LESBIANS’ AND GAY MEN’S PERCEPTIONS OF STEREOTYPING: RELATIONSHIP TO CAREER INTERESTS AND SENSE OF BELONGING

by

Elizabeth Wong

A thesis submitted in conformity with the requirements for the degree of Master of Arts
Department of Applied Psychology and Human Development
Ontario Institute for Studies in Education
University of Toronto

© Copyright by Elizabeth Wong (2018)
Abstract

The “gender inversion” stereotype that lesbians and gay men are similar to the opposite gender continues to be a pervasive part of how others perceive lesbians and gay men (Reyna, Wetherell, Yantis, & Brandt, 2014). The purpose of this study was to examine the relationship between lesbians’ and gay men’s awareness and endorsement of the gender inversion stereotype and their interest in pursuing gender-typical careers (masculine careers for gay men and feminine careers for lesbians). Seventy-four gay men and 108 lesbians completed questionnaires assessing awareness and the endorsement of the gender inversion stereotype, sense of belonging, anticipated discrimination, perceived support from role models and interest in pursuing masculine and feminine careers. Awareness of stereotype had no influence on gay men’s or lesbians’ career interests. This study expands the research on stereotypes into the area of lesbians’ and gay men’s career development.
Acknowledgments

I would like to thank Dr. Margaret Schneider whose feedback and support throughout the thesis process was invaluable. I would also like to thank Dr. Jeanne Watson for her helpful feedback on the various drafts. I am also grateful for all my friends and family for their endless support and encouragement. Finally, I would like to give a special thanks to my fellow MA cohort for their support and the fun times throughout the MA.
Table of Contents

Acknowledgments........................................................................................................................................... iii
Table of Contents................................................................................................................................................. iv
List of Tables ...................................................................................................................................................... vi
List of Figures .................................................................................................................................................... vii
List of Appendices ............................................................................................................................................ viii
Introduction......................................................................................................................................................... 1
Chapter 1. Literature Review ............................................................................................................................. 4
  Stereotypes about Lesbians and Gay Men ............................................................................................................ 4
    Gender inversion stereotyping............................................................................................................................ 4
    Awareness and endorsement of the gender inversion stereotype .................................................................... 7
  Lesbians’ and Gay Men’s Career Interests ......................................................................................................... 9
  Gay men’s and lesbians’ interest in masculine and feminine careers................................................................. 10
  Anticipated discrimination.................................................................................................................................... 14
  Perceived support from role models .................................................................................................................. 15
Gender Stereotyping and Career Interest ............................................................................................................ 17
  Influence of stereotype awareness on career interests .................................................................................... 18
  Influence of stereotype endorsement on career interests ............................................................................... 19
Sense of Belonging .............................................................................................................................................. 21
    Defining sense of belonging............................................................................................................................... 21
  Gay men’s and lesbians’ sense of belonging ......................................................................................................... 23
    Sense of belonging mediates influence of stereotypes on career interests ................................................... 23
Purpose of Study .................................................................................................................................................... 26
Chapter 2. Methodology .................................................................................................................................... 29
  Participants .......................................................................................................................................................... 29
  Procedure .......................................................................................................................................................... 30
  Measures ........................................................................................................................................................... 32
  Statistical Analysis............................................................................................................................................. 38
Chapter 3. Results ................................................................................................................................................. 41
  Data Cleaning.................................................................................................................................................... 41
  Outliers and Assumption Testing ...................................................................................................................... 41
  Awareness and Endorsement of the Gender Inversion Stereotype .................................................................. 42
  Gay Men’s and Lesbians’ Interest in Masculine and Feminine Careers .......................................................... 44
Anticipated Discrimination and Perceived Support from Role Models in Masculine and Feminine Careers ........................................................................................................... 45
Impact of Stereotype Awareness ................................................................................................................. 46
Impact of Stereotype Endorsement .................................................................................................................. 47
Summary of Results ........................................................................................................................................... 48
Chapter 4. Discussion ...................................................................................................................................... 50
Limitations and Further Future Directions ...................................................................................................... 52
Clinical and Counselling Implications ........................................................................................................ 54
Conclusion ....................................................................................................................................................... 55
References ......................................................................................................................................................... 56
Appendices ....................................................................................................................................................... 73
List of Tables

Table 1 .................................................................................................................. 29
Table 2 .................................................................................................................. 38
Table 3 .................................................................................................................. 42
Table 4 .................................................................................................................. 43
Table 5 .................................................................................................................. 44
Table 6 .................................................................................................................. 45
Table 7 .................................................................................................................. 46
Table 8 .................................................................................................................. 47
Table 9 .................................................................................................................. 48
Table 10 ............................................................................................................... 48
Table 11 .............................................................................................................. 86
Table 12 .............................................................................................................. 87
Table 13 .............................................................................................................. 88
Table 14 .............................................................................................................. 89
Table 15 .............................................................................................................. 93
Table 16 .............................................................................................................. 94
List of Figures

Figure 1 .................................................................................................................. 40
Figure 2 .................................................................................................................. 40
List of Appendices

Appendix A ....................................................................................................................... 73
Appendix B ....................................................................................................................... 74
Appendix C ....................................................................................................................... 75
Appendix D ....................................................................................................................... 76
Appendix E ....................................................................................................................... 78
Appendix F ....................................................................................................................... 79
Appendix G ....................................................................................................................... 80
Appendix H ....................................................................................................................... 81
Appendix I ....................................................................................................................... 82
Appendix J ....................................................................................................................... 83
Appendix K ....................................................................................................................... 85
Introduction

Despite improving attitudes towards and greater acceptance of lesbian and gay individuals in recent years, one does not have to look far to find portrayals of gay men in the media as “girly” and “feminine” and lesbians as “manly” and “butch” (Raley & Lucas, 2006). Consequently, studies have found that the stereotype that gay men and lesbians are similar and share characteristics and interests with opposite gender or the “gender inversion” stereotype is pervasive in attitudes towards lesbians and gay men amongst undergraduate students (Holley, Larson, Adelman, & Trevino, 2008; Reyna et al., 2014), counsellors (Boysen, Vogel, Madon, & Wester, 2006), teachers, and even within the lesbian, gay, bisexual, and transsexual (LGBT) community (Boysen, Fisher, Dejesus, Vogel, & Madon, 2011). Furthermore, some lesbians and gay men are aware of stereotypes that target their group (Adams, Cahill, & Ackerlind, 2005; Gates & Mitchell, 2013), and even endorse these stereotypes themselves (Boysen et al., 2011).

Despite this evidence that gay men and lesbians continue to be stereotyped as being similar to the opposite gender, there is a lack of research examining the impact of the gender inversion stereotype on gay men and lesbians. This gap in the literature drives this study which examined how awareness and endorsement of gender inversion stereotyping plays a role in gay men’s and lesbians’ lives.

This study proposed that one area that awareness of the gender inversion stereotype may potentially have its influence is in the careers lesbians and gay men are interested in pursuing. Previous research has found that awareness that others may perceive them in stereotyped ways can affect women’s career interests (Burkley & Blanton, 2009; Cheryan, Plaut, Davies, & Steele, 2009; Davies, Spencer, Quinn, & Gerhardstein, 2002; Master, Cheryan, & Meltzoff, 2015). For example, reminding women that they may be negatively stereotyped and viewed by others as
being bad at math and technology resulted in women expressing less interest in pursuing careers involving math and technology compared to women who were not reminded of these stereotypes (Schmader, Johns, & Barquissau, 2004). Similarly, resembling lesbian and gay stereotypes, Ellis, Ratnasingam, and Wheeler (2012) found that lesbians and gay men reported less interest in gender-typical careers, e.g., gay men are stereotyped as being more similar to females and report less interest in careers that have been characterized as masculine\(^1\). Gay men were almost four times less likely to express interest in masculine careers such as auto mechanic or electrician compared to heterosexual men. Lesbians were two times less likely to express interest in feminine careers such as beautician compared to heterosexual women. Thus, there is some evidence that gay men’s and lesbians’ career interests resemble the gender inversion stereotype. However, little is understood as to why gay men and lesbians express these interests. The present study explored whether awareness and endorsement of gender inversion stereotyping may provide a potential explanation.

As this area has yet to be explored, it is also important to examine the factors that may contribute to the relationship between gender inversion stereotypes and career interests. Some research studies have found that feeling valued and accepted by others or having a sense of belonging is important in making decisions about one’s career (Good, Rattan & Dweck, 2012; Johnson, 2012; Ostrove, Stewart, & Curtin, 2011). These studies suggest that perceiving that one is not valued or accepted in a career may result in individuals opting out of certain career paths (Good et al., 2012). Additionally, studies have found that a sense of belonging is important in

\(^1\) Note that this research involves measuring interest and perceptions of careers or occupations that have historically been perceived as more male or female dominated or stereotyped as being more appropriate for men or women. In discussing these careers, the language can become problematic. In the interest of clarity, and similar to language in previous research (Forsman & Barth, 2017; Liben et al., 2002; Massey, 2010), this study will use a short form and refer to “masculine” or “feminine” careers (traits).
explaining the relationship between gender stereotypes and women’s interests in pursuing careers that are stereotyped as being masculine (Cheryan et al., 2009; Thoman, Smith, Brown, Chase, & Lee, 2013). For example, Cheryan et al., 2009 found activating women’s awareness of the stereotype that women are bad at math reduced women’s interest in masculine careers. They also found that the effect was mediated by a lower sense of belonging, i.e., feeling valued and accepted within masculine careers. Thus, the purpose of this study was to examine the relationship between awareness and endorsement of the stereotype that suggests that gay men and lesbians share characteristics of the opposite gender or the gender inversion stereotype, and gay men’s and lesbians’ interest in pursuing gender-typical careers (masculine careers for gay men and feminine careers for lesbians). This study also seeks to answer whether sense of belonging mediates this relationship.

The following section provides an overview of research on the gender inversion stereotype, lesbians’ and gay men’s careers interests and the possible relationship between career interests and stereotypes.
Chapter 1. Literature Review

Stereotypes about Lesbians and Gay Men

It is important to acknowledge that there have been improvements in the attitudes and treatment of sexual minorities over the years. In 1978, homosexuality was removed as a diagnosis under the Diagnostic and Statistical Manual (Boysen et al., 2006). Moreover, there has been increased legislative action to prevent discrimination against people based on their sexual orientation. In 1996, sexual orientation was added to the Canadian Charter of Rights and Freedoms as prohibited grounds for discrimination. More recently, in 2015, sexual minorities were afforded greater rights, with gay marriage being recognized as a right in the United States in the historic Supreme Court ruling, Obergefell v. Hodges, and has been legal in all Canadian provinces since 2005 with the Civil Marriage Act. This coincides with more positive attitudes towards lesbians and gay men (Dasgupta & Rivera, 2006; Yang, 1997). Despite these improvements, stereotyping of and gay men and lesbians persists.

**Gender inversion stereotyping.** One of the most common stereotypes that currently exists is that gay men share characteristics and interests with heterosexual females, while lesbians have interests and characteristics that are similar to heterosexual men, herein referred to as the gender inversion stereotype (Geiger, Harwood, & Hummert, 2006; Boysen et al., 2011). Kite and Deux (1987) posited the gender inversion theory which suggests that people, in general, tend to view gay men as sharing similarities to heterosexual females, while lesbians are perceived to be similar to heterosexual men. Since this theory was proposed, there has been substantial research examining heterosexuals’ perceptions of gay men and lesbians. These findings support that gay men are seen as more feminine compared to heterosexual men and lesbians are viewed as more masculine than heterosexual women (Blashill & Powlishta, 2009;
Geiger et al., 2006; Kite & Deux, 1987; Wright & Canetto, 2009). The majority of these studies have relied on trait assignment tasks where people are asked to assign a list of masculine and feminine traits to heterosexual men and women and gay men and lesbians. For example, Kite and Deux (1987) asked participants to evaluate one of four individuals: a heterosexual male, a heterosexual female, a gay man and a lesbian. Participants were randomly asked to rate one of these individuals on a list of masculine and feminine attributes. The results indicated that participants were more likely to assign traits that are considered feminine to gay men, e.g., high voice and sensitive and masculine traits to lesbians, e.g., tough, compared to their heterosexual counterparts (Kite & Deaux, 1987).

Although attitudes towards lesbians and gay men have changed over the years, subsequent studies have found similar patterns when asking people to rate gay men and lesbians on lists of traits (Madon, 1997; Wright & Canetto, 2009) and occupational interests and activities (Blashill & Powlishta, 2009). For example, Blashill & Powlishta (2009) expanded on the Kite and Deaux (1987) study by including activities and occupations. Following Kite and Deaux (1987), participants were randomly assigned to rate either a “typical” gay man, a lesbian, a heterosexual man or a woman on the likelihood that they would possess 75 traits, activities, or interests. These items had been determined to be masculine, feminine, or gender neutral based on ratings from previous research (Liben, Bigler Ruble, Martin, & Powlishta, 2002). During the analysis, neutral items were removed, and participants’ ratings of masculine and feminine items were compared. The research found that participants were more likely to assign feminine items to gay men than heterosexual men and masculine items to lesbians compared to heterosexual women. These results provide some support that people continue to stereotype lesbians and gay
men as being similar to the opposite gender. However, there is some evidence that gender stereotypes applied to gay men and lesbians is not as clear.

Sandfort (2005) noted methodological issues with these previous studies including that these studies focused on the assignment of masculine and feminine traits or asked people to rate sexual minorities on masculinity and femininity scales (Terman & Miles, 1936). These methodological concerns are problematic because while traditionally gender had been conceptualized as masculine and feminine, Bem (1974) introduced the concept of androgyny which suggests that people can possess levels of masculine and feminine traits and can be high in both types (androgynous) or low in both types (undifferentiated). Consequently, the studies above which typically compared gay men and lesbians to their heterosexual counterparts on feminine and masculine traits separately as an indication of the gender inversion stereotyping do not account for the possibility that gay men and lesbians may be more androgynous or undifferentiated compared to their heterosexual counterparts. Thus, it is possible that the previous studies do not fully capture stereotypes targeting gay men and lesbians.

This is supported by studies that have found that perceptions of gay and lesbians are more multi-faceted when assessed by free listing of traits and stereotypes associated with gay men or lesbians (Brambilla, Carnaghi, & Ravenna, 2011; Clausell & Fiske, 2005; Geiger et al., 2006). For example, following improvements on masculinity and femininity scales to include androgyny, such as the Bem Sex Role Inventory (Bem, 1974), it was found that lesbians and gay men were perceived to be more androgynous compared to heterosexuals (Sandfort, Burger, Lazaroms, & Verheul, 2001). Additionally, Clausell and Fiske (2005) found that when heterosexuals were asked to list stereotypes of gay men, some stereotypes did not conform to gay men being feminine, e.g., biker and hyper-masculine. Similarly, research examining
undergraduate students’ free listing of stereotypes of lesbians found that it was more multifaceted and included feminine stereotypes, such as lipstick lesbian (Brambilla et al., 2011; Geiger et al., 2006). However, at the same time, both Brambilla et al. (2011) and Clausell and Fiske (2005) also found evidence of stereotypes that conformed to previous research, for example, categorizing lesbians as masculine, e.g., “butch.” In sum, these results suggest that there are more multifaceted perceptions of lesbians and gay men that do not conform to the gender inversion stereotype. However, it is also clear from this research that stereotypes suggesting that lesbians and gay men are similar to the opposite gender persists. The issue with stereotyping is that people who are being stereotyped are often well aware that they perceived in these stereotyped ways.

