psychology Of Sexual Orientation And Gender Diversity*, 2(3), 321-328. doi:10.1037/sgd0000116
- Lloyd, S., & Operario, D. (2012). HIV risk among men who have sex with men who have experienced childhood sexual abuse: Systematic review and meta-analysis. *AIDS Education And Prevention*, 24(3), 228-241. doi:10.1521/aeap.2012.24.3.228
- Marszalek, J., Cashwell, C. S., Dunn, M. S., & Jones, K. (2004). Comparing Gay Identity Development Theory to Cognitive Development: An Empirical Study. *Journal Of Homosexuality*, 48(1), 103-123. doi:10.1300/J082v48n01\_05
- Mays, V. M., & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal Of Public Health*, 91(11), 1869-1876. doi:10.2105/AJPH.91.11.1869
- McAndrew, S., & Warne, T. (2010). Coming out to talk about suicide: Gay men and suicidality. *International Journal Of Mental Health Nursing*, 19(2), 92-101. doi:10.1111/j.1447-0349.2009.00644.x
- Mendoza-Denton, R., Downey, G., Purdie, V. J., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal Of Personality And Social Psychology*, 83(4), 896-918. doi:10.1037/0022-3514.83.4.896

- Mereish, E. H., & Poteat, V. P. (2015). A relational model of sexual minority mental and physical health: The negative effects of shame on relationships, loneliness, and health. *Journal Of Counseling Psychology*, 62(3), 425-437. doi:10.1037/cou0000088
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal Of Health And Social Behavior*, 36(1), 38-56. doi:10.2307/2137286
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674-697. doi:10.1037/0033-2909.129.5.674
- Migliaccio, T. (2009). Men's friendships: Performances of masculinity. *The Journal Of Men's Studies*, 17(3), 226-241. doi:10.3149/jms.1703.226
- Mohr, J. J., & Kendra, M. S. (2011). Revision and extension of a multidimensional measure of sexual minority identity: The Lesbian, Gay, and Bisexual Identity Scale. *Journal Of Counseling Psychology*, 58(2), 234-245. doi:10.1037/a0022858
- Morrison, T. G., Kenny, P., & Harrington, A. (2005). Modern Prejudice Toward Gay Men and Lesbian Women: Assessing the Viability of a Measure of Modern Homonegative Attitudes Within an Irish Context. *Genetic, Social, And General Psychology Monographs*, 131(3), 219-250. doi:10.3200/MONO.131.3.219-250
- Morrison, M. A., & Morrison, T. G. (2002). Development and validation of a scale measuring modern prejudice toward gay men and lesbian women. *Journal of Homosexuality*, 43( 2), 15– 37.
- Mudrey, R., & Medina-Adams, A. (2006). Attitudes, Perceptions, and Knowledge of Pre-Service Teachers Regarding The Educational Isolation of Sexual Minority Youth. *Journal Of Homosexuality*, 51(4), 63-90. doi:10.1300/J082v51n04\_04
- Netemeyer, Richard G., Bearden, William O., & Sharma, Subhash. (2003). *Scaling Procedures: Issues and Applications*. London: Sage Publications.
- Noelle, M. (2002). The ripple effect on the Matthew Shepard murder: Impact on th assumptive worlds of members of the targeted group. *American Behavioral Scientist*, 46(1), 27-50. doi:10.1177/0002764202046001004
- Otis, M. D., Rostosky, S. S., Riggle, E. B., & Hamrin, R. (2006). Stress and relationship quality in same-sex couples. *Journal Of Social And Personal Relationships*, 23(1), 81-99. doi:10.1177/0265407506060179
- Pachankis, J. E., Goldfried, M. R., & Ramrattan, M. E. (2008). Extension of the rejection

