Lehigh University
Lehigh Preserve

Theses and Dissertations

2015

Minority Stress in the Sexual Minority Older Adult Population: Exploring the Relationships among Discrimination, Mental Health, and Quality of Life

Bethany Perkins Detwiler
Lehigh University

Follow this and additional works at: http://preserve.lehigh.edu/etd

Part of the Counseling Psychology Commons

Recommended Citation

Detwiler, Bethany Perkins, "Minority Stress in the Sexual Minority Older Adult Population: Exploring the Relationships among Discrimination, Mental Health, and Quality of Life" (2015). *Theses and Dissertations*. 2571.
http://preserve.lehigh.edu/etd/2571

This Dissertation is brought to you for free and open access by Lehigh Preserve. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Lehigh Preserve. For more information, please contact preserve@lehigh.edu.

Minority Stress in the Sexual Minority Older Adult Population: Exploring the Relationships among Discrimination, Mental Health, and Quality of Life

by

Bethany Perkins Detwiler

Presented to the Graduate and Research Committee

of Lehigh University

in Candidacy for the Degree of

Doctor of Philosophy

in

Counseling Psychology

Lehigh University

April 2015

Copyright by Bethany Perkins Detwiler

April 2015

Approved and recommended for acceptance as a dissertation in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

____
Date

____
Dissertation Advisor: Grace I. L. Caskie, Ph.D.

____
Accepted Date

Committee Members:

____
Grace I. L. Caskie, Ph.D.
Associate Professor, Lehigh University

____
Christopher T. H. Liang, Ph.D.
Associate Professor, Lehigh University

____
Amanda G. Eckhardt, Ph.D.
Adjunct Professor, Lehigh University
Aftercare Coordinator and Research Specialist, Restore NYC

____
Jennifer A. Margrett, Ph.D.
Associate Professor, Iowa State University

ACKNOWLEDGEMENTS

As the quote says, "it takes a village to make a dissertation." Well, that's not quite what the quote says. However, it feels incomplete to finalize this project without paying tribute to those who were influential in its creation. First and foremost, my advisor and chair Dr. Grace Caskie has been instrumental not only in this project, but also in my personal and professional growth. Her dedication to reading draft after draft, offering gentle but firm guidance in the project's development, and supporting me in my journey through the dark jungle that is hierarchical multivariate multiple regression have been vital in my dissertation experience. I also have my other committee members to thank: Drs. Chris Liang, Amanda Eckhardt, and Jennifer Margrett for their contagious enthusiasm for my research as well as their supportive and helpful feedback throughout this experience. As a whole, the counseling psychology faculty of Lehigh have been an immense source of support in all of my endeavors over the last six years, and I graduate this program with a deep sense of gratitude for each of them.

I am thankful to my husband who has had to share me with this doctoral program since the day we met. His steady nature, sense of humor, and ability to put my irrationalities into a more rational perspective have been an invaluable resource. I am also appreciative of my stepdaughter's joyful presence, as she is a daily reminder of the fun, humor, and light in the world. I am grateful to my parents and brothers for believing in me since day one and offering unwavering support of my career. I am also indebted to my friends for their support along the way, whether in the form of answering panicked statistics questions over G-Chat, offering a willing ear to my frustrations and complaints, or joining me for a yoga session, cup of coffee, or happy hour.

As this chapter of my life and career comes to a close, I reflect on what this dissertation project has meant to me, the places it has gone, and where I hope it takes me in the future. It has been a faithful yet demanding companion for more than three years; it has been at times a source of immense pride and at others a dark cloud that was most looming when put aside during an attempt at relaxation. It has been a stoic receiver of the full spectrum of emotions, from rage and hopelessness to jubilance and elation. It has at different points served as an impetus for action, a mirror of self-reflection, a place for my two cats to nap, and a coaster for a strong and dirty vodka martini. It was with me through joys and challenges in all areas of my life, both academic and personal, like a (too) loyal companion. With this, I bid farewell to my dissertation in all of its shapes and forms and look forward to taking what I have learned not only from my study, but also about myself, into the bright blue future ahead.

TABLE OF CONTENTS

Certificate of Approval……………………………………………………………………...…iii

Acknowledgements……………………………………………………………………………iv

Table of Contents………………………………………………………………………………vi

List of Tables…………………………………………………………………………………viii

List of Figures……………………………………………………………………………......ix

Abstract…………………………………………………………………………………………1

CHAPTER I

Introduction……………………………………………………………………………………..3

Discrimination………………………………………………………………………………….4

Social Support……………………………………………………………………………...11

Self-Esteem………………………………………………………………………………...13

Current Study………………………………………………………………………………14

CHAPTER II

Review of the Literature…………………………………………………………………16

Meyer's (2003) Model: An Overview…………………………………………………...16

Meyer's (2003) Model: Linking Oppression and Social Stress………………………………19

Meyer's (2003) Model: Linking Social Stress and Psychological Outcomes………………...22

Meyer's (2003) Model: Social Support and Self Esteem as Moderators……………………..26

Aging, Ageism, and the Older Adult Identity…………………………………………...30

Sexual Minority Older Adults: An Invisible Population……………………………………...34

Sexual Minority Older Adults and Minority Stress: What We Know………………………..39

CHAPTER III

Method………………………………………………………………………………………...45

Sample………………………………………………………………………………………...45

Procedure……………………………………………………………………………………...47

Measures………………………………………………………………………………………47

Analysis Plan……………………………………………………………………………….55

CHAPTER IV

Results…………………………………………………………………………………….58

Preliminary Analyses……………………………………………………………….....58

Hierarchical Multivariate Multiple Regression……………………………………...58

CHAPTER V

Discussion………………………………………………………………………………..64

Findings………………………………………………………………………………66

Limitations……………………………………………………………………………77

Implications and Future Directions…………………………………………………..82

Conclusion……………………………………………………………………………86

References………………………………………………………………………………..88

APPENDICES

A. Recruitment Advertisement……………………………………………………………116

B. Informed Consent………………………………………………………………………117

C. Demographic Survey…………………………………………………………………...119

D. The Ageism Survey…………………………………………………………………….123

E. Heterosexist Harassment, Rejection, and Discrimination Scale……………………….124

F. Outness Inventory………………………………………………………………………126

G. Internalized Homonegativity Subscale of the Lesbian, Gay, and Bisexual Identity Scale….127

H. Multidimensional Scale of Perceived Social Support…………………………………128

I. Sexual Minority and Older Adult Within-Group Social Network Assessment…………....129

J. Single-Item Self Esteem Scale…………………………………………………………130

K. The UCLA Loneliness Scale…………………………………………………………...131

L. Satisfaction with Life Scale……………………………………………………………132

M. Quality of Life – Alzheimer's Disease Survey…………………………………………133

N. Kessler Psychological Distress Scale…………………………………………………134

Vita……………………………………………………………………………………….135

LIST OF TABLES

Table 1. Descriptive Data and Correlations of Study Variables……………………………..……111

Table 2. Univariate Results from the Hierarchical Multivariate Regression:

Unstandardized Regression Weights……………………………………………………….114

LIST OF FIGURES

Figure 1. Conceptual model.....103

Figure 2. Participant age distribution.....104

Figure 3. Participant gender identity distribution.....105

Figure 4. Participant sexual orientation distribution.....106

Figure 5. Social network as a moderator for heterosexism and psychological distress.....107

Figure 6. Social support as a moderator for internalized homonegativity and psychological distress..... 108

Figure 7. Social network as a moderator for internalized homonegativity and life satisfaction.....109

Figure 8. Social network as a moderator for internalized homonegativity and loneliness.....110

ABSTRACT

Sexual minority (e.g., lesbian, gay, bisexual, and other non-heterosexual orientations) adults over 50 years of age represent a large yet under-researched population. The intersections of sexual orientation- and age-related discrimination and their relationships with well-being have yet to be explored together within this population. In response, this study assessed whether certain aspects of Meyer's (2003) Minority Stress Theory apply to the sexual minority older adult population, with the additions of the minority stressor of ageism and the stress-ameliorating factor of self-esteem. Specifically, the relationship of minority stressors (i.e., ageism, heterosexism, internalized homonegativity (IH), outness) to well-being (i.e., loneliness, life satisfaction, quality of life (QOL), psychological distress (PD)) was examined as well as whether those relationships were maintained after controlling for demographic variables and were moderated by stress-ameliorating factors (i.e., self-esteem, social support, and social network size) as theorized by Meyer.

Hierarchical regression analyses with a sample of 189 sexual minority adults aged 50 and older offered partial support for Meyer's model. Ageism and heterosexism were significantly related to PD and QOL; additionally, IH was related to PD. These findings remained generally stable after including demographic variables, indicating the saliency for the minority stressors regardless of individuals' age, gender, sexual orientation, and partner status. The relationship between PD and mild heterosexism was moderated by social network, and the link between PD and mild IH was moderated by social support. Social network also moderated the links between mild IH and both life satisfaction and loneliness.

These findings highlight the saliency of ageist and heterosexist discrimination in well-being for sexual minority older adults. This population is at risk for experiencing discrimination due to their marginalized identities, this discrimination has connections with psychosocial well-

being, and this population utilizes social supports to buffer against mild levels of minority stress. These results suggest areas for future research on minority stress, with ongoing research on intersections of marginalized identities for older adults as well as the use of other stress-ameliorating strategies for coping with discrimination areas to explore. Findings also call for culturally-sensitive practice in older adult care, including awareness of discrimination and encouragement for coping skills.

Chapter I

Introduction

The sexual minority (e.g., lesbian, gay, bisexual, and other non-heterosexual orientations) adult population over fifty years of age is a large yet remarkably under-researched population in the United States. The American Psychological Association (APA; 2008) defines sexual orientation as an "enduring pattern of emotional, romantic, and/or sexual attractions to men, women, or both sexes" (para. 2) that is "distinct from other components of sex and gender, including biological sex (the anatomical, physiological, and genetic characteristics associated with being male or female), gender identity (the psychological sense of being male or female), and social gender role (the cultural norms that define feminine and masculine behavior)" (para. 3). In light of these definitions of terms, the current study focuses on diversity in sexual orientation (e.g., gay, lesbian, bisexual, queer), which is considered to be distinct from diversity in gender identification (e.g., transgender, androgynous, genderqueer, gender non-conforming). Also of note, the present study is focusing on adults 50 years of age and older who identify their sexual orientation as anything other than heterosexual; for brevity, the term "sexual minority older adult" is utilized throughout to identify this specific population.

Sexual minority older adults represent a population characterized by intersections of two disadvantaged identities (i.e., sexual minority and older adult) and potentially may also represent additional minority identities (e.g., ethnic/racial identity, gender identity, disability status, low socioeconomic status, etc.). APA's (2009) report on Multicultural Competency in Geropsychology highlights the ways in which research in policy and practice has recently drawn attention to the need for increased awareness of and sensitivity to the interaction of diverse identities, particularly within the older adult population. In fact, Knight, Karel, Hinrichsen,

Qualls, and Duffy (2009) encourage psychologists and gerontologists to be "aware of individual diversity in all its manifestations, including how gender, ethnicity, language, religion, socioeconomic status, sexual orientation, gender identity, disability status, and urban or rural residence interact with attitudes and beliefs about aging" (p. 208), as a "focus on the interactions between age and cohort and other aspects of individual diversity are critical for understanding the social context of an individual's experiences in late life" (p. 208).

Fredriksen-Goldsen (2011) estimates that more than two million sexual minority older adults reside in the United States (US), and as the size of the aging population in the US increases, the number of sexual minority older adults is expected to double between 2000 and 2030. Crisp, Wayland, and Gordon (2008) note that sexual minority older adults represent every ethnic minority group and further that members of this group are aging at the same rate and experiencing similar challenges in ability and healthcare as heterosexual older adults in the United States. Nevertheless, sexual minority older adults face ignorance and a lack of awareness in both scientific and clinical settings. As a result, the current study will examine experiences of ageism, heterosexism, and degree of outness as predictors of the psychological wellbeing of sexual minority older adults and whether perceived social support moderates these relationships.

Discrimination

The American Psychological Association's (APA) Presidential Task Force on Preventing Discrimination and Promoting Diversity defines prejudice as "attitudes (positive or negative) toward individuals based on faulty and inflexible generalizations related to their perceived affiliations" and discrimination as "treating people differently, and generally more negatively, because they belong to particular groups…[it] is also referred to as *bias* because of this negative behavioral aspect" (2012, pp. 9-10). In other words, prejudice refers generally toward one's

attitude, while discrimination refers more toward one's behavior. However, this APA taskforce's statement cautions against separating discriminatory attitudes and behaviors, as attitudes generally inform discriminatory behaviors. As a result, the present study uses "discrimination" as an umbrella term for negative attitudes, beliefs, and behaviors toward individuals based on their affiliations with different groups.

A few different theories have been proposed to explain how having an oppressed identity impacts wellbeing. The current study utilizes Meyer's (2003) Minority Stress Theory for the sexual minority population, which posits that individuals with stigmatized minority identities (i.e., those who do not identify as heterosexual) are at higher risk for experiencing chronic stress due to their identity. Meyer's theory details pathways linking identification with an oppressed group with the experience of unique social stressors and ameliorating factors due to having an oppressed identity, which in turn relate to mental health outcomes. Meyer breaks down the minority stressors into two categories---distal stress (i.e., external events of prejudice through discrimination or violence) and proximal stress (i.e., internal responses to distal stress, including expectations of rejection, concealment of identity, and internalized homonegativity). In its full form, Meyer's model includes both mediation and moderation. Regarding mediation, he proposes that general stress and minority stress mediate the relationships of environmental circumstances, minority identity, and minority status with mental health outcomes. Additionally, Meyer's theory includes minority identity characteristics, including prominence (i.e., salience of the identity); valence (i.e., self-evaluation of identity); and level of integration of the sexual minority identity with other identities, along with stress-ameliorating factors (i.e., coping and social support) as moderators of relationships of minority stress to mental health outcomes in the model.

The present study focuses on a segment of the moderated relationships within Meyer's model, specifically testing the relationships of distal and proximal stressors to a set of psychosocial outcomes and whether stress-ameliorating factors moderate those relationships. Currently, Meyer's model has been directly applied to sexual as well as ethnic minority identities in a number of capacities (see Bowleg, Huang, Brooks, Black, & Burkholder, 2003; Meyer, 1995), but it has been tested within the aging population only in a more limited scope (see Kuyper & Fokkema, 2010). The present study also assesses the inclusion of two potential additional variables within Meyer's model that may be relevant for the older adult population in particular – ageism as a minority stressor and self-esteem as a potential stress-ameliorating factor.

In terms of discrimination related to age identity, the International Longevity Center's (ILC) Anti-Ageism Taskforce (2006) reports that ageism is a particularly widespread type of discrimination due to its rampant acceptance and endorsement in US culture. Unlike racism, sexism, and even heterosexism, ageism has yet to become a major area of concern within tolerance and diversity issues in the US. Moreover, ageism is unique in that it is something to which the vast majority of individuals may experience as they naturally age, unlike other forms of discrimination based on more stable group differences, such as ethnicity or sexual orientation (Bennett & Gaines, 2010). In fact, Palmore (2001) describes ageism (i.e., discrimination toward individuals based on their identity as an older person) as "the third great 'ism' in our society, after racism and sexism" (p. 572).

Ageism has been found to have a negative impact on older adults in the US in a number of areas of wellbeing. As referenced by the ILC (2006), studies indicate that 35% of physicians incorrectly associate blood pressure increases as a normal part of aging (Hajjar, 2002),

chemotherapy is under-utilized in patients with breast cancer over the age of 65 despite potential health benefits (Du, Key, Osborne, Mahnken, & Goodwin, 2003), and 60% of older adults fail to receive appropriate preventive services for their health (National Center for Chronic Disease Prevention and Health Promotion, 2004). These types of discriminatory beliefs have high potential for dangerous outcomes for the physical health of older adults, such as inadequate care for illness and higher risk for medical problems (ILC, 2006). Moreover, Rupp, Vodanovich, and Credé (2006) found that ageism can negatively impact work environments for older adults. In fact, the authors found that young people were more likely to recommend harsher punitive measures for poor work performance for older adults than they were for younger people. Rupp et al. conclude that younger people are more likely to view an older adult's poor performance as a stable trait rather than an isolated incidence; this ageist belief can have indelible consequences for older adults' job retention and seeking abilities. Although some evidence of the harmful impact of ageism on older adults has been supported by research, the links between experiences of ageism and mental health remain unclear, and ageism has yet to be studied within the sexual minority older adult population. The present study considers ageism as a potential additional distal stressor within Meyer's (2003) model, which may be linked with psychosocial outcomes for this population.

In line with Meyer's (2003) Minority Stress Theory, heterosexism is another form of discrimination that impacts the sexual minority older adult population as a distal stressor. Incidents of heterosexist discrimination are a common theme in the lives of sexual minority older adults (Cronin, Ward, Pugh, King, & Price, 2010; D'Augelli & Grossman, 2001; Fredriksen-Goldsen, 2011; Grossman, D'Augelli, & O'Connell, 2001; Herek, 2008). Sexual orientation-related verbal abuse is experienced by half to two-thirds of sampled populations (Fredricksen-

Goldsen, 2011; Grossman et al., 2001; Herek, 2008). Further, Herek found that 20% of sexual minority older adults reported a sexual orientation-related crime against their person or property since they turned 18, 10% experienced employment or housing discrimination, 55% perceived a degree of felt stigma due to their sexual orientation, and Cronin et al. found that 45% of sexual minority older adult service users experienced discrimination in provision of services. Threats of physical violence have been reported by 29% (Grossman et al., 2001) and 42% (Fredricksen-Goldsen, 2011), and threats of being "outed" are experienced by 29% (i.e., having their sexual orientation identity revealed to others without their consent; Grossman et al., 2001). On a more systemic level, the sexual minority population in the US faces social stressors due to limitations on their legal rights. To illustrate, at the time of data collection for this study, Stark (2013) noted that only nine states plus Washington, DC currently allow same-sex couples to legally marry, resulting in a total of only 15% of Americans who reside in a state that permits legal same-sex marriages. Legal marriage opens opportunities to 1,100 federal benefits for couples; as a result, the vast majority of same-sex couples are unable to access these advantages (Stark, 2013). These limitations to the rights of sexual minority individuals help to illustrate the mismatch of societal expectations and individual identity proposed in Meyer's model that increases the stress experienced by those with a minority identity. In sum, these findings underscore the prevalence of discrimination in the lives of sexual minority older adults.

Social stress aimed toward sexual minority older adults in particular results in a salient need for these individuals to make important and challenging life decisions in ways that will ensure their self-preservation, even if it results in greater invisibility and decreased satisfaction with life. When sexual minority older adults receive or request services (e.g., medical care, caregivers, social services), the fear of discrimination can lead them to hide their sexual

orientation, avoid acknowledging their partner to others, remain isolated from sexual minority-friendly communities and activities, or avoid accessing services overall (Brotman, Ryan, & Cormier, 2003). All four of these options render a degree of invisibility of the sexual minority older adult population in the general population, the sexual minority community, and in older adult care services and housing, as well as an overall diminished quality of life for sexual minority older adults.

In support of Meyer's (2003) theory, instances of heterosexist discrimination have significant negative impacts on the psychological wellbeing of sexual minority older adults (D'Augelli & Grossman, 2001; Grossman et al., 2001; Mays & Cochran, 2001). Mays and Cochran (2001) found that 76% of sexual minority adults reported having experienced any form of discrimination and 25% reported experiencing discrimination based on sexual orientation alone; in the same sample, participants who identified as homosexual or bisexual were significantly more likely than heterosexually-identified participants to meet diagnostic criteria for at least one psychiatric disorder, a finding that was replicated by Grossman et al. (2001) in a sample of sexual minority older adults. Moreover, sexual minority older adults who had experienced discrimination were also more likely to feel as though the discrimination experience(s) interfered with their abilities to lead a full and productive life, highlighting the impact that discrimination and victimization can have on overall quality of life for sexual minority adults (Mays & Cochran, 2001). Similarly, Waldo (1999) tested indirect and direct forms of minority stress in the workplace and found support for the link between workplace heterosexism and psychological distress (i.e., depressive and anxious symptomatology), health problems, and job dissatisfaction in a sample of lesbian, gay, and bisexual adult workers.

In addition to psychological distress, experiences of discrimination have been negatively associated with a number of other difficulties. Specifically, experiencing sexual orientation discrimination has been linked with decreased self-esteem (D'Augelli & Grossman, 2001; Grossman et al., 2001), increased loneliness (Grossman et al., 2000; Kuyper & Fokkema, 2010), and higher levels of internalized homophobia (D'Augelli & Grossman, 2001). To illustrate, Kuyper and Fokkema (2010) applied dimensions of Meyer's (2003) Minority Stress Model to explore the impact of sexual orientation-based social stressors (i.e., negative experiences due to sexual orientation, expectations of prejudiced reactions, concealment of sexual minority identity) and an ameliorating factor (sexual minority social network) on loneliness in sexual minority older adults. Their results indicated that including the components of the Minority Stress Model significantly increased the variance explained in loneliness within the population, with experiences of prejudiced events, expectations of prejudiced interactions, and sexual minority network size serving as significant predictors for loneliness. D'Augelli and Grossman also found support for the negative impact of different types of discrimination on sexual minority older adults; specifically, the type of discriminatory behaviors influenced the severity of the negative outcomes from the incident, with physical attacks having more of a negative impact on sexual minority older adults than verbal attacks.

Older adults who identify as members of a sexual minority group face potential for compounded stigma due to multiple minority identities, through heterosexism and ageism. Although ageism as a factor in the older adult identity has yet to be empirically tested within Meyer's (2003) Minority Stress Theory, the combination of belonging to two oppressed groups – older adults and sexual minority individuals – may result in elevated levels of social stress. To illustrate, Moradi, Mohr, Worthington, and Fassinger (2010) found that, although White lesbian,

gay, and bisexual (LGB) individuals and LGB people of color expressed similar levels of perceived heterosexism, internalized homophobia, and comfort with disclosure of sexual orientation, LGB people of color were significantly less open with their LGB identity than their White counterparts. However, it is important to note that these are only two of the numerous diverse identities individuals have; sexual minority older adults may also identify with other traditionally oppressed groups, such as those associated with their ethnic identity, gender identity, or disability status, that may additionally influence the levels of social stress they experience.

Social Support

Social support and engagement, which are considered ameliorating factors within Meyer's (2003) minority stress model, are important for all older adults, regardless of sexual orientation (Golden, Conroy, & Lawlor, 2009; Johnston, Brosi, Hermann, & Jaco, 2011; Kwag, Martin, Russell, Franke, & Kohut, 2011; White, Philogene, Fine, & Sinha, 2009). Specifically, Golden et al. found that social engagement can serve as a buffer against cognitive decline, depression, anxiety, and physical disability and that it was associated with higher self-rated happiness, better quality of life, and feeling that life is worth living in a sample of adults 65 and older. Social support has also been found to protect against loneliness and fatigue (Kwag et al., 2011), predict sense of control and empowerment (Johnston et al., 2011), and was associated with better self-reported general health (White et al., 2009) for older adults.

However, social support may be especially important for sexual minority older adults due to the heightened risk of stigma, discrimination, and victimization they experience (Fokkema & Kuyper, 2009; Fredriksen-Goldsen, 2011; Grossman, D'Augelli, & Hershberger, 2000). Yet, sexual minority older adults may lack the social support they need; research has indicated that

sexual minority older adults are more likely to have fewer social connections, experience divorce, be childless, be in a relationship but living separately from their partner, and have less regular contact with family members than their heterosexual counterparts (Fokkema & Kuyper, 2009; Fredriksen-Goldsen, 2011). In addition, Grossman et al. found that, for a sample of sexual minority older adults, greater satisfaction with social support was associated with less loneliness and that sexual minority older adults who cohabited with their partners were likely to have better mental and physical health and less loneliness. Sexual minority older adults have also been found to rate their received social support from individuals who know their sexual orientation as more satisfying than the social support they received from individuals who were not aware of their sexual orientation (Grossman et al., 2000). Moreover, Masini and Barrett (2008) found that in a sample of gay, lesbian, and bisexual older adults, participants felt that the social support they received from friends was a stronger predictor than social support from family of lower levels of depression, anxiety, and internalized homonegativity as well as higher levels of quality of life.