**Awareness and endorsement of the gender inversion stereotype.** Acknowledging that gender inversion stereotype continues to be endorsed is important because stereotyped individuals are often aware of the stereotypes that target their group. As Crocker, Major, & Steele (1998) note, “African Americans, for example, are likely to be well aware that stereotypes portray them as intellectually inferior and aggressive; and women are well aware that stereotypes portray them as emotional, bad at math, and lacking leadership aptitude” (p. 518). Similarly, research studies have found that sexual minorities are well aware that sexual orientation stereotypes exist (Adams et al., 2005; Boysen et al., 2011; Gates & Mitchell, 2013). Recent research has found that lesbians and gay men report expecting to be stereotyped when they interact with heterosexuals (Gate & Mitchell, 2013). Gates and Mitchell (2013) asked gay men and lesbians to complete a stigma consciousness questionnaire (Pinel, 1999), which assesses the extent to which one expects to be stereotyped by heterosexuals based on their sexual orientation. Ninety-nine percent of participants endorsed at least one item on the questionnaire, expressing
concern that heterosexuals would judge them based on their sexual orientation and that they think about their sexual orientation when they interact with heterosexuals.

Taking this a step further, Burkley and Blanton (2009) proposed that heightened awareness of stereotyping may result in internalization of these stereotypes or stereotype endorsement. According the Burkley and Blanton (2009), stereotype endorsement is when members of stereotyped groups come to believe that the stereotypes that target them are accurate. It is possible that lesbians and gay men may internalize and come to endorse or believe that the gender inversion is true. However, results for gay men’s and lesbians’ endorsement of the gender inversion stereotype are mixed with some support for endorsement of the gender inversion stereotype (Boysen et al., 2011). For example, Boysen and colleagues (2011) asked gay and heterosexual students to rate the extent to which a list of traits was characteristic of gay men. They found that gay men were equally likely as heterosexuals to rate gay men as being overly expressive and emotional, which are traits typically stereotyped as feminine. However, other research (Pillard, 1991) has found that when gay men and lesbians rate themselves on traits, they perceived themselves as androgynous suggesting a discrepancy in how gay men perceive themselves compared to others regarding endorsement of the gender inversion stereotype. One possible explanation for this discrepancy may lie in the difference between perceiving oneself as conforming to stereotypes compared to perceiving others. As a way to protect themselves, people may rely on cognitive strategies for self-enhancement purposes, such as the blind spot bias - the tendency to rate oneself as less prone to biases (Pronin, Lin, & Ross; 2002). Thus, these biases may make them less likely to perceive themselves in stereotypical ways compared to others (Burkley & Blanton, 2006). Clearly, more research needs to be conducted to explore gay men's and lesbians' endorsement of the gender inversion stereotype.
Together these findings suggest that gay men and lesbians are aware of sexual orientation stereotypes (Gates & Mitchell, 2015) and that gay men may endorse the gender inversion stereotype when assigning traits to other gay men (Boysen et al., 2011). However, there are several gaps that need to be addressed including whether gay men and lesbians are aware of the existence of gender inversion stereotypes specifically. Also, it is unknown whether lesbians endorse the gender inversion stereotype. Nonetheless, the previous research findings have important implications for gay men and lesbians. Lesbians and gay men often report that they believe that stereotypes have impacted their lives (Gates & Mitchell, 2013), yet, there is a lack of research focusing on the specific aspects of their lives that are impacted. Burkley and Blanton (2009) proposed that one consequence of awareness of stereotypes, in general, is that it can decrease motivation, personal striving, and the pursuit of goals. However, to date, there has been little research examining how awareness or endorsement of the gender inversion stereotype may affect the pursuit of goals for lesbians and gay men. One potential area that awareness or endorsement of the gender inversion stereotype may influence lesbians’ and gay men’s personal goals is the careers that they are interested in pursuing.

Lesbians’ and Gay Men’s Career Interests

Since 1980, there has been growing interest in the career development of lesbians and gay men (Adams et al., 2005; Lonborg & Phillips, 1996; Longerbeam, Inkelas, Johnson, Lee, 2007; McFadden, 2015). Lesbians and gay men face unique challenges in their career development including discrimination (Parnell, Lease & Green, 2012), lack of role models and social support (Nauta, Saucier, & Woodard, 2001), and issues related to coming out in the workplace (Harris, 2014). At the same time, studies show that there is also positivity in the form of high outcome expectations and high career self-efficacy, although this may also represent a
tendency to minimize experiences of discrimination (Adams et al., 2005; Förster, Higgins & Werth, 2004). Considering these issues, gay men and lesbians often report that their sexual orientation influences their academic and career interests (Schneider & Dimito, 2010; White, 2014) Although lesbians and gay men report opened opportunities in some cases (Adams et al., 2005; Schneider & Dimito, 2010; White, 2014), examination of their career interests in masculine and feminine careers suggest that they may perceive some careers to be closed off to them.

**Gay men’s and lesbians’ interest in masculine and feminine careers.** One way that careers have been categorized in the literature is based on gender, or masculine, feminine, or gender neutral. Masculine careers typically include science, technology, engineering, and math (STEM), (although sciences usually refer to the physical sciences such as physics), careers in the military, policing, and jobs in the trades. Feminine careers usually involve the arts, humanities and the social sciences, careers that require working with children or helping careers such as nursing and social work. There is substantial evidence that men tend to be underrepresented in feminine careers and express less interest in feminine careers compared to masculine careers and compared to heterosexual women (Falk, Rottinghaus, Casanova, Borgen, & Betz, 2017; Lippa, 2002; 2008; 2010). Meanwhile, heterosexual women tend to be underrepresented and express less interest in masculine careers compared to feminine careers and compared to heterosexual men (Falk et al., 2017; Lippa, 2002; 2010). This research is important because research examining gay men and lesbians suggest that their career interests tend to reflect the gender inversion stereotype. Similar to heterosexual women, gay men tend to express less interest in masculine careers, and similar to heterosexual men, lesbians tend to express less interest in
feminine careers compared to their heterosexual counterparts (Carpenter, 2008; Chung & Harmon, 1994; Ellis et al., 2012; Lewis & Seaman, 2004; Lippa, 2002, 2008).

Chung and Harmon (1994) conducted one of the first studies investigating the relationship between gender, sexual orientation, and career interests and aspirations. Gay and heterosexual men (matched on demographic variables) were asked to complete the self-directed search (SDS; Holland, 1985) which assesses career interests in six categories: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. The SDS is a common career assessment tool (Bullock-Yowell, Leuty, To, & Mathis, 2017) and has often been used in the literature to determine differences in interest in masculine and feminine careers. Typically, greater interest in Investigative and Realistic careers suggests a preference for masculine careers and greater interest in Artistic and Social careers suggests a preference for feminine careers (Peterson & Hyde; Swan, 2005; Yang & Barth, 2015). Using the SDS, Chung and Harmon (1994) asked participants to rate the extent to which they “like” a list of occupations or activities. Resembling heterosexual women’s career interests (Falk et al., 2017; Lippa, 2002; 2010), they found that gay men reported greater interest in Social and Arts domains and less interest in Realistic and Investigative careers compared to heterosexual men.

Similarly, in a comprehensive study of LGB university students in Canada and the United States, Ellis et al. (2012) compared interests in various careers among lesbians, gay men and heterosexuals. Participants were asked to rate the appeal of 26 occupations disregarding their talents and their financial situation on a scale from 1 (as unappealing as you can imagine) -100 (as appealing as you can imagine). Occupations were determined to be “male-preferred” if heterosexual men expressed more interest compared to heterosexual women, and “female-preferred” if vice-versa. They found that gay men reported significantly less interest in “male-
preferred” occupations such as athlete, auto mechanic, electrician, high school coach, and police officer, and greater interest in “female-preferred” occupations such as actor/actress, artist, beautician, designer, nurse and novelist compared to heterosexual men. Lesbians evidenced greater interest in “male-preferred” occupations compared to heterosexual females and less interest in “female-preferred” occupations.

There is also evidence that lesbians and gay men differ in the extent to which their interest in feminine and masculine careers is similar to opposite gender. Lippa (2002; 2008) had heterosexual men and women and gay men and lesbians rate their preference from strongly like to strongly dislike for 50 occupations and their self-ascribed masculinity and femininity. They then compared gay men’s and lesbians’ scores on occupational preference to their heterosexual counterparts and reported effect sizes (Cohen’s d). The findings supported previous research and indicated that gay men reported a higher preference for feminine occupations, while lesbians reported a significantly greater preference for masculine occupations compared to their heterosexual counterparts. However, the size of the effect was stronger for gay men (d = 1.14) compared to lesbians (d = .53). This is consistent with the findings that gender inversion stereotyping may be less prevalent for lesbians compared to gay men (Blashill & Powlishta, 2009). Together this research suggests that lesbians and gay men report less interest in gender-typical careers. In other words, resembling the gender inversion stereotype gay men tend to report less interest in feminine careers, while lesbian’s masculine careers compared to their heterosexual counterparts and this preference is more robust for gay men compared to lesbians.

However, there are also contradicting findings in the literature that suggest that some lesbians and gay men report avoiding gender-atypical careers (feminine careers for gay men and masculine carers for lesbians). Ritter and Terndrup (2002) proposed that while lesbians and gay
men may choose careers where they are highly represented, some may choose to avoid professions that conform to stereotypes (feminine jobs for gay men and masculine jobs for lesbians). White’s (2014) qualitative study highlights these contradicting findings. While gay men and lesbians reported that they gravitated towards stereotypically “gay jobs” in that they chose gender-atypical careers, some participants expressed that when making career choices, they were motivated to reject stereotypically “gay jobs” such as makeup artists and hair dresser which are traditionally feminine careers (Liben et al., 2002). Thus, there is a discrepancy in the literature regarding whether gay men and lesbians indicate that they are interested or avoid certain careers. An explanation for this discrepancy may be related to lesbians’ and gay men’ identity development and the extent to which they have disclosed their sexual orientation to others or outness.

Lesbians’ and gay men’s outness and openness about their sexuality have implications for their careers (Button, 2004; Woods, 1993). Woods (1993) proposed “counterfeiting” as an identity management strategy for sexual minorities who have not come out about their sexuality to others. Indeed, Button (2004) found that gay men and lesbians who were less open to others about their sexuality were more likely to report using counterfeiting strategies. According to Woods (1993) the goal of “counterfeiting” is to maintain a heterosexual identity and involves actively avoiding interests that are associated with being gay or lesbian. This suggests that lesbians and gay men who are in the closet may express less interest in careers that are gender-atypical (lesbians and masculine careers) rather than gender-typical, (e.g., lesbians and feminine careers). Thus, whether gay men’s and lesbians’ career interests align with stereotypes may also be partly be shaped by the extent to which a lesbian or gay individual is out to others. One limitation to the previous studies on career interests (Chung & Harmon, 1994; Ellis et al., 2012)
is that these studies often include individuals who are out of the closet and do not include measures of outness. Consequently, this study seeks to improve on previous research by including a measure of outness.

Despite the contradicting findings, of particular interest to this study is that there is some evidence that gay men and lesbians tend to report less interest in gender-typical careers. That is gay men report less interest in masculine careers, and lesbians report less interest in feminine careers compared to their heterosexual counterparts (Carpenter, 2008; Chung & Harmon, 1994; Ellis et al., 2012; Lewis & Seaman, 2004; Lippa, 2002, 2008), and that this preference is more common for gay men than lesbians (Lippa, 2002; 2008). A question that remains in the literature is why do gay men and lesbians report different career interests in gender-typical career compared to their heterosexual counterparts.

Career theories provide a potential explanation for this finding (Astin, 1984; Gottfredson, 1996). Gottfredson’s (1996) theory of circumscription and compromise proposed that people use cognitive maps that help to organize their perceptions of careers, such as the personalities of the people in the jobs and appropriateness of jobs for certain people. According to the theory, gender (i.e., masculinity and femininity) is one dimension that is used to help organize people perceptions about careers. However, when people perceive that careers are inaccessible due to obstacles and focus on barriers to certain careers, they may prematurely restrict and foreclose on career options. Some potential barriers that have been proposed include anticipating discrimination and perceived social support.

**Anticipated discrimination.** Lesbians and gay men often report anticipating and expecting discrimination in school (Russell, Seif, & Truong, 2001) and at work (Burns & Krehely, 2011; Croteau & Lark, 2009; Chung, 2001; Herek, 2009). Herek (2009) found, in a
study of over 600 gay men, lesbians, and bisexuals that 34% agreed that people think less of sexual minority individuals, 25.5% disagreed that employers would hire qualified sexual minorities. Many researchers have proposed that anticipated discrimination or the expectation of experiencing discrimination (Prati & Pietrantoni, 2014) plays a major role in the career development of lesbians and gay men because it is considered a major career barrier for lesbians and gay men (Chung & Harmon, 1994; Fassinger, 1996; Parnell et al., 2012 Schneider & Dimito, 2010). To avoid discrimination, lesbians and gay men may choose careers based on safety (Fassinger, 1996). This suggests that perceiving discrimination is a strong deterrent for certain careers for lesbians and gay men and may result in foreclosing on careers without consideration of their options.

**Perceived support from role models.** Another potential factor that contributes to foreclosure is the lack of role models in the fields. In general, perceiving the presence of role models in one’s career is important to work satisfaction and choice (Croteau & Lark, 2009; Nauta et al., 2001). Role models are particularly important for sexual minorities as there is evidence that lesbians and gay men feel less supported during their career decision making process (Croteau & Lark, 2009; Nauta et al., 2001). Given the underrepresentation of lesbian and gay men in gender-typical careers (Carpenter, 2008), they may feel that there is a lack of presence or support from role models in these careers. Subsequently, they choose to avoid these careers and try to seek work environments that they perceive to have supportive role models (White, 2014). For example, White (2014) found that 76% of participants felt that seeking an affirming work environment was an important part of their career decision making. Participants also indicated that having role models was an important aspect of an affirming environment.
Anticipated discrimination and perceived support from role models may also explain why lesbians report greater interest in masculine careers, but not as strong as heterosexual men (Blashill & Powlishta, 2009; Lippa, 2008). Men tend to express more negative attitudes towards gay men and lesbians and are more likely to express hostility compared to women (Jellison, McConnell, & Gabriel, 2014; Holley et al., 2008). Additionally, certain masculine careers have historically been actively discriminatory toward gay men and lesbians, including the military (Don’t Ask, Don’t Tell Policy) and policing (criminalization of sexual minorities). Consequently, masculine careers that are overrepresented by men may be associated with greater anticipated discrimination for both lesbians and gay men (Poulin, Gouliquer, & McCutcheo, 2017). Additionally, success in female-dominated careers is related to having traits such as being gentle, nurturing, helpful to others, sociable, kind, cooperative, and supportive (Cekja & Eagly, 1999). Therefore, feminine careers may still present as an attractive career for some lesbians and gay men because they are perceived to be “friendly.” Meanwhile, masculine careers are associated with traits such as aggressive, dominant and competitive (Cekja & Eagly, 1999) and may present as less appealing options and be perceived as less friendly. Also, lesbians may experience double discrimination in masculine careers (Bowleg, 2008; Schneider & Dimito, 2010). That is lesbians experience discrimination based on gender and sexual orientation in masculine careers. Lesbians run into additional barriers in masculine careers including common gender stereotypes that portray women as being incapable of lacking leadership skills and being unassertive, bad at math and computers and physically weak (von Hippel, Wiryakusuma, Bowden, & Shochet, 2011). This is also compounded with the glass ceiling (Frank, 2006) and the underrepresentation of women in masculine careers (McKenzie, 2007; Statistics Canada, 2011; Economics and Statistics Administration, 2011) which creates an environment lacking in role models.
representing the same gender (McCullough, 2011). Consequently, lesbians may have to contend with multiple barriers in masculine careers related to gender and sexual orientation and as a result, express less interest in masculine careers.