- sensitivity construct to the interpersonal functioning of gay men. *Journal of Consulting and Clinical Psychology*, 76, 306– 317.
- Pachankis, J. E., Hatzenbuehler, M. L., Rendina, H. J., Safren, S. A., & Parsons, J. T. (2015). LGB-affirmative cognitive-behavioral therapy for young adult gay and bisexual men: A randomized controlled trial of a transdiagnostic minority stress approach. *Journal Of Consulting And Clinical Psychology*, 83(5), 875-889. doi:10.1037/ccp0000037
- Paul, J. P., Catania, J., Pollack, L., Moskowitz, J., Canchola, J., Mills, T., & ... Stall, R. (2002). Suicide attempts among gay and bisexual men: Lifetime prevalence and antecedents. *American Journal Of Public Health*, 92(8), 1338-1345. doi:10.2105/AJPH.92.8.1338
- Peplau, L. A., & Fingerhut, A. W. (2007). The Close Relationships of Lesbian and Gay Men. *Annual Review Of Psychology*, 58, 405-424. doi:10.1146/annurev.psych.58.110405.085701
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal Of Personality And Social Psychology*, 90(5), 751-783. doi:10.1037/0022-3514.90.5.751
- Pew Research Center. (2011). Shifting attitudes about same-sex marriage. Accessed at: <http://people-press.org/2011/03/03/section-3-attitudes-toward-social-issues>.
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal Of Adolescent Research*, 7(2), 156-176.
- Potoczniak, D. J., Aldea, M. A., & DeBlaere, C. (2007). Ego identity, social anxiety, social support, and self-concealment in lesbian, gay, and bisexual individuals. *Journal Of Counseling Psychology*, 54(4), 447-457. doi:10.1037/0022-0167.54.4.447
- Provence, M. M., Rochlen, A. B., Chester, M. R., & Smith, E. R. (2014). 'just one of the guys': A qualitative study of gay men's experiences in mixed sexual orientation men's groups. *Psychology Of Men & Masculinity*, 15(4), 427-436. doi:10.1037/a0035026
- Radkowsky, M., & Siegel, L. J. (1997). The gay adolescent: Stressors, adaptations, and psychosocial interventions. *Clinical Psychology Review*, 17(2), 191-216. doi:10.1016/S0272-7358(97)00007-X
- Rivers, I. (2004). Recollections of Bullying at School and Their Long-Term Implications for Lesbians, Gay Men, and Bisexuals. *Crisis: The Journal Of Crisis Intervention*

- And Suicide Prevention, 25(4), 169-175. doi:10.1027/0227-5910.25.4.169
- Roberts, A. L., Austin, S. B., Corliss, H. L., Vandermorris, A. K., & Koenen, K. C. (2010). Pervasive trauma exposure among US sexual orientation minority adults and risk of posttraumatic stress disorder. *American Journal Of Public Health, 100*(12), 2433-2441. doi:10.2105/AJPH.2009.168971
- Rohner, R. P. (2004). The parental “acceptance–rejection syndrome”: Universal correlates of perceived rejection. *American Psychologist, 59*, 827–840.
- Roper, E. A., & Halloran, E. (2007). Attitudes toward gay men and lesbians among heterosexual male and female student-athletes. *Sex Roles, 57*(11-12), 919-928. doi:10.1007/s11199-007-9323-0
- Rumens, N. (2010). Workplace friendships between men: Gay men’s perspectives and experiences. *Human Relations, 63*(10), 1541-1562. doi:10.1177/0018726710361987
- Rye, B. J., & Meaney, G. J. (2010). Measuring homonegativity: A psychometric analysis. *Canadian Journal Of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 42*(3), 158-167.
- Safren, S. A., & Pantalone, D. W. (2006). Social Anxiety and Barriers to Resilienc Among Lesbian, Gay, and Bisexual Adolescents. In A. M. Omoto, H. S. Kurtzman, A. M. Omoto, H. S. Kurtzman (Eds.) , *Sexual orientation and mental health: Examining identity and development in lesbian, gay, and bisexual people* (pp. 55-71). Washington, DC, US: American Psychological Association. doi:10.1037/11261-003
- Sánchez, F. J., Greenberg, S. T., Liu, W., & Vilain, E. (2009). Reported effects of masculine ideals on gay men. *Psychology Of Men & Masculinity, 10*(1), 73-87. doi:10.1037/a0013513
- Sánchez, F. J., & Vilain, E. (2012). “Straight-Acting Gays”: The relationship between masculine consciousness, anti-effeminacy, and negative gay identity. *Archives Of Sexual Behavior, 41*(1), 111-119. doi:10.1007/s10508-012-9912-z
- Savin-Williams, R. C., & Ream, G. L. (2003). Sex variations in the disclosure to parents of same-sex attractions. *Journal Of Family Psychology, 17*(3), 429-438. doi:10.1037/0893-3200.17.3.429
- Schneider, M. S., & Witherspoon, J. (2000). Friendship patterns among lesbian and gay youth: An exploratory study. *Canadian Journal Of Human Sexuality, 9*(4), 239-246.