Social involvement with other sexual minority-identified individuals or affirmative organizations may also be an ameliorating factor, though findings have been mixed. In a qualitative study of gay, lesbian, and bisexual youths and young adults, Nesmith, Burton, and Cosgrove (1999) found that participants perceived other sexual minority individuals in social networks to be generally more supportive than non-sexual minority individuals. However, Grossman, D'Augelli, and O'Connell (2001) found that involvement with LGB organizations was associated with lower levels of loneliness and internalized homophobia in a sample of sexual minority older adults, but it was not associated with mental health or substance use. In sum, social support plays an important role in the lives of aging adults, and it holds even greater

importance for sexual minority older adults, as their social embeddedness and cohesion may be at greater risk due to their minority status.

Self-Esteem

Self-esteem was explored in the present study as a potential additional moderating variable in Meyer's (2003) Minority Stress model for sexual minority older adults. Self-esteem is an under-researched yet important construct in the lives of older adults and sexual minority adults. In fact, in the older adult population more generally, research has indicated that, when used as a predictor variable, higher self-esteem can protect against depressive symptoms in adults across the lifespan; however, depressive symptoms were not significantly predictive of self-esteem as an outcome variable (Orth, Robins, Trzesniewski, Maes, & Schmitt, 2009). In sexual minority adult populations, lesser degrees of "outness" predicted lower self-esteem (Legate, Ryan, & Weinstein, 2011), lower self-esteem predicted higher self-stigma (Feinstein, Davila, & Yoneda, 2012), and self-esteem moderated the relationship between experience of heterosexist events and psychological distress, with lower levels of self-esteem increasing risk for psychological issues (Szymanski, 2009). Corning (2002) found support for the moderating role of self-esteem in the relationship between personal gender-based discrimination and depression-related psychological distress in a sample of women, indicating that as personal self-esteem increased, the positive relationship between discrimination and distress diminished.

The inclusion of self-esteem in research focused specifically on sexual minority older adults has been more limited. Fokkema and Kuyper (2009) found that low self-esteem predicted loneliness in a sample of sexual minority older adults. Additionally, D'Augelli et al. (2001) found that past mental health, current mental health, and suicidal ideation across the lifespan were correlated with self-esteem in sexual minority older adults, and D'Augelli and Grossman

(2001) found that experiences of physical assaults predicted low self-esteem in sexual minority older adults. Beyond these studies, self-esteem has yet to be included as a variable of focus in sexual minority older adult studies. Self-esteem has not been directly proposed as a stress-ameliorating factor within Meyer's (2003) minority stress theory, which identifies coping strategies and social support as key ameliorating factors. Therefore, the current study will assess the potential utility of self-esteem in buffering against the influence of distal and proximal minority stress on the psychosocial, mental health outcomes for sexual minority older adults.

Current Study

Sexual minority older adults are a nearly invisible population in great need of additional research that could be used to better inform clinicians, caregivers, adult service providers, educators, and others of their unique strengths, challenges, and needs. As a step toward filling the many gaps in the research focused on sexual minority older adults, the present study seeks to explore the applicability of some elements of Meyer's (2003) minority stress model, while also assessing the relevance of some new constructs for the model (i.e., ageism and self-esteem). Specifically, this study addresses relationships among distal minority stressors (i.e., perceived frequency of ageist and heterosexist events) and proximal minority stressors (i.e., outness and internalized homonegativity), demographic variables, stress-ameliorating factors (i.e., social support, social network size, and self-esteem) with and psychosocial outcomes in a sample of sexual minority older adults. The following research questions will be addressed (see Figure 1):

1. Are distal stressors of perceived heterosexist and ageist discriminatory events and proximal stressors of degree of outness and internalized homonegativity related to psychological distress, life satisfaction, quality of life, and loneliness in sexual minority older adults? It is hypothesized that greater perceived discrimination (both

heterosexist and ageist) and greater internalized homonegativity will be related to greater psychological distress, lower life satisfaction, and greater loneliness and that greater degrees of outness will be related to lower psychological distress, higher life satisfaction, and less loneliness.

2. How do the relationships in research question one differ when controlling for participant sexual orientation, gender, age, and marital status? Examination of the influence of these demographic variables is exploratory.
3. To what degree do potential stress-ameliorating factors of perceived level of general social support, size of older adult sexual minority social network, and self-esteem moderate the relationships in research question one? It is hypothesized that greater levels of perceived social support, larger social networks, and higher self-esteem will lessen the strength of the relationships between perceived discrimination, internalized homonegativity, and outness and psychological distress, life satisfaction, and loneliness, thereby buffering the negative psychological and social impacts of perceived discrimination.

Chapter II

Review of the Literature

Meyer's (2003) Minority Stress Model: An Overview

Meyer (2003) proposed the Minority Stress Model as a framework for explaining and accounting for both the social stressors and the ameliorating factors that shape the experiences of those from oppressed groups. Meyer's model expands the concept of social stressors to include not only personally experienced events that are perceived by the individual as negative or stressful – known as proximal stressors – but to also include oppression due to the larger social and institutional environment or climate as a source of stress – termed in this model as distal stressors. Proximal and distal stressors together have the potential to enact negative impacts on a number of areas of wellbeing in individuals from oppressed groups, including mental health. Ameliorating factors, in contrast, are experiences that may serve to buffer against the deleterious minority stressors and may include personal resources of resilience and hardiness as well as group-level resources of social cohesion and support (Meyer, 2003).

In general, Meyer's (2003) model is founded on the assumption that people from stigmatized groups, such as those with sexual minority identities, people of color, those with a disability status, or any other oppressed group identity, are at a higher risk for experiencing social stress. Meyer posits that, for individuals with a minority identity, a "mismatch" occurs between the oppressed person's experience and identity and the social climate in which he or she lives; this incongruence then becomes a source of social stress. For example, a person who identifies as having a sexual minority identity may live in a state that does not allow legal same-sex marriage; the tension between this person's identity and the restriction on her or his rights is identified in Meyer's model as a distal stressor.

Meyer (2003) emphasizes three key aspects of minority stress. First, minority stress represents a unique and additional level of stress that adds to the typical, pre-existing everyday stressors (e.g., work, familial conflict, time management) faced by most people. As a result, stigmatized individuals are required to make more adaptations to their environment than non-stigmatized people due to the higher levels of stress they face. Second, minority stress tends to be both chronic and stable. Minority stress stems from deep-seated cultural beliefs that are difficult to truly eradicate. Third, minority stress is founded in larger structural institutions and social processes that extend beyond the individual experience of general stress.

It is important to note that Meyer's (2003) model provides only one potential theory that describes the ways in which oppressed identities, stress, and well-being are connected for individuals belonging to minority populations. Some recent work has proposed other theories to explain the unique experiences and outcomes related to minority stressors. Specifically, Hatzenbuehler (2009) proposes a mediational model to explain how stigma related to having a sexual minority identity "gets under the skin" (p. 707). In this mediational model, Hatzenbuehler posits that the link between stressors related to having a sexual minority identity (e.g., discrimination, violence, and other prejudice-based events) and psychopathology (e.g., depression, anxiety, and substance use disorders) is mediated by three domains: coping and emotional regulation, social/interpersonal, and cognitive. In other words, individuals with sexual minority identities encounter stressful prejudice-based events, which then trigger general psychological responses related to stress, which then confer risk for psychopathology. The difference in this approach as compared with Meyer's model is that Hatzenbuehler's theory implies that the link between stressors and psychopathology is not direct – which differs from Meyer's model – but that rather, this link is explained by psychological processes. Both models

seem plausible and both have found support in prior research findings, though future research is necessary to better illuminate the underlying processes for minority stress experiences.

Meyer's (2003) Minority Stress Model for sexual minority populations includes both mediating and moderating variables in its design. The two predictor variables in Meyer's design are environmental circumstances and the presence of a minority status (i.e., sexual orientation), which Meyer distinguishes from minority identity (e.g., lesbian, gay, bisexual), as an individual may or may not actively identify with a minority status they hold. Mediators in the model include minority identity, general stressors, distal minority stressors, and proximal minority stressors. These variables link to the outcome variable of positive/negative mental health outcomes and are moderated by characteristics of the minority identity (e.g., how prominent it is) and coping and social support variables (for a more detailed description of the model, refer to Meyer, 2003, Figure 1). As a result, Meyer's model can be conceptualized in multiple parts: the link of minority status and the environment to minority identity and stressors and the link between stressors, ameliorating factors, and mental health. The current study focuses primarily on this second stage – stressors, ameliorating factors, and both positive and negative mental and social outcomes.

In Meyer (2003), the Minority Stress Model is applied specifically to the experience of sexual minority individuals living in the United States. Meyer proposes that sexual minority individuals are likely to face unique stressors due to their oppressed identities. These minority stressors include "external, objective stressful events and conditions (chronic and acute)," "expectations of such events and the vigilance this expectation requires," and "the internalization of negative societal attitudes" (Meyer, 2003, p. 676). Meyer also notes that the concealment of one's sexual minority identity in response to societal pressures may be a fourth social stressor

process that occurs for this population specifically. Meyer's model for sexual minority individuals also embraces the resilience often found in oppressed groups. To do so, the model also includes stress-ameliorating factors that reflect domains of coping and resilience. These factors can be considered either personal or group resources. Personal resources may include individual factors, such as personality traits (e.g., resilience), while group resources are accessible to all members of the oppressed group to help counteract stigma, such as gay-affirming communities and events.

Meyer's (2003) Minority Stress Model: Linking Oppression and Social Stress

Research has shown support for Meyer's (2003) Minority Stress Model as applied to the sexual minority population, although these studies are few and are often subjected to some notable limitations. Study designs and research methodology within this area of study vary, including quantitative, qualitative, cross-sectional, and longitudinal approaches. Moreover, studies seem to have primarily focused on one of the two key aspects of Meyer's model – either the association between having a minority identity and experiencing minority stress factors or the association between experiencing minority stress factors and experiencing negative outcomes.

Balsam and Szymanski's (2005) quantitative study and Bowleg et al.'s (2003) qualitative study both explored the first aspect of Meyer's (2003) model highlighting the link between minority identities and minority stress by exploring the social stressors involved in identifying as a lesbian or bisexual woman. Balsam and Szymanski assessed 272 participants, ranging in age from 18 to 66 years old (M = 34.75, SD = 10.27), who identified as lesbians or bisexual women. The study focused primarily on proximal minority stress variables, including degree of outness, internalized homophobia, experiences of discrimination, and experiences of victimization within both current and lifetime same-sex relationships as predictive of relationship quality, and their

results showed support for the additive nature of minority stress. Specifically, internalized homophobia was positively associated with experiences of victimization through physical or sexual violence and negatively associated with relationship quality, and lifetime discrimination was associated with all domestic violence variables excluding sexual minority-specific victimization (Balsam & Szymanski, 2005). Interestingly, outness was not associated with relationship variables; Balsam and Szymanski inferred that this lack of association may reflect that an incongruence between partners' outness levels may be more influential on relationship quality than outness level alone. In contrast, Bowleg et al.'s qualitative approach focused on the compounding effects of "triple jeopardy," or the participants' experiences of identifying with three oppressed groups – sexual minority, female, and Black. Bowleg et al. assessed a sample of 19 Black self-identified lesbians ranging in age from 26 to 68 years old (M = 45, SD = 10.58). The authors found themes consistent with Meyer's model present in their participants' stories, including experiences with blatant and implicit discrimination, stress over concealment of identity, and institutional discomfort. However, the qualitative approach used by Bowleg et al. supplements Balsam and Szymanski's findings, as the compounding influence of multiple minority identities is apparent; one participant stated that "the deck is definitely stacked against you" when a person experiences this triple jeopardy (p. 97). Major strengths of these two studies included the utilization of a scientific and empirical approach to understanding minority stress as well as the inclusion of bisexual women, who are often neglected in research. Both study designs faced limitations common to research within the sexual minority population, including the use of a convenience sample and the lack of closeted women in the participant pool.

Meyer, Schwartz, and Frost (2008) also provide an additional perspective to the first aspect of Meyer's (2003) theory through the exploration of the link between disadvantaged

identities and the resulting stress and access to coping resources in a sample of 524 individuals, including 396 sexual minority (lesbian, bisexual, and gay) and 128 heterosexual participants. The authors hypothesized that disadvantaged identities (including minority sexual orientations, races/ethnicities, and identifying as women) would be associated with higher rates of stress exposure and reduced utilization of coping resources. Moreover, the authors proposed that each minority identity would be associated with greater stress; that is, individuals with one, two, or three of the minority identities would have greater exposure to stressors respectively. Meyer et al.'s study strengthened the pre-existing literature through their inclusion of a more diverse sample; within the sexual minority sample, White, Black, and Latino participants made up roughly one-third of the population each, and the sample was also evenly split between men and women. For comparison purposes, the heterosexual participants included only White individuals, approximately evenly split between men and women. The sample had an average age of 32 years (*SD* = 9); age range was not reported.

Meyer et al. (2008) found support for the role of some minority identities and their association with increased stress exposure and reduced use of coping skills. The authors found partial support for the LGB identity hypothesis, as sexual minority-identified participants had significantly greater exposure to acute stressors (e.g., job loss, death of a loved one, childhood abuse), including prejudiced-based acute stressors, but not chronic stressors (e.g., everyday discrimination, unemployment, financial distress) than their heterosexual counterparts. Additionally, the authors found support for their hypothesis regarding sexual minority individuals who also identify with a racial/ethnic minority group; Black and Latino LGB individuals had a stronger association with both general (e.g., unemployment, parenting, financial) and prejudice-based stress exposure and less access to coping mechanisms (e.g.,

perception of control, social network, sexual minority community involvement) when compared with their White heterosexual and White LGB counterparts. This finding shows support for the compounding influence of intersectionality on social stressors and access to coping resources. Interestingly, results indicated no significant relationship between identifying as a woman (regardless of race/ethnicity and sexual orientation) and experiencing any type of stressors when compared with their male counterparts.

The Meyer et al. (2008) study did face some notable limitations that impact the generalizability of its findings. The sample did not include heterosexual individuals who were members of Black or Latino ethnic groups due to the analytical design, which limited the degree to which the experience of LGB Black and Latino individuals can be compared with the experience of heterosexual Black and Latino individuals. Moreover, the results did not differentiate between the impacts of general racism versus homophobia within the Black and Latino communities specifically in terms of the LGB ethnic minority individuals' experiences of stress. In other words, pinpointing the true source of prejudice-based stress reported by the participants is impossible. Nevertheless, the authors conclude that in general, individuals who are members of disadvantaged groups are likely to face increased exposure to stressors than those from advantaged groups.

Meyer's (2003) Minority Stress Model: Linking Social Stress and Psychological Outcomes

Thus far, the literature reviewed that addresses Meyer's (2003) model has focused on links between having a minority identity and experiencing minority stress; the following research highlights the second aspect of the model – the link between minority stress variables and health and psychological outcomes. As a precursor to his 2003 theoretical approach to minority stress, Meyer (1995) explored how minority stress variables impact mental health, utilizing a large

sample (*N* = 741) of gay men living in New York City whose ages ranged from 21 to 76 (*M* = 38, *SD* = 8.4); specifically, he investigated how internalized homophobia, stigma (i.e., expectations of sexual orientation-based rejection or discrimination), and prejudice were related to outcome variables of psychological distress, demoralization (e.g., dread, anxiety, and hopelessness), guilt, sex problems, and suicide. The results of the Meyer (1995) study indicated support for minority stress as a predictor of well-being; all three minority stress variables were individually significant predictors of all five outcome variables, and when considered simultaneously, all predictors, with the exception of sex problems, continued to be significantly related to all outcome variables. This study is notable as it is one of the first to provide evidence for Meyer's (2003) theory of minority stress within the sexual minority population. In addition, the study utilized a large sample, which increased the statistical power of the results, and rather than recruiting participants from only gay-affirming groups and organizations, snowball sampling was used to also assess gay men who were not associated with these organizations. However, the results of Meyer (1995) were limited due to a lack of diversity within its sample, as it represented primarily White, urban, well-educated, and young- to middle-aged men, and because a number of the measures had not been previously validated given that this study was one of the first to assess many of the minority stress variables.

Variables within Meyer's (2003) Minority Stress Model were also assessed within a multiple minority population in Szymanski and Sung's (2010) study exploring predictors of psychological distress in a sample of Asian American sexual minority individuals. Minority stressors included perceived experiences of heterosexist events, perceived experiences of racist events, heterosexism within communities of color, racism within sexual minority communities, race-related problems in dating relationships, internalized homonegativity, outness to family, and

outness to the world in general as predictive of psychological distress. The authors found mixed support for Meyer's model; stressors of heterosexism within communities of color, race-related dating relationship problems, internalized heterosexism, and outness to the world were significant and unique predictors of psychological distress in the sample, while outness to family was not a significant predictor. Additionally, Szymanski and Sung also assessed for potential moderators (i.e., interactions of internalized heterosexism with outness to family and interactions of internalized heterosexism with outness to world) and mediators (i.e., outness to family and outness to world), but neither hypothesis was supported in the results. These results bolster findings that intersecting minority identities can compound the stressors individuals face. Moreover, the focus on a non-White population expanded the breadth of sexual minority population research greatly. However, the results are still limited due to the lack of diversity in respondent's educational background, age (ranged from 18-55 years with an average of 21.37), and the collapsing of different nationalities (e.g., Korean American, Chinese American, Thai American) into one identifying category of Asian American.

Hatzenbuehler, Nolen-Hoeksema, and Erickson (2008) also assess the link between minority stressors and deleterious health and mental health outcomes. Specifically, using a longitudinal approach, the authors explored the degree to which minority stress variables (i.e., experiences with prejudice, internalized homophobia, and expectations of rejection) was related to health-risk behaviors and mental health issues (i.e., HIV transmission risk behaviors, substance use, and depressive symptoms) in a sample of gay men dealing with a major life stressor and whether the minority stress variables would be related to the outcome variables in different ways over time. The authors assessed a sample of 74 gay male caregivers providing care to men who were very sick with AIDS and receiving care from hospice organizations. All

of the participants were either close friends or in an intimate relationship with the men for whom they were providing care, and their ages ranged from 28 to 60 (M = 40). The majority of the sample was Caucasian (86.5%), and all participants were recruited from the San Francisco Bay area. Participants were assessed approximately one month prior to the death of their friend/partner, and again at one, six, 13 and 18 months after the death of their friend/partner.

Longitudinal hierarchical linear modeling indicated some significant associations between minority stress factors and health outcomes over time; reports of discrimination were associated with substance use, perception of danger related to one's sexual orientation and perceived rise in homophobic attitudes were associated with depressive symptoms, and internalized homophobia was associated with HIV risk due to number unprotected sexual partners and HIV risk due to the number of times the participant engaged in unprotected anal intercourse (Hatzenbuehler et al., 2008). Based on these findings, the authors speculate that minority stress experience may trigger gay men to engage in escape-avoidance behaviors to cope with the additional stressors, leading to risky behaviors. Additionally, it seems that experiencing long-term minority stress may result in hopelessness and depressive symptoms in this sample. As a result, it seems as though minority stress factors may be important to assess for and consider when providing care to gay men, especially those coping with a significant life stressor. Despite the strengths and contributions of this study, results should be interpreted with caution due to the lack of diversity in the sample, small sample size, use of self-report measures, and difficulty in ascertaining whether experiencing bereavement may have led to increased vulnerability to minority stress for the respondents. Moreover, the participants were assessed between 1989 and 1992; as a result, findings may not be as relevant today as views, attitudes,

and policy toward sexual minority individuals have shifted drastically since the time of assessment.

Finally, Waldo (1999) tested the utility of the minority stress model for lesbian, gay, and bisexual adults within the workplace specifically. Using structural equation modeling, Waldo explored the link between heterosexism, defined by direct (e.g., anti-gay jokes or comments) and indirect (e.g., health benefits for same-sex partners) sexual minority intolerance, psychological distress (i.e., depressive and anxious symptoms), physical health, and job satisfaction in a sample of 287 gay, lesbian, and bisexual adults. Results indicated that a more intolerant workplace climate was associated with higher levels of psychological distress, more deleterious health outcomes, and greater levels of job dissatisfaction, which also predicted higher absenteeism and work withdrawal. This study provides support for the minority stress model within the workplace, as well as the link between discrimination and well-being for sexual minority workers. However, the generalizability of the findings is limited due to a minimal presence of bisexual-identified participants (7.7%), ethnically diverse participants (9.6%), and the use of a lesbian, gay, and bisexual community event for sample recruitment.

Meyer's (2003) Model and Sexual Minority Populations: Social Support and Self Esteem as Moderators

A few studies have also shown support for various pieces of Meyer's (2003) model through exploration of moderating variables. To illustrate, Szymanski (2009) assessed the relationship between perceptions of heterosexist discriminatory events and psychological distress and whether this relationship would be moderated by number of social supports, self-esteem, and use of an avoidant coping style (e.g., denial and disengagement as a form of coping with stress) with a sample of gay and bisexual men. Szymanksi found a significant positive relationship

between experiences of heterosexism and psychological distress, but the findings regarding moderation were mixed; use of avoidant coping techniques and number of social supports did not significantly moderate the predictive relationship between heterosexism and psychological distress. Self-esteem, however, was a significant moderator, so that higher self-esteem decreased the negative impact of heterosexism. An important consideration regarding Szymanski's study may be the operationalization of the construct of social support; rather than assessing perceived quality of received support, the measure tallied the number of people within the respondent's social network. One limitation to the study is that the participant pool lacked in diversity in ethnicity and education, resulting in sample of mostly White, highly educated, and young-middle adult bisexual or gay men. In addition, as is common with most research within sexual minority populations, there may have been a threat to the study's external validity due to sampling bias; gay and bisexual men who agreed to complete the survey may be notably different from the remainder of the gay and bisexual male population. Specifically, Szymanksi notes that this sampling bias may have been the cause of skewed findings for reported perceptions of heterosexist events, as this population may have experienced fewer events of heterosexism in general, facilitating comfort in completing the survey.

Szymanksi and Owens (2009) also assessed the moderating role of group-level coping (e.g., being involved in community groups and activities based on group identity, such as sexual minority social groups) within the relationship between experiences of sexist and heterosexist events and psychological distress in a sample of lesbian and bisexual women. Although Szymanski and Owens did find a significant, positive relationship between discrimination and psychological distress, the only significant moderator in their analysis was gender-based group-level coping as a moderator of the link between sexism and psychological distress. Sexual

orientation-based group-level coping did not significantly moderate the relationship of heterosexism or sexism with distress, and gender-based group-level coping was not a significant moderator of the relationship between heterosexism and distress.

Szymanksi and Owens (2009) note that the construct measured in the gender-based coping scale used in their study most accurately reflected active engagement, while the sexual orientation-based coping scale seemed to measure feelings of belonging to a community, which may have contributed to the mixed findings. Similar to Szymanksi (2009), the Szymanksi and Owens study was also limited by a homogenous sample of predominantly White women, almost half of whom had attended at least some graduate school, thereby limiting the accuracy with which the study results can be generalized outside of the participant pool. Sampling biases may have also played a role in explaining the results of the study, as women who complete the survey may have been more socially embedded and therefore may have experienced less distress than those who did not take the study.