However, while anticipated discrimination and perceived role models might provide a possible explanation for gay men’s and lesbians’ interest in masculine and feminine careers, one area that has been ignored in the literature is the role of lesbians’ and gay men’s awareness and endorsement of gender inversion stereotyping in these career interests. The main question that this study seeks to answer is, does awareness or endorsement of the gender inversion stereotyping partially explain gay men and lesbians career interests? The next section provides an overview of the current state of the research examining the relationship between stereotypes and career outcomes.

**Gender Stereotyping and Career Interest**

Researchers have emphasized the potential importance of examining stereotypes on the career development of lesbians and gay men (Lonborg & Phillips, 1996; Sandfort, 2005). For example, Sandfort (2005) argued that examining how lesbians and gay men deal with the gender inversion stereotype is an important direction for future research. Lonborg & Phillips (1996) applied this question to their career path and emphasized that a key question in career development is the extent to which stereotypes influence the career choices and intentions of lesbians and gay men. Many years after these assertions, the question remains whether stereotypes play a role in gay men and lesbians career interests.

There is some evidence the stereotypes can affect career interests for other groups. Since 1995, researchers have argued that negative stereotypes can detrimentally affect the academic outcomes of individuals who are targeted by stereotypes (Steele & Aronson, 1995). Steele and
Aronson (1995) proposed that when people are aware of stereotypes targeting their group, particularly negative stereotypes, they fear confirming these stereotypes or being perceived through the lens of these stereotypes. This “stereotype threat” occurs from merely knowing that a negative stereotype can be applied to them in a situation. For example, according to Steele and Aronson (1995), for women, simply being aware that others may perceive them as being bad at math may elicit stereotype threat. Steele and Aronson (1995) theorized that this threat detrimentally affects one’s performance in areas where there is a risk that a negative stereotype may be applied to them. For example, women may experience stereotype threat during a math test because they become aware of negative stereotypes that they are bad at math and subsequently, perform poorly on the test. There has substantial evidence support that reminding people about negative stereotypes about their group can affect performance in activities where the stereotypes are relevant, such as, African Americans and their academic ability (Steele & Aronson, 1995) women and math (Spencer, Steele, & Quinn, 1999), older adults and cognitive tasks (Hess & Hinson, 2006, Lamont, Swift, & Abrams, 2015), women and sports (Chalabaev, Sarrazin, & Fontaine, 2009). More importantly, expanding on their theory, Steele and Aronson (1995) hypothesized that stereotypes may ultimately impact career decisions and interests.

Influence of stereotype awareness on career interests. There is some support for the hypothesis that making people aware of stereotypes can affect their career interests. Studies in this area have focused on experimental designs that increase awareness of stereotypes by reminding women of negative stereotypes about women in math and science, and then assess their interests in pursuing careers in the STEM fields (Cheryan et al., 2009; Davies et al., 2002; Master et al., 2015). This research indicates that when women are reminded of negative stereotypes about their group, they tend to report lower interest in the STEM fields. For example,
Davies and colleagues (2002) examined whether activating negative stereotypes had an effect on women’s interest in STEM fields. They presented participants with commercials which either portrayed women in stereotypical ways (e.g., a woman drooling in anticipation of using a new brownie mix) to remind women of negative stereotypes or neutral commercials (i.e., no humans were present in the commercials). In the third study, women were asked to rate the extent to which they were interested in several careers and academic items from 1 (no interest) to 7 (strong interest). The researchers found that women who watched the stereotypical commercials reported less interest in quantitative careers compared to those who watched the neutral commercials. This research provides evidence that awareness of gender stereotypes through activation via being placed in a situation that highlights the stereotypes can lower women’s interests in careers that have been characterized as masculine.

**Influence of stereotype endorsement on career interests.** Additionally, Burkley and Blanton (2009) proposed that a consequence of being aware of stereotypes is that lesbians and gay men can come to internalize stereotypes that target their group and endorse these stereotypes or believe them to be true. Similar to awareness, there is some evidence that stereotype endorsement is related to lower interest in pursuing stereotype relevant careers. Women who report higher endorsement of negative gender stereotypes about women and masculine careers report less interests in masculine careers (Cundiff, Vescio, Loken, & Lo, 2013; Schmader et al., 2004). For example, using the implicit association tests, Cundiff et al. (2013) found that women who implicitly endorsed the stereotype that male = science and female = humanities reported less interest in pursuing a career in the sciences. Similarly, Schmader et al. (2004) asked women to rate the extent to which they endorsed three gender stereotype statements. Participants were subsequently asked to rate the extent to which they were interested in persisting in their STEM
major. Schmader et al. (2004) found that greater endorsement of the stereotype that women are bad at STEM was related to less interest in continuing to persist in the STEM field.

It is important to note that the majority of this literature has focused on gender and its effect on women’s interests in STEM careers. However, there have been recent attempts at expanding this research to men and arts (Shen-Miller & Smiler, 2015; Forsman & Barth, 2017), teaching and working with children (Kalokerinos, Kjelsaas, Bennetts, & von Hippel, 2017), other masculine careers for women (Smith, Brown, Thoman, & Deemer, 2015), and career choices for Black students (Fischer, 2010; Gordon, 2016). These results support the hypothesis that activating stereotypes can reduce interest in gendered careers. For example, Forsman and Barth (2017) presented men with descriptions of masculine and feminine jobs with and without titles and assessed their interest in these careers. Participants were asked to rate the jobs as masculine or feminine to ensure that participants were aware of stereotypes related to the careers. They hypothesized that including the job title of feminine careers (e.g., nurse) would activate stereotypes and subsequently result in men reporting less interest in feminine careers. Indeed, the men reported the lowest interest in careers when the feminine job title was included in the description compared to when there was no title (e.g., “people in this career”) or when masculine career titles were used (e.g., auto-mechanics). Similarly, for Black men, greater stereotypical portrayals of Black men in the media was associated with expressing less interest in careers that require a college education (Gordon, 2016).

Together these studies suggest that gender stereotypes can influence career interests for women and men. For women in general, awareness (Cheryan et al., 2009; Davies et al., 2002; Master et al., 2015) and endorsement (Cundiff et al., 2013; Schmader et al., 2004) of gender stereotypes about women’s ability in math and science can affect their interest in these careers.
Additionally, there is some evidence of similar findings for men in general, and feminine careers (Shen-Miller & Smiler, 2015; Forsman & Barth, 2017). However, the issue with this research is that the vast majority has focused on heterosexuals and masculine and feminine careers. Meanwhile, the relationship of gay men and lesbians career interests and stereotypes has been largely ignored in the quantitative literature. As mentioned previously, qualitative research provides some evidence in that gay men and lesbians report that stereotypes play a role in their career decision making (White, 2014). White (2014) conducted a qualitative study examining the role of sexual identity and career decision for lesbians and gay men and found that 32% of participants reported that they foreclosed on career opportunities because of sexual orientation stereotypes. The question that remains is whether gender inversion stereotyping of gay men and lesbians, specifically, at least partially explains their interest in masculine and feminine careers. In particular, this study seeks to examine whether awareness or endorsement of the gender inversion stereotype is related to their lower interest in gender-typical careers. In addition, this study seeks to examine how stereotypes influence career interests. This particular study is focused on the role of sense of belonging in explaining the relationship.

**Sense of Belonging**

**Defining sense of belonging.** According to Baumeister and Leary (1995), sense of belonging is a fundamental need. It has been defined as the “sense of personal involvement in a social system so that persons feel themselves to be an indispensable and integral part of the system” (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992, p.173). Expanding on this definition further to specific areas such as school settings, Goodenow (1993) defined sense of belonging as the extent to which one feels accepted, valued and included by those within the
area. The current study defines sense of belonging as feeling that one is valued and accepted by the people within masculine and feminine careers fields.

The extent to which one feels accepted and valued by others within an environment or group is important for mental health and is associated with increased self-esteem, life satisfaction, and decreased depression (Hunter, Case, Joseph, Mekawi, & Bokari, 2017; McCallum & McLaren, 2011; Wilczynska, Januszek, & Bargiel-Matusiewicz., 2015). Pertinent to this study, research indicates that sense of belonging goes beyond mental health and has an impact on academic and career decision making. For example, the extent to which one feels valued and accepted in school is a stable predictor of achievement, achievement motivation (Goodenow, 1993; Goodenow and Grady 1993), as well as persistence and engagement (Freeman, Anderman, & Jensen. 2007). There is research that shows that various groups seek out activities that increase their sense of belonging (Han, Radel, McDowd, & Sabata, 2016) and that perceiving an environment such as schools or workplaces to be unwelcoming or unaccepting cause’s people to avoid these settings.

This has been highlighted for women in STEM careers (Johnson, 2012) and ethnic minority groups in schools (Johnson, 2007; Mok, Martiny, Gliebs, Keller, & Froelich, 2016). For women, a greater sense of belonging in STEM fields is associated with a greater intention to pursue math in the future (Good et al., 2012). More important to this study is that feeling that one does not belong affects career interest and enjoyment (Patrick, Ryan, & Kaplan, 2007). McCallum & McLaren (2011) proposed that sense of belonging is important to career decision making because when people feel that they do not belong or are not valued in an area, they may withdraw and disengage from a certain career path. Careers in which a diverse workforce is accepted and valued may be perceived to be more welcoming, and subsequently, people will be
more likely to express interest or that they like the career. Consequently, sense of belonging is not only an important variable for well-being, but also for career decision-making.

Gay men’s and lesbians’ sense of belonging. The reason that sense of belonging is particularly important is that lesbians and gay men tend to report feeling less valued and accepted in the general community and in schools compared to heterosexuals (Aerts, Van Houtte, Dewaele, Cox, & Vinke, 2012; Galliher, Rostosky, & Hughes, 2004; McCallum & McLaren, 2011; Rostosky, Owens, Zimmerman, & Riggle, 2003; Robinson & Espelage, 2011). According to Walton and Cohen (2011), people in groups that experience stigma, prejudice and discrimination experience “belonging uncertainty,” which is the question of acceptance and being in a state of doubt about their belonging within professional and academic settings (Walton & Cohen, 2011). For example, they may question whether or not they will be fully included in positive social relationships in school and work. Consequently, lesbians and gay men are at risk of having a lower sense of belonging in their professional and school life in general. This is problematic because research suggests that awareness of stereotypes impacts sense of belonging.

Sense of belonging mediates influence of stereotypes on career interests. According to the motivational experiences model of stereotype threat (Thoman et al., 2013), a sense of belonging within a domain, is a critical motivational experience that is vulnerable to stereotypes. One reason that awareness or endorsement of stereotypes may affect a person’s sense of belonging is that it creates a view that certain groups are devalued within the field. According to labeling theory (Link, 1987), stigmatization of social groups is a process in which people with power in society use stereotypes to label those who are less powerful as being deviant or inferior. This label or stigma suggests that they have a devalued social position or undesirable characteristic. Thus, increased awareness of gender inversion stereotyping or believing that the
stereotype is true increases perceptions that they are not valued or accepted within gender-typical careers. Gay men and lesbians may perceive that their skills will not be valued or accepted by others in the field or that others within those fields are not accepting of them. For example, the stereotype that lesbians are similar to heterosexual men may suggest that they have masculine traits or skills that may not be valued or accepted by people in careers that are labelled feminine. Consequently, for lesbians and gay men, the gender inversion stereotype may threaten lesbian and gay individuals’ feelings of being valued or accepted within certain careers, thus affecting their interests to pursue these careers.

To date, there have been a handful of studies that have examined the role of stereotypes and sense of belonging on career outcomes (Cheryan et al., 2009; Good et al., 2012; Master et al., 2015; Walton & Cohen, 2011). Good and colleagues (2012) examined the relationship between perceived stereotyping in a math environment, sense of belonging in math and intentions to pursue math in the future for women. They found that sense of belonging mediated the relationship between perceived environmental stereotypes and women’s intentions to pursue math. That is, the more women perceived that others believed stereotypes about women in a math environment, the lower their sense of belonging in math, which in turn lowered their intent to pursue math courses.

Similarly, in a study examining the role of stereotypes on children’s interests, Master et al. (2015) presented girls and boys and with a picture of a computer science classroom containing stereotypical objects, e.g., videogames, star war, tech magazines, or a picture of a computer science classroom with neutral items e.g., water bottles, pens, lamps. Participants then completed questionnaires regarding their sense of belonging in the classroom and the interests in enrolling in the class. The results indicated that girls given the stereotypical picture expressed less interest
in pursuing the computer science course and lower sense of belonging in the classroom compared boys. Meanwhile, there was no difference in girls’ and boys’ interest or sense of belonging in the neutral condition. Mediational analyses indicated that girls’ lower interest compared to boys in the stereotyped condition was mediated by a lower sense of belonging in the stereotypical classroom. Cheryan and colleagues (2009) conducted a similar study with adults using an actual room rather than pictures and found similar results. Providing evidence that the room activated gender stereotypes, women in the room with the stereotypical objects reported greater gender stereotype-related concerns such as feeling that people would draw conclusions based on their gender and feeling more anxious that they would confirm negative gender stereotypes compared to those in the room with gender neutral items. These findings provide some evidence that the relationship between awareness of stereotypes and interest in careers is mediated by feeling that one belongs in the career. It may be that similarly, awareness or endorsement of the gender inversion stereotype may threaten lesbians’ and gay men’s sense of belonging in gender-typical careers and subsequently, lower their interests to pursue these careers.

In sum, there is evidence that awareness and endorsement of stereotypes can influence career interests for minority groups. In particular, for women in general, activating negative stereotypes about their performance in math and computers can affect their interest in pursuing careers that require these subjects. Furthermore, sense of belonging has been found play a mediating role in that heightening people’s awareness of stereotyping seems to threaten the extent to which they feel accepted or valued within these careers and subsequently, affects career interests. However, there remain questions regarding whether gay men’s and lesbians’ awareness of the existence and endorsement of the gender inversion stereotype may explain
lesbian and gay men’s career interests in gender-typical careers and the potential role of sense of 
belonging in this relationship. Consequently, this study seeks to fill this gap in the literature.