- Shearer, A., Hunt, M., Chowdhury, M., & Nicol, L. (2015). Effects of a Brief Mindfulness Meditation Intervention on Student Stress and Heart Rate Variability. *International Journal Of Stress Management*, doi:10.1037/a0039814
- Sherry, A. (2007). Internalized homophobia and adult attachment: Implications for clinical practice. *Psychotherapy: Theory, Research, Practice, Training*, 44(2), 219-225. doi:10.1037/0033-3204.44.2.219
- Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlowe-Crowne Social Desirability Scale. *Journal Of Clinical Psychology*, 28(2), 191-193. doi:10.1002/1097-4679(197204)28:2<191::AID-JCLP2270280220>3.0.CO;2-G
- Szymanski, D. M. (2006). Does internalized heterosexism moderate the link between heterosexist events and lesbians' psychological distress? *Sex Roles*, 54, 227-234. doi: 10.1007/s11199-006-9340-4
- Tomash, J. J., & Reed, P. (2015). Using conditioning to elicit skin conductance responses to deception. *Learning And Motivation*, 49, 31-37. doi:10.1016/j.lmot.2015.02.002
- Ueno, K. (2010). Patterns of cross-orientation friendships in high schools. *Social Science Research*, 39(3), 444-458. doi:10.1016/j.ssresearch.2009.10.001
- van Eeden-Moorefield, B., & Benson, K. E. (2014). A conditional process explaining partnered gay men's perceived relationship stability. *Family Relations: An Interdisciplinary Journal Of Applied Family Studies*, 63(4), 469-481. doi:10.1111/fare.12078
- Villatte, J. L., Vilardaga, R., Villatte, M., Vilardaga, J. P., Atkins, D. C., & Hayes, S. C. (2016). Acceptance and Commitment Therapy modules: Differential impact on treatment processes and outcomes. *Behaviour Research And Therapy*, 77, 52-61. doi:10.1016/j.brat.2015.12.001
- Wade, J. C., & Donis, E. (2007). Masculinity ideology, male identity, and romantic relationship quality among heterosexual and gay men. *Sex Roles*, 57(9-10), 775-786. doi:10.1007/s11199-007-9303-4
- Wagner, C. R., & Abaied, J. L. (2016). Skin conductance level reactivity moderates the association between parental psychological control and relational aggression in emerging adulthood. *Journal Of Youth And Adolescence*, 45(4), 687-700. doi:10.1007/s10964-016-0422-5
- Westefeld, J. S., Maples, M. R., Buford, B., & Taylor, S. (2001). Gay, lesbian, and

- bisexual college students: The relationship between sexual orientation and depression, loneliness, and suicide. *Journal Of College Student Psychotherapy*, 15(3), 71-82.
- White, S. M., & Franzini, L. R. (1999). Heteronegativism? The attitudes of gay men and lesbians toward heterosexuals. *Journal Of Homosexuality*, 37(1), 65-79.  
doi:10.1300/J082v37n01\_05
- Wilder, H., & Wilder, J. (2012). In the wake of Don't Ask Don't Tell: Suicide prevention and outreach for LGB service members. *Military Psychology*, 24(6), 624-642.  
doi:10.1080/08995605.2012.737725
- Worthen, M. F. (2014). Blaming the jocks and the Greeks? Exploring collegiate athletes' and fraternity/sorority members' attitudes toward LGBT individuals. *Journal Of College Student Development*, 55(2), 168-195.
- Zamboni, B. D., Crawford, I., & Carrico, A. W. (2008). Predictors of sports motivation among gay and bisexual men. *Journal Of Homosexuality*, 54(4), 449-468.  
doi:10.1080/00918360801991539