Taken together, the results of Szymanski (2009) and Szymanski and Owens (2009) indicate that the role of various types of social support as an ameliorating factor for sexual minority individuals in alignment with Meyer's model remains unclear; quantity of social supports was not a significant moderator in Szymanski's (2009) study, and only active forms of social engagement were significant in Szymanksi and Owens' (2009) study. However, both studies faced notable limitations due to homogenous samples and potential sampling bias. In an attempt to shed light on the mixed findings, the current study aims to assess the moderating role of social support from a different lens, as the selected methods measure both the respondent's perceived *quality* of social support as well as the *quantity* of people in participants' social networks. The inclusion of both social network size as well as perceived quality of social

support will shed additional light on Pinquart and Sorenson's (2001) findings that the quality of social support was more strongly tied to loneliness than the quantity of social contacts in a meta-analysis of research within the older adult population.

Additionally, self-esteem is also assessed in the current study as a potential moderator that may weaken the strength of the negative relationship between perceived discrimination and psychological wellbeing. Although not focused on sexual minority-identified individuals, Corning's (2002) study assessing the role of self-esteem as a moderator for the link between gender-based discrimination and psychological distress provides a useful framework for the stress-buffering role of self-esteem. Specifically, with a sample of 100 female undergraduate students, Corning found that the relationship between experiences of gender-based discrimination and depression-related psychological distress was only revealed once self-esteem was considered in the research model. Additionally, findings indicated that as personal self-esteem increased, the positive relationship between discrimination and depression diminished, underscoring the stress-buffering role of personal self-esteem within this sample. Thus, the Corning study provides support for the potential inclusion of personal self-esteem as a stress-ameliorating factor in the current study; however, given that the participants in the Corning study were all female-identified, primarily of White/European descent, and young adults, it is unknown how accurately the findings may generalize to other populations.

Beyond the research discussed here, no further studies were found that directly assess potential moderators between the relationship of minority stressors and psychological outcomes. In light of the limited scope of empirical support, more research is needed to further explore the role of minority stress in the experiences of members of oppressed groups, especially for those with multiple minority identities. Although the plight of sexual minority individuals has been

recently explored, the exploration of how both social stressors as well as ameliorating, resilience-based variables has been included in only a handful of studies. Many questions still remain as to how these variables interact for members of other oppressed groups, such as older adults, and those with other forms of double and triple jeopardy.

Aging, Ageism, and the Older Adult Identity

The theory of optimal aging proposes that older adults who are able to function successfully across various domains to the degree of her or his desire, regardless of the presence of physical limitations or illness, are aging optimally (Baltes & Baltes, 1990). These domains of functioning include spiritual, physical, cognitive, emotional, functional, and social domains. Baltes and Baltes suggest that this optimization occurs through the process of adaption to challenges and stressors that often come with age (e.g., loss of social network, loss of functional ability, financial stress). Older adults adapt to stressors through selection (selecting behaviors and activities that are both important to them and also feasible), optimization (working to reach satisfaction with the chosen activity through practice), and compensation (making up for the loss of ability by accomplishing activities in novel ways; Baltes & Baltes, 1990). This theory differs from the theory of successful aging (Rowe & Kahn, 1996) in a key way. Successful aging theory posits that effective aging occurs through "low probability of disease and disease-related disability, high cognitive and physical functional capacity, and active engagement with life" (p. 433), with these three domains interacting with one another hierarchically. The difference between optimal and successful aging theories lies in the idea that according to optimal aging, one can age effectively despite the presence of disease or low functioning, while successful aging suggests that the absence of disease is a key part of effective aging.

The theory of optimal aging (Baltes & Baltes, 1990) provides a framework of aging that is compatible with Meyer's (2003) Minority Stress Model for sexual minority individuals. In line with Meyer's model, Baltes and Baltes suggest that people can still reach their potential despite the stressors they may face. In other words, older adults can adapt to and overcome stressors to maintain optimal functioning that is defined uniquely by the individual. Similarly, Meyer's model includes not only the presence of identity-related stressors that impact functioning, but also adaptive ameliorating factors (i.e., coping, social support) that can offset the negative outcomes of stress.

Considering Meyer's (2003) model, the older adult identity represents membership in an additional group that is also at risk for minority stress. Ageism is one of the most salient forms of minority stress in the lives of older adults. Butler (1980) describes ageism as constituting three primary forms: "prejudicial attitudes toward the aged, toward old age, and toward the aging process, including attitudes held by the elderly themselves," "discriminatory practices against the elderly, particularly in employment, but in other social roles as well," and "institutional practices and policies which, often without malice, perpetuate stereotypic beliefs about the elderly, reducing their opportunities for a satisfactory life and undermine their personal dignity" (p. 8). Some of the prevalent stereotypes and discriminatory behaviors that often take place toward older adults include assumptions of memory loss, slowness, passivity, helplessness, physical changes, sensory deficits, and more (Nelson, 2005). Associated discriminatory behaviors include the use of patronizing language (e.g., baby talk, over-accommodation in speech), negative descriptors for older adult service users in professional settings (e.g., older patients are senile and rigid), or elder abuse (e.g., neglect, harm, or exploitation of an older adult) (Nelson, 2005). As another example of a widely endorsed element of ageism, Bennett and Gaines (2010)

discuss the term “senior moment,” used by individuals of all ages during moments of memory lapse. The use of this term implies an assumption that memory declines with older age and that people who have not reached older adulthood who use this term have expectations that they will also experience memory loss in congruence with the stereotype.

In 2006, the International Longevity Center’s (ILC) Anti-Ageism Taskforce released a report on the presence of ageism in the US. In general, the report notes that over time, views toward older adults in the US have shifted from veneration to disdain over the “burden” of older adults on society. The authors posit that this shift mirrors the simultaneous shift of work from taking place within the home, where older people owned land and therefore the main sources of income (e.g., farming) to outside the home in more industrial settings, where older people held less authority. In addition, negative views of older adults may also be linked with an innate fear of death and the decline of vitality associated with nearing the end of the lifespan (ILC, 2006). US culture, especially through the media, pressures individuals to fight against their natural aging processes through medication, makeup, and plastic surgery; these pressures reinforce the negative attitudes directed toward aging and the aged.

The ILC’s (2006) report notes the ways in which ageism becomes perpetuated at a number of systemic levels in society. At a more distal level, many older adults face a lack of comprehensive national health insurance coverage, which could result in older adults neglecting needed preventive services, screenings, or help-seeking when medically indicated. Likewise, the lack of lifelong education resources makes it difficult for older adults to maintain and improve their work-related skills, heightening their risk for job loss. Additionally, employers may be less likely to hire and retain older adult employees due to increasing cost of healthcare coverage in the US. Finally, commonplace cultural relics that scapegoat or make fun of older

adults perpetuate stereotypes, including birthday cards that jest about growing older and common negative language, such as ‘dirty old man,’ and other hurtful terminology. Overall, it is clear that ageism is rampant in many areas of US culture, perpetuating prejudiced attitudes and discriminatory behaviors toward older adults.

The ILC’s taskforce (2006) also outlines some of the specific ways ageism-related minority stress is present in the lives of older adults. One of the most direct forms of ageism is elder abuse. As referenced in the ILC’s report, Pillemer and Finkelhor (1988) found that between one and three million older adults (aged 65 and older) indicated that they had been mistreated (through injury, exploitation, or other means) by a caretaker; more recent studies estimate that between two and ten percent of older adults have experienced elder abuse (Lachs & Pillemer, 2004). Despite the prevalence of elder abuse, as referenced by the ILC (2006), an estimated one out of every six incidents of elder abuse is actually reported to authorities (The National Center on Elder Abuse, 1998), and only 21 states in the US maintain a registry of perpetrators of elder abuse (The National Center on Elder Abuse, 2002). The ILC (2006) reports that health care discrimination is another form of ageism, through medical professions “writing off” older adults’ medical complains as part of the aging process and the general deficit in provision of screenings and medical services to older adults. Moreover, the report references the US Senate Special Committee on Aging (2003), which found that despite the fact that older adults consume the highest amount of prescription drugs of all indicated populations, 40% of drug trials during the 1990s excluded older adults (75 and older) from prescription drug trials. The ILC (2006) cites additional settings for ageism, including nursing homes, occupational settings, emergency services, media, and marketing. The report underscores the ways in which ageism is one of the least recognized and least fought form of oppression in this country.

Exploration of the true impact of ageism on older adults is likewise limited in scientific research. Empirical studies have indicated that ageism influences physical well-being; in fact, Hausdorff, Levy, and Wei (1999) found that providing older adults with reinforced, positive stereotypes about aging resulted in a marked increase in the participants' walking speed and performance. However, the reinforcement of negative stereotypes did not significantly impact walking speed and performance. The authors surmise that if the negative views of aging shifted to a more positive approach, some physical health problems often faced by older adults may be mitigated. Lai (2009) also found support for the influence of aging-related attitudes on mental health. The author studied a sample of Chinese older adults living in the US, Canada, Taiwan, China, and Hong Kong to explore the ways in which different cultural attitudes toward aging can influence mental health; the results indicated that a positive attitude toward aging was one of the strongest predictors for better mental health. Westerhof and Barrett (2005) found similar cultural ties for negative attitudes toward aging; a sample of US and German adults aged 40 to 75 indicated that feeling younger than one's actual age predicted higher life satisfaction and positive affect and lower levels of negative affect, but only for participants from the United States. Beyond these studies, empirical research has yet to explore the ways in which experiencing ageism influences psychological and social wellbeing of older adults, including those with multiple minority identities.

Sexual Minority Older Adults: An Invisible Population

Meyer's (2003) Minority Stress Model implies that multiple oppressed identities likely compound social stressors for individuals from stigmatized groups. The current study focuses on the experiences of individuals with membership in two traditionally oppressed groups – sexual minority older adults. This population represents an especially under-researched and under-

recognized group; the APA Taskforce on Aging (2012) notes that "according to the 2000 U.S. census, older persons in a same-sex partnership live in more than 99 percent of U.S. counties. Yet, because of the prejudices in the country against homosexuals of all ages and backgrounds, and the prevailing stereotype that older persons are 'sexless,' older members of the gay, lesbian, bisexual, and transgender community have an exceptionally difficult time being accepted in society" (p. 44). The sexual minority older adult population is large and continues to grow; Fredriksen-Goldsen (2011) estimates that over two million sexual minority older adults live in the US, with that figure expected to double between 2000 and 2030.

Recently, psychological research practices have been challenged to attune to the intersectionality of multiple minority identities, rather than considering one broad category of identity as a single lens. To illustrate, Crenshaw (1991) describes the typical efforts of identity politics as desiring to "transcend difference" (p. 1242) but failing by focusing on individual categories of identity, which often "conflates or ignores intragroup differences" (p. 1242). For example, by focusing on a single dimension of minority identity, such as "women," differences among members of that group, such as those may identify as a woman and a lesbian, a woman and Black, or a woman and disabled, are ignored. In reality, Crenshaw notes that often the challenging experiences that a person may face based on one identity (e.g., identity as a gay person) can be shaped or influenced by other identities (e.g., identity as an older adult). Crenshaw also highlights two important dimensions of intersectionality: structural and political. Structural intersectionality refers to the marginalization an individual faces due to his or her position of social status (e.g., when a woman of color who experienced rape is unable to access rape counseling due to her low socioeconomic status) (Crenshaw, 1991). Political intersectionality describes the experience for individuals with intersecting identities who are

represented by political or activist efforts that have conflicting agendas (e.g., a feminist group that does not attend to racial differences may continue to reinforce racial oppression, and vice versa for racial groups and subordination of women) (Crenshaw, 1991). As a result, structural and political intersectionality underscore the compounding minority stressors captured in Meyer's (2003) model experienced by individuals with multiple minority identities in unique ways. However, explorations in intersectionality are rarely captured by traditional research in psychology. Cole (2008) notes that hypothesis-based psychological research is often dependent on categorizing individual identities for facilitating data analysis and hypothesis formation and testing, which in the past has reduced the inclusion of intersectionality in diversity research. Further, Cole explains that categorization of identity is in itself a "process of exclusion" (p. 450), as a label such as "woman," "Black," "LGB," or "transgender" can hide the diversity within these groups. In light of the standards of traditional hypothesis-based research methods, along with the call to assess intersectionality more accurately, Cole encourages researchers and clinicians to be critical of broad category-based reports of findings related to minority groups and to assess intricacies within identities when forming research questions and hypotheses.

In addition to the lack of research on intersectionality in general, a number of other factors may contribute to the lack of research, awareness, and recognition of sexual minority older adults. One contributing factor may be the generally taboo attitude toward the sexuality of older adults. In fact, the public often assumes that older adults do not engage in sexual activity; however, Lindau et al. (2007) found that 73% of adults aged 57-64, 53% of adults aged 65-74, and 26% of adults aged 75-85 engage in sexual activity. Compounding the belief that older adults are asexual, Hillman (2008) notes that the media portrayal of older adult sexuality is one-dimensional; although the recent increase in advertising for medications that treat common

sexual problems for older adults may aid in decreasing the taboo of older adult sexuality, it presents sexual activity as "defined solely by penetrative, heterosexual intercourse," which may not be an accurate presentation (p. 291). These biased or negative views of older adult sexuality in general likely translate to additional prejudice toward the experiences of sexual minority older adults specifically.

Within the provision of services, the clinical, healthcare, and community climate has also likely contributed to the invisibility of sexual minority older adults as well as to additional physical and psychological costs for this population (Cronin, Ward, Pugh, King, & Price, 2010; Grossman, 2008; McFarland & Sanders, 2003; Smith, McCaslin, Chang, Martinez, & McGrew, 2010). Cronin et al. (2010) note that the lack of regard and concern for the sexuality-related needs of older adults has resulted in additional costs for sexual minority adults specifically; these additional costs may include the added expense to find and employ sexual minority-friendly caregivers, added transportation costs to access these specified resources (Cronin et al., 2010), concerns over whether same-sex partners will be accepted for services (McFarland & Sanders, 2003), and doubts that services offered will be sexual minority-friendly (Smith et al., 2010). Jackson, Johnson, and Roberts (2008) found that these concerns are real in a sample of 132 lesbian, gay, bisexual, and transgender adults; participants reported that they would be fearful of disclosing their sexual orientation in a long-term care facility, they believed that sexual minority patients do not have equal access to care services, and they felt that sexual minority sensitivity training and LGB-friendly retirement facilities would be important future steps.

In general, many sexual minority individuals, especially sexual minority older adults, also fear disclosing their sexual orientation; this fear may result from the intolerant climate of service provision as well as from the fact that sexual minority older adults matured and have lived in

cultural contexts that were often climates of stigma and intolerance (Fredriksen-Goldsen, 2011). Grossman (2008) notes that the categorization of a non-heterosexual orientation as a “disorder” until 1973 also likely exacerbated the fear of disclosure, as the time period until 1973 included current older adults’ formative, adolescent, young adult, and likely some adulthood years. Research supports this hypothesis; David and Knight (2008) found that in a sample of 383 young, middle-aged, and older gay male adults, the older population was less likely to disclose their sexual orientation and to experience higher levels of homonegativity. Grossman also explores the historical need for the sexual minority population to “pass” as heterosexual to avoid discrimination and victimization. This need for “passing” can be an ongoing struggle for sexual minority older adults, as some have reported denial of services or acceptance in community senior centers after becoming openly identified as a member of a sexual minority group (Grossman, 2008).

Within social sciences research, a number of factors may also contribute to the lack of research focusing on sexual minority older adults. Specifically, methodological and sampling limitations may partially account for the invisibility of sexual minority older adults in both scientific and clinical settings. Some research limitations include national studies on aging neglecting to inquire about sexual orientation, a lack of funding for sexual minority research (Crisp et al., 2008), inconsistent terminology for aging (e.g., at what age does one become an “older adult”), and one-dimensional measurements of sexual orientation (e.g., asking only about present sexual orientation identification rather than changes over the life span, broadened categories of romantic attraction, and sexual behavior histories) (Grossman, 2008). These methodological challenges are not unique to the sexual minority older adult population, however. In fact, Moradi, Mohr, Worthington, and Fassinger (2009) identified several research issues

pervasive in all studies focused on sexuality; these difficulties include making decisions about who to include in participant samples, the lack of consensus on defining sexual constructs (e.g., sexual orientation, sexual identity), and the complex relationship between sexuality and gender. In terms of sampling limitations, Grossman points to the historical need for sexual minority individuals to "pass" as straight that may have resulted in a pervasive fear of sexual orientation disclosure among older adults in general, including for research studies. Moreover, Grossman discusses the lack of diversity in the existing sexual minority literature, which has focused primarily on White, male, young-old age ranges (i.e., 55-70 years), living in more metropolitan areas, with little focus on stratification across age categories. Crisp et al. (2008) point out that bisexual individuals specifically experience other unique challenges, including discrimination from the straight community, being unwelcome, ignored, or oppressed within the gay and lesbian community, and feeling the need to present as gay or lesbian to gain acceptance in gay and lesbian community. In other words, bisexual adults of all ages have a "special closet" due to pressures from multiple groups to be silent about their bisexual identity.

Sexual Minority Older Adults and Minority Stress: What We Know

Although limited in scope, existing research within the sexual minority population shows preliminary support for the applicability of Meyer's (2003) Minority Stress Model to sexual minority older adults. For example, heterosexist victimization has been found to be a minority stress risk factor for sexual minority older adults. To illustrate, D'Augelli and Grossman (2001) studied reports of lifetime victimization incidents within a sample of 416 sexual minority older adults over the age of 60. Results indicated that experiences of discrimination were common among the participants; 63% reported verbal abuse, 29% reported threats of violent action, 29% were threatened with being "outed," 16% reported being physically attacked, 12% were

threatened with weapons, 11% had objects thrown at them, and 7% were sexually assaulted. Moreover, respondents often reported that these incidents of discrimination occurred multiple times throughout their lifespan, with men experiencing threats and attacks more often than women. D'Augelli and Grossman also explored mental health correlates for instances of victimization; their results indicated that experiencing lifetime victimization was significantly related to low self-esteem, suicide-related internalized homonegativity, increased loneliness, and overall self-reported mental health issues. Adults who had experienced physical attacks were found to have significantly lower self-esteem and higher suicide-related internalized homonegativity than those who had experienced verbal attacks only, or no attacks. Finally, 13% of the respondents reported that they had made a suicide attempt in the past, which was also significantly related to past experiences of victimization.

Utilizing the same sample of 416 sexual minority older adults, Grossman, D'Augelli, and O'Connell (2001) explored the dimensions of psychosocial support and health correlates within the participant pool. Results indicated that the vast majority (84%) of participants reported that their mental health was good to excellent, with 14% reporting their mental health as fair, and 2% as poor. Interestingly, the authors did not find significant relationships between mental health and amount of time spent with other sexual minority individuals or membership in sexual minority organizations. However, the authors did find a significant positive relationship between income and mental health. Results also indicated no significant differences in mental health based on sex or sexual orientation, but findings did show that participants cohabiting with a partner reported better mental health than participants not living with a partner. The authors also explored self-reported self-esteem; findings indicated that higher self-esteem was significantly related to cohabitating with a partner, higher income, larger social support networks, lower

incidences of victimization, and younger age. Findings also indicated that more than half of participants reported feeling lonely and most participants reported low levels of internalized homonegativity, but higher levels of homonegativity were associated with older age, identifying as a man, living alone, low income, less involvement in sexual minority organizations, and smaller support networks. Finally, in terms of social support, participants reported an average of 6.3 individuals in their support networks. Additionally, women reported larger networks than men. Participants reported being most satisfied with the support they received from people who knew about their sexual orientation, people with the same sexual orientation as the respondent, and people of the same age. Significant negative relationships were found between satisfaction with social support and loneliness.

D'Augelli and Grossman's and Grossman, D'Augelli, and O'Connell's (2001) studies show support for the applicability of Meyer's (2003) Minority Stress Model within the sexual minority older adult population. The findings suggest that minority stressors, such as heterosexist discrimination and internalized homonegativity, are significantly related to psychological and social correlates for the population. These studies are some of the first to explore the ways in which heterosexist discrimination specifically impacts sexual minority older adults across their lifespans, thereby underscoring the need for ongoing research and empirically-informed practices for this population. Additionally, both studies utilized a large sample, strengthening the power and validity of the findings. However, findings were limited by the focus on simple self-reports of mental health (e.g., "How would you describe your mental and emotional health at the present time?"), some of which were lacking in psychometric testing. Moreover, the sample, though large, was notably homogenous, as 71% of participants were men, 70% lived in large or small cities, and 90% identified as Caucasian. The participant pool also

likely reflected sampling biases similar to other research with sexual minority populations, as recruiting efforts focused on sexual minority-affirming groups and organizations. A final limitation to the study is the lack of assessment of time period during which incidents of victimization occurred; this limitation makes it more difficult to infer causality between discrimination and negative health outcomes.

More recently, Kuyper and Fokkema (2010) directly applied aspects of Meyer's (2003) Minority Stress Model to a sample of 122 sexual minority older adults between the ages of 55 and 85 residing in the Netherlands. These authors studied minority stressors of concealment of one's sexual minority identity, expectation of external objective stressful events, experiences of external objective stressful events, and internalized homonegativity as well as ameliorating factors of social embeddedness and sexual minority social support (operationalized as number of social contacts). The primary outcome variables were three types of loneliness – general loneliness, emotional loneliness, and social loneliness. The first model within a hierarchical multiple regression process indicated that having a steady partner, a larger general social network, good physical health, and high self-esteem were related to lower levels of general loneliness and explained 41% of the variance in general loneliness. The minority stressors and ameliorating factors added in the second step increased the variance in general loneliness explained to 52%; experiences of sexual orientation-based discrimination or negative reactions, expectations of negative reactions from caregivers, and smaller sexual minority social networks were positively associated with general loneliness. Results were similar for the outcome variables of emotional and social loneliness, with minority stress model explaining 45% and 39% of the variances, respectively.

Kuyper and Fokkema's (2010) study is important to the field of sexual minority older adult research, as it was the only one found to directly apply minority stress theory to the experiences of this population. Additionally, they expanded the construct of loneliness to include different dimensions of loneliness, adding to the awareness of the unique social experience of sexual minority older adults. The authors' findings support policy and practice geared toward ethical, tolerant, and accepting care and legislature for the wellbeing of sexual minority older adults, especially those living in the Netherlands. Despite the numerous strengths of Kuyper and Fokkema's study, it is important to note some of its limitations, including use of a convenience sample that was likely biased, a lack of representation of bisexual older adults, and a smaller sample size. The exclusive use of Dutch participants also limits the generalizability of results to the US population, as sexual minority older adults in different countries likely have significantly different experiences based on the climate of tolerance both socially and politically.

Finally, the role of ageism as a stressor in the lives of sexual minority older adults is a under-researched domain. David and Knight (2008) provided one of the only studies that assessed ageism and its correlates within this population. Specifically, utilizing a sample of 383 gay men who were categorized into racial categories of Black (n = 188) and White (n = 195) and self-described age categories of "younger," "middle," and "older" adults, David and Knight assessed links among race-, age-, and sexual orientation-based stigmatization, coping skills, and mental health outcomes. Study findings indicated that both Black and White older adults endorsed some experiences of ageism, but its prevalence was significantly higher in the Black sample, which supports Crenshaw's (1991) theory on the compounding influence of intersections of multiple minority identities. However, David and Knight did not find a significant link between ageism, coping, and mental health outcomes for the Black sample in their study, which

was contrary to their proposed hypotheses. The authors posited that the lack of support for the link between ageism, coping style (active or disengaged), and mental health outcomes may reflect that the Black sample utilizes coping strategies not assessed in the research methodology, or the sample may be less willing to disclose emotional struggles. The current study also assesses the link between ageism, stress-ameliorating factors, and psychosocial outcomes; however, rather than assessing coping style, stress-buffering factors are measured through social support, social network, and self-esteem, which may yield differing results from David and Knight's study. Despite the numerous limitations in the existing sexual minority older adult research literature, the studies explored here indicate that this population is likely to face unique challenges in line with Meyer's (2003) Minority Stress Model. Sexual minority older adults face rampant discrimination due to ageist beliefs and practices, heterosexist beliefs and practices, as well as difficulties associated with the natural aging process and resulting stressors. However, the additive impacts of stressors and ameliorating factors associated with these multiple minority identities on wellbeing has yet to be addressed within scientific literature. Therefore, the current study will fill a major gap in research that will hopefully shed light on the ways in which service providers, professionals, caregivers, family members, and social support networks can provide multiculturally-informed caring practices for sexual minority older adults in the US.