**Purpose of Study**

The purpose of this study is to make several contributions to the research on stereotypes 
about gay men and lesbians and gay men’s and lesbians’ career interests. Firstly, while the 
literature provides evidence that stereotypes targeting gay men and lesbians are changing, the 
gender inversion stereotype continues to be perpetuated (Holley et al., 2008; Reyna et al., 2014). 
Lesbians and gay men express awareness of being stereotyped by others (Adams et al., 2005; 
Gates & Mitchell, 2013) and may come to endorse these stereotypes themselves (Boysen et al., 
2011). However, questions that remain are, to what extent are gay men and lesbians aware of 
gender inversion stereotyping, i.e., that people stereotypes gay men and lesbians as being similar 
to the opposite gender, and to what extent do lesbians and gay men endorse the stereotype. 
Consequently, one goal of this study was to determine the extent to which lesbians and gay men 
are aware of and endorse the gender inversion stereotype.

Secondly, there is some evidence that, similar to the gender inversion stereotype, 
lesbians, and gay men are less likely than their heterosexual counterparts to express interest in 
gender-typical fields, i.e., masculine careers for gay men and feminine careers for lesbians 
(Chung & Harmon, 1994; Ellis et al., 2012). However, little is understood as to why gay men and 
lesbians sometimes express interests that are different from the opposite gender. One potential 
explanation is gay men and lesbians express less interest because they perceive barriers in these 
careers including anticipated discrimination and lack of perceived support from role models.
Thus, this study also sought to explore the possibility that gay men and lesbians anticipate greater discrimination and perceived less support from role models in gender-typical careers.

Thirdly, despite extensive research that stereotypes can affect career interests for heterosexual women in STEM careers and heterosexual men in feminine careers (Cheryan et al., 2009; Davies et al., 2002; Master et al., 2015; Shen-Miller & Smiler, 2015; Forsman & Barth, 2017), there is a lack of research exploring the relationship between gay men’s and lesbians’ awareness that gender inversion stereotype exist or endorsement of the stereotype and interest in pursuing masculine and feminine careers. Consequently, the main purpose of this study is to examine whether awareness of the stereotype that lesbians are similar to heterosexual men and gay men are similar to heterosexual women may partially explain why lesbians and gay men express less interest in pursuing gender-typical fields.

Lastly, this study sought to get a better understanding as to what may explain the relationship between awareness and endorsement of the gender inversion stereotype and career interests. Previous research indicates stereotypes can threaten one’s sense of belonging within a career or field, i.e., the extent to which they feel valued or accepted by others in the careers and subsequently reduce their interest in those careers (Cheryan et al., 2009; Master et al., 2015). Thus, this study explored whether the relationship between awareness of the gender inversion stereotype and interests in gender-typical careers is mediated by lower sense of belonging in these careers.

Due to inconsistencies in the research regarding stereotype endorsement, there were no hypotheses regarding the extent to which gay men and lesbians endorsed the gender inversion stereotype. Based on the research above, the following hypotheses are proposed:
Hypothesis 1: The majority of gay men and lesbians will report statements about gender inversion stereotyping to be usually true and always true.

Hypothesis 2: Gay men and lesbians will report less interest in pursuing gender-typical careers, i.e., less interest in masculine careers compared to feminine for gay men and less interest in feminine careers compared to masculine careers for lesbians.

Hypothesis 3: Gay men and lesbians will report greater anticipated discrimination, and perceive less support from role models in pursuing gender-typical careers compared to gender-atypical careers.

Hypothesis 4: Greater awareness of gender inversion stereotyping will predict lower interest in pursuing gender-typical careers for gay men and lesbians.

Hypothesis 5: Greater endorsement of gender inversion stereotyping will predict lower interest in pursuing gender-typical careers for lesbians and gay men.

Hypothesis 6: For lesbians and gay men, sense of belonging in gender-typical careers will mediate the relationship between awareness of the gender inversion stereotype and interest in gender-typical careers.

Hypothesis 7: For lesbians and gay men, sense of belonging in gender-typical careers will mediate the relationship between endorsement of the gender
Chapter 2. Methodology

Participants

In total 332 people completed the survey. Of those, 145 participants were excluded for reasons including that they did not indicate their sexual orientation (n = 47), they were not between the ages of 18-30 (n = 18), they were not living in Canada or the US (n = 2), they were not currently attending a post-secondary institution, did not identify as gay or lesbian (n = 67) or they identified as transgendered (n = 8). Participants with missing data (n = 4) were also removed based on analyses which indicated that removal of these participants did not affect the findings. The final total for participants that were included in the following analyses were 74 gay men and 108 lesbians. Table 1 provides a summary of the demographic information for gay men and lesbians. The majority of gay men and lesbians were residing in the United States at the time that they completed the study and were not a member of a minority group based on ethnicity or culture.

Table 1

Demographic characteristics of lesbians and gay men in final sample

<table>
<thead>
<tr>
<th></th>
<th>Lesbians (N = 108)</th>
<th>Gay men (n = 74)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age(^a)</td>
<td>20.8 (3.4)</td>
<td>21.8 (3.8)</td>
</tr>
<tr>
<td>Country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>43 (39.8)</td>
<td>19 (25.7)</td>
</tr>
<tr>
<td>United States</td>
<td>58 (60.2)</td>
<td>55 (74.3)</td>
</tr>
<tr>
<td>Minority based on ethnicity or culture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23 (21.3)</td>
<td>19 (25.7)</td>
</tr>
<tr>
<td>No</td>
<td>83 (76.9)</td>
<td>55 (74.3)</td>
</tr>
<tr>
<td>Unknown</td>
<td>2 (1.9)</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. Values are expressed as n (%) unless otherwise indicated.  
\(^a\)Mean (Standard Deviation).
**Procedure**

Before recruitment, a power analysis was completed. Based on recommended sample sizes required for mediation (Fritz & MacKinnon, 2007), it was determined that a minimum sample size of 59 gay men and 59 lesbians was required for this study. Recruitment of participants began following approval from the University of Toronto Social Sciences, Humanities and Education Research Ethics Board. Between August 14, 2017, and August 29, 2017, participants were recruited through posters on the University of Toronto (UofT) campus (Appendix A), lesbian, gay, bisexual, transgendered and queer (LGBTQ) listservs, and social media (e.g., Facebook advertising, sharing with friends of the researcher via social media, and posting on Facebook groups). For LGBTQ listservs, if the listserv was moderated, the moderators were emailed, and permission was requested to send the study advertisement to subscribers (Appendix B). Two out of the four moderators contacted agreed to send the advertisement to subscribers. Regarding social media, a Facebook advertisement was created (Appendix C). The link to the Facebook advertisement was shared through friends of the researcher on their Facebook pages, and the advertisement was also paid to be shown to people through Facebook ads. Using the advertisement settings on Facebook, the advertisement was targeted only to be displayed to Facebook users who had interests in LGBTQ groups, who were between the ages of 18-30, and were living in Canada or the United States.

On all the posters and advertisements, participants were informed that the purpose of the study was to examine the relationship between perceptions of stereotyping of lesbians and gay men and career interests. They were also informed of the recruitment requirements including the time commitment, target age, sexual orientation, education and language requirements. All recruitment material also mentioned that participants would have the opportunity to enter a draw.
to win one of two $50 amazon gift cards. Participants who were interested in participating were
directed to enter the Qualtrics survey link included in the advertisements into their web browser.
Qualtrics (https://www.qualtrics.com/) is a secure survey research platform where the consent
form and questionnaires were uploaded.

Once participants entered the link, they were shown the consent form (Appendix D)
which also informed participants that they could withdraw from the study up until they submitted
their questionnaires because their data would be submitted anonymously. Participants were only
able to continue to the survey questions after clicking on the “I agree to participate in this study”
button at the end of the consent form. After clicking on the button, participants were asked to
complete measures assessing awareness of gender inversion stereotyping and endorsement of
gender inversion stereotypes. Since participants were asked to rate gay men and lesbians on
masculine and feminine traits separately for the stereotype endorsement questionnaire, to control
for order effects, whether participants rated lesbians or gay men first on the stereotype
endorsement questionnaire was counterbalanced. Participants were then asked to rate sense of
belonging, anticipated discrimination and perceive support from role models in masculine and
feminine careers separately. Again, to control for order effects, whether participants rated
perceived support from role models, sense of belonging and anticipated discrimination for
masculine or feminine careers first was also counterbalanced. Finally, participants completed
measures of career interests, outness, and the demographics questionnaire. After participants
completed the survey, they were provided with another Qualtrics link and asked to click on it if
they wished to enter the draw. The link redirected participants to another Qualtrics website
where they were able to enter their institution/school email.
The questionnaire items used to assess stereotype awareness, sense of belonging, anticipated discrimination and perceived support from role models were entered into principal component analysis (PCA) with promax rotation to allow for relationships between factors to validate the measures. Reliability analyses were also run to determine the reliability and internal consistency of the scales. Analyses were completed separately for lesbians and gay men and ratings of masculine and feminine careers. The goal of the factor analysis was to determine the items that would create a meaningful scale for the variables of interests. Also, to facilitate comparisons between gay men’s and lesbians’ rating of masculine and feminine careers, items were removed if it had low factor loadings for one type of career, but not the other, and if removal of the items did not greatly affect the internal consistency of the scales. A summary of the factor analyses is presented in the measures, but detailed descriptions of the factor analyses are found in Appendix K.

Measures

*Stereotype Awareness Questionnaire (SAQ).* The SAQ (Appendix E) was created for this study and measures awareness of the existence of gender inversion stereotyping among gay men and lesbians. The majority of the items were created by the researcher to capture awareness that gender inversion stereotyping persists. For example, “Stereotypes that gay men are similar to heterosexual women still exist today.” Some items were based on previous research asking participants to list stereotypes about gay men and lesbians (Massey, 2010). For example, “People stereotype gay men as having traits like being sensitive, caring, creative.” Participants were asked to rate the extent to which they believed the nine statements about gender inversion stereotyping of gay men and lesbians to be true on a five-point likert scale from 1 = never true to
5 = always true. Two items were reverse scored, e.g., “I don’t think people stereotype gay men as being somehow similar to heterosexual women.”

The original nine items were reduced to six items representing awareness of gender inversion stereotyping following PCA (see Appendix K). This unitary factor explained 45.42% and 50.73% of the variance for lesbians and gay men respectively. Reliability analyses conducted in this study indicated good internal consistency of the six-item scale for gay men and lesbians, Cronbach’s alpha = .86 and .83 respectively. Participants’ awareness of gender inversion stereotyping was the average score of the six items with higher scores indicating greater awareness of gender inversion stereotyping.

**Bem Sex Role Inventory (short form)** (*BSRI-SF; Bem, 1981*). The BSRI-SF was used to assess the extent to which lesbians and gay men endorse the gender inversion stereotyping. It consisted of a list of 20 traits that are typically thought of as “masculine” or “feminine.” Participants indicated the extent to which they would rate these 20 traits as characteristic of gay men and lesbians separately. The 20 traits were the 10 feminine items (e.g., eager to soothe hurt feelings) and 10 masculine items (e.g., assertive) in the Short Form - Bem Sex Role Inventory (Bem, 1981). Participants rated the items on a five-point likert scale from 1 = not at all characteristic to 5 = completely characteristic. The original BSRI has been used extensively to examine adherence to sex typing and sex-role stereotyping (Calvo-Salguero, Garcia-Martinez, & Monteoliva, 2008). Although there are criticisms of the validity of the original BSRI (Hoffman & Borders, 2001) questioning the factor structure of the original items as masculine and feminine (Choi & Fuqua, 2003), the short form has shown greater validity (Choi, Fuqua, & Newman, 2009). Furthermore, the items have been found to differentiate between men and women (Oswald, 2004). The internal consistencies of the masculine and feminine items on the BSRI-SF
in this study were in the good to excellent range with Cronbach alpha ranging from .92 to .94 for feminine items and .82 to .89 for feminine items. This is consistent with previous studies using the short-form BSRI which has found internal consistencies reliabilities ranging from .84 to .89 for masculine items and .91 to .92 for feminine items (Duhachek & Iacobucci, 2004; Choi et al., 2009). The average score for assigning gender-typical traits to gay men and lesbian was subtracted from assigning gender-atypical traits to gay men and lesbian. This is an improvement from previous studies that do not account for the possibility of perceiving sexual minorities as androgynous (Blashill & Powlishta, 2009). Consequently, higher scores suggest greater endorsement of gender inversion stereotyping, while lower scores suggest endorsement that gay men and lesbians are gender-typical in their traits.

Sense of Belonging Questionnaire (SOBQ). The SOBQ was an eight-item questionnaire adapted from the 18-item Sense of Belonging Inventory (SOBI; McLaren, Gibbs, & Watts, 2013). The items assessed the extent to which participants feel valued and accepted within careers that are considered masculine and feminine separately. Participants were asked to rate the 8-items on a five-point likert scale, ranging from 1= strongly disagree to 5 = strongly agree while thinking about pursuing careers that are considered masculine and to rate the same eight items when they think about pursuing careers that are considered feminine. For example, participants were asked the item, “I would feel that what I have to offer is not valued by others in these careers,” when thinking about pursuing careers that are considered masculine career and when thinking about pursuing careers that are considered feminine.

Following PCA (see Appendix K), the scale was reduced from eight items were retained. For ratings of sense on belonging in masculine careers, the one factor solution explained 53.11% of the variance for gay men and 39.3% for lesbians. For ratings of sense of belonging in feminine
careers, the one factor solution explained 50% of the variance for gay men and 51.82% for lesbians. The original SOBI yielded high internal consistency with Cronbach’s alphas of .95 and .96 for gay men for both the general and gay communities (McLaren, Jude, & McLachlan, 2008) and .96 and .97 for lesbians in the general and lesbian communities, respectively (McLaren, 2009). In this study, the SOBQ had adequate to excellent internal consistency with Cronbach’s alphas of .90 and .85 for gay men’s ratings of masculine and feminine careers respectively, and .77 and .85 for lesbians’ ratings of masculine and feminine careers respectively. Higher average scores on the seven items of the SOBQ indicated greater sense of belonging in masculine careers or feminine careers.

Anticipated Discrimination Scale-Modified (ADS-M; Prati & Pietrantoni, 2014). A modified version of the ADS was used to measure the extent to which lesbians and gay men anticipate experiencing discrimination based on their sexual orientation. Participants were asked to rate the four items on a five-point likert scale, ranging from 1= strongly disagree to 5 = strongly agree while thinking about pursuing careers that are considered masculine (Appendix F), and to rate the same four items when they think about pursuing careers that are considered feminine (Appendix G). For example, participants were asked the item, “Given my sexual orientation, I will have to work harder than other workers to advance,” when thinking about pursuing careers that are considered masculine and when thinking about pursuing careers that are considered feminine.

Factor analyses confirmed the presence of a one factor solution for the four items explaining 72% to 84% of the variance for gay men’s and lesbians’ ratings of masculine and feminine careers (Appendix K). Previous factor analysis yielded a single factor with an internal consistency of .77 score on the four items (Prati & Pietrantoni, 2014). Furthermore, Prati and
Pietrantoni (2014) found that the scale positively related to perceiving heterosexist climate in the workplace providing evidence for convergent validity. The ADS in this study yielded great to excellent internal consistency with Cronbach’s alphas of .93 and .87 for gay men’s ratings of masculine and feminine careers respectively, and .88 and .90 for lesbians’ ratings of masculine and feminine careers respectively. A higher average score on the ADS-M indicates greater anticipated discrimination in masculine careers or feminine careers.

Influence of Others on Academic and Career Decision Scale-Modified (IOACDS-M; Nauta & Kokaly, 2001). A modified version of the IOACDS containing seven items was created and used to assess participants’ perceived support from role models in careers that are considered masculine and feminine. Participants were asked to rate the seven items on a five-point likert scale, ranging from 1 = strongly disagree to 5 = strongly agree while thinking about pursuing careers that are considered masculine, and to rate the same seven items when they think about pursuing careers that are considered feminine. For example, participants were asked to rate “There will be no one in these careers who shows me how to get where I am going with my career,” when thinking about pursuing masculine careers and then when pursuing feminine careers.

Following factor analyses, the seven-item scale was reduced to six items (see Appendix K) representing perceive support from role models in masculine and feminine careers. For masculine careers, the one factor solution explained 56.21% and 50.48% of the variance for gay men and lesbians respectively. For feminine careers, the one factor explained 60.79% and 49.56% of the variance for gay men and lesbians respectively. Nauta & Kokaly (2001) found that the original IOACDS was significantly positively correlated with measures of general social support and career certainty and showed good test-retest reliability over a 10-week period (r =
.The IOACDS-M in this study yielded good internal consistency with Cronbach’s alphas of .83 and .85 for gay men’s ratings of masculine and feminine careers respectively, and .80 and .85 for lesbians’ ratings of masculine and feminine careers respectively. Higher average scores on the six items indicate greater perceived support from role models in masculine careers or feminine careers.

**Outness Questionnaire (OQ).** To assess the extent to which one has disclosed their sexual orientation to others, participants rated the extent to which groups of people in their lives, e.g., immediate family, straight friends, school peers, extended family, and strangers are aware of their sexual orientation on a four-point likert scale from 1 (not at all out) to 4 (out to most people) (Appendix H). Participants’ outness score was based on their average rating for all five groups with higher scores indicating greater disclosure of sexual orientation.

**Career Interests Questionnaire (CIQ).** The CIQ (Appendix I) was constructed for the current study to assess interest in careers that gender typed as “masculine,” “feminine” or “gender neutral.” Data from the National Household Survey in 2011 on people employed in occupations by gender was used (Statistics Canada, 2011). Data from the 2016 survey were not yet available. Careers were selected based on the number of male and females employed in these occupations for a total of 24 occupations. Consistent with previous research using a similar method (Adachi, 2013), careers were classified as “masculine” if there were 30% more men than women in the career. Those with 30% more women than men were classified as “feminine,” and others were classified as gender-neutral occupations. Table 2 presents the list of masculine, feminine, and gender-neutral items. Participants were asked to rate the extent to which they are interested in pursuing these careers on a five-point likert scale from 1 (not at all interested) to 5 (very interested). Higher average scores on the eight male-dominated careers suggested greater interest
in pursuing masculine careers. Similarly, higher average score on the eight female-dominated careers and eight “gender neutral” careers suggested higher interests in pursuing feminine and gender-neutral careers, respectively.

Table 2

*Masculine, Feminine and Gender-Neutral Careers Items in the Career Interest Questionnaire*

<table>
<thead>
<tr>
<th>Masculine</th>
<th>Feminine</th>
<th>Gender-Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Programmer</td>
<td>Nurse</td>
<td>Lawyer</td>
</tr>
<tr>
<td>Software Engineer</td>
<td>Social worker</td>
<td>Accounting</td>
</tr>
<tr>
<td>Architect</td>
<td>Librarian</td>
<td>Musician</td>
</tr>
<tr>
<td>Physicist</td>
<td>Elementary or Kindergarten Teacher</td>
<td>Actor/Actress</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>Nutritionist</td>
<td>Economist</td>
</tr>
<tr>
<td>Business Manager/Supervisor</td>
<td>Psychologist</td>
<td>Pharmacist</td>
</tr>
<tr>
<td>Web Designer</td>
<td>Human Resources</td>
<td>Veterinarian</td>
</tr>
<tr>
<td>Dentist</td>
<td>Paralegal</td>
<td>Human resources</td>
</tr>
</tbody>
</table>

*Demographics Questionnaire.* Participants completed standard demographic questions (Appendix J), including ethnicity, gender, age, current program, first language, their current program of study and their sexual orientation. Participants were also asked several qualitative questions regarding the career that they saw themselves pursuing when they graduated, other careers that they had considered pursuing and whether there were any careers that they avoided due to the stereotype orientation stereotypes.

**Statistical Analysis**

All analyses were conducted using the Statistical Package for the Social Sciences (SPSS v. 24). For hypothesis testing, paired-samples t-tests were used to test hypotheses regarding differences in ratings for masculine and feminine items (e.g., comparing ratings of gay men’s anticipated discrimination in masculine and feminine careers).

Preacher and Hayes (2008) Statistical Package for the Social Sciences PROCESS syntax for the percentile boot-strapping method was used to test the relationship between stereotype
awareness, sense of belonging and career interests. Awareness of the gender inversion stereotype and stereotype endorsement were entered separately as the independent variable (X), sense of belonging as the mediator (M), and the average score of interest in pursuing masculine careers (gay men) or feminine careers (lesbians) was entered as the outcome variable (Y). Outness was entered as a covariate in the model. Following Baron and Kenny’s (1986) method for testing mediation, prior to examining indirect effects, the direct relationship between the predicted pathways, X (stereotype awareness or stereotype endorsement) -> Y (career interests), X (stereotype awareness or stereotype endorsement) -> M (sense of belonging) and M (sense of belonging) -> Y (career interests) were examined to determine whether there were sufficient relationships to suggest the possibility of a mediational relationship. Preacher and Hayes (2008) suggest that testing for indirect effects may be warranted in cases where suppression effects are hypothesized even if there is no direct relationship between the predictor and outcome. However, since the relationship between the variables was not hypothesized to be a suppression effect, the indirect effect or mediation effect analyses were not completed if there was no direct relationship. Also, following Baron and Kenny’s (1986) guidelines, there had to be a significant relationship between the X and M and M and Y for the mediational relationship effect to be tested if there was evidence of a direct effect.

The bootstrap analyses with 1,000 bootstrap samples and 95% confidence intervals (CI) were conducted. Using this method, when a path’s CI does not overlap 0 (e.g., .2 and .5), it is considered significant at p < .05, and if it does overlap zero (e.g., -.2 to .5), it is considered nonsignificant. The figures below present the models that were tested for gay men and lesbians.
Figure 1

*Hypothesized Mediation Model for Influence of Stereotype Awareness on Gay Men’s and Lesbians’ Interests in Gender-Typical Careers Mediated by Sense of Belonging in Gender-Typical Careers*

![Diagram 1](image1)

Figure 2

*Hypothesized Mediation Model for Influence of Stereotype Endorsement on Gay Men’s and Lesbians’ Interests in Gender-Typical Careers Mediated by Sense of Belonging in Gender-Typical Careers*

![Diagram 2](image2)
Chapter 3. Results

Data Cleaning

Several methods were used during the data cleaning process to ensure the integrity of the data. Responses for participants who took less than seven minutes to complete the survey were screened to identify irregular responding patterns. Two participants were identified, but their responses showed variability, which suggests that they did not simply respond “strongly agree” to all items and were kept in the data set. Two datasets (values and label version of the data) were used to minimize coding errors. Means scores for question items were compared between the two data sets to ensure no errors in coding. Finally, frequency analyses were used to ensure that responses to likert scale items were in an acceptable range, e.g., (1-5). T-tests were completed to determine order effects of presentation of rating gay men or lesbians for stereotype endorsement or ratings of masculine and feminine careers for sense of belonging, perceived support from role models or anticipated discrimination. No significant differences were found.

Outliers and Assumption Testing

Exploratory analyses using Kolmogorov-Smirnov and Shapiro-Wilks revealed that distribution of the awareness of stereotype, careers interests, and sense of belonging variables violated the assumption of normality. Additionally, several outliers (z-scores > ±3SD (Osbourne, 2010)) were found. All analyses were run with bootstrapping (1000 samples) to address issues with non-parametric data and outliers. However, there were no differences in the findings between standard techniques and bootstrapping. Therefore, only the results of the standard techniques are reported.
Awareness and Endorsement of the Gender Inversion Stereotype

Table 3 presents the means and standard deviations for stereotype awareness from the SAQ. It was evident from the scores that both gay men and lesbians are well aware that the gender inversion stereotype exists and that lesbians and gay men are stereotyped as being similar to the opposite gender.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gay Men</td>
<td>4.04</td>
<td>.68</td>
</tr>
<tr>
<td>Lesbians</td>
<td>4.04</td>
<td>.66</td>
</tr>
</tbody>
</table>

Note. Values are the mean of the ratings on a five-point Likert scale (1 = Never True to 5 = Always True).

To explore gay men’s and lesbians’ awareness of the gender inversion stereotype further, Table 4 presents the percentage of responses for each item on the stereotype awareness questionnaire (SAQ). The vast majority of gay men and lesbians reported that the six statements assessing stereotype awareness were usually true or always true. There was also evidence that participants perceived the stereotype to be more pervasive for gay men than lesbians. For example, Seventy-five percent of participants (n = 135) responded usually true and always true for “stereotypes that gay men are in some ways similar to heterosexual women,” compared to approximately 60% (n = 110) for “stereotype that lesbians are in some ways similar to heterosexual men still exists today.”
Table 4

Percentage of Responses for Stereotype Awareness Questionnaire Items Combined for Gay Men and Lesbians

<table>
<thead>
<tr>
<th>Stereotypes</th>
<th>Never + Rarely True</th>
<th>Sometimes True</th>
<th>Usually + Always True</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotypes that gay men are in some ways similar to heterosexual women still exist today</td>
<td>6 (3.3)</td>
<td>41 (22.5)</td>
<td>135 (74.2)</td>
</tr>
<tr>
<td>Stereotypes that lesbians are in some ways similar to heterosexual men still exist today</td>
<td>14 (7.7)</td>
<td>58 (31.9)</td>
<td>110 (60.4)</td>
</tr>
<tr>
<td>Some people stereotype gay men as “acting feminine”</td>
<td>3 (1.7)</td>
<td>19 (10.5)</td>
<td>159 (87.8)</td>
</tr>
<tr>
<td>Some people stereotype lesbians as “acting manly”</td>
<td>4 (2.2)</td>
<td>41 (22.5)</td>
<td>137 (75.3)</td>
</tr>
<tr>
<td>I don’t think people stereotype gay men as being somehow similar to heterosexual women</td>
<td>143 (78.6)</td>
<td>31 (17.0)</td>
<td>8 (4.4)</td>
</tr>
<tr>
<td>I don’t think people stereotype lesbians as being somehow similar to heterosexual men</td>
<td>127 (69.8)</td>
<td>45 (24.7)</td>
<td>10 (5.5)</td>
</tr>
</tbody>
</table>

Note. Values are expressed as n (%) and are the mean of the ratings on a five-point likert scale (1 = Never True to 5 = Always True).

To examine whether participants endorsed the gender inversion stereotype, paired samples t-tests were used to assess whether participants were more likely to assign gender-atypical traits (feminine traits to gay men and masculine traits to lesbians) compared to gender-typical traits (masculine traits to gay men and feminine traits to lesbians) using the BSRI-SF items. There were no significant differences between how both gay men and lesbians respectively assigned gender-atypical and gender-typical traits, t(73) = .58, p = .56 and t(107) = -.58, p = .62. This suggests that gay men and lesbians do not tend to endorse the gender inversion stereotype. They tend to perceive masculine and feminine traits as being characteristic of both gay men and lesbians equally.
Table 5

*Mean Stereotype Endorsement Scores and Standard Deviation for Gay Men and Lesbians*

<table>
<thead>
<tr>
<th></th>
<th>Gender Atypical Traits (GA)</th>
<th>Gender-Typical Traits (GT)</th>
<th>Difference (GA-GT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Gay Men</td>
<td>3.16</td>
<td>.61</td>
<td>3.13</td>
</tr>
<tr>
<td>Lesbians</td>
<td>3.21</td>
<td>.55</td>
<td>3.23</td>
</tr>
</tbody>
</table>

Note. Values are the mean of the ratings on a five-point likert scale (1 = Not at all characteristic of gay men or lesbians to 5 = Completely characteristic of gay men or lesbians).

**Gay Men’s and Lesbians’ Interest in Masculine and Feminine Careers**

Planned comparisons using t-tests compared gay men’s and lesbians interest in pursuing gender neutral, masculine, and feminine careers, as measured by the CIQ. It was hypothesized that gay men would report less interest in masculine careers compared to feminine careers. However, this was not supported. Although gay men’s self-reported interests in careers were in the expected direction, gay men reporting less interest in masculine careers (M = 2.07, SD = .78) compared to feminine careers (M = 2.22, SD = .75), this difference was not statistically significant, \( t(73) = -1.20, p = .23 \). Similarly, gay men’s interests in masculine careers was not significantly different from their interest in pursuing gender neutral careers (M = 2.16, SD = .35), \( t(73) = -.95, p = .35 \).

Contrary to the hypothesis that lesbians would express less interest in feminine careers, lesbians reported significantly less interest in masculine career (M = 1.78, SD = .74) compared to feminine careers (M = 2.30, SD = .66), \( t(107) = 5.52, p < .001 \). Lesbians also reported significantly greater interest in feminine careers compared to gender neutral careers (M = 2.13, SD = .64), \( t(107) = 2.80, p = .006 \). The difference between lesbians’ interests in masculine career and gender-neutral careers was also significant \( t(107) = 5.14, p < .001 \) in that lesbians expressed significantly less interest in pursuing a masculine career compared to gender neutral careers.
Anticipated Discrimination and Perceived Support from Role Models in Masculine and Feminine Careers

T-tests were used to compare ratings of anticipated discrimination in masculine and feminine careers. Scores on the ADS-M indicated that both gay men and lesbians anticipated significantly more discrimination in masculine careers compared to feminine careers, $t(73) = 5.40, p < .01$ and $t(107) = 4.90, p < .01$ respectively. Similarly, t-tests comparing perceived support from role models as assessed by the IOADCS-M indicated that both gay men and lesbians also perceived significantly less support from role models in masculine careers compared to feminine careers, $t(73) = -2.88, p < .01$ and $t(107) = -6.62, p < .01$ respectively.

Table 6 presents the means and standard deviations for scores on these questionnaires. These results were consistent with the hypotheses for gay men but inconsistent for lesbians.

Table 6

<table>
<thead>
<tr>
<th></th>
<th>Gay Men</th>
<th></th>
<th>Lesbians</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>ADS-M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculine</td>
<td>3.49</td>
<td>1.16</td>
<td>3.85</td>
<td>.89</td>
</tr>
<tr>
<td>Feminine</td>
<td>2.88</td>
<td>1.07</td>
<td>3.37</td>
<td>1.03</td>
</tr>
<tr>
<td>IOADCS-M</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculine</td>
<td>3.77</td>
<td>.68</td>
<td>3.51</td>
<td>.69</td>
</tr>
<tr>
<td>Feminine</td>
<td>3.96</td>
<td>.60</td>
<td>3.92</td>
<td>.59</td>
</tr>
<tr>
<td>OQ</td>
<td>3.10</td>
<td>.76</td>
<td>3.17</td>
<td>.65</td>
</tr>
</tbody>
</table>

Note. ADS-M = Anticipated Discrimination Scale – Modified; IOADCS-M = Influence of Others on Academic and Careers Decision Scale – Modified and assessed on a scale from 1 (strongly disagree) to 5 (strongly agree); OQ = Outness Questionnaire and was assessed on a
Impact of Stereotype Awareness

The predicted relationship between stereotypes awareness, sense of belonging and career interests were tested using PROCESS to determine the presence of a significant relationship between career interest and stereotype awareness for gay men and lesbians and the possibility of the mediating influence of sense of belonging.