Chapter III

Method

Sample

Participants for the study were recruited through online survey collection. The online survey was advertised through social media outlets, sexual minority group listservs, chat rooms, and other relevant online groups. For a sample recruitment advertisement, see Appendix A.

Because many relevant studies focusing on sexual minority older adults have utilized a minimum age of 50 for study participation (see Fredriksen-Goldsen, 2011, for a review), eligible participants for the current study were defined as community-dwelling adults aged 50 and older who identified as having a sexual identity as anything other than heterosexual, assessed through an initial demographic question. Recruiting efforts were made to include participants from a variety of ages of 50 years and older, socioeconomic backgrounds, locations, sexual orientations, levels of ability, gender identities, and degrees of outness. According to Cohen (1988), to achieve the desired power of .80, assuming an effect size of $f^2 = 0.06$ ($R^2 = .20$) with an alpha level of 0.05 for the 23-predictor multivariate regression with four outcome variables, a minimum of 173 participants was needed.

The analysis sample included 189 participants with valid data. For graphical descriptions of the distributions of age, gender, and sexual orientation, see Figures 2, 3, and 4 (respectively). The average age of the study participants was 60.41 years old (*SD* = 7.76), with reported ages ranging from 50 to 86 years. Participants aged 50 to 60 years old represented 53.4% of the sample, 61-70 years old represented 37.1%, 71-80 years represented 6.9%, and 81-90 years represented 2.6%. In terms of biological sex, 61.9% of the sample identified as female, and 38.1% of the sample identified as male. Two participants identified their biological sex as

“intersex,” but were excluded from the analysis sample due to insufficient cell sizes. This sample represented a range of gender identities; participants were offered an eight-point continuum on which they could rate the degree to which they identified as a woman, a man, or somewhere in between. When dichotomized, 115 (60.8%) of the participants identified as more toward “woman,” while 74 (39.2%) identified themselves as more toward “man.” However, when considering gender as non-dichotomous, 58.7% of the participants identified themselves as cisgender (i.e., fully “woman” or fully “man”), and 41.3% of participants felt their gender fell somewhere along the continuum, highlighting the dynamic nature of gender identity.

Similarly, participant sexual orientations represented a range of attraction along an eight-point scale. When dichotomized, 111 (58.7%) participants identified as exclusively gay or lesbian, while 78 (41.3%) identified as having some degree of attraction to both men and women. When considering ethnic identity, the participants were rather homogenous, with 89.9% of respondents identifying as Caucasian/White. Other ethnic identities represented included Hispanic/Latino(a) (4.2%), Biracial or Multiracial (3.7%), Jewish (1.1%), Black/African American (0.5%), and Asian/Indian Subcontinent (0.5%). Average household yearly income displayed a fairly even distribution, with 43.6% of participants reporting an income of up to $50,000, 42% reporting an income between $50,001 and $100,000, and 14.4% having an income over $100,000. The sample was generally highly educated, with 65.6% of participants having a graduate or professional degree, 18.5% having a bachelor’s degree, 6.3% having an associate’s or technical degree, 6.9% having some college experience, 1.1% having a GED, and 1.6% having a high school diploma. The sample was evenly split for partner status, with 51.9% of participants not currently in a partnered relationship, and 48.1% in a partnered relationship.

Procedure

Participants provided informed consent prior to beginning the survey online (see Appendix B). The survey data were anonymous as no identifying information was requested. The demographic survey was the initial section of the questionnaire. Respondents were considered ineligible for participation if they indicated that their age was less than 50 years old (Appendix C, Question 2) or that in general, they reported that they were attracted exclusively to the opposite sex (i.e., a response of "0" on Appendix C, Question 11). To enhance the validity of the online survey tool, the participants were instructed to type in the current time at the start of the survey, halfway through the survey, and again at the end. Surveys completed in less than 10 minutes were not included in the participant pool (n = 24); this number was based on trial survey completions that indicated a minimum of approximately 15 minutes to complete the survey. This procedure is further validated by the fact that these participants who were eliminated due to survey completion timing also failed to complete the full set of survey items. To increase sample size, a snowball-sampling technique was utilized; in line with recommendations by Kalton and Anderson (1986), participants received a request to share the survey link with other sexual minority older adults in their social network, who were then also encouraged to refer others.

Measures

Demographics. Variables including age, sex, gender identity along a continuum, ethnicity, income, education, cohabitation status, marital status, sexual orientation in general, sexual orientation emotionally, sexual orientation physically, sexual orientation of most recent sexual activity, age of coming out to close family/friends, and age of coming out to others were assessed in a demographic questionnaire. Items exploring different dimensions of sexual orientation identity reflected DeBlaere, Brewster, Sarkees, and Moradi's (2010)

recommendations to assess multiple dimensions of sexuality while also utilizing culturally-neutral language. In addition, question and answer construction for the items related to cohabitation and marital status reflected recommendations set forth by Bates, DeMaio, Robins, and Hicks (2010) to best represent appropriate choices for those in either opposite- and same-sex relationships. For analysis, responses to marital status were converted into a dichotomous variable of partnered or not partnered. Sexual orientation was dichotomized into bisexual-identified (i.e., scale responses other than 100% attracted to the same sex) and primarily gay or lesbian-identified (i.e., those that responded 100% attracted to the same sex). Gender identity was dichotomized into "mostly male" and "mostly female." The demographic survey is located in Appendix C.

Ageism. Perception of experienced ageist events was assessed using the Ageism Survey (Palmore, 2000). The Ageism Survey consists of 20 items assessing frequency of experienced ageist events. Respondents were instructed to reflect on how often they have experienced each event. Sample items include "I was called an insulting name related to my age" and "I was sent a birthday card that pokes fun at old people." The scale of the item responses used on the original survey was altered for the present study. The original response options included *Never*, *Once*, and *More than Once* on a three-point Likert scale. In light of Preston and Colman's (2000) findings that scales with greater numbers of response options increase the assessment's validity, reliability, and discriminating power, the response options were expanded to include *Never, Once in a While, Sometimes, A Lot, Most of the Time,* and *Almost all of the Time*, with scores falling on a six-point Likert scale. The edited version of the survey is shown in Appendix D. The total score for frequency of perceived ageist events was calculated as the average of individual item responses.

Palmore (2000) found that the original Ageism Survey has adequate levels of reliability and validity; the scale appears to have one factor with an eigenvalue of 4.74, Cronbach's alpha of .81, and the items seemed to have high face validity based on results from a panel of older adults and colleagues of the scale's author. The original survey was tested for reliability and validity with a convenience sample of 84 older adults aged 60 and older from local churches and senior centers; the sexual orientation of the participants was not reported (Palmore, 2000). With a sample of 383 Black and White younger, middle aged, and older adult gay men, David and Knight (2008) found the Ageism Survey to have Cronbach's alphas of .89 and .77 for the older Black and White groups, respectively. For the current study, the Ageism Survey demonstrated adequate reliability with Cronbach's alpha of .91.

Heterosexism. Perception of heterosexist events was assessed using the lesbian, gay, and bisexual inclusive form of the Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS; Szymanski, 2006; see Appendix E). The HHRDS was developed for use with sexual minority adults and includes 14 items. Respondents were instructed to think about events that have occurred in the past year, and response options included six Likert scale items ranging from *the event has never happened to me* (1) to *the event happened almost all the time; more than 70% of the time* (6). Scores were calculated through averaging valid item responses, with higher scores indicating more frequent experiences of discrimination. For the four items related to workplace and school, participants will have the option to select "N/A" to account for those who may not have been involved in work or school during the past year. Sample items included "How many times have you heard anti-lesbian/anti-gay remarks from family members?" and "How many times have you been treated unfairly by teachers or professors because you are a gay/lesbian/bisexual person?". Validity for the scale within the sample of lesbian and bisexual

women was assessed through correlations between the HHRDS and measures of psychological distress; results indicated correlations mirroring expected pathways between greater scores on HHRDS and greater levels of psychological distress (Szymanski, 2006). Szymanski (2009) found support for reliability of the full scale score with a sample of gay and bisexual men (α = .91), and Feinstein, Goldfried, and Davila (2012) found similar results with a sample of gay men and lesbians (α = .94). For the current study, the HHRDS demonstrated adequate reliability with Cronbach's alpha of .88.

Outness. Degree of outness was assessed using the Outness Inventory (OI; Mohr & Fassinger, 2000; see Appendix F). The OI includes 11 items that assess to what degree the respondent is open about his or her sexual orientation to different people; however, based on analyses by Mohr and Fassinger, only items 1-10 are used in the calculation of the total score. Individual items include names of different types of people (e.g., siblings, my work peers, members of my religious community), with Likert-scale response options ranging from *person definitely does NOT know about your sexual orientation status* (1) to *person definitely knows about your sexual orientation status, and it is OPENLY talked about* (7), with an additional option of *not applicable to your situation; there is no such person or group of people in your life* (0). Scores on the OI are determined through averaging items 1-10, where higher scores indicate higher degrees of outness. The OI was originally normed by Mohr and Fassinger with a sample of 590 lesbians and 414 gay men ranging between 18 and 69 years of age. Confirmatory factor analyses show support for the reliability of the subscales of the OI, however, the authors do not report reliability for the full scale, which will be used for the current study (Mohr & Fassinger, 2000). Validity studies also showed support for the psychometric properties of the OI; the scale demonstrated convergent validity with assessments of individual involvement within the sexual

minority community, where higher degrees of outness were associated with greater involvement in the community. Mohr and Fassinger do note some limitations to the OI as a result of a use of a convenience sample for the norm data, the high mean scores for outness across participants, and all participants reporting having been in same-sex relationships for at least three months. Additionally, the sample included a limited number of older adults and also did not include bisexual individuals. The outness inventory demonstrated adequate reliability for use in full-scale form with the current study, with Cronbach's alpha of .88.

Internalized Homonegativity. Internalized homonegativity (IH) was assessed using the Internalized Homonegativity subscale of Mohr and Kendra's (2011) Lesbian, Gay, and Bisexual Identity Scale (see Appendix G). The subscale includes three items with responses ranging from *disagree strongly* (1) to *agree strongly* (6), with high scores indicating a higher degree of IH. Scores on the subscale are computed through a mean of responses to each item. A sample item from the measure is "if it were possible, I would choose to be straight." Mohr and Kendra (2011) found that the IH subscale demonstrated adequate validity, as it was positively correlated with another measure of IH (r = .85) and negatively correlated with a measure of connection between sexual minority individuals and their sexual minority identity (r = -.43), a measure of life satisfaction (r = -.21), and a measure of self-esteem (r = -.33). The IH subscale was also found to have strong reliability through confirmatory factor analysis (Cronbach's α = .86) and test-re-test reliability (r = .92). It is important to note that the IH subscale was normed with a sample of 654 college students whose ages ranged from 18 to 52 years (Mohr & Kendra, 2011); the subscale's efficacy for use with older adults has yet to be established. However, the scale's reliability was also found to be adequate for use with the current study's population with Cronbach's alpha of .80.

Perceived General Social Support. Perceived quality of social support was assessed using the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988; see Appendix H). The MSPSS is a 12-item assessment measuring the level of social support within different interpersonal domains. The MSPSS includes three subscales – Family, Friends, and Significant Other – as well as a total score for perceived social support. The current study utilized the total score of the MSPSS, which was calculated as the average of the 12 item responses, with higher scores indicating stronger perceived social support. Likert-scale response options range from *very strongly disagree* (1) to *very strongly agree* (7). Sample items include "my family really tries to help me," and "there is a special person in my life who cares about my feelings." Zimet et al. (1988) found adequate internal reliability for the full scale ($\alpha = .91$); additionally, their factor analysis found support for the three-factor structure of the MSPSS. Tests for correlations between the MSPSS and a depression inventory for individuals with either high or low levels of stress lend preliminary support for the MSPSS as an assessment for the buffering effect of social support. Although the MSPSS has not been used with sexual minority older adults specifically, it has been utilized with a sample of sexual minority youth (Cronbach's $\alpha = .92$; D'Augelli, Grossman, & Starks, 2005), a sample of men aged 16-24 who have sex with men (Cronbach's $\alpha = .91$; Dowshen, Binns, & Garofalo, 2009), and a sample of older adults 55 years of age and older (Cronbach's $\alpha = 0.88$; Oxman, Freeman, Jr., & Manheimer, 1995). The MSPSS was demonstrated to have adequate reliability in the current sample, with Cronbach's alpha of .92.

Sexual Minority Older Adult Social Networks. Mirroring Kuyper and Fokkema's (2010) approach (see Appendix I), quantity of in-network social support was assessed through a question of whether the participant has regular contact with other adults 50 years of age or older

who also identify as non-heterosexual, and if so, with how many different individuals. To reduce potential skewness of the data, responses to this question were capped at a maximum of 50 contacts. Regular contact was described similarly to Kuyper and Fokkema's definition as including visits both at place of residence and out of the house, telephone contact, e-mail contact, or one-on-one social network contact.

Self-esteem. Self-esteem was assessed using the Single-Item Self Esteem Scale (SISE; Robins, Hendin, & Trzesniewski, 2001; see Appendix J). The item offers responses on a five-point Likert scale, ranging from (1) *not very true of me* to (5) *very true of me*. The SISE was developed as a shortened measure of self-esteem to compare with the Rosenberg Self-Esteem Scale (RSE), which has been found to have strong reliability and validity (Rosenberg, 1989). When comparing the SISE to the RSE, Robins et al. found the SISE to be an equally strong measure of self-esteem; the SISE and RSE were highly correlated ($r = 0.80$) in a sample of community dwelling adults ranging in age from 21 to 61. The SISE item states, "I have high self-esteem."

Loneliness. Loneliness was assessed using the third version of the University of California Los Angeles (UCLA) Loneliness Scale (Russell, Peplau, & Cutrona, 1980; see Appendix K). The UCLA Loneliness Scale consists of 20 items with four-point Likert scale responses ranging from *never* (1) to *always* (4). Total scores for loneliness are created through averaging individual responses, where higher scores indicate more loneliness. Russell et al. (1980) found the scale to have strong reliability (Cronbach's αs ranged from 0.89 to 0.94) and had a test-retest correlation of 0.73 in a sample of older adults. Sample items include "How often do you feel you lack companionship?" and "How often do you feel that people are around

you but not with you?". The scale demonstrated adequate reliability with the current sample, with a Cronbach's alpha of .93.

Life satisfaction. Global life satisfaction was assessed using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffen, 1985; see Appendix L). The SWLS is a brief five-item measure with responses to each item ranging from *strongly disagree* (1) to *strongly agree* (7). A sample item is "the conditions of my life are excellent." The SWLS has been administered to sexual minority college students, with Cronbach's alpha of .88 (Mohr & Kendra, 2011), and with a large sample of sexual minority adults, with Cronbach's alpha of .91 (Balsam, Beauchaine, Mickey, & Rothblum, 2005). The SWLS demonstrated adequate reliability for use in the current sample with Cronbach's alpha of .91.

Quality of life. Quality of life was assessed using the Quality of Life-Alzheimer's Disease (QOL-AD) survey (Logsdon et al., 1999, 2002; see Appendix M). The QOL-AD was originally designed to assess quality of life in older adults who have cognitive impairment. However, Revell, Caskie, Willis, and Schaie (2009) utilized the QOL-AD in a sample of older adults without cognitive impairment, and internal consistency was strong ($\alpha = 0.83$). Additionally, Revell et al. found support for a three-factor model (Psychological, Social, and Physical Well-being) that explained a total of 54.4% of the variance in Quality of Life. The scale consists of 13 items with four response choices, ranging from 1 = "poor" to 4 = "excellent." Participants are instructed to consider their current quality of life according to different domains, with examples including "physical health," "mood," "family," and "ability to do chores around the house." Scores are created as the sum of the items, with a possible range of 13 to 52. Similar to the procedure used in Revell et al., the current study used written instructions to facilitate the online survey process rather than the interview format used in the original QOL-AD (Logsdon et

al., 1999). Also, item seven, which focuses on the domain "marriage," was altered to read "romantic relationship (if partnered), or closest personal relationship (if not partnered)" to utilize more inclusive language. This alteration reflects similar verbal instructions administered to unmarried participants in Logsdon's et al. (2002) study. This modified QOL-AD demonstrated adequate reliability in the current study, with Cronbach's alpha of .87.

Psychological distress. Psychological distress was assessed using the Kessler Psychological Distress Scale (K10; Kessler et al., 2002; see Appendix N). The K10 is a brief 10-item assessment of affective- and anxiety-related psychological distress with response options on a five-point Likert scale ranging from (1) *none of the time* to (5) *all of the time*, with answer summed for a total score of psychological distress ranging from 10 to 50. Andrews and Slade (2001) found that the K10 has strong validity through demonstration of significant correlations with other measures of general psychological distress and psychological diagnostic criteria. Sample items include "In the past 30 days, how often did you feel nervous?" and "In the past 30 days, how often did you feel worthless?". The K10 demonstrated adequate reliability for use in the current sample, with Cronbach's alpha of .94.

Analysis Plan

Analysis variables were first assessed for normality, including skewness and kurtosis, as well as for any issues with multicollinearity among minority stress and ameliorating factors. Benchmarks for excessive skewness and kurtosis values for this data reflected standards set by West, Finch, and Curran (1995), who proposed that skewness should be limited to between ±2 and kurtosis should be limited to between ±7. Multicollinearity was assessed through examining correlations among predictor variables, with correlations ±.5-.6 or higher identified as problematic (Leech, Barrett, & Morgan, 2011).

The main research questions were examined through a hierarchical multivariate multiple linear regression (MMLR) to test the relationships between the predictor variables and the outcome variables of psychological distress, loneliness, life satisfaction, and quality of life. Model 1 tested the relationships of the minority stress variables of perceptions of heterosexist events, outness, internalized homonegativity, and perceptions of ageist events to the four outcome variables of loneliness, life satisfaction, quality of life, and psychological distress. Model 2 added the demographic variables of sexual orientation identity, gender identity, age, and partner status to the first model. Finally, Model 3 examined the ameliorating factors of general perception of social support, size of sexual minority older adult social network, and self-esteem to test whether these variables would moderate the relationships of the minority stress variables to the outcomes. The moderating factors were included both as predictors as well as interaction variables following the procedures outlined in Aiken and West (1991). Specifically, after centering all variables, twelve interaction terms were created as the products of the three moderating variables and the four minority stress predictor variables. Significant results for any interaction terms were interpreted using simple slope plots.

For inclusion in the hierarchical MMLR, all continuous predictor variables were mean-centered, and demographic categorical variables (i.e., partner status, gender identity, and sexual orientation) were coded with dummy codes of "0" and "1." For an explanation of dichotomization for categorical variables, refer to the Demographics section of the Method. Each of the three models was tested for multivariate significance using Wilks' λ, and the variance explained by each model was obtained through the multivariate R^2, calculated as $1 - \lambda$ (Cohen, 1988, p. 470). The multivariate R^2, or the coefficient of determination, represents the

degree to which the model's data fits the regression line; in other words, it reflects the amount of variance in the outcome variables explained by the model.

For any model that had a significant multivariate result, the univariate significance of each model was assessed through individual follow-up *F*-tests for the four outcome variables, and the variance explained in each outcome variable was obtained through the univariate R^2 value. Third, for any outcome variable that had a statistically significant univariate model, the significance of the individual relationship of each predictor with the outcome variable (i.e., the regression weights) was examined through univariate *t*-tests. A key component of the hierarchical approach to regression is the assessment of change in variance explained between each new (here, fuller) model and the prior one, as this study's hypotheses assume that each subsequent model should improve the amount of variance explained by the prior model. To test the significance of the change in multivariate R^2 between the models in the hierarchical MMLR, the procedures described in Leichman (2013) were followed. In brief, utilizing the Wilks' λ values from the two models being compared, a Wilks' λ value for the difference between the two regression models (i.e., Model 1 vs. Model 2 and then Model 2 vs. Model 3) was computed by hand, and its Rao's *F* approximation value was computed to obtain the statistical significance level (i.e., the *p*-value) for the change between the two models. Unlike univariate hierarchical regression analysis, the procedure for multivariate hierarchical regression in traditional statistical analysis programs does not automatically produce information regarding significance in change in Wilks' λ; thus, these values were calculated by hand using the formulae in Leichman (2013).

Chapter IV

Results

Preliminary Analysis

Normality of variables was assessed through examination of skewness and kurtosis as well as assessing the presence of multicollinearity among predictor variables. All analysis variables met criteria for skewness and kurtosis according to West et al. (1995) with the exception of Internalized Homonegativity, which demonstrated a skewness statistic of 2.197. For ease of interpretation for this variable, it was not transformed due to its mild positive skew. However, results should be interpreted with caution. Correlations among the predictor variables were small to moderate (with Pearson's r ranging from .022 to .513), indicating that multicollinearity was not a concern. For full descriptive data and correlation values, see Table 1.

Hierarchical Multivariate Multiple Linear Regression

Results of the full three-step hierarchical multivariate multiple linear regression (MMLR) are presented in Table 2. In line with Aiken and West's (1991) guidelines, the unstandardized regression weights are presented due to potential miscalculations of standardized beta weights for the interaction terms in regression models.

Model 1: Minority Stress Predictors. The first MMLR model utilized predictor variables of perceived ageism, perceived heterosexism, degree of outness, and degree of internalized heterosexism and outcome variables of psychological distress, loneliness, life satisfaction, and quality of life. The multivariate test of the regression model was significant, with Wilks' $\lambda = .68$, $F(16, 554) = 4.74$, $p < .001$. This model had a multivariate R^2 value of .32, indicating that this model explained 32% of the variance in this set of outcomes.

Univariate follow-up *F*-tests indicated that these four predictors as a set explained a significant amount of the variance in psychological distress (R^2 = .22, or 22% of variance, p < .001), quality of life (R^2 = .12, or 12% of variance, p < .001), and loneliness (R^2 = .10, or 10% of variance, p = .001) but not in life satisfaction (R^2 = .03, or 3% of variance, p = .239). For the outcome variables with a significant R^2 (i.e., psychological distress, quality of life, and loneliness), the regression weights of the four predictor variables were examined to determine which were statistically significant. Results indicated that perceived ageism (b = .31, p = .005), perceived heterosexism (b = .18, p = .014), and internalized homonegativity (b = .18, p = .003) were significantly and positively related to psychological distress, so that higher levels of perceived heterosexism, perceived ageism, and internalized homonegativity were associated with greater psychological distress. For the outcome measure of quality of life, perceived heterosexism was the only significant predictor (b = -.17, p = .003), indicating that higher levels of perceived heterosexism were associated with lower quality of life. For the outcome measure of loneliness, despite the set of four predictors together explaining a significant amount of the variance in loneliness, no individual predictors were significantly related to loneliness.