Table 7 presents the relationships between stereotype awareness, sense of belonging and interests in pursuing masculine careers for gay men. Following Baron and Kenny (1986) method for testing the presence of a mediational effect, the pathways were examined for significant relationships. For gay men, greater stereotype awareness significantly predicted lower sense of belonging in masculine careers ($p = .05$). Also, greater sense of belonging in masculine careers significantly predicted greater interest in masculine careers ($p < .01$). However, stereotype awareness did not significantly predict interests in masculine careers.

Table 7

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>T</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-&gt;M</td>
<td>-.30</td>
<td>.15</td>
<td>-1.99*</td>
<td>-.60</td>
<td>.00</td>
</tr>
<tr>
<td>M-&gt;Y</td>
<td>.27</td>
<td>.10</td>
<td>2.67**</td>
<td>.07</td>
<td>.47</td>
</tr>
<tr>
<td>X-&gt;Y</td>
<td>.06</td>
<td>.16</td>
<td>.41</td>
<td>-.25</td>
<td>.37</td>
</tr>
</tbody>
</table>

Note: X->M = stereotype awareness -> sense of belonging in masculine careers; M->Y = sense of belonging in masculine career -> interests in masculine careers, X->Y = stereotype awareness -> interests in masculine careers; *$p = <.05$, **$p = < .01$}

For lesbians, none of the predicted pathways were significant. Table 8 presents the relationships between stereotype awareness, sense of belonging and interest in pursuing feminine careers for lesbians. Stereotype awareness was not a significant predictor of interest in pursuing feminine careers or sense of belonging in feminine careers. Also, sense of belonging in feminine careers did not significantly predict interest in pursuing these careers. Thus, awareness of the
gender inversion stereotype did not significantly predict career interests in gender-typical careers for both lesbians and gay men. Since there was no direct relationship between stereotype awareness and careers interests, as per Baron and Kenny (1986), the mediational influence of sense of belonging was not further explored.

*Table 8*

*Standardized Regression Coefficients Testing Relationship Among Stereotype Awareness (X), Sense of Belonging (M) and Interest in Feminine Careers (Y) for Lesbians*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>T</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-&gt;M</td>
<td>.08</td>
<td>.11</td>
<td>.78</td>
<td>-.15</td>
<td>.31</td>
</tr>
<tr>
<td>M-&gt;Y</td>
<td>.10</td>
<td>.73</td>
<td>1.43</td>
<td>-.04</td>
<td>.25</td>
</tr>
<tr>
<td>X-&gt;Y</td>
<td>-.04</td>
<td>.09</td>
<td>.42</td>
<td>-.21</td>
<td>.14</td>
</tr>
</tbody>
</table>

Note: X->M = stereotype awareness -> sense of belonging in feminine careers; M->Y = sense of belonging in feminine career -> interests in feminine careers, X->Y = stereotype awareness -> interests in feminine careers; **p = < .01

**Impact of Stereotype Endorsement**

PROCESS (Preacher & Hayes, 2008) was also to determine the relationships between career interest and endorsement of the gender inversion stereotype for gay men and lesbians, and the possibility of the mediating influence of sense of belonging.

Table 9 presents the relationship between stereotype endorsement, sense of belonging in masculine careers and interest in pursuing masculine careers for gay men. It was hypothesized that greater endorsement of the gender inversion stereotype would predict less interest in masculine careers. However, the findings contradicted the hypothesis in that greater endorsement of the gender inversion stereotype predicted greater interest in masculine careers. This suggests the presence of a direct effect; however, stereotype endorsement was not a significant predictor of sense of belonging in masculine careers. According to Baron and Kenny (1986), there must be a significant relationship in all three pathways for a mediation effect. Thus, sense of belonging
was not tested as a mediator of the relationship between stereotype endorsement and interest in masculine careers for gay men.

**Table 9**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>T</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-&gt;M</td>
<td>.18</td>
<td>.25</td>
<td>.07</td>
<td>-.33</td>
<td>.69</td>
</tr>
<tr>
<td>M-&gt;Y</td>
<td>.24</td>
<td>.09</td>
<td>2.47*</td>
<td>.05</td>
<td>.43</td>
</tr>
<tr>
<td>X-&gt;Y</td>
<td>.45</td>
<td>.19</td>
<td>2.35*</td>
<td>.07</td>
<td>.84</td>
</tr>
</tbody>
</table>

Note.  X->M = stereotype endorsement -> sense of belonging in masculine careers; M->Y = sense of belonging in masculine career -> interests in masculine careers, X->Y = stereotype endorsement -> interests in masculine careers; **p = < .01

Table 10 presents the relationship between stereotype endorsement, sense of belonging in feminine careers, and interest in pursuing feminine careers for lesbians. Similar to stereotype awareness, endorsement of the gender inversion stereotype did not predict sense of belonging or interests in feminine careers for lesbians.

**Table 10**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>T</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-&gt;M</td>
<td>-.12</td>
<td>.18</td>
<td>-68</td>
<td>-.48</td>
<td>.24</td>
</tr>
<tr>
<td>M-&gt;Y</td>
<td>.11</td>
<td>.07</td>
<td>1.46</td>
<td>-.04</td>
<td>.25</td>
</tr>
<tr>
<td>X-&gt;Y</td>
<td>.11</td>
<td>.14</td>
<td>.77</td>
<td>-.17</td>
<td>.39</td>
</tr>
</tbody>
</table>

Note.  X->M = stereotype endorsement -> sense of belonging in feminine careers; M->Y = sense of belonging in feminine career -> interests in feminine careers, X->Y = stereotype endorsement -> interests in feminine careers

**Summary of Results**

There were several key findings. Firstly, the vast majority of participants believed that that gay men and lesbians continue to be stereotyped. Secondly, contrary to the second hypothesis,
lesbians were most interested in pursuing feminine careers and least interested in pursuing masculine careers. Similarly, gay men were most interested in gender-typed, masculine, careers, although this trend did not reach significance. Thirdly, both groups of participants believed that there would be less discrimination and more support from role models in feminine careers compare to masculine careers. Fourthly, awareness of gender inversion stereotyping was not related to career interests. Fifthly, stereotype endorsement was not related to interests in feminine careers for lesbians, but it was a significant predictor of preference for masculine careers for gay men. Finally, due to the lack of relationships among the variables, stereotype awareness, endorsement, career interests and sense of belonging, following Baron and Kenny’s (1986) convention, the mediational effect of sense of belonging was not tested. Thus, there was no evidence in this study of a mediational effect of sense of belonging.
Chapter 4. Discussion

The present study examined the role of gender inversion stereotyping on lesbians’ and gay men’s interest in gender-typical careers. Overall, gay men and lesbians were well aware that gender inversion stereotyping persists. However, contrary to the hypotheses, awareness of the stereotype had no influence on interests in pursuing gender-typical careers for gay men or lesbians. Meanwhile, greater endorsement had no influence on lesbians’ careers interests and, unexpectedly predicted greater interest in masculine careers for gay men. This finding is noteworthy, however, it can only be speculated as to why endorsing the gender inversion stereotype increased gay men’s interests in masculine careers. Further qualitative research to explore the gay men’s and lesbian’s perceptions of how stereotypes influence their career interests is needed to shed light on this finding. Overall these results suggest that awareness of gender inversion stereotyping had little influence on gay men’s and lesbians’ career interests.

Instead, this study found that lesbians were gender-typical in the career interest, while gay men tended not to be. Overall, both groups preferred feminine compared to masculine careers. This suggests that factors other than stereotyping are at work here. As mentioned previously, masculine careers are male-dominated and men tend to report more negative attitudes towards lesbians and gay men (Jellison et al., 2014; Holley et al., 2008). Meanwhile, feminine careers are associated with traits such as warmth, supportive, and nurturing (Cekja & Eagly, 1999). Consequently, feminine careers may be perceived to be more welcoming for lesbians and gay men, and masculine careers to be less welcoming. Indeed, both gay men and lesbians reported anticipating more discrimination and perceived less support from role models in masculine compared to feminine careers. Thus, it is likely that issues regarding discrimination in the respective careers are playing an important role rather than gender inversion stereotyping.
The importance of discrimination also explains the discrepancy between the significant findings for lesbians and non-significant finding for gay men. Lesbians must contend with discrimination based on sexual orientation and gender in masculine careers (Bowleg, 2008; Schneider & Dimito, 2010; White, 2014). The compounded effect of experiencing discrimination based on two identities can result in lesbians feeling particularly unwelcome in careers where men are overrepresented. However, as this research did not focus on discrimination, more research is needed to elucidate the exact relationship between anticipating discrimination, feeling welcomed, and interests in gender-typed careers.

The hypotheses in this study was based on previous research of women and gender stereotypes which has found that awareness of stereotypes does influence women’s career interests (Cheryan et al., 2009; Cundiff et al., 2013; Fischer, 2010; Forsman & Barth, 2017; Gordon, 2016; Schmader et al., 2004; Shen-Miller & Smiler, 2015). Apparently this finding did not generalize to the impact of stereotyping on gay men and lesbians. This inconsistency may be explained by the difference in how stereotypes were defined in this study. Previous research of women targeted specific stereotypes and then assessed career interests and intentions in related careers (Cheryan et al., 2009; Davies et al., 2002; Master et al., 2015). For example, previous research activated gender stereotypes that women are bad at math and then assessed interest or intention to pursue a career in math (Davies et al., 2002). However, this study examined general awareness of gender inversion stereotyping. The issue with examining only general awareness is that stereotypes targeting lesbians and gay men are complex. Although there is support gay men and lesbians continue to be stereotyped (Blashill & Powlishta, 2009; Geiger et al., 2006; Kite & Deux, 1987; Wright & Canetto, 2009) improvements in measuring and assessing gender inversion stereotyping has shown that stereotypes about gay men and lesbians are more
multifaceted (Clausell & Fiske, 2005; Geiger et al., 2006). Gay men can be perceived as feminine, but can also be hyper-masculinized. Similarly, lesbians can be stereotyped as masculine, i.e., butch, but also hyper-feminized. Furthermore, these gender stereotypes are complicated further by other stereotypes that suggest that gay men and lesbians are not fit for particular careers. For example, there is a stereotype that both gay men and lesbians should not work with children, which is typically considered a feminine career. These additional stereotypes may also be on the minds of gay men and lesbians and play a role in their career interests. Thus, another area for future research may be to expand the stereotype awareness questionnaire to include a broad range of stereotypes targeting gay men’s and lesbians’ career options or target specific stereotypes and their interest in relevant careers. For example, future studies can examine stereotypes that gay men are weak and interests in masculine jobs requiring physical strength.

The finding may also reflect that attitudes towards gay men and lesbians are improving and changing very quickly (Dasgupta & Rivera, 2006; Yang & Barth, 1997) with growing societal support for equal rights for lesbians and gay men. Thus, there is social change that is occurring resulting in changes in which this research is being conducted. It may be that these stereotypes are not relevant or important to gay men and lesbians. Another interesting direction for future research may be to examine whether or not lesbians and gay men care about stereotypes in light of changing times.

Limitations and Further Future Directions

There were several limitations to this study. The findings are not generalizable due to sample size, the limited inclusion of minorities and the majority of participants being from the United States. Also, the recruitment methods relied on word of mouth, social media, or
community centres and listservs, which tend to draw more people who are openly out to others compared to those who are still in the closet or in transition. Although this study attempted to improve on previous research by including measures of outness (Chung & Harmon, 1994; Ellis et al., 2012), the results indicated that the majority of participants were openly out. Consequently, these findings cannot be generalized to those who are in the early stages of the coming out process. Additionally, due to the low sample size and the focus on including only gay men and lesbians who are currently in post-secondary education, these findings would not be generalizable to all gay men and lesbians.

There were also several limitations to this study that may have affected the findings and ability to find relationships between stereotype awareness or stereotype endorsement and career interests. Firstly, this study did not include a list of all masculine and feminine careers (Blashill & Powlishta, 2009). For example, typical feminine careers that have been associated with gay men such as hair dressing or interior design and masculine careers such as the trades or military, law enforcement were not included in this study. Some of these masculine careers, such as the military and law enforcement that have been historically associated with discrimination towards sexual minorities. Consequently, these findings cannot be used to describe gay men and lesbians interests in all masculine and feminine careers. Future studies in this area may consider including a broader list of masculine and feminine careers.

Secondly, this study focused on gay men and lesbians who were students in academic institutions. It was proposed that these people would be actively thinking about careers. However, at the same time, students who are already majoring in a program may have little flexibility in their career interests and only express interest in careers that are related to their current major. There was some support in this study. Gay men and lesbians expressed generally
low interest in the careers selected for the questionnaire. To control for this potential, students were asked to include their major/current program, but many participants listed their general degree (Bachelor of Arts), rather than their current program (Business Management), so this data was not used. Consequently, another direction for future research is to examine the influence of stereotypes on lesbians and gay men who are not currently attending an academic institution.

Lastly, the measures used in this research were based on previous studies. However, with changes to policies and greater acceptance of lesbians and gay men, the context in which research is situated is constantly changing. For example, the nature of stereotypes about gay men and lesbians can change overtime (Sandfort, 2005) and what is considered masculine and feminine traits has been questioned (Choi & Fuqua, 2003). Consequently, the measures that were used in this study may not be appropriate to use currently. Thus, another potential area for future research may be to examine gay men’s and lesbians’ current perceptions of the nature of gender inversion stereotypes and how they have changed over time.

Clinical and Counselling Implications

This study suggests that the extent to which gay men and lesbians feel welcome in a career may be important in their career decision making. Anticipated discrimination may be an important factor that contributes to whether gay men’s and lesbians feel welcome in a career. Consequently, for career counsellors, exploring experiences of discrimination and perceived support from role models may be particularly important. Interventions may be developed to help gay men and lesbians cope with discrimination and access additional supports in masculine careers to improve the extent to which they feel welcome and prevent gay men and lesbians from prematurely closing on their career options.
Additionally, despite more positive attitudes towards gay men and lesbians, the results indicate that they are well aware of gender inversion stereotyping. Although this study found that awareness of the gender inversion stereotypes did not influence career interests for gay men and lesbians in this study, more research is needed to elucidate the potential effect of these stereotypes on gay men and lesbian’s well-being and career decision making. However, it is important that clinicians recognize that stereotypes continue to be perpetuated. Clinicians may consider exploring clients’ perceptions of how these stereotypes have influenced their lives to better understand the potential role of stereotypes.