Model Two: Addition of Demographic Controls of Age, Gender, Partner Status, and Sexual Orientation. The second MMLR model took into account the demographic variables of gender identity, age, sexual orientation, and partner status related to the relationships among ageism, heterosexism, outness, internalized homonegativity and psychological distress, loneliness, life satisfaction, and quality of life. The multivariate test of this regression model was statistically significant, with Wilks' Λ = .48, F(32, 654) = 4.49, p < .001. This second model had a multivariate R^2 of .52, indicating that the model explained 52% of the variance in the outcome set, which represents a change in multivariate R^2 of .20, or 20%, between the first and second

models. To assess whether this change in multivariate R^2 was significant, *Rao's F* approximation was calculated and tested for significance. Results indicated that the change between the two models was statistically significant, with Rao's $F = 10.19$, $p < .001$. A significant change between the two models indicates that Model 2 explained a significantly greater amount of variance in the data when compared with Model 1.

Univariate *F*-tests indicated that Model 2 explained a significant amount of variance in all four outcome variables (all *p*s < .001), which include psychological distress (28%), quality of life (22%), life satisfaction (19%), and loneliness (29%). Individual tests for the regression weights of the predictor variables in the psychological distress model indicated that perceived ageism ($b = .37$, $p = .001$), perceived heterosexism ($b = .19$, $p = .013$), internalized homonegativity ($b = .16$, $p = .010$), age ($b = -.02$, $p = .011$), and partner status ($b = -.24$, $p = .031$) were significantly associated with psychological distress. Perceived heterosexism ($b = -.21$, $p < .001$) and partner status ($b = .37$, $p < .001$) were significantly associated with quality of life. For life satisfaction, age ($b = .04$, $p = .005$) and partner status ($b = 1.23$, $p < .001$) were significant predictors. For loneliness, perceived heterosexism ($b = .15$, $p = .002$), age ($b = -.01$, $p = .004$), and partner status ($b = -.44$, $p < .001$) were significantly related to the outcome variable. Overall, the inclusion of the demographic control variables, particularly age and partner status, improved the amount of variance explained by the first model.

Model Three: Addition of Moderating Variables of Self-Esteem, Social Support, and Social Network. The third MMLR model assessed whether the links of perceived heterosexist events, ageism, outness, and internalized homonegativity with the outcome variables of psychological distress, life satisfaction, quality of life, and loneliness were moderated by social support, social network, and self-esteem while controlling for the demographic variables that

were added in Model 2. The overall multivariate test for Model 3 was significant, with Wilks' λ = .11, $F(92, 643) = 5.32$, $p < .001$, and the multivariate R^2 of .89 indicated that this model explained 89% of the variance in the outcome set. Change in multivariate R^2 between the second and third models was significant, with Rao's F approximation = 12.40, $p < .001$, $\Delta R^2 = .37$ or 37%, indicating that the addition of the moderating variables and their corresponding interaction terms significantly increased the amount of variance explained in the four outcome variables. Univariate F-tests indicated that the third model explained a significant amount of variance for all four outcome variables, which include psychological distress (57%, $p < .001$), quality of life (52%, $p < .001$), life satisfaction (52%, $p < .001$), and loneliness (70%, $p < .001$).

For psychological distress, perceived ageism ($b = .37$, $p < .001$), perceived heterosexism ($b = .14$, $p = .046$), and internalized homonegativity ($b = .13$, $p = .008$) continued to be significant predictors; in addition, the moderator variable self-esteem ($b = -.22$, $p < .001$) was significantly related to psychological distress. The significant interaction of perceived heterosexism with social network size ($b = .01$, $p = .027$) indicated that social network size moderated the relationship of heterosexism and psychological distress (see Figure 5), and the significant interaction of internalized homonegativity with social support ($b = .08$, $p = .043$) indicated that social support moderated the relationship of internalized homonegativity with psychological distress (see Figure 6). For those with larger social networks, heterosexism was associated positively with psychological distress; in contrast, for those with smaller social networks, heterosexism was unrelated to psychological distress. For those with greater social support, internalized homonegativity was positively related to psychological distress, but for those with weaker social support, internalized homonegativity was unrelated to psychological distress. However, it is important to note that the predicted psychological distress of those with

lower levels of social support were consistently higher than those with higher levels of social support until the highest level of internalized homonegativity, where psychological distress was similar regardless of the amount of social support.

For quality of life, perceived ageism ($b = -.19$, $p = .010$) became a significant predictor after controlling for the moderator variables, and the minority stress variable of perceived heterosexism ($b = -.12$, $p = .016$) remained significant even after controlling for the moderator variables. In addition, two moderators --- self-esteem ($b = .13$, $p < .001$) and social support ($\beta = .13$, $p < .001$) --- were significantly associated with quality of life. However, no interaction effects were statistically significant.

When considering life satisfaction, perceived ageism ($b = -.45$, $p = .034$) became a significant predictor in this model that controlled for the set of moderator variables. In addition, the moderators self-esteem ($b = .40$, $p < .001$) and social support ($b = .34$, $p < .001$) were statistically significant predictors, though only the interaction of internalized homonegativity with social network ($b = -.02$, $p = .038$) was significant (see Figure 7). Figure 7 shows that, for those with larger social networks, internalized homonegativity was negatively associated with life satisfaction; in contrast, for those with smaller social networks, internalized homonegativity was positively associated with life satisfaction. At higher levels of internalized homonegativity, this interaction effect diminished, with similar life satisfaction being reported by participants regardless of social network size.

Finally, outness ($b = .04$, $p = .038$) became a significant predictor of loneliness in this model, but heterosexism was no longer significant. The demographic variable of partner status ($b = -.12$, $p = .034$) remained significant, but age was non-significant after the addition of the moderating variables. Three moderators --- self-esteem ($b = -.11$, $p < .001$), social network ($\beta =$

-.01, $p = .005$), and social support ($b = -.20$, $p < .001$) --- were statistically significant predictors of loneliness, and the interaction of internalized homonegativity with social network ($b = .01$, $p = .008$) was also significantly associated with loneliness. As shown in Figure 8, the significant interaction effect suggested that, for those with smaller social networks, internalized homonegativity was negatively associated with loneliness; in contrast, for those with larger social networks, internalized homonegativity had a positive relationship with loneliness. However, at the highest levels of internalized homonegativity, this interaction effect lessened as participants with all social network sizes reported similar levels of loneliness.

Chapter V

Discussion

Efforts to better understand the unique experience of individuals who identify as a member of a sexual minority group, as well as those with multiple minority identities, have become more prevalent in research trajectories at present. Specifically, Meyer's (2003) Minority Stress Theory proposes a model that explains how having a minority identity – specifically, a sexual minority identity – results in additional stressors in daily life, as well as notable stress-buffering factors, that shape the experience of sexual minority-identified individuals. Research has begun to explore how having multiple minority identities can influence an individual's experience using samples exploring gender, race, and sexual identities, such as Black lesbian women (Bowleg et al., 2003) and Asian American sexual minority individuals (Szymanski & Sung, 2010), and some have explored the experiences of older sexual minority adults (D'Augelli & Grossman, 2001; Grossman, D'Augelli, & O'Connell, 2001; Herek, 2008). However, research has yet to explore how the intersection of ageist and heterosexist minority stress may influence the experience of sexual minority older adults.

Theories on aging --- and, specifically Baltes and Baltes's (1990) theory of optimal aging ---allude to the ability of the aging adult to live a fulfilled and successful life through adaptation to challenges that may arise in various domains, including physical, emotional, and social areas of functioning. In line with Meyer's (2003) model, the older adult identity combined with the LGB identity is not a necessary precursor to distress; older adults can still age optimally or function successfully with minority stress through the utilization of stress-ameliorating factors or adaptations to challenges they face. Baltes and Baltes theorize that optimal aging occurs through the process of adaption to stressors that often come with age (e.g., loss of social network, loss of

functional ability, financial stress), just as Meyer's model suggests the utilization of stress-buffering and supportive factors (social support, resilience) as strategies for coping with minority stress. The missing component in these theories for the sexual minority older adult population, however, relates to whether or not minority stress theory is applicable for this population in particular and whether ageism serves as an additional minority stressor for sexual minority older adults. In light of this gap in research, the current study explored minority stress predictors of perceived ageist events, perceived heterosexist events, internalized homonegativity, and outness in relation to outcome variables of psychological distress, quality of life, life satisfaction, and loneliness. Additionally, potential stress-buffering moderating variables of self-esteem, social support, and social network size were assessed.

Participants for the present study were found through web-based data collection. Online survey links were distributed to relevant listservs, social network pages, and agencies, resulting in a final sample of 189 individuals aged 50 years and older who identified their sexual orientation as anything other than heterosexual. The resulting sample reflected a range of sexual, gender, and age identities, but a primarily White-identified and middle- to upper-class sample. Utilizing hierarchical multivariate multiple regression, the present study indicated important findings supporting the utilization of Meyer's (2003) theory for sexual minority older adults. This section reports findings for the four outcome variables across the three hierarchical regression models, an interpretation of findings within the context of the larger body of relevant literature, a discussion of study limitations and future directions, as well as implications for research and practice.

Findings

Minority Stress Predictors (Ageism, Heterosexism, Outness, and Internalized Homonegativity). The present study provided support for the utility of Meyer's (2003) minority stressors, with the addition of ageism, in understanding sexual minority older adults' reports of psychological distress, quality of life, life satisfaction, and loneliness. This study's hypothesis that greater perceived discrimination (heterosexist and ageist) and greater internalized homonegativity would be related to greater psychological distress, lower life satisfaction, and greater loneliness, and that greater degrees of outness would be related to lower psychological distress, higher life satisfaction, and less loneliness was only partially supported.

Across each of the three hierarchical regression models, ageism, heterosexism, and internalized homonegativity were significantly related to psychological distress, with all relationships reflecting hypothesized directions. Specifically, experiencing greater ageism, heterosexism, and internalized homonegativity was associated with more psychological distress. In contrast, the relationships of these minority stress predictors were less consistent for the other outcomes. For quality of life, heterosexism was consistently significant across each of the three regression models, with lower heterosexism related to greater quality of life, but ageism only became a significant predictor of quality of life in the third model after controlling for the set of demographic characteristics, the three moderators, and the interaction terms. Similarly, ageism was only a significant predictor of life satisfaction in the third regression model; thus after controlling for demographic characteristics, the moderators, and their interaction terms, having experienced less ageism was found to be associated with greater life satisfaction. Finally, loneliness was also minimally linked to the stress variables, demonstrating significant relationships with heterosexism in the second model and outness in the third.

On the whole, links of minority stress variables to psychological distress and quality of life were most notable in the study findings. These findings are consistent with Grossman, D'Augelli, and O'Connell (2001), who found a significant negative relationship between incidents of victimization and mental health in a sample of older sexual minority adults. The significant relationship between heterosexism and psychological distress also aligns with research that has found support for the link between lifetime sexual orientation-based victimization and depression in lesbian, gay, and bisexual older adults (Fredriksen-Goldsen et al., 2013) and with Waldo's (1999) findings that indicated a link between workplace heterosexism and psychological distress in lesbian, gay, and bisexual adults. The significant relationship between ageism and psychological distress across all three models provides ample support for the additional stressor of age-related discrimination in the lives of sexual minority older adults to this model.

Internalized homonegativity was also tied with psychological distress across all three models; in fact, internalized homonegativity was not related to any other outcome variable besides psychological distress. The significant association of internalized homonegativity and psychological distress supports Meyer's (2003) minority stress theory, as internalized homonegativity reflects an individual's proximal response to a more distal stressor (i.e., stigma around having a sexual minority identity). Additionally, the link between internalized homonegativity and psychological distress aligns with findings from Fredriksen-Goldsen et al. (2013), who found internalized stigma to significantly predict depression in a similar sample. However, the lack of significant links between internalized homonegativity and quality of life, loneliness, or life satisfaction contradicts the study hypotheses. For example, Fredriksen-Golden et al.'s study found that internalized stigma explained a significant amount of variance in

disability level in sexual minority older adults, which would likely be related to similar variables of quality of life and life satisfaction. However, the lack of a significant relationship between internalized homonegativity and loneliness does align with Kuyper and Fokkema's (2009) findings that also did not find support for this link in a sample of LGB adults. An important consideration in understanding the findings of the present study is the low level of internalized homonegativity reported by the sample (M = 1.49; range = 1.00 – 5.00); this low mean suggests that the present findings may not have accurately captured the true range of experienced internalized homonegativity for sexual minority older adults.

When quality of life is considered, ageism and heterosexism were the only significant minority stress predictors, with heterosexism significantly related to quality of life across all three models and ageism only in the third model. This set of findings offers support for Meyer's (2003) minority stress model; Meyer proposes that the more frequent experiences of identity-based stigma that come with having a minority identity can negatively influence well-being and mental health. The current study's quality of life assessment reflects general well-being across many aspects of daily life, including health, mood, and energy; as a result, findings indicate that experiences of sexual identity- and age-related discrimination may correlate with quality of life for sexual minority older adults more generally. Quality of life has rarely been included as a study variable in sexual minority research; however, the current study's findings align with results from Mays and Cochran (2001), indicating a significant negative relationship between perceived sexual orientation-based discrimination and quality of life in a sample of LGB adults. Additionally, Utsey, Chae, Brown, and Kelly (2002) found that cultural racism was significantly and negatively associated with quality of life in a sample of ethnically diverse adults. These findings, along with the results of the current study, seem to suggest that identifying with a

minority group and its associated stigma-related stressors are linked with individuals' quality of life. Ageism only became a significant predictor of quality of life after controlling for the moderating variables of self-esteem, social network, and social support in the third hierarchical model. This finding may suggest that LGB older adults' experience of ageism is only related to their quality of life when both stress-buffering resiliency factors and demographic characteristics are also considered.

For life satisfaction and loneliness, minority stress variables were less salient as predictors. Ageism was the only minority stress predictor significantly related to life satisfaction, and only in the third hierarchical model, indicating that ageism plays a role only when accounting for stress-buffering factors. Similarly, loneliness demonstrated few significant relationships with minority stress predictors; heterosexism was significantly related to loneliness, but only in the second model, and outness was related only in the third model. The link between heterosexism and loneliness aligns with findings from Grossman et al. (2000) and Kuyper and Fokkema (2010), which demonstrated similar results in related samples. On the whole, minority stressors seem to be most influential to psychological distress and quality of life rather than life satisfaction and loneliness for sexual minority older adults.

Demographic Variables (Gender, Age, Partner Status, and Sexual Orientation). The results of the present study including notable findings related to the links between the demographic variables of gender, age, partner status, and sexual orientation and the four outcome variables. Specifically, of the four demographic variables, only age and partner status were significantly associated with any of the outcome variables. Age was significantly and negatively associated with psychological distress and loneliness and positively associated with life satisfaction, suggesting that older participants were more likely to be more satisfied with life and

have lower rates of psychological distress and loneliness than younger participants. These findings align with some prior research findings but deviate from others. The link between older age and lower levels of psychological distress seem to be in alignment with Jorm's (2000) study assessing for age differences in adults' susceptibility to anxiety and depression across the lifespan; specifically, their results indicated that when risk factors were controlled, older participants were less susceptible to anxiety and depression than younger participants, potentially due to increased emotional control with advancing age. The findings of age's positive relationship with the psychosocial outcomes may also reflect Carstensen's (1995) theory of socioemotional selectivity, which suggests that as individuals feel that their time before death is more limited, they pursue different social goals and may be more likely to prune down their social support networks to include only those who offer the most support, thereby managing their emotional experiences. However, the findings linking older age and lower levels of loneliness seem contrary to prior research. To illustrate, Barg et al. (2006) utilized a mixed-methods approach to explore older adults' understanding of loneliness, and the findings suggested that older adults anticipate increased loneliness as they age, attributing that increase to loss of social contacts and support systems to illness and mortality factors, as well as social withdrawal.

The differing results related to age in the current study might be attributed to the concentration of younger older adults in the participant pool, as 90.5% of the sample was between 50 and 70 years old. Higher rates of mortality and loss of social contacts may not be quite as salient for adults in the 50-70 age range when compared with those over the age of 70. The findings indicating a positive relationship between older age and greater life satisfaction also seems to reflect the younger age range of the present sample. Though the current study's findings align with Hamarat et al.'s (2001) study, indicating that older adults (66+) had

significantly greater life satisfaction than their middle-aged and young adult counterparts, it also highlights some of the within-group differences in life satisfaction among older adults indicated in Gerstorf, Ram, Röcke, Lindenberger, and Smith's (2008) study, suggesting that once older adults are closer to their death, their life satisfaction substantially increases. Thus, had the present sample included more participants who were more advanced in age, the findings related to age and life satisfaction may have reflected a different relationship.

Partner status was significantly and negatively associated with psychological distress and loneliness and positively associated with quality of life and life satisfaction. These findings indicate that those who were in a partnered relationship reported less psychological distress and loneliness and greater quality of life and life satisfaction. These findings align with Grossman, D'Augelli, and O'Connell's (2001) findings that gay, lesbian, and bisexual older adults who were cohabitating with their partners were less likely to be lonely and more likely to report better mental and physical health. Additionally, Kuyper and Fokkema (2010) found similar results in a sample of LGB older adults in the Netherlands, indicating that participants who had a steady partner, regardless of cohabitation status, had lower levels of emotional loneliness than non-partnered participants; specifically, those without partners were significantly more likely to feel as though they had a sense of emptiness in their lives.

It is important to note that neither gender nor sexual orientation were significantly related to any of the four outcome measures in either Model 2 or Model 3. This lack of significant findings indicates that gender and sexual orientation did not have a significant influence on psychological well-being, loneliness, life satisfaction, or quality of life for the participants when considered along with both minority stress factors as well as stress-buffering moderators. These findings suggest that the relationship of minority stress and stress-ameliorating factors on the

psychological well-being of sexual minority older adults may be similar regardless of these individuals' gender (mostly male or mostly female) and sexual orientation (gay/lesbian or bisexual) identities. Kertzner, Meyer, Frost, and Stirratt (2009) found a similar pattern, as gender was not a significant predictor for social or psychological wellbeing in a sample of LGB adults. However, the authors did find that a bisexual identity was associated with decreased social well-being – a relationship that was mediated by the participants' connectedness within their community and positive attitudes about their sexual identity. This difference in the current study's results may be explained by the age differences in the two samples; Kertzner et al. found that younger age was also associated with decreased social well-being; therefore, the older adult sample in the present study may account for the lack of significant associations among sexual orientation and the outcome measures. Additionally, the sample methodology for the present study was likely biased toward participants who were comfortable disclosing their sexual identity and likely involved in the LGB community, which speaks to the mediating factors for bisexuality and well-being from Kertzner et al.'s study.

The inclusion of the four demographic variables in the second regression model also served the purpose of controlling for these factors in the relationships among the minority stress variables and the social and psychological outcome variables from Model 1. For psychological distress, quality of life, and life satisfaction, no differences were observed in which relationships were statistically significant or nonsignificant after controlling for demographic variables, suggesting that these relationships are still salient even when gender, age, partner status, and sexual orientation are accounted for. For loneliness, one change in the statistical significance of links between minority stressors and loneliness was found when demographic variables were considered; in Model 2, heterosexism became significantly and positively related to loneliness,

suggesting that when demographic variables are accounted for, higher rates of heterosexist events were associated with higher levels of loneliness.

Moderator Variables (Social Support, Social Network, and Self-Esteem). The current study explored the utility of potential stress-buffering moderator variables within a sample of sexual minority older adults. Specifically, social support, social network size, and self-esteem were assessed for their potential roles as protective factors against minority stress for this population. This approach reflects Meyer's (2003) minority stress model, which includes not only stressful factors but also stress-ameliorating factors for coping with minority stress-related stigma. Meyer's model focuses on both personal and group-level coping, including personal traits of hardiness and resilience and group-level traits related to social support and embeddedness. The present study utilized self-esteem as a potential personal coping factor and social support and social network size as group-level protective moderators.

In general, the protective variables in this study seemed to be important factors for sexual minority older adults. Self-esteem was significantly associated with all four outcome variables, indicating that higher levels of self-esteem were linked with lower rates of psychological distress, greater quality of life, greater life satisfaction, and lower levels of loneliness. The role of self-esteem in connection with the four outcome variables bolsters the findings of prior research. Specifically, Fokkema and Kuyper (2009) found a significant negative relationship between self-esteem and loneliness in a sample of LGB older adults, and Cassidy, O'Connor, Howe, and Warden (2004) found that personal self-esteem was significantly and negatively related to depression and anxiety in a sample of mixed-age LGB adults.

Social network was significantly and negatively associated with loneliness, indicating that, for greater social network size, lower loneliness was reported. Social support was

significantly and positively associated with quality of life and life satisfaction and negatively associated with loneliness, indicating that higher rates of social support was linked with better quality of life and greater life satisfaction and lower loneliness. These findings align with Fokkema and Kuyper's (2007) study on LGB older adults in the Netherlands, which indicated that social embeddedness, which is a construct that assessed quantity and frequency of social contact rather than quality of relationships, was significantly and negatively related to loneliness. Additionally, in a sample of adults 65 and older, Golden, Conroy, and Lawlor (2009) found that social engagement protected against depression and anxiety, and social engagement was also positively associated with self-rated happiness and quality of life. It is interesting to note that in the present study, social support was more strongly associated with outcome variables than social network size was, which may indicate that the quality of social relationships plays a larger role in the overall psychological and social well-being of sexual minority older adults. Finally, this study's findings regarding social support are in line with Pinquart and Sorenson's (2001) findings that in a meta-analysis of older adult research, the quality of social support was more strongly tied to loneliness than the quantity of social contacts.

When considering the interaction effects for the moderating variables, social network size moderated the relationship between perceived heterosexism and psychological distress, such that those with larger social networks were better protected against psychological distress when experiencing lower levels of heterosexism. The interaction effect seemed to diminish as the level of heterosexism increased, such that social network became less of a protective factor against psychological distress. In general, this finding may suggest that sexual minority older adults with higher quantities of social contacts may find their psychological health better protected against more infrequent acts of heterosexism than those with smaller social groups.

Social network also significantly moderated the relationship of internalized homonegativity to both life satisfaction and loneliness, such that those with larger social networks and lower levels of internalized homonegativity had higher levels of life satisfaction and lower levels of loneliness than those with smaller social networks, effects that diminished for those with higher levels of internalized homonegativity. These significant interactions suggest that having a larger quantity of social contacts supports life satisfaction and protects against loneliness in the face of mild levels of internalized homonegativity, though higher levels of internalized homonegativity are associated with lower life satisfaction and higher levels of loneliness regardless of social network size.

Finally, social support was found to moderate the relationship between internalized homonegativity and psychological distress, such that those with greater quality of social support had lower levels of psychological distress than those with lower quality of social support at mild levels of internalized homonegativity. This effect diminished at higher rates of internalized homonegativity, suggesting that higher quality social support may protect sexual minority older adults from lower levels of internalized homonegativity-related psychological distress. This finding is consistent with Masini and Barrett's (2008) study that indicated that in a sample of 220 lesbian, gay, and bisexual adults aged 50-79, participants reported that their social support from their friends was associated with lower levels of depression, anxiety, and internalized homonegativity.

When considering the moderation effects hypothesized in these models, it is notable that social support was only involved in one significant interaction despite being significantly related to three of the four outcome variables, and self-esteem was not involved in any significant interaction terms despite being significantly associated with all four outcome variables. These

results indicate that social support and self-esteem, though tied with the outcome variables independently, did not serve the moderating role that was expected based on Meyer's (2003) Minority Stress theory. It is possible, however, that these variables may have stronger moderating roles for other stressors not assessed by the current study. For this sample, social network received the most support for its role as a stress-buffering factor for minority stress, suggesting that the quantity of social contacts rather than the quality of those relationships may be most important within the minority stress model for this population. Additionally, internalized homonegativity was involved in three of the four significant moderation effects, twice with social network (for life satisfaction and loneliness) and once with social support (for psychological distress), suggesting that a sense of having a larger and more supportive social group may dissipate stress resulting from negative views about one's self due to having a sexual minority identity.

It is also important to note what was not supported with the current study's findings in terms of the moderation factors in particular. Specifically, ageism was not involved in any significant interaction terms, while heterosexist-related stressors were significant. The lack of involvement of social support, social network size, and self-esteem in the relationships among ageist discrimination and psychological distress and quality of life implies that this population either may utilize other forms of stress coping to buffer against ageism, or they may have no buffers at all to protect them. Due to how rampant and implicitly tolerated ageist discrimination is in US society, it seems likely that there are limited resources for older adults to cope with it, as many may not have the language, resources, or support to work against it. However, older adults may also utilize more individual forms of coping with stress to support them against negative outcomes associated with ageist discrimination.

In general, the significant interactions terms seemed to imply that social support and social network size may protect against lower levels of heterosexist-related minority stress, but not at higher levels. This trend suggests that as minority stress increases, sexual minority older adults' social coping is not as effective for ameliorating stress. This population may turn to other strategies for stress coping not assessed by the current study when heterosexist stress increases. Meyer's (2003) full model includes, in addition to social support, individual coping strategies as a potential stress-ameliorating variable. Sexual minority older adults may indeed shift their coping more inward rather than outward when heterosexism increases; it is conceivable that because discrimination can be socially derived, it might feel more difficult to reach out to others when discrimination is at its worst.

Limitations

This study may have faced some limitations due to the characteristics of the sample as well as the research design. This study's sample demonstrated unique qualities related to demographic variables, such as gender identity, sexual orientation, age, and partner status, as well as some key study variables. In terms of gender and sexual orientation identities, nearly half of the sample identified outside of traditional binary male/female gender identities and somewhere in between gay/lesbian and bisexual. However, for analysis purposes, gender data were dichotomized into "mostly male" and "mostly female" categories, and sexual orientation data were split into "gay/lesbian" and "bisexual" categories. Although both sets of data around the gender and sexual orientation identities of the sample point to the utility of a continuum rather than categorical approach to understanding how sexual minority older adults identify their gender and sexual orientations, the limitations of the study's research design did not incorporate these nuances in identity demonstrated by the sample.

It is also important to note the age of the participants, as the sample as a whole represented a younger segment of the older adult population. Although the chosen minimum age reflects practices of prior research (e.g., Fredriksen-Goldsen, 2011), grouping in adults in their 50s with adults through their mid-80s can hold some important implications regarding sexual and age discrimination. In terms of sexual discrimination, the Stonewall Riots in New York, which are often considered the start of the LGB acceptance movement, occurred in 1969; the youngest study participants (i.e., those reporting being 50 years old) were born just five years prior to the riots, while the oldest participant (86 years old) was 41 years old at the time of the riots. The average participant --- at 60 years old --- was 15 years old at the time of the riots and the start of the movement toward LGB acceptance. As a result, the higher presence of younger older adults in this sample may play a role in the study outcomes.

Additionally, the participants likely also experienced survey items related to ageism in unique ways depending on their age. The types of ageism experienced by someone in their 50s may be different than someone in the 70s; moreover, when you consider the overlapping identities of being older as well as being part of the sexual minority community, ageism may be experienced in different ways. To highlight, Brotman, Ryan, and Cormier (2002) report that older sexual minority adults face some unique challenges within the gay community related to their age. The authors speak to the LGB community as often being youth-oriented, which can make accessing that community more difficult for older members. Moreover, Brotman et al. share that participants reflected on a sense of some pervasive ageist views that dominate the LGB community in general, with beauty, youth, and ageist attitudes especially valued by the community. Considering the current study, although one may question how salient ageism is for

adults in their 50s, the intersection of age and sexual identity for this population may add weight to the presence and impact of ageist discrimination for these individuals.

Additional cohort effects related to time since coming out openly as gay, lesbian, bisexual, or other sexual identity may also be important to consider here. Mohr and Fassinger (2000) explored links between outness and lesbian/gay identity development and found significant positive relationships between commitment to lesbian/gay identity and level of outness, indicating that those who were further along in their lesbian/gay identity development were more likely to be more out to others. The current study's sample was notably out overall, which may reflect to some degree the participants' understanding of their sexual identities as well as the age of the participants, and some potential biases in sampling online and within LGB-active communities. As a result, participants who are in their 60s who may have had 30 or 40 years exploring their LGB identity and sharing it with others would have different experiences related to sexual identity discrimination than an individual who is 20 who may have just began their identity development.

The participants of the current study were also limited to individuals from primarily middle and higher income brackets and who also identified as White/Caucasian. The homogeneity of the ethnic and class identities of the sample may have impacted the study findings as well as how accurately the findings may generalize to those of other class and ethnic backgrounds. Specifically, people of color as well as people from working-class backgrounds who also identified as having a sexual minority identity and older age would likely experience not only different types of additional minority stress due to their ethnic and class identities, but also experience heterosexism and ageism in different ways due to the intersection of their identities. As an example, identifying as an older lesbian within the White community may be

very different than identifying as an older lesbian within the Black community. Different types of minority stress could be more salient with other identities for this population. Moreover, individuals may find support from other communities with whom they identify which could offset other experiences of minority stress. In terms of social class, Carr (2010) found that social class moderated the relationship between age and psychological distress, such that older adults living in poverty were at a high risk of psychological distress than those above the poverty line. This finding provides further evidence that class may play an integral role in access to mental health care and stress-buffering support for older adults, which may not be captured by the current study.

The current study has some additional limitations due to potential threats to validity, as outlined by Heppner, Kivlighan, and Wampold (2008) and Shadish, Cook, and Campbell (2002). In terms of internal validity, a threat may exist in the selection procedures for the proposed sample. The use of online data sampling enhanced the convenience of recruitment for this study; however, sexual minority older adults who do not use the internet, or do not complete surveys online, were excluded from participating. Online data recruitment may have also resulted in a biased pool of participants who may be more socially engaged and more likely to be open with their sexual orientation identity, including involvement in LGB groups, they may have additional resources for support, and may have had fewer experiences of discrimination, which could have facilitated their willingness to participate in this study. Additionally, older adults with certain physical limitations or disabilities may not have been able to access or complete the survey.

In terms of construct validity, the use of all self-report measures represents a mono-method bias. In other words, a participant who tends to answer self-favorably or in a self-deprecating way to survey questions will have a full set of biased results, as all items are self-

report. It is important to note that certain measures used in this study that were chosen over longer measures to be sensitive to testing fatigue, including the Single-Item Self Esteem Scale (SISE; Robins et al., 2001) and the Quality of Life – Alzheimer's Disease survey (QoL-AD; Logsdon et al., 1999, 2002), may have had some limitations. Although Robins et al. found the SISE to be highly correlated with a longer, validated measure of self-esteem, the fact that it consisted of only one item to assess self-esteem may have limited its ability to fully assess self-esteem, which may be a more multidimensional and complex construct that the single item could assess. Additionally, the quality of life measure was originally developed as a brief measure for adults with Alzheimer's; although the survey has been successfully utilized with populations who do not have Alzheimer's (e.g., Revell et al., 2009), the brevity of the measure may have resulted in too general of an assessment of quality of life for the present study. To illustrate, the World Health Organization's Quality of Life assessment (The WHOQOL Group, 1998) is widely used and has 100 items assessing quality of life on a broader scale when compared with the QoL-AD assessment. In addition, some of the QoL-AD items may not have been as relevant to assessment of quality of life for the younger participants in this sample (e.g., memory; ability to do chores). A different measure may have yielded more dynamic results for this population. External validity may also be threatened due to difficulties with generalizing the relationships within the current study to individuals and settings outside of the tested sample. Although diverse in gender and sexual orientation identity, the sample for the present study lacked in diversity across ethnic, socio-economic, and educational statuses within the sexual minority older adult community.

It is important to note that several participants offered useful commentary and feedback regarding the applicability of the survey items to their individual experiences. For example, one

participant noted that some of the items regarding family did not apply, due to this person's status as the last surviving family member. Similarly, other participants shared that the way they define "family" was in a less traditional sense and rather in terms of "families of choice", which may have added some unexplained variation in interpretation and response to some survey items. Additionally, some participants spoke to other potential sources of minority stress that were not assessed by the current study; to illustrate, one person commented, "Many things I have not experienced, or do not believe had to do with my being a lesbian, I have experienced as a woman. A femme woman. My answers would have been different if you asked if I felt attacked, overlooked or in danger as a woman." In effect, these comments suggest that a quantitative, survey-based approach, while useful for statistical purposes can indeed limit the depth and complexity of the data, especially given how nuanced each participants' various identities and experiences appear to be.

Implications and Future Directions

This study offers several important implications on many levels --- from the individual to society --- within the fields of aging and sexual minority research and services. Primarily, the study offers partial support for the utility of Meyer's (2003) Minority Stress theory for sexual minority older adults along with the additional minority stressor of age-related discrimination. Meyer's theory highlights that sexual minority older adults face additional stressors and associated psychological and social struggles in relation to their minority identities. The current study findings were consistent with Meyer's theorized links between variables related to the sexual minority identity (i.e., heterosexism, outness, and internalized homonegativity) and psychological outcomes and also supports the current study's consideration of ageism as an

additional challenge in the lives of sexual minority older adults, which is an often over-looked area of discrimination.

At the individual level, the findings of the study call on friends, partners, companions, family members, and caregivers of sexual minority older adults to heighten their sensitivity to and awareness of the role of age- and sexual identity-related discrimination for these individuals. By being curious about others with diverse identities and maintaining a mindful approach to how sexual minority older adults are spoken to and treated, minority stress may be reduced and coping strategies can be enhanced within this population. Moreover, researchers and service providers for older adults may benefit from considering the role of minority discrimination based on both age and sexual orientation when assessing the overall functioning and well-being of this population. Better attending to the unique experiences of this population may require service providers to move past stigma or hesitation related to inquiring about older adults' sexuality, instead understanding these individuals within a more holistic and culturally sensitive framework.

This study also found some support for the usefulness of considering stress-buffering constructs for sexual minority older adults. In particular, self-esteem, social support, and social network size were all related to some aspects of psychosocial well-being for this group. Additionally, the social constructs were especially noteworthy as they were significant moderators, reducing some of the association between minority stress and well-being. These findings imply that sexual minority older adults may find a great deal of support through their social endeavors. Service providers may improve the lives of sexual minority older adults by encouraging them to join social groups or take part in social activities as a way to improve their well-being and reduce the impact of minority stress.

The findings of this study also speak to societal concerns related to discrimination in the lives of sexual minority older adults. Ageism was found to have clear ties with well-being for this population; however, ageist discrimination is rarely spoken of, addressed, or challenged in a visible way. Individuals can become more aware of their own ageist biases and behaviors, and those with societal agency can press media outlets and other forms of communication to spread the word about the implications of ageism in the US. Additionally, findings support the need for ongoing efforts toward eradicating heterosexist discrimination, especially within the older adult population, which often goes unaddressed.

This study also has implications for researchers in the fields of ageing and sexuality. In particular, the findings of this study support the use of more inclusive and continuum-based items in survey research, particularly in terms of demographic variables, to more accurately assess the complexities of sexual minority older adults' sexual orientation identities. The diverse responses to questions related to sexual orientation and gender in this study highlighted the complexities of sexual minority older adults' understanding of who they are and how they describe themselves. The use of binary "male" and "female" responses and limited categories for sexual orientation in effect mute the wider scope of identity that sexual minority older adults embrace.

This study also highlights some important areas for future research. In particular, future studies may consider replicating a similar assessment of Meyer's (2003) model with a sample that is more diverse in terms of ethnicity and education backgrounds, as well as a sample that includes more adults over the age of 70. To do so, researchers may need to do more in-person or telephone surveying to access a more diverse population. Additionally, the current study did not test Meyer's model in full; future research may explore aspects of the original model not

included in this study, such as general stress variables, the minority stressor of expectations of rejection, characteristics of the minority identity, as well as other coping strategies, such as personal resilience. Further research may also test the utility of other theoretical models for this population, such as Hatzenbuehler's (2009) mediational model, which suggests that psychological processes (e.g., emotion regulation) mediate the relationship between stigma and psychological outcomes.

Future research may also consider exploring other important aspects of identity for this population. Exploring minority stress related to gender diversity, ethnic identity, and disability status may be especially important for this population. The use of a qualitative approach may also aid in capturing the complexities of the sexual minority older adult identity and their unique experiences with discrimination. As described above in the limitations section, many participants in the current study shared that some of the quantitative measures did not serve as an accurate match for their experiences; therefore, a qualitative approach might allow those experiences to be understood and explored in a what that may be less typical with a quantitative methodology.

Research may also expand this study's findings by exploring more directly the intersectionality of older age and sexual identity as a source of stress. In particular, this study's design and methodology, though considering both aspects of identity, did not assess for areas of overlap between the two. It is likely that being older and identifying with a sexual minority group at the same time has some unique implications for how individuals may experience minority stress. Bowleg (2008) reflects on the need for research to consider true intersections of identity rather than using an *additive* approach. For instance, rather than asking about different identities separate from others, a true assessment of intersectionality would simply ask about

one's experiences not limited to one identity or another, as a way to consider the participant as a whole person. Bowleg offers suggestions for qualitative approaches to take to better assess intersectionality, such as more open-ended questions around participant experiences without the use of "and" to separate different aspects of identities, but suggestion for quantitative options are less clear.

In general, the creation of strong quantitative measures of intersecting identities would be a useful development in the field of social science research. Potential survey items could utilize language such as "I have found social support within the LGB community as an older adult" or "I have had experiences of discrimination within the older adult community due to my sexual identity." Moreover, for the older adult sexual minority population, future research may consider exploring intersectionality through a moderation model utilizing age or ageism as a moderator for heterosexism and psychosocial outcomes, which may provide somewhat more information around intersectionality than a purely additive model.

Conclusion

This study provides some insight into the experiences of the growing population of sexual minority older adults in the United States. In particular, this group may be at risk for experiencing greater levels of stress due to their sexual- and age-related minority statuses, which may relate to their overall psychological and social well-being. However, this population is resourceful and resilient, as noted by the importance of social support and personal self-esteem related to their quality of life and well-being. This population is also striving for optimal aging through adaptation to stressors and challenges that come with older age (Baltes & Baltes, 1991).

Moreover, this study highlights the presence of discrimination in the lives of sexual minority older adults, in terms of both age- and sexual orientation-related prejudiced views,

actions, and policies. These aspects of stigma are tangible and have potential to be deleterious for this population, especially without the support of individual and group coping resources. Finally, this study highlights the complexity of identity related to sexual orientation and gender, which is often hidden due to the use of a traditional gender and sexual orientation binary approach. In sum, the sexual minority older adult population is comprised of complex and unique individuals with likewise unique needs due to their sexual orientation and age identities, reinforcing the call for more culturally-sensitive practices to reduce stigma and discrimination while bolstering this population's coping and resilience.

References

Ageism in the Health Care System: Short Shifting Seniors?: Hearing Before the Special Committee on Aging, Senate, 108th Cong. 6 (2003) (Testimony of Daniel Perry).

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.

American Psychological Association. (2008). *Answers to your questions: For a better understanding of sexual orientation and homosexuality*. Washington, DC. Retrieved from http://www.apa.org/helpcenter/sexual-orientation.aspx

American Psychological Association, Committee on Aging. (2009). *Multicultural competency in geropsychology.* Washington, DC: American Psychological Association. Retrieved from http://www.apa.org/pi/aging/programs/pipeline/multicultural-geropsychology.aspx

American Psychological Association, Presidential Task Force on Preventing Discrimination and Promoting Diversity. (2012). *Dual pathways to a better America: Preventing discrimination and promoting diversity*. Washington, DC: American Psychological Association. Retrieved from http://www.apa.org/pubs/info/reports/promoting-diversity.aspx

Andrews, G. & Slade, T. (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health, 25*, 494–497. doi: 10.1111/j.1467-842X.2001.tb00310.x

Balsam, K. F., Beauchaine, T. P., Mickey, R. M., & Rothblum, E. D. (2005). Mental health of lesbian, gay, bisexual, and heterosexual siblings: Effects of gender, sexual orientation, and family. *Journal of Abnormal Psychology, 114*(3), 471-476. doi: 10.1037/0021-843X.114.3.471

Balsam, K. F. & Szymanski, D. M. (2005). Relationship quality and domestic violence in women's same-sex relationships: The role of minority stress. *Psychology of Women Quarterly, 29*(3), 258-269. doi: 10.1111/j.1471-6402.2005.00220.x

Baltes, P. B. & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging: Perspectives from the behavioral sciences* (pp. 1-34). New York, NY: Press Syndicate of the University of Cambridge.

Barg, F. K., Huss-Ashmore, R., Wittink, M. N., Murray, G. F., Bogner, H. R., & Gallo, J. J. (2006). A mixed-methods approach to understanding loneliness and depression in older adults. *The Journals of Gerontology: Series B, Psychological Science and Social Science, 61*(6), 329-339. doi: 10.1093/geronb/61.6.s329

Bates, N., DeMaio, T.J., Robins, C., & Hicks, W. (2010). *Classifying relationship and marital status among same-sex couples. U.S. Census Bureau & Westat, 2010*. Retrieved from https://www.amstat.org/sections/srms/Proceedings/y2010/Files/400104.pdf

Bennett, T. & Gaines, J. (2010). Believing what you hear: The impact of aging stereotypes upon the old. *Educational Gerontology, 36*(5), 435-445. doi: 10.1080/03601270903212336

Bowleg, L., Huang, J., Brooks, K., Black, A., & Burkholder, G. (2003). Triple jeopardy and beyond: Multiple minority stress and resilience among Black lesbians. *Journal of Lesbian Studies*, *7*(4), 87-108. doi: 10.1300/J155v07n04_06

Bowleg, L. (2008). When Black + lesbian + woman ≠ Black lesbian woman: The methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, *59*(5-6), 312-325. doi: 10.1007/s11199-008-9400-z

Brotman, S., Ryan, B., & Cormier, R. (2003). The health and social service needs of gay and lesbian elders and their families in Canada. *The Gerontologist, 43*(2), 192-202. doi:10.1093/geront/43.2.192

Butler, R. N. (1980). Ageism: A foreword. *Journal of Social Issues*, *36*(2), 8-11. doi: 10.1111/j.1540-4560.1980.tb02018.x

Carr, A. G. (2010). *Age and coping as predictors of physical health and psychological well-being: The role of poverty status as a moderator.* (Unpublished doctoral dissertation). Lehigh University, Bethlehem, PA.

Carstensen, L. L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current Directions in Psychological Science*, *4*, 151-156. doi: 10.1111/1467-8721.ep11512261

Cassidy, C., O'Connor, R. C., Howe, C., & Warden, D. (2004). Perceived discrimination and psychological distress: The role of personal and ethnic self-esteem. *Journal of Counseling Psychology, 51*(3), 329-339. doi: 10.1037/0022-0167.51.3.329

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Cole, E. (2008). Coalitions as a model for intersectionality: From practice to theory. *Sex Roles, 59*, 443-453. doi: 10.1007/s11199-008-9419-1

Corning, A. F. (2002). Self-esteem as a moderator between perceived discrimination and psychological distress among women. *Journal of Counseling Psychology, 49*(1), 117-126. doi: 10.1037//0022-0167.49.1.117

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*(6), 1241-1299. doi: 10.2307/1229039

Crisp, C., Wayland, S., & Gordon, T. (2008). Older gay, lesbian, and bisexual adults: Tools for age-competent and gay affirmative practice. *Journal of Gay & Lesbian Services, 20*(1-2), 5-29. doi: 10.1080/10538720802178890

Cronin, A., Ward, R., Pugh, S., King, A., & Price, E. (2010). Categories and their consequences: Understanding and supporting the caring relationships of older lesbian, gay and bisexual people. *International Social Work, 54*(3), 421-435. doi: 10.1177/0020872810396261

D'Augelli, A. R. & Grossman, A. H. (2001). Disclosure of sexual orientation, victimization, and mental health among lesbian, gay, and bisexual older adults. *Journal of Interpersonal Violence, 16*(10), 1008-1027. doi: 10.1177/088626001016010003

D'Augelli, A. R., Grossman, A. H., & Starks, M. T. (2005). Parents' awareness of lesbian, gay, and bisexual youths' sexual orientation. *Journal of Marriage and Family Therapy, 67*(2), 474-482. doi: 10.1111/j.0022-2445.2005.00129.x

D'Augelli, A. R., Grossman, A. H., Hershberger, S. L., & O'Connell, T. S. (2001). Aspects of mental health among older lesbian, gay, and bisexual adults. *Aging & Mental Health, 5*(2), 149-158. doi: 10.1080/13607860120038366

David, S. & Knight, B. G. (2008). Stress and coping among gay men: Age and ethnic differences. *Psychology and Aging, 23*(1), 62-69. doi: 10.1037/0882-7974.23.1.62

DeBlaere, C., Brewster, M. E., Sarkees, A., & Moradi, B. (2010). Conducting research with LGB people of color: Methodological challenges and strategies. *The Counseling Psychologist*, *38*(3), 331-362. doi: 10.1177/0011000009335257

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71-75. doi: 10.1207/s15327752jpa4901_13

Dowshen, N., Binns, H. J., & Garofalo, R. (2009). Experiences of HIV-related stigma among young men who have sex with men. *AIDS Patient Care STDS, 23*(5), 371-376. doi: 10.1089/apc.2008.0256

Du, X. L., Key, C. R., Osborne, C., Mahnken, J. D., & Goodwin, J. S. (2003). Discrepancy between consensus recommendations and actual community use of adjuvant chemotherapy in women with breast cancer. *Annals of Internal Medicine*, *138*(2), 90.

Feinstein, B. A., Davila, J., & Yoneda, A. (2012). Self-concept and self-stigma in lesbians and gay men. *Psychology and Sexuality, 3*(2), 161-177. doi: 10.1080/19419899.2011.592543

Feinstein, B. A., Goldfried, M. R., & Davila, J. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *Journal of Consulting and Clinical Psychology, 80*(5), 917-927. doi: 10.1037/a0029425

Fokkema, T. & Kuyper, L. (2009). The relation between social embeddednessand loneliness among older lesbian, gay, and bisexual adults in the Netherlands. *Archives of Sexual Behavior, 38*, 264-275. doi: 10.1007/s10508-007-9252-6

Fredriksen-Goldsen, K. I. (2011). *Resilience and disparities among lesbian, gay, bisexual, and transgender older adults*. In Public Policy & Aging Report, National Academy on Aging, Summer 2011.

Fredriksen-Goldsen, K. I., Emlet, C. A., Kim, H. J., Muraco, A., Erosheva, E. A., Goldsen, J., & Hoy-Ellis, C. P. (2013). The physical and mental health of lesbian, gay male, and bisexual (LGB) older adults: The role of key health indicators and risk and protective factors. *The Gerontologist*, *53*(4), 664-675. doi: 10.1093/geront/gns123

Gerstorf, D., Ram, N., Röcke, C., Lindenberger, U., & Smith, J. (2008). Decline in life satisfaction in old age: Longitudinal evidence for links to distance from death. *Psychology and Aging, 23*(1), 154-168. doi: 10.1037/0882-7974.23.1.154

Golden, J., Conroy, R. M., & Lawlor, B. A. (2009). Social support network structure in older people: Underlying dimensions and association with psychological and physical health. *Psychology Health and Medicine 14*(3), 280-290. doi: 10.1080/13548500902730135

Grossman, A. H. (2008). Conducting research among older lesbian, gay, and bisexual adults. *Journal of Gay & Lesbian Social Services, 20*(1-2), 51-67.

Grossman, A. H., D'Augelli, A. R., & Hershberger, S. L. (2000). Social support networks of lesbian, gay, and bisexual adults 60 years of age and older. *Journal of Gerontology: Psychological Sciences, 55B*(3), 171-179.