Conclusion

Overall, this study aimed to fill a gap in the stereotyping and career development literature by examining the impact of stereotypes on lesbians’ and gay men’s lives, in particular, their career interests. Many questions remain to be answered regarding the complex relationship between stereotypes and career interests for gay men and lesbians. To what extent do various other occupational stereotypes influence gay men and lesbians career decision making? Does general awareness of gender inversion stereotype affect other aspects of their lives? How do gay men and lesbians perceive masculine and feminine careers and what factors contribute to whether they feel welcome in gender-typed careers? The hope is that these findings may be used to refine and encourage future research to explore these questions.
References


doi:10.1080/15298860802505202


Oswald, P. A. (2004). An examination of the current usefulness of the Bem Sex-Role Inventory. *Psychological Reports, 94*(3), 1331-1336. doi: 10.2466/pr0.94.3c.1331-1336


Appendices

Appendix A

Recruitment Poster

The Role of Stereotypes on Career Interests and Belonging Amongst Lesbians and Gay Men

Researchers at OISE, Applied Psychology & Human Development Department are conducting a study examining the relationship between perceptions of stereotyping and career interests for lesbians and gay men. We hope to recruit lesbians and gay men who are students between the ages of 18 to 30, to participate in a 20-40 minute online survey. To thank you for your participation, you will be entered for a chance to win one of two $50 Amazon gift cards.

Lesbians and gay men must be fluent in reading English. Participation is voluntary. If you would like more information or would like to participate, please enter the link below in your browser.

Link: https://tinyurl.com/ybwrz4zh
Appendix B

Recruitment Listserv E-Mail

Dear [Name],

My name is Elizabeth Wong, and I am a graduate student at the University of Toronto in the Clinical and Counselling Psychology program under the supervision of Dr. Margaret Schneider. I am currently conducting a study on how awareness of stereotypes influences lesbians’ and gay men’s career interests.

We are seeking lesbian and gay students between the ages of 18-30 to complete our online survey. I am emailing to ask if you can post this notice to your listserv:

Researchers at the OISE, Applied Psychology & Human Development Department are conducting a survey to examine how perceptions of stereotyping influences gay men’s and lesbians’ career interests. We are seeking lesbians and gay men who are students between the ages of 18-30 to complete a survey. We want to know about your perceptions of stereotyping and your career interests. The survey takes approximately 20-40 minutes to complete, and you will be entered in a draw to win one of two $50 Amazon gift cards for participating.

To learn more or to complete the survey, follow the link below.

Link:  https://tinyurl.com/ybwrz4zh

I appreciate your time and assistance.

Thank you,

Elizabeth
Researchers at the OISE, Applied Psychology & Human Development Department are conducting a survey to examine how perceptions of stereotyping influences gay men’s and lesbians’ career interests. We are seeking lesbians and gay men between the ages of 18-30 who are students to complete a survey. We want to know about your perceptions of stereotyping and your career interests. The survey takes approximately 20-40 minutes to complete, and you will be entered in a draw to win one of two $50 Amazon gift cards for participating.

To learn more or to complete the survey, follow the link below.

Link: https://tinyurl.com/ybwrz4zh
Appendix D

Informed Consent Agreement

Information about the study

My name is Elizabeth Wong, and I am a graduate student at the University of Toronto under the supervision of Dr. Margaret Schneider. My research interests include how perceptions of common stereotypes about lesbians and gay men influences their career interests. This survey examines the relationship between perceiving common stereotypes and career interests for lesbians and gay men between the ages of 18-30. It also seeks to explore the factors that may contribute to this relationship including feelings of belonging, perceived support, discrimination, and demographic information. The questionnaire will take 20-40 minutes to complete. In recognition of your time, you will have the option to enter your email into a draw to win one of two $50 Amazon gift cards.

All of your responses will be completely confidential and anonymous. You will not be asked for your name or any other personal identifying information in the questionnaires. At the end of the survey, you will be asked to enter your school email address to enter the prize draw. Your school email will be collected separately and will not be attached to the questionnaire data. Only the investigators will have access to the data, which will be stored in electronic format or on encrypted USB that will be stored in a locked cabinet at the OISE building for approximately five years after completion or publication and then destroyed. If the study is presented or published, no identifying information will be used.

Participation in this study is voluntary. Although this survey is low risk, it includes questions about discrimination and stereotyping that may make some feel uncomfortable. This survey also includes statements reflecting stereotypes. We do not endorse these existing stereotypes, but we want your perception of these. This discomfort is not expected to be more than you would experience in daily life or in conversations about these topics. If you are not comfortable answering a question, you may choose to not answer and skip the question without penalty. Also, you can withdraw your consent and stop your participation at any time during the session without penalty by closing the browser. However, as the data is anonymous, once your responses have been submitted, the data cannot be removed from the dataset.

If you have questions about the research you may contact either of the following investigators:

Elizabeth Wong, M.A. Department of Applied Psychology & Human Development, OISE, University of Toronto, email: eliza.wong@utoronto.ca

Dr. Margaret Schneider, Ph.D., Department of Applied Psychology & Human Development, OISE, University of Toronto, email: margaret.schneider@utoronto.ca

If you having any questions regarding your rights as a human subject and participant in this study, you may contact the University of Toronto Ethics Review office at: ethics.review@utoronto.ca

Please print this screen if you want a copy of this page for your own records
By clicking on the “I consent and wish to participate in this survey” box below, I acknowledge that I have read and understand the information in this agreement.
Appendix E

Stereotype Awareness Questionnaire

Stereotypes are assumptions that people make about a group of individuals. One stereotype about gay men and lesbians is that they are thought to be similar to the opposite gender, i.e., gay men are “feminine” or “act like women,” or lesbians are “masculine” and “act manly.” We would like to get an idea of how common this stereotype is today. Please read the following statements about stereotyping and indicate the extent to which you believe these statements to be true:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never True</th>
<th>Rarely True</th>
<th>Sometimes True</th>
<th>Usually True</th>
<th>Always True</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotypes that gay men are in some ways similar to heterosexual women still exist today</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Stereotypes that lesbians are in some ways similar to heterosexual men still exist today</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Some people stereotype gay men as “acting feminine”</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Some people stereotype lesbians as “acting manly”</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I don’t think people stereotype gay men as being somehow similar to heterosexual women</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I don’t think people stereotype lesbians as being somehow similar to heterosexual men</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People stereotype gay men as having traits like being sensitive, caring, creative</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People stereotype lesbians as having traits like being brave, independent, capable</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>People stereotype gay men as being interested in activities, such as the arts and fashion</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

In your own words, please describe the extent to which you think that the stereotype that gay men and lesbians are in some ways similar to the opposite gender, i.e., gay men are “feminine” or “act like women” or lesbians are “masculine” and “act manly” exists today.

______________________________________________________________________________
______________________________________________________________

______________________________________________________________________________

______________________________________________________________________________
Appendix F
Anticipated Discrimination Scale – for “Masculine” Careers

Below are items about the extent to which you expect to experience discrimination in the workplace. Similar to the items above, when you think about pursuing a career that is considered “masculine,” please rate the extent to which you agree the following statements.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homophobia and heterosexism would be major barriers to achieving what I would want to achieve in these careers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will be treated unfairly because of my sexual orientation in these careers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Given my sexual orientation, I will have to work harder than other workers to advance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Given my sexual orientation, I would have to work harder than other workers to be accepted by my colleagues and/or supervisors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix G

Anticipated Discrimination Scale – for “Feminine” Careers

Below are items about the extent to which you expect to experience discrimination in the workplace. Similar to the items above, when you think about pursuing a career that is considered “feminine,” please rate the extent to which you agree the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homophobia and heterosexism would be major barriers to achieving what I would want to achieve in these careers.</td>
<td>0   0   0   0   0   0</td>
</tr>
<tr>
<td>I will be treated unfairly because of my sexual orientation in these careers.</td>
<td>0   0   0   0   0   0</td>
</tr>
<tr>
<td>Given my sexual orientation, I will have to work harder than other workers to advance.</td>
<td>0   0   0   0   0   0</td>
</tr>
<tr>
<td>Given my sexual orientation, I would have to work harder than other workers to be accepted by my colleagues and/or supervisors.</td>
<td>0   0   0   0   0   0</td>
</tr>
</tbody>
</table>
Appendix H

Outness Measure

These are groups of people who you may have told about your sexual orientation. Please indicate the extent to which you are out to these groups of individuals.

<table>
<thead>
<tr>
<th></th>
<th>Not at all out</th>
<th>Out to a few people</th>
<th>Out to some people</th>
<th>Out to most people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight Friends</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Immediate Family (i.e., Mother, Father, Siblings)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>LGB Friends</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>School Peers</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Extended Family (i.e., grandparents, aunts, uncles)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Strangers</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Appendix I

Career Interest Questionnaire

Below is a list of occupations or careers. All things being equal such as your specific talents or financial considerations, how interested you would be in pursuing these jobs or careers?

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Not at all interested</th>
<th>Slightly Interested</th>
<th>Moderately Interested</th>
<th>Very Interested</th>
<th>Extremely Interested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social worker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Librarian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary or Kindergarten Teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer programmer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lawyer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paralegal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musician</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actor/Actress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web Designer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinarian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutritionist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager/Supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix J

Demographics Questionnaire

How would you describe your sexual orientation?

☐ Gay
☐ Lesbian
☐ Other (please specify): ______________________

Age: ______________

Which school are you currently attending? _____________________________

What degree are you pursuing? (e.g., Bachelor of Arts, Diploma, Advance Diploma)
____________________________________

What is your current program of study: ________________________________

Year: ☐ 1st ☐ 2nd ☐ 3rd ☐ 4th ☐ other

Please indicate your gender: __________

Please indicate what state/province you are currently residing: ______________

Would you consider yourself to be part of a visible minority or a minoritized person based on culture or ethnicity?

☐ Yes
☐ No

To what extent do you feel satisfied with the support you receive from the following people for your career and academic choices?

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither Satisfied nor Dissatisfied</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friends</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Siblings</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Parents</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Instructors</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>School support (e.g., careers centre)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Partner</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Members of the lesbian and gay community</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
What do you see yourself doing in terms of a career when you graduate? Please indicate the specific type of career. For example, mechanical engineering, dentistry, surgeon, singer, actor…etc.

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Other than your current career path, were there any other careers you had considered? If so, please indicate which careers. For example, mechanical engineering, dentistry, surgeon, musician, actor…etc.

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Were there any careers that you had considered pursuing, but were discouraged because of sexual orientation stereotypes? If so, please indicate which careers. For example, mechanical engineering, dentistry, surgeon, musician…etc.

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

To what extent do you think that you conform to stereotypes about gay men or lesbians?

● Extremely
● Very
● Somewhat
● Slightly
● Not at
Appendix K
Principle Component Analyses

Stereotype Awareness Questionnaire

Gay men

PCA was conducted on the nine items from the SAQ for gay men. As the purpose of the SAQ was to create a unitary measure of stereotype awareness, a one factor solution was selected for the nine items. Table 11 presents the correlations among items for the stereotype awareness questionnaire. Initial review of the correlations indicated two items, “People stereotype lesbians as having traits like being brave, independent, capable,” and “People stereotype gay men as having traits like being sensitive, caring, creative” correlated poorly with the rest of the items (r < .3). Factor analysis is dependent on the relationship among items, and so these items were deemed to be measuring an aspect unrelated to the stereotype awareness. While it is possible that these two items may represent a factor, the current recommendation for a reliable scale is to have at least four items (Harvey, Billings, and Nilan, 1985). As such, these items were removed from the factor analysis for gay men.

The remaining seven-items were entered into another factor analysis which indicated a possible 7-factor solution that explained 46.34% of the variance. The Kaiser-Meyer-Olkin measure indicated adequate sampling adequacy, KMO = .67 (according to Field, 2009). Bartlett’s Test of Sphericity, χ² (21) = 262.25, p < .001 indicated that correlations among items were significantly large for PCA. A reliability analysis on the items indicated internal consistency of .86 for the 7-item scale. Table 12 presents the factor loadings for the 7-item solution and Cronbach’s alpha if individual items were removed.
Table 11

*Inter-Item Correlations for Gay Men’s Ratings on the Stereotype Awareness Questionnaire*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stereotypes that gay men are in some ways similar to heterosexual women still exist today</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Stereotypes that lesbians are in some ways similar to heterosexual men still exist today</td>
<td>.67</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Some people stereotype gay men as “acting feminine”</td>
<td>.64</td>
<td>.43</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Some people stereotype lesbians as “acting manly”</td>
<td>.44</td>
<td>.57</td>
<td>.66</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I don’t think people stereotype gay men as being somehow similar to heterosexual women</td>
<td>.53</td>
<td>.38</td>
<td>.51</td>
<td>.40</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I don’t think people stereotype lesbians as being somehow similar to heterosexual men</td>
<td>.39</td>
<td>.46</td>
<td>.31</td>
<td>.48</td>
<td>.74</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. People stereotype gay men as having traits like being sensitive, caring, creative</td>
<td>.32</td>
<td>.35</td>
<td>.25</td>
<td>.38</td>
<td>.32</td>
<td>.30</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. People stereotype lesbians as having traits like being brave, independent, capable</td>
<td>-.09</td>
<td>.10</td>
<td>.10</td>
<td>.17</td>
<td>.00</td>
<td>.04</td>
<td>.48</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9. People stereotype gay men as being interested in activities, such as the arts and fashion</td>
<td>.26</td>
<td>.14</td>
<td>.29</td>
<td>.21</td>
<td>.26</td>
<td>.17</td>
<td>.28</td>
<td>.29</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 12

*Factor Loadings, Communalities, and Cronbach’s Alpha if Item Deleted for Seven-Item One Factor Solution of Gay Men’s Rating of Stereotype Awareness Questionnaire*

<table>
<thead>
<tr>
<th>Stereotypes that gay men are in some ways similar to heterosexual women still exist today</th>
<th>Factor loadings</th>
<th>Communalities</th>
<th>Cronbach’s alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.754</td>
<td>.568</td>
<td>.824</td>
</tr>
<tr>
<td>Stereotypes that lesbians are in some ways similar to heterosexual men still exist today</td>
<td>.710</td>
<td>.504</td>
<td>.830</td>
</tr>
<tr>
<td>Some people stereotype gay men as “acting feminine”</td>
<td>.707</td>
<td>.499</td>
<td>.832</td>
</tr>
<tr>
<td>Some people stereotype lesbians as “acting manly”</td>
<td>.727</td>
<td>.529</td>
<td>.826</td>
</tr>
<tr>
<td>I don’t think people stereotype gay men as being somehow similar to heterosexual women</td>
<td>.715</td>
<td>.511</td>
<td>.828</td>
</tr>
<tr>
<td>I don’t think people stereotype lesbians as being somehow similar to heterosexual men</td>
<td>.657</td>
<td>.432</td>
<td>.835</td>
</tr>
<tr>
<td>People stereotype gay men as having traits like being sensitive, caring, creative</td>
<td>.450</td>
<td>.202</td>
<td>.859</td>
</tr>
</tbody>
</table>

**Lesbians**

Similar to gay men, in the initial analysis of the factor structure, all nine items were entered into a principal component analysis to create a unitary construct of stereotype awareness.