Grossman, A. H., D'Augelli, A. R., O'Connell, T. S. (2001). Being lesbian, gay, bisexual, and 60 or older in North America. *Journal of Gay & Lesbian Social Services, 13*(4), 23-40. doi: 10.1300/J041v13n04_05

Hajjar, I. (2002). Age-related bias in the management of hypertension: A national survey of physicians' opinions on hypertension in elderly adults. *Journals of Gerontology A: Biological Sciences and Medical Sciences, 57*(8), M487–91. doi: 10.1093/gerona/57.8.M487

Hamarat, E., Thompson, D., Zabrucky, K. M., Steele, D., Matheny, K. B., & Aysan, F. (2001). Perceived stress and coping resource availability as predictors of life satisfaction in young, middle-aged, and older adults. *Experimental Aging Research, 27*(2), 181-196. doi: 10.1080/036107301750074051

Hatzenbuehler, M. L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychological Bulletin*, *135*(5), 707. doi: 10.1037/a0016441

Hatzenbuehler, M. L., Nolen-Hoeksema, S., & Erickson, E. J. (2008). Minority stress predictors of HIV risk behavior, substance use, and depressive symptoms: Results from a prospective study of bereaved gay men. *Healthy Psychology, 27*(4), 455-462. doi: 10.1037/0278-6133.27.4.455

Hausdorff, J. M., Levy, P. B. R., & Wei, P. J. Y. (1999). The power of ageism on physical function of older persons: Reversibility of age-related gait changes. *Journal of the American Geriatrics Society*, *47*(11).

Heppner, P. P., Kivlighan, D. M., & Wampold, B. E. (2008). *Research design in counseling.* Belmont, CA: Brooks/Cole.

Herek, G. M. (2008). Hate crimes and stigma-related experiences among sexual minority adults in the United States: Prevalence estimates from a national probability sample. *Journal of Interpersonal Violence, 24*(1), 54-74. doi: 10.1177/0886260508316477

Hillman, J. (2008). Sexual issues and aging within the context of work with older adult patients. *Professional Psychology: Research and practice*, *39*(3), 290. doi: 10.1037/0735-7028.39.3.290

International Longevity Center's Anti-Ageism Taskforce. (2006). *Ageism in America.* Retrieved from http://www.mailman.columbia.edu/sites/default/files/Ageism_in_America.pdf

Jackson, N. C., Johnson, M. J., & Roberts, R. (2008). The potential impact of discrimination fears of older gays, lesbians, bisexuals, and transgender individuals living in small- to

moderate-sized cities on long-term health care. *Journal of Homosexuality, 54*(3), 325-339. doi: 10.1080/00918360801982298

Johnston, J. H., Brosi, W. A., Hermann, J. R., & Jaco, L. (2011). The impact of social support on perceived control among older adults: Building blocks of empowerment. *Journal of Extension, 49*(1), 1-8.

Jorm, A. F. (2000). Does old age reduce the risk of anxiety and depression? A review of epidemiological studies across the adult life span. *Psychological Medicine, 30*, 11-22. doi: 10.1017/S0033291799001452

Kalton, G., & Anderson, D. W. (1986). Sampling rare populations. *Journal of the Royal Statistical Society. Series A (General)*, 65-82. doi: 10.2307/2981886

Kertzner, R. M., Meyer, I. H., Frost, D. M., Stirratt, M. J. (2009). Social and psychological well-being in lesbians, gay men, and bisexuals: The effects of race, gender, age, and sexual identity. *American Journal of Orthopsychiatry, 79*(4), 500-510. doi: 10.1037/a0016848

Kessler, R. C., Andrews, G., Golpe, L. J., Hiripr, E., Mroczek, D. K., … & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32,* 959–976.

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., … & Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*. 60(2), 184-189.

Knight, B. G., Karel, M. J., Hinrichsen, G. A., Qualls, S. H., & Duffy, M. (2009). Pikes Peak Model for training in professional geropsychology. *American Psychologist, 64*(3), 205-214. doi: 10.1037/a0015059

Kuyper, L. & Fokkema, T. (2010). Loneliness among older lesbian, gay, and bisexual adults: The role of minority stress. *Archives of Sexual Behavior, 39*, 1171-1180. doi: 10.1007/s10508-009-9513-7.

Kwag, K. H., Martin, P., Russell, D., Franke, W., & Kohut, M. (2011). The impact of perceived stress, social support, and home-based physical activity on mental health among older adults. *International Journal of Aging and Human Development, 72*(2), 137-154.

Lachs, M. S. & Pillemer, K. (2004). Elder abuse. *The Lancet, 364*(9441), 1263-1272. doi: 10.1016/S0140-6736(04)17144-4

Lai, D. W. (2009). Older Chinese' attitudes toward aging and the relationship to mental health: An international comparison. *Social work in health care*, *48*(3), 243-259. doi: 10.1080/00981380802591957

Leech, N. L., Barrett, K. C., & Morgan, G. A. (2011). *IBM SPSS for intermediate statistics: Use and interpretation* (4th ed.). New York, NY: Taylor & Francis Group.

Legate, N., Ryan, R.M., & Weinstein, N. (2012). Is coming out always a "good thing"? Exploring the relations of autonomy support, outness, and wellness for lesbian, gay, and bisexual individuals. *Social Psychological and Personality Science*, *3*(2), 145-152. doi: 10.1177/1948550611411929

Leichman, E. S. (2013). *Predictive Validity of the Individual Growth and Development Indicators: Examination of Students who Attend Head Start.* (Unpublished doctoral dissertation). Lehigh University, Bethlehem, Pennsylvania.

Lindau, S. T., Schumm, L. P., Laumann, E. O., Levinson, W., O'Muircheartaigh, C. A., & Waite, L. J. (2007). A study of sexuality and health among older adults in the United States. *New England Journal of Medicine*,*357*(8), 762-774. doi: 10.1056/NEJMoa067423

Logsdon, R. G., Gibbons, L. E., McCurry, S. M., & Teri, L. (1999). Quality of life in Alzheimer's disease: Patient and caregiver reports. *Journal of Mental Health and Aging*, *5*, 21–32. Retrieved from http://www.psychosomaticmedicine.org

Logsdon, R. G., Gibbons, L. E., McCurry, S. M., & Teri, L. (2002). Assessing quality of life in older adults with cognitive impairment. *Psychosomatic Medicine*, *64*, 510–519. Retrieved from http://www.psychosomaticmedicine.org

Masini, B. E. & Barrett, H. A. (2008). Social support as a predictor of psychological and physical well-being and lifestyle in lesbian, gay, and bisexual adults aged 50 and over. *Journal of Gay & Lesbian Social Services, 20*(1/2), 91-110. doi: 10.1080/10538720802179013

Mays, V. M. & Cochran, S. D. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health, 91*(11), 1869-1876. doi: 10.2105/AJPH.91.11.1869

McFarland, P. L. & Sanders, S. (2003). A pilot study about the needs of older gays and lesbians: What social workers need to know. *Journal of Gerontological Social Work, 40*(3), 67-80.

Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, *36*(1), 38-56. doi: 10.2307/2137286

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674. doi: 10.1037/0033-2909.129.5.674

Meyer, I. H., Schwartz, S., & Frost, D. M. (2008). Social patterning of stress and coping: Does disadvantaged social statuses confer more stress and fewer coping resources? *Social Science & Medicine, 67*, 368-379. doi:10.1016/j.socscimed.2008.03.012

Mohr, J. J. & Fassinger, R. (2000). Measuring dimensions of lesbian and gay male experience. *Measurement and Evaluation in Counseling and Development, 33*(2), 66-90. Retrieved from http://mec.sagepub.com/

Mohr, J. J. & Kendra, M. S. (2011). Revision and extension of a multidimensional measure of sexual minority identity: The Lesbian, Gay, and Bisexual Identity Scale. *Journal of Counseling Psychology, 58*(2), 234-245. doi: 10.1037/a0022858

Moradi, B., Wiseman, M. C., DeBlaere, C., Goodman, M. B., Sarkees, A., Brewster, M. E., & Huang, Y. P. (2010). LGB of color and White individuals' perceptions of heterosexist stigma, internalized homophobia, and outness: Comparisons of levels and links. *The Counseling Psychologist*, *38*(3), 397-424. doi: 10.1177/0011000009335263

National Center for Chronic Disease Prevention and Health Promotion (CDC). (2004). *The State of Aging and Health in America 2004.* Washington, DC: U.S. Department of Health & Human Services.

The National Center on Elder Abuse. (1998). *National Elder Abuse Incidence Study.* Retrieved from http://www.aoa.gov/AoARoot/AoA_Programs/Elder_Rights/Elder_Abuse/docs/AbuseReport_Full.pdf

The National Center on Elder Abuse (2002). *A Response to the Abuse of Vulnerable Adults: The 2000 Survey of State Adult Protective Services.* Retrieved from http://www.ncea.aoa.gov/Resources/Publication/docs/apsreport030703.pdf

Nelson, T. D. (2005). Ageism: Prejudice against our feared future self. *Journal of Social Issues, 61*(2), 207-221. doi: 10.1111/j.1540-4560.2005.00402.x

Nesmith, A. A., Burton, D. L., & Cosgrove, T. J. (1999). Gay, lesbian, and bisexual youth and young adults: Social support in their own words. *Journal of Homosexuality*, *37*(1), 95-108. doi: 10.1300/J082v37n01_07

Orth, U., Robins, R. W., Trzesniewski, K. H., Maes, J., & Schmitt, M. (2009). Low self-esteem is a risk factor for depressive symptoms from young adulthood to old age. *Journal of Abnormal Psychology, 118*(3), 472-478. doi: 10.1037/a0015922

Oxman, T. E., Freeman, Jr., D. H., & Manheimer, E. D. (1995). Lack of social participation or religious strength and comfort as risk factors for death after cardiac surgery in the elderly. *Psychosomatic Medicine, 57*(1), 5-15. Retrieved from http://www.psychosomaticmedicine.org

Palmore, E. (2001). The ageism survey: First findings. *The Gerontologist, 41*(5), 572-575. doi: 10.1093/geront/41.5.572

Pillemer, K. & Finkelhor, D. (1988). The prevalence of elder abuse: A random sample survey. *The Gerontologist, 28*(1), 51-57. doi: 10.1093/geront/28.1.51

Pinquart, M. & Sorenson, S. (2001). Influences on loneliness in older adults: A meta-analysis. *Basic and Applied Social Psychology, 23*(4), 245-266. doi: 10.1207/S15324834BASP2304_2

Preston, C. C., & Colman, A. M. (2000). Optimal number of response categories in rating scales: reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, *104*(1), 1-15.

Revell, A. J., Caskie, G. I. L., Schaie, K. W., & Willis, S. L. (2009). Factor structure and invariance of the Quality of Life in Alzheimer's Disease (QoL-AD) Scale. *Experimental Aging Research, 35*(2), 250-267. doi: 10.1080/03610730902720521

Riggle, E. D., Thomas, J. D., & Rostosky, S. S. (2005). The marriage debate and minority stress. *PS: Political Science and Politics*, *38*(2), 221-224.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*(2), 151-161. doi: 10.1177/0146167201272002

Rosenberg, M. (1989). *Society and the Adolescent Self-Image* (revised). Middletown, CT: Wesleyan University Press.

Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The Gerontologist, 37*(4), 433-440. doi: 10.1093/geront/37.4.433

Rupp, D. E., Vodanovich, S. J., & Credé, M. (2006). Age bias in the workplace: The impact of ageism and causal attributions. *Journal of Applied Social Psychology*, *36*(6), 1337-1364. doi: 10.1111/j.0021-9029.2006.00062.x

Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology, 39*(3), 472-480. doi:10.1037/0022-3514.39.3.472

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference.* Boston, MA: Houghton Mifflin.

Smith, L. A., McCaslin, R., Chang, J., Martinez, P., & McGrew, P. (2010). Assessing the needs of older gay, lesbian, bisexual, and transgender people: A service-learning and agency partnership approach. *Journal of Gerontological Social Work, 53*, 387-401. doi: 10.1080/01634372.2010.486433

Stark, C. (2013, March 26). By the numbers: Same-sex marriage. *CNN.* Retrieved from http://www.cnn.com

Szymanski, D. M. (2006). Does internalized heterosexism moderate the link between heterosexist events and lesbians' psychological distress? *Sex Roles, 54*(3/4), 227-234. doi: 10.1007/s11199-006-9340-4

Szymanski, D. M. (2009). Examining potential moderators of the link between heterosexist events and gay and bisexual men's psychological distress. *Journal of Counseling Psychology, 56*(1), 142-151. doi: 10.1037/0022-0167.56.1.142

Szymanski, D. M. & Owens, G. P. (2009). Group-level coping as a moderator between heterosexism and sexism and psychological distress in sexual minority women. *Psychology of Women Quarterly, 33*(2), 197-205. doi: 10.1111/j.1471-6402.2009.01489.x

Szymanski, D. M. & Sung, M. R. (2010). Minority stress and psychological distress among Asian American sexual minority persons. *The Counseling Psychologist, 38*(6), 848-872. doi: 10.1177/0011000010366167

The WHOQOL Group. (1998). The World Health Organization Quality of Life Assessment (WHOQOL): Development and general psychometric properties. *Social Science and Medicine, 46,* 1569-1585. doi: 10.1016/S0277-9536(98)00009-4

Utsey, S. O., Chae, M. H., Brown, C. F., & Kelly, D. (2002). Effect of ethnic group membership on ethnic identity, race-related stress and quality of life. *Cultural Diversity and Ethnic Minority Psychology, 8*(4), 366-377. doi: 10.1037/1099-9809.8.4.367

Waldo, C. R. (1999). Working in a majority context: A structural model of heterosexism as minority stress in the workplace. *Journal of Counseling Psychology, 46*(2), 218-232. doi: 10.1037/0022-0167.46.2.218

West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues and applications* (56-75). Thousand Oaks, CA: Sage Publications.

Westerhof, G. J., & Barrett, A. E. (2005). Age identity and subjective well-being: A comparison of the United States and Germany. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *60*(3), S129-S136.

White, A. M., Philogene, G. S., Fine, L., and Sinha, S. (2009). Social support and self-reported health status of older adults in the United States. *American Journal of Public Health*, *99*(10), 1872-1878. doi: 10.2105/AJPH.2008.146894

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1). doi: 10.1207/s15327752jpa5201_2