Similar to gay men, initial review of the questionnaire revealed low correlations (r < .3) for the same two items for lesbians, “People stereotype lesbians as having traits like being brave, independent, capable,” and “People stereotype gay men as having traits like being sensitive, caring, creative.” These items were removed from the analysis. The remaining seven items were entered into another factor analysis. However, the results indicated that an additional item loaded poorly onto the one factor solution, with a factor loading of .15 suggesting a six item-factor
solution accounting for 45.42% of the variance. Reliability analyses also supported removing this item, as removal of this item increased the Cronbach’s alpha for this scale from .79 to .83. As a result, this item was removed, and the remaining six items were entered into another PCA. The results indicated a unitary factor representing awareness of gender inversion stereotyping consisting of six items. The Kaiser-Meyer-Olkin measure indicated adequate sampling adequacy, KMO = .65 (according to Field, 2009). Bartlett’s Test of Sphericity $\chi^2 (15) = 305.49$, $p < .001$ indicated that correlations among items were significantly large for PCA. Table 13 presents the factor loadings, communalities, and Cronbach’s alpha if individual items were removed for the final six-item factor solution for lesbians.

Table 13

<table>
<thead>
<tr>
<th>Factor Loadings</th>
<th>Communalities</th>
<th>Cronbach’s Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotypes that gay men are in some ways similar to heterosexual women still exist today</td>
<td>.711</td>
<td>.506</td>
</tr>
<tr>
<td>Stereotypes that lesbians are in some ways similar to heterosexual men still exist today</td>
<td>.740</td>
<td>.547</td>
</tr>
<tr>
<td>Some people stereotype gay men as “acting feminine”</td>
<td>.676</td>
<td>.456</td>
</tr>
<tr>
<td>Some people stereotype lesbians as “acting manly”</td>
<td>.711</td>
<td>.505</td>
</tr>
<tr>
<td>I don’t think people stereotype gay men as being somehow similar to heterosexual women</td>
<td>.600</td>
<td>.360</td>
</tr>
<tr>
<td>I don’t think people stereotype lesbians as being somehow similar to heterosexual men</td>
<td>.592</td>
<td>.350</td>
</tr>
</tbody>
</table>
Table 14

*Factor Loadings, Communalities, and Cronbach’s Alpha if Item Deleted for Six-Item One Factor Solution of Gay Men’s Rating of Stereotype Awareness Questionnaire*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
<th>Communalities</th>
<th>Cronbach’s Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotypes that gay men are in some ways similar to heterosexual women still exist today</td>
<td>.758</td>
<td>.574</td>
<td>.828</td>
</tr>
<tr>
<td>Stereotypes that lesbians are in some ways similar to heterosexual men still exist today</td>
<td>.704</td>
<td>.495</td>
<td>.837</td>
</tr>
<tr>
<td>Some people stereotype gay men as “acting feminine”</td>
<td>.721</td>
<td>.520</td>
<td>.836</td>
</tr>
<tr>
<td>Some people stereotype lesbians as “acting manly”</td>
<td>.716</td>
<td>.512</td>
<td>.834</td>
</tr>
<tr>
<td>I don’t think people stereotype gay men as being somehow similar to heterosexual women</td>
<td>.716</td>
<td>.512</td>
<td>.833</td>
</tr>
<tr>
<td>I don’t think people stereotype lesbians as being somehow similar to heterosexual men</td>
<td>.656</td>
<td>.430</td>
<td>.842</td>
</tr>
</tbody>
</table>

**Conclusion**

The results suggest a seven-item factor solution for gay men and six-item for lesbians. However, to facilitate comparisons among gay men and lesbians the six-item solution found for lesbians selected for the stereotype awareness questionnaire. This was decided because the item that was retained in the factor solution for gay men had the lowest factor loading (.20) and the reliability analysis indicated that removal of the items would have a non-consequential impact on the reliability of the scale, Cronbach’s alpha would remain .86. The results indicated that retaining a six-item factor for stereotype awareness was more robust for gay men in terms of total variance explained and internal consistency compared to the seven-item questionnaire for gay men. The six-item factor (See Table 14 for factor loadings) compared to the seven-item factor explained more variance, 50.73% compared to 46.34%. The Kaiser-Meyer-Oklin measure indicated adequate sampling adequacy, KMO = .65 (according to Field, 2009). Bartlett’s Test of
Sphericity $\chi^2 (15) = 246.55, p < .001$ indicated that correlations among items were significantly large for PCA. Consequently, these six items were determined to be the best items to use for the stereotype awareness questionnaire for both gay men and lesbians.

**Sense of Belonging Questionnaire**

*Gay men – Masculine careers*

The eight items of the SOBQ used to assess sense of belonging in masculine careers were entered into a principal component analysis with promax rotation. The Kaiser-Meyer-Oklin measure indicated ‘great’ sampling adequacy, KMO = .90 (according to Field, 2009). Bartlett’s Test of Sphericity, $\chi^2 (28) = 290.55, p < .001$ indicated that correlations among items were significantly large for PCA. Review of the correlations indicated sufficient correlation among items ($r > .30$). The results indicated a one factor, eight-item solution for gay men’s rating of sense of belonging within masculine careers that explained 53.11% of the variance. Internal consistency as determined by Cronbach’s alpha was .90.

*Lesbians – Masculine items*

Similar to gay men, the eight items used to assess sense of belonging in masculine career for lesbians were entered into a principal component analysis with promax rotation. The Kaiser-Meyer-Oklin measure indicated ‘good’ sampling adequacy, KMO = .75 (according to Field, 2009). Bartlett’s Test of Sphericity, $\chi^2 (28) = 203.85, p < .001$ indicated that correlations among items were significantly large for PCA. The results indicated a two-factor model with three items loading onto one component explaining 10% of the variance and five items explain 32.87% of the variance loading for a total of 42.87%.

However, some researchers recommend that a scale requires at least four items to be interpretable (Harvey et al., 1985). Additionally, some of the items appeared to cross load onto the other factors. Consequently, to facilitate comparisons among lesbians and gay men, another
factor analysis was completed forcing one factor. The Kaiser-Meyer-Oklin measure for the one factor solution indicated ‘good’ sampling adequacy, KMO = .76 (according to Field, 2009). Bartlett’s Test of Sphericity $\chi^2 (28) = 208.90$, $p < .001$ indicated that correlations among items were significantly large for PCA. Similar to gay men, the results indicated that a one factor solution explaining 39.3% of the variance would also be a possible factor solution for lesbians with Cronbach’s alpha of .77. Consequently, this eight-item scale was determined to represent the extent to which lesbians feel valued and accepted in masculine careers.

**Gay men – Feminine Careers**

The eight items from ratings of sense of belonging in feminine careers for gay men was entered into a PCA with promax rotation. The Kaiser-Meyer-Oklin measure indicated ‘great’ sampling adequacy, KMO = .83 (according to Field, 2009). Bartlett’s Test of Sphericity $\chi^2 (28) = 222.71$, $p < .001$ indicated that correlations among items were significantly large for PCA. The PCA suggested a two-factor solution with three items loading onto one factor and the other five loading onto a separate factor.

However, since, it would be ideal to be able to compare gay men on their sense of belonging in masculine and feminine careers, it was determined that a one factor solution should be used. Thus, the factor analyses were completed again with the eight items forced onto one factor. The Kaiser-Meyer-Oklin measure indicated ‘great’ sampling adequacy, KMO = .84 (according to Field, 2009). Bartlett’s Test of Sphericity $\chi^2 (28) = 234.50$, $p < .001$ indicated that correlations among items were significantly large for PCA. The results indicate the one factor solution with all 8-items adequately loading onto one factor explaining 50% of the variance with Cronbach’s alpha of .85. Similar to lesbians and masculine careers, reliability analyses supported the combination of all items into one factor representing gay men’s sense of belonging.
in feminine careers. For almost all items, removing an item from the scale reduced the reliability of the measure.

**Lesbians – Feminine Careers**

Finally, the eight items for ratings of feminine careers for lesbians were entered into a principal component factor analysis. The Kaiser-Meyer-Olkin measure indicated ‘great’ sampling adequacy, KMO = .88 (according to Field, 2009). Bartlett’s Test of Sphericity $\chi^2 (28) = 336.22, p < .001$ indicated that correlations among items were significantly large for PCA. Similar to the SOBI masculine careers for gay men, the analysis indicated a one factor solution explaining 51.82% of the variance with Cronbach’s alpha of .85. Thus, these items were deemed to represent lesbian’s sense of belonging in feminine careers.

**Anticipated Discrimination Scale – Modified**

Four separate principal component analyses were completed on the four items assessing anticipated discrimination. Table 15 presents the tests of sampling adequacy (KMO), adequacy of correlations, and reliability for masculine careers, while Table 16 presents this data for ratings of anticipated discrimination in feminine careers. The results support, consistently, the presence of one factor for lesbians and gay men’s rating of anticipated discrimination in masculine and feminine careers.
Table 15

*Factor loading, Communalities, and Cronbach’s Alpha if Item Deleted for Single Factor Four-Item Solution Ratings of Anticipated Discrimination in Masculine Careers*

<table>
<thead>
<tr>
<th></th>
<th>Gay Men</th>
<th></th>
<th>Lesbians</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor</td>
<td>Communalities</td>
<td>Cronbach’s</td>
<td>Factor</td>
</tr>
<tr>
<td></td>
<td>Loading</td>
<td></td>
<td>if item</td>
<td>Loading</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>deleted</td>
<td></td>
</tr>
<tr>
<td>Homophobia and</td>
<td>.908</td>
<td>.825</td>
<td>.918</td>
<td>.815</td>
</tr>
<tr>
<td>heterosexism would</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be major barriers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to achieving what I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>would want to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>achieve in these</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>careers I will</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be treated unfairly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>because of my sexual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>orientation in these</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>careers Given my</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sexual orientation,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will have to work</td>
<td>.915</td>
<td>.837</td>
<td>.914</td>
<td>.855</td>
</tr>
<tr>
<td>harder than other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>workers to advance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Given my sexual</td>
<td>.922</td>
<td>.850</td>
<td>.910</td>
<td>.905</td>
</tr>
<tr>
<td>orientation, I would</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have to work harder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>than other workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to be accepted by</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>my colleagues and/or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>supervisors.</td>
<td>.912</td>
<td>.832</td>
<td>.915</td>
<td>.863</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KMO</td>
<td>.77</td>
<td></td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Bartlett’s Test of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sphericity</td>
<td>280.80***</td>
<td></td>
<td>258.96***</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.93</td>
<td></td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Total Variance</td>
<td>83.56%</td>
<td></td>
<td>73.95%</td>
<td></td>
</tr>
<tr>
<td>Explained</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *** = p < .001 and df = 6
Table 16

*Factor loading, Communalities, and Cronbach’s Alpha if Item Deleted for Single Factor Four-Item Solution for Ratings of Anticipated Discrimination in Feminine Careers*

<table>
<thead>
<tr>
<th>Item Solution for Ratings of Anticipated Discrimination in Feminine Careers</th>
<th>Gay Men</th>
<th></th>
<th>Lesbians</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>Communalities</td>
<td>Cronbach’s if item deleted</td>
<td>Factor Loading</td>
<td>Communalities</td>
</tr>
<tr>
<td>Homophobia and heterosexism would be major barriers to achieving what I would want to achieve in these careers</td>
<td>.768</td>
<td>.589</td>
<td>.877</td>
<td>.814</td>
</tr>
<tr>
<td>I will be treated unfairly because of my sexual orientation in these careers.</td>
<td>.871</td>
<td>.759</td>
<td>.818</td>
<td>.898</td>
</tr>
<tr>
<td>Given my sexual orientation, I will have to work harder than other workers to advance.</td>
<td>.881</td>
<td>.777</td>
<td>.815</td>
<td>.909</td>
</tr>
<tr>
<td>Given my sexual orientation, I would have to work harder than other workers to be accepted by my colleagues and/or supervisors.</td>
<td>.876</td>
<td>.768</td>
<td>.819</td>
<td>.886</td>
</tr>
<tr>
<td>KMO</td>
<td>.79</td>
<td></td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>153.25**</td>
<td></td>
<td>284.39**</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>.87</td>
<td></td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td>Total Variance Explained</td>
<td>72.33%</td>
<td></td>
<td>76.99%</td>
<td></td>
</tr>
</tbody>
</table>

Note. ** = p < .001 and df = 6

**Influence of Others on Academic and Career Decision Scale – Modified**

The seven items from the IOACDS-M for masculine careers was entered into a PCA. However, it was evident that one of the items for ratings of feminine careers (“I currently know of someone who has a career that would be considered “feminine” that I would like to pursue,”)
had low factor loading for lesbians and gay men and correlated poorly with all items, r < .3 for gay men and lesbians. While the same items for ratings of masculine careers did not show poor correlations, (“I currently know of someone who has a career that would be considered “masculine” that I would like to pursue,”) analyses indicated that the internal consistency of the scale would increase or remain the same if this item was removed, .83 to .83 for gay men and .78 to .80 for lesbians. Consequently, it was determined that this item should be removed, and questionnaire was reduced to six items for all of the PCA analyses.

Gay Men – Masculine careers

The six items from the IOACDS-M for masculine careers were entered into a PCA. The PCA indicated the presence of one factor with the Kaiser-Meyer-Oklin measure indicated ‘good’ sampling adequacy, KMO = .77 (according to Field, 2009). Bartlett’s Test of Sphericity, $\chi^2$ (15) = 178.48, p < .001 indicated that correlations among items were significantly large for PCA. Also supporting the presence of a one factor solution, the results indicate that the Cronbach’s alpha would either decrease or be unaffected by removing the items from the scale. This seven-item solution explained 56.21% of the variance with Cronbach’s alpha of .83.

Lesbians – Masculine careers

Similar to the gay men, the PCA supported the presence of one factor representing perceptions of support from role models in masculine careers. The Kaiser-Meyer-Oklin measure indicated ‘good’ sampling adequacy, KMO = .74 (according to Field, 2009). Bartlett’s Test of Sphericity $\chi^2$ (15) = 212.10, p < .001 indicated that correlations among items were significantly large for PCA. This factor solution explained 50.48% of the total variance and Cronbach’s alpha for the scale was .80, representing good internal consistency.
*Gay Men – Feminine careers*

The six items of the IOACDS-M for ratings of feminine careers was entered into a PCA and indicated the presence of a one factor solution representing perceived social support from role models in feminine careers. The Kaiser-Meyer-Oklin measure indicated ‘good’ sampling adequacy, KMO = .84 (according to Field, 2009). Bartlett’s Test of Sphericity, $\chi^2 (15) = 230.69.10$, $p < .001$ indicated that correlations among items were significantly large for PCA. This factor solution explained 60.79% of the total variance and Cronbach’s alpha for the scale was .85. Also supporting the presence of a one factor solution, the results indicate that the Cronbach’s alpha would either decrease by removing the items from the scale.

*Lesbians – Feminine careers*

Finally, the six items of the role model questionnaire for ratings of role models in feminine careers were entered into a PCA and determined the presence of a one-factor solution representing lesbians; perceived support from role models in feminine careers. The Kaiser-Meyer-Oklin measure indicated ‘good’ sampling adequacy, KMO = .75 (according to Field, 2009). Bartlett’s Test of Sphericity, $\chi^2 (15) = 205.65$, $p < .001$ indicated that correlations among items were significantly large for PCA. This factor solution explained 49.56% of the total variance and Cronbach’s alpha for the scale was .85.