Figure 1

Conceptual Model

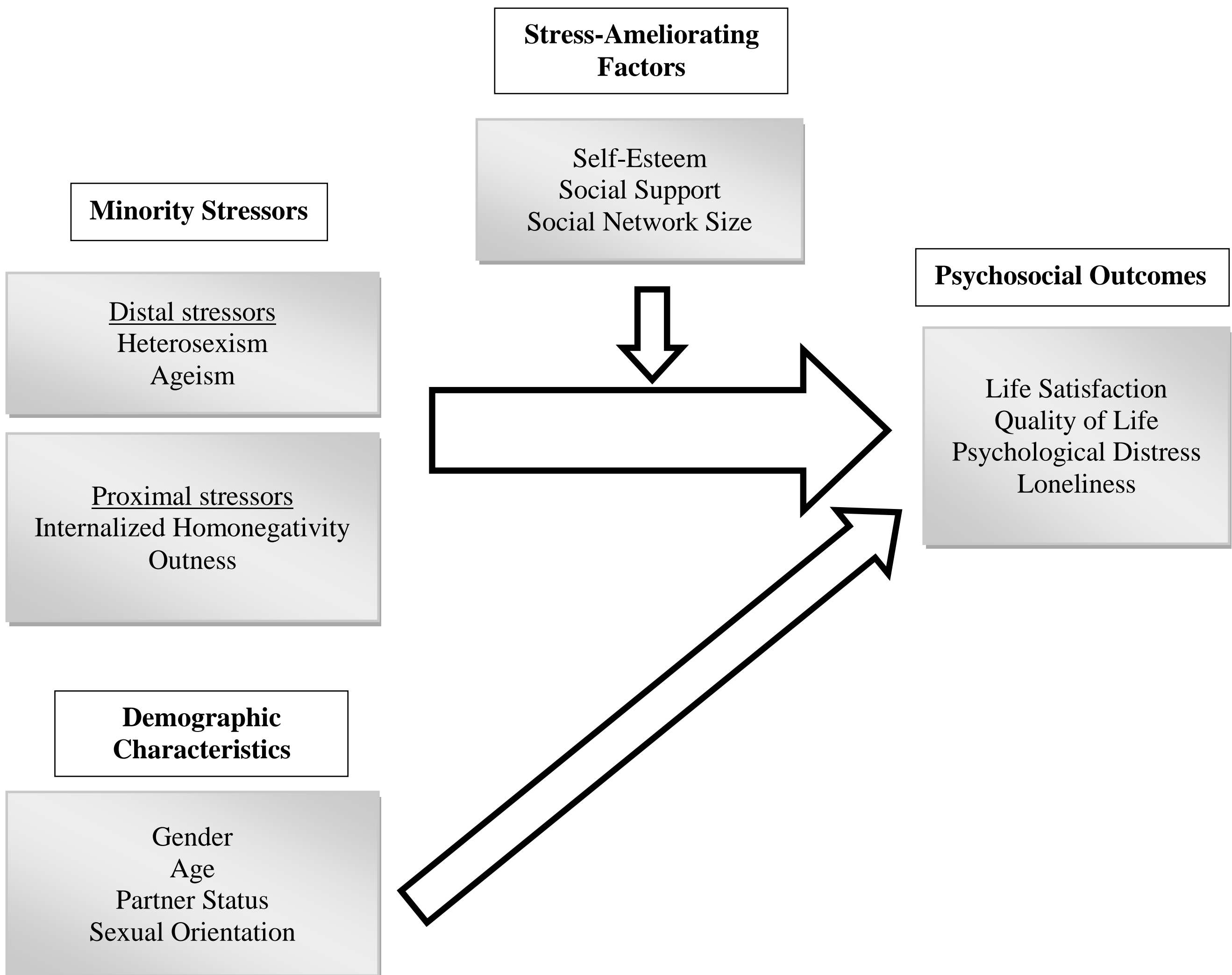

Figure 2

Participant Age Distribution

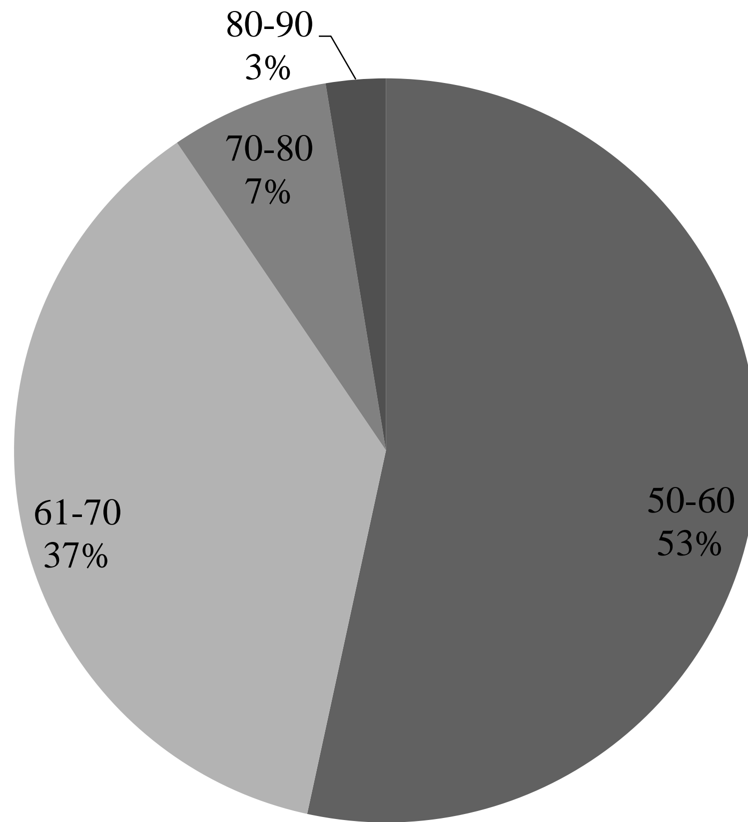

Figure 3

Participant Gender Identity Distribution

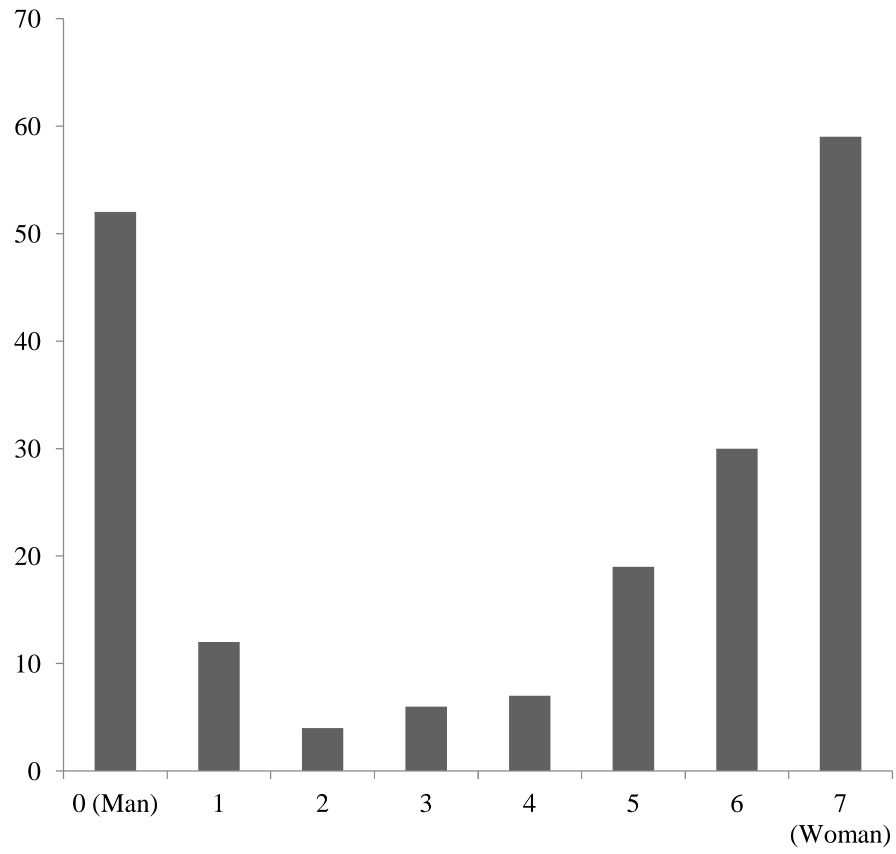

Figure 4

Participant Sexual Orientation Distribution

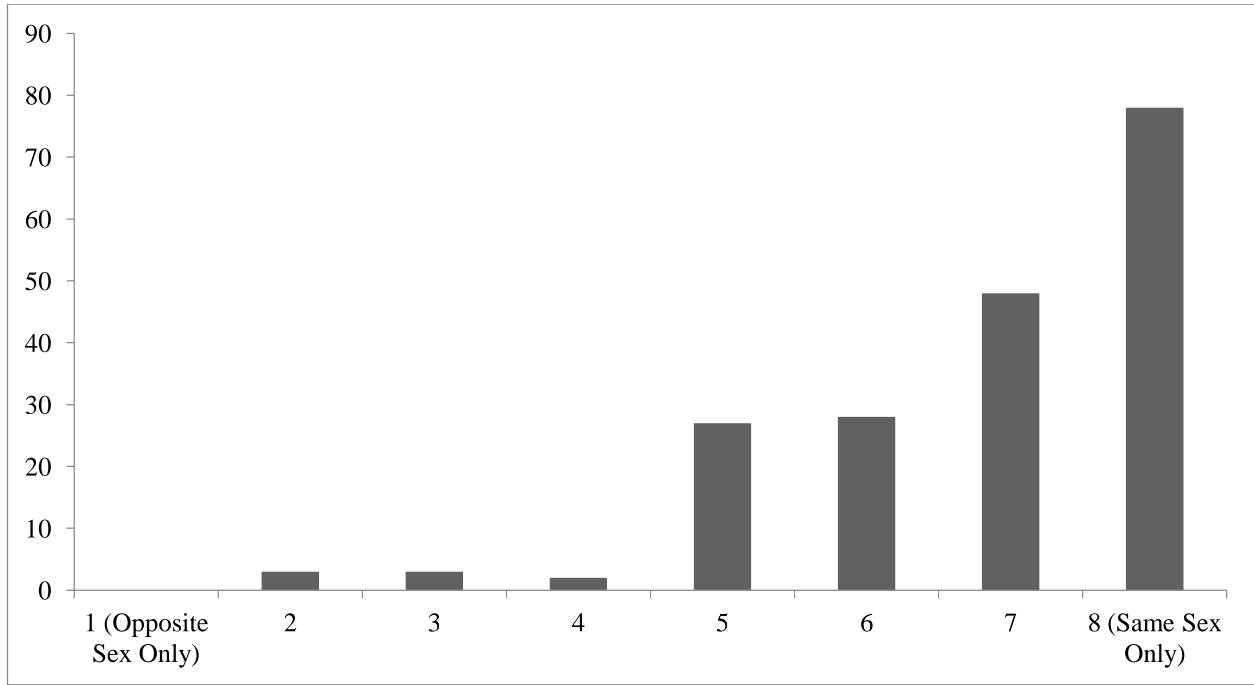

Figure 5

Social Network as a Moderator for Heterosexism and Psychological Distress

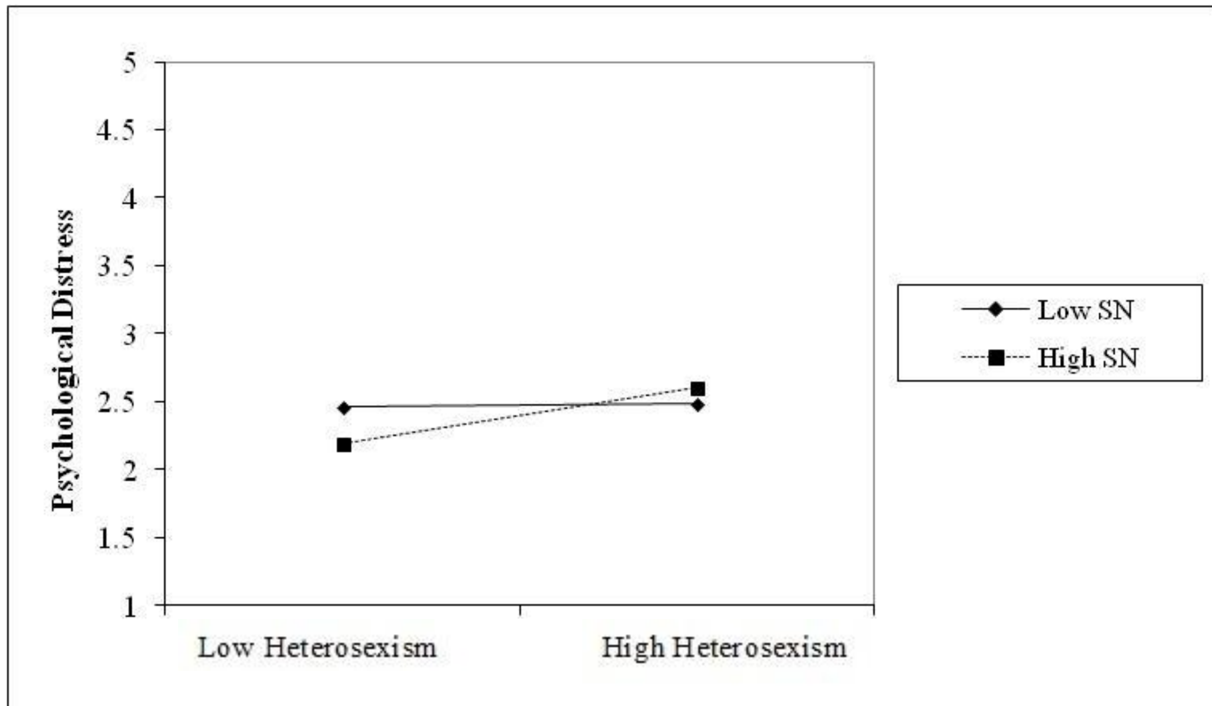

Figure 6

Social Support as a Moderator for Internalized Homonegativity and Psychological Distress

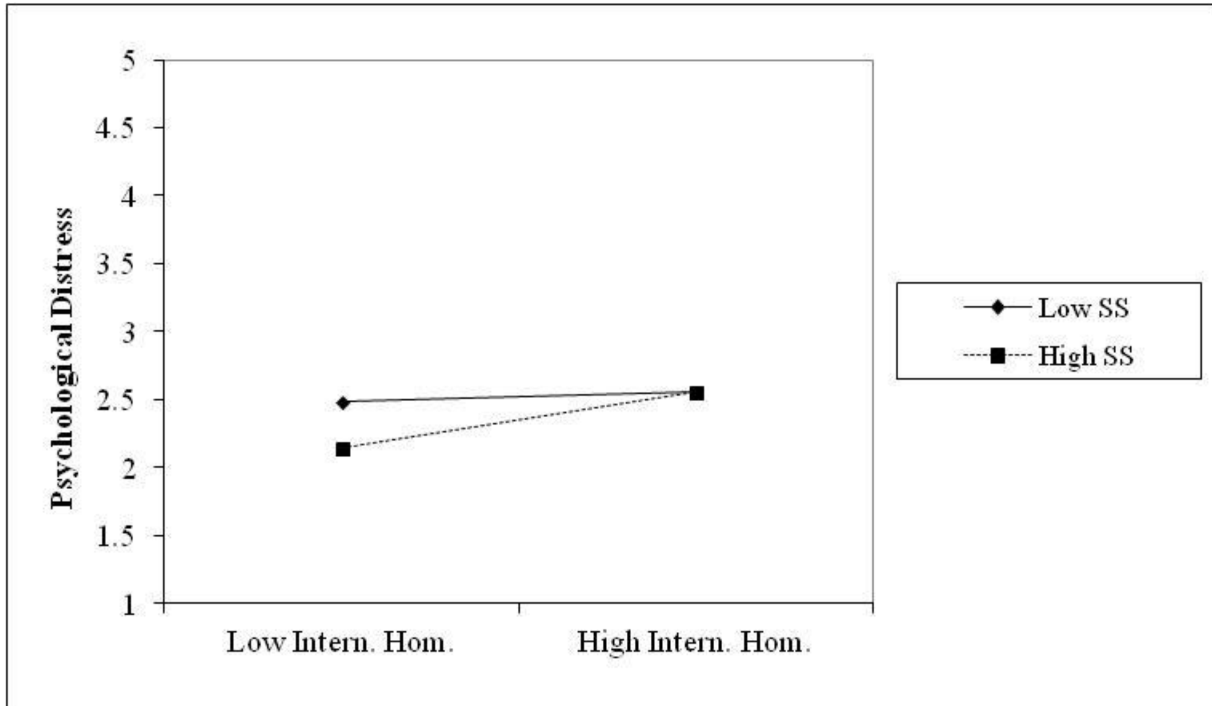

Figure 7

Social Network as a Moderator for Internalized Homonegativity and Life Satisfaction

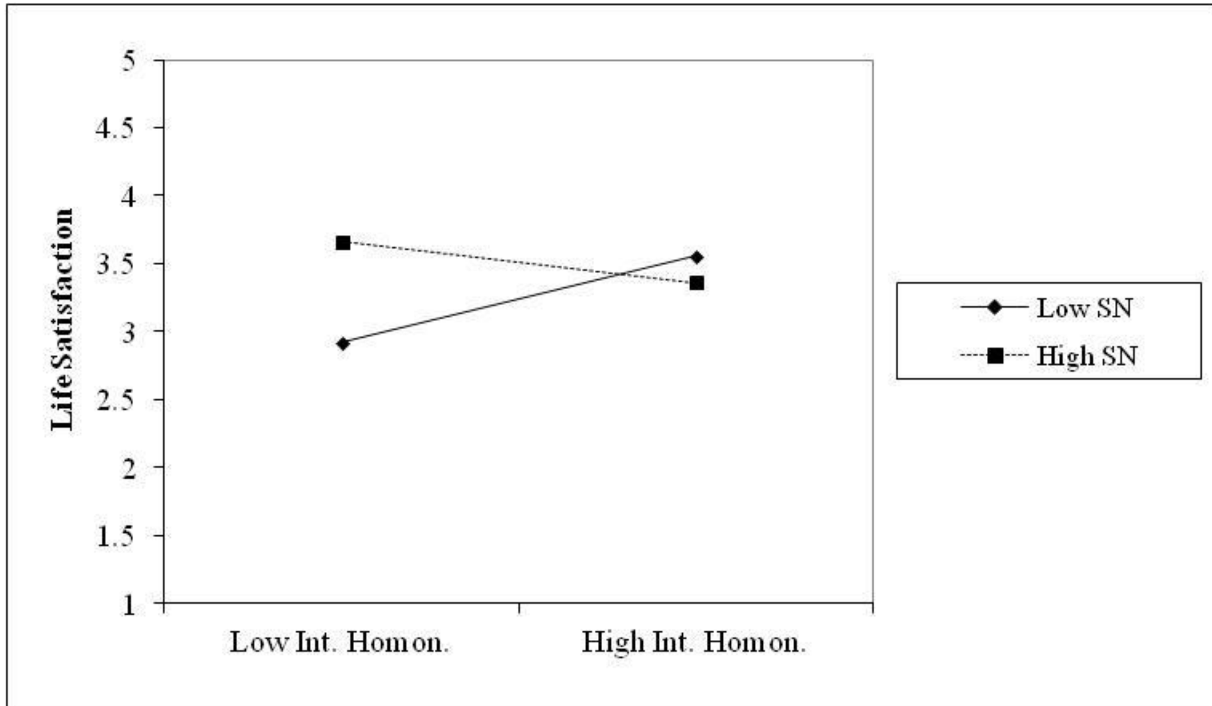

Figure 8

Social Network as a Moderator for Internalized Homonegativity and Loneliness

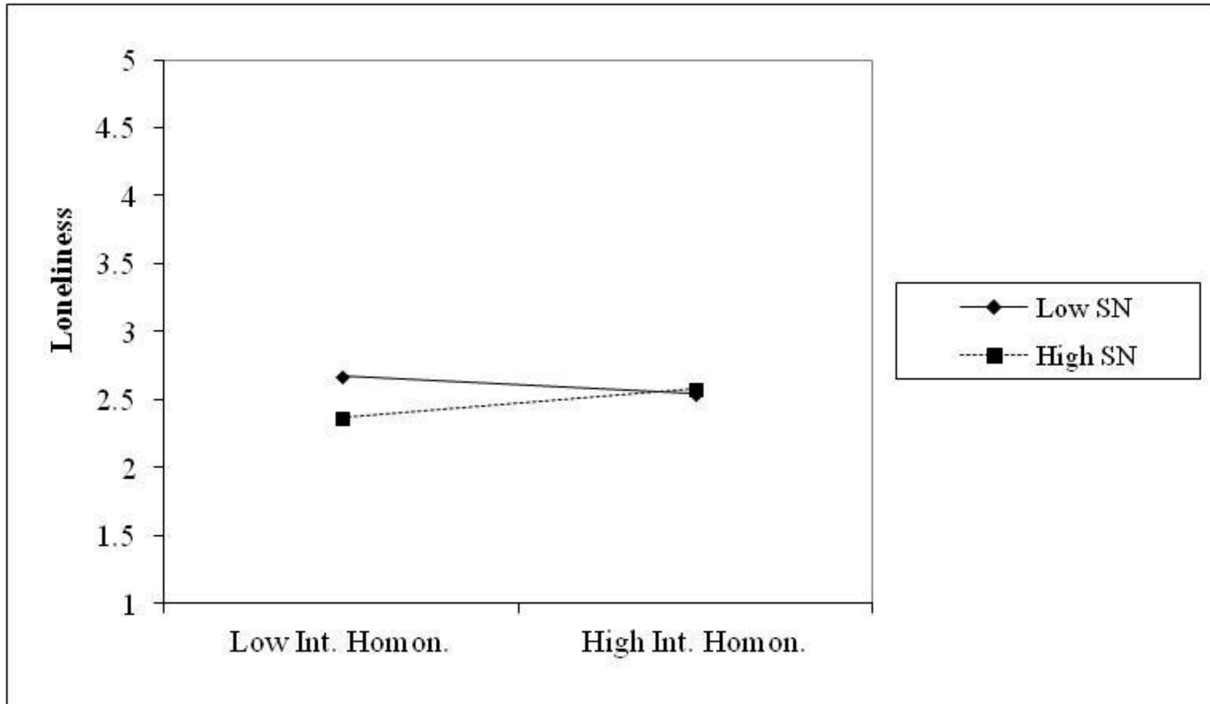

Table 1
Descriptive Data and Correlations of Study Variables

Measure	1	2	3	4	5	6
1. Ageism	1.000					
2. Heterosexism	.516***	1.000				
3. Outness	-.101	-.041	1.000			
4. Internal. Homon. (IH)	.321***	.245**	-.206**	1.000		
5. Gender	.184*	.105	.080	-.042	1.000	
6. Age	.058	-.151*	-.057	-.132	.069	1.000
7. Partner Status	.028	.224**	.208**	.048	.123	-.267***
8. Sexual Orientation	.063	-.007	.098	-.110	-.065	-.006
9. Self-Esteem (SE)	-.099	-.057	.047	-.089	.079	.098
10. Social Network (SN)	-.051	-.041	.245*	-.103	-.069	.121
11. Social Support (SS)	-.117	-.232**	.207**	-.134	.127	.049
12. Loneliness	.247**	.250**	-.117	.183*	-.108	-.122
13. Psych. Distress	.386***	.355***	-.021	.321***	-.067	-.183*
14. Quality of Life	-.264***	-.314***	.075	-.067	.006	.059
15. Life Satisfaction	-.153*	-.113	.068	-.053	.103	.104
M	1.67	1.93	5.71	1.48	0.61	60.49
SD	0.56	0.81	1.30	0.91	0.49	7.75
Skewness	1.89	1.23	-1.06	2.20	-4.60	0.80
Kurtosis	4.13	1.66	1.00	4.30	-1.81	0.51

(table continues)

Table 1, continued

Measure	7	8	9	10	11
7. Partner Status	1.000				
8. Sexual Orientation	.072	1.000			
9. Self-Esteem (SE)	.130	.054	1.000		
10. Social Network (SN)	.174*	.026	-.003	1.000	
11. Social Support (SS)	.395***	-.001	.308***	.177*	1.000
12. Loneliness	-.341***	-.071	-.536***	-.243**	-.703***
13. Psych. Distress	-.045	-.080	-.546***	-.070	-.335***
14. Quality of Life	.238**	.036	.507***	.061	.511***
15. Life Satisfaction	.325***	-.023	.529***	.139	.512***
M	0.49	0.42	5.06	14.16	5.27
SD	0.50	0.50	1.58	13.55	1.27
Skewness	0.03	0.31	-0.89	1.47	-0.71
Kurtosis	-2.02	-1.92	0.09	1.32	0.22

(table continues)

Table 1, continued

Measure	12	13	14	15
12. Loneliness	1.000			
13. Psych. Distress	.565***	1.000		
14. Quality of Life	-.680***	-.623***	1.000	
15. Life Satisfaction	-.650***	-.514***	.723***	1.000
M	2.171	1.844	2.943	4.736
SD	.503	.781	.543	1.520
Skewness	.320	1.449	-.734	-.696
Kurtosis	-.064	1.444	.329	-.456

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2

Univariate Results from the Hierarchical Multivariate Regression: Unstandardized Regression Weights

Step/Predictor	Psychological Distress			Quality Of Life		
	1	2	3	1	2	3
Step 1: Minority Stress						
Ageism	.312**	.368**	.374***	-.141	-.133	-.193*
Heterosexism	.182*	.187*	.136*	-.166**	-.210***	-.121*
Outness	.033	.052	.058	.026	-.003	-.019
Inter. Homon. (IH)	.184**	.155*	.135**	.032	.033	.036
Step 2: Demographics						
Gender		-.167	-.086		.018	-.049
Age		-.017*	-.009		.008	.003
Partner Status		-.235*	.027		.367***	.097
Sexual Orientation		-.071	-.049		.007	.008
Step 3: Moderators						
Self-Esteem (SE)			-.221***			.132***
Social Network (SN)			-.003			.000
Social Support (SS)			-.076			.128***
Ageism*SE			-.098			.013
Ageism*SN			-.003			-.007
Ageism*SS			.009			-.033
Heterosexism*SE			-.075			-.017
Heterosexism*SN			.009*			-.004
Heterosexism*SS			-.046			.073
Outness*SE			.002			-.009
Outness*SN			.000			-.001
Outness*SS			-.031			.004
IH*SE			.017			-.019
IH*SN			-.001			-.005
IH*SS			.083*			-.045
Univariate R^2	.22***	.28***	.57***	.12***	.22***	.52***

(table continues)

Table 2, continued

Step/Predictor	Life Satisfaction 1	Life Satisfaction 2	Life Satisfaction 3	Loneliness 1	Loneliness 2	Loneliness 3
Step 1: Minority Stress Predictors						
Ageism	-.343	-.393	-.446*	.130	.125	.092
Heterosexism	-.088	-.205	.063	.055	.147**	.041
Outness	.065	-.024	-.111	.269	.005	.039*
Internal. Homon.	.018	.038	.096	.255	.038	.020
Step 2: Demographics						
Gender		.233	.122		-.092	-.064
Age		.039**	.019		-.013**	-.004
Partner Status		1.230***	.417		-.443***	-.122*
Sexual Orientation		-.165	-.135		-.028	-.039
Step 3: Moderators						
Self-Esteem			.402***			-.107***
Social Network			.010			-.005**
Social Support			.342***			-.195***
Ageism*SE			-.070			.064
Ageism*SN			-.003			-.006
Ageism*SS			.248			-.047
Heterosexism*SE			-.055			-.031
Heterosexism*SN			-.011			.001
Heterosexism*SS			-.012			.033
Outness*SE			.011			-.006
Outness*SN			-.009			.003
Outness*SS			.042			.000
IH*SE			-.102			-.005
IH*SN			-.019*			.007**
IH*SS			.059			-.008
Univariate R^2	.03	.19***	.52***	.10**	.29***	.70***

* $p < .05$. ** $p < .01$. *** $p < .001$.

Appendix A

Study Recruitment Advertisement

Dear Participant,

My name is Bethany Perkins, M.Ed., and I am a doctoral candidate in the Counseling Psychology program at Lehigh University, under the guidance of Grace I. L. Caskie, Ph.D. I am working on a research project examining the wellbeing of lesbian, gay, and bisexual (LGB) older adults. The survey will take approximately 20-30 minutes to complete. I hope that this study will bring to light the unique experiences of LGB older adults while also informing future research and clinical practice. As a thank you for participating in this study, you will have an opportunity to receive one of two $25 Amazon gift cards that will be given to the 20th and 40th people who complete the survey. Your involvement is crucial for the success of this study, and I hope that you will participate.

In order to participate, you must:

a) *Be 50 years of age or older*

b) *Identify your sexual orientation as anything other than heterosexual/straight*

c) *Live either independently or in assisted living*

If you meet these criteria and are interested in participating, please click the following link or copy and paste it into your browser to complete the online survey: (link).

Thank you kindly for your interest and participation. If you have questions about this study, please contact Bethany Perkins at blp209@lehigh.edu or Grace Caskie at caskie@lehigh.edu. This research has been approved by the Lehigh University Institutional Review Board (Number).

Sincerely,
Bethany Perkins, M.Ed.

Appendix B

Participant Informed Consent

Consent Form
Exploring Minority Stress: Ageism, Heterosexism, and Social Support in the Sexual Minority Older Adult Population

You are invited to be in a research study of the well-being of older adults who identify as non-heterosexual. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Bethany L. Perkins, M.Ed., Counseling Psychology doctoral candidate at Lehigh University, under the direction of Grace I. L. Caskie, Ph.D., Counseling Psychology associate professor at Lehigh University.

Background Information

The purpose of this study is to explore the unique experiences of older lesbian, gay, and bisexual (sexual minority) adults and their well-being. You were invited to participate in this study based on your association with databases, groups, listservs, or events related to sexual minorities and/or older adults.

Procedures

If you agree to be in this study, we would ask you to fill out a 119-item questionnaire that will ask for some personal information (e.g., age, sex, partner status), information about your social experiences, and your general well-being. This questionnaire will take approximately 20-30 minutes to complete.

Risks and Benefits of Participation

We estimate that the potential risks for participating in this study are minimal. However, you may experience some psychological discomfort when answering questions about your personal life, social habits, and psychological well-being. Also, some questions may ask you to think about difficulties you have experienced in the past (e.g., experiences of discrimination), which may cause additional discomfort.

It is not anticipated that you will receive any direct benefits from participating in the study. Nevertheless, your participation in this research will help the investigators better understand the needs of sexual minority older adults to inform clinical care, policies, and future research for this population.

Compensation

As a thank you for participating in this study, you have an opportunity to receive one of two $25 Amazon gift cards that will be given to the 20th and 40th people who complete the survey.

Confidentiality

The records of this study will be kept confidential and any information collected through this research project that personally identifies you will not be voluntarily released or disclosed without your separate consent, except as specifically required by law. If you choose to disclose your contact information to be included in the gift card opportunity, this information will be kept separate from your survey data. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records. Information about you will be electronically coded and your name will not appear on the questionnaire, as you will be assigned a unique numeric identification code.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Lehigh University. If you do decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

The researchers conducting this study are: Bethany L. Perkins, M.Ed. and Grace I. L. Caskie, Ph.D. You may ask any questions you may have now (if in person) or via email or phone:

Bethany Perkins: blp209@lehigh.edu
Grace Caskie: caskie@lehigh.edu, 610-758-6094

If in person, you will be given a copy of this information to keep for your records, or if online, please print a copy for your records.

Statement of Consent

If completing online, by clicking "I accept," or if in person, by signing below, I am indicating that I have read the above information. I have had the opportunity to ask questions and have my questions answered. I consent to participate in the study.

Signature:_______________________________________ Date:________________

Signature of Investigator:____________________________ Date:________________

Appendix C

Demographic Survey

1. What is the time? __:__

2. What is your age? ____

3. What is your biological sex?

    a. Female

    b. Male

    c. Intersex

4. At which point on a continuum most accurately reflects how you describe your gender identity?

0	1	2	3	4	5	6
Exclusively Male			Equally Male and Female			Exclusively Female

5. How do you describe your ethnicity?

    a. African American/Black

    b. Asian/Indian Subcontinent

    c. Caucasian/White

    d. Hispanic/Latino/a

    e. Native American

    f. Pacific Islander

    g. Biracial or Multiracial

    h. Other – please specify:____________________

6. Which of the following options best describes your yearly income at present:

    a. Less than $10,000

    b. $10,001-20,000

c. $20,001-30,000

d. $30,001-40,000

e. $40,001-50,000

f. $50,001-60,000

g. $60,001-70,000

h. $70,001-80,000

i. $80,001-90,000

j. $90,001-100,000

k. More than $100,000

7. Which of the following best reflects your highest degree of education:

   a. Elementary or middle school

   b. Some high school

   c. High school diploma

   d. GED

   e. Some college

   f. Associate's or technical degree

   g. Bachelor's degree

   h. Graduate or professional degree

8. Which of the following best describes your current cohabitation status:

   a. Living with legally married spouse

   b. Living with domestic/civil union partner

   c. Living with partner – no legal recognition

   d. Living apart from married spouse/registered partner

   e. Not currently in a cohabitating relationship

9. Which of the following best describes your current marital status:

a. Now legally married

b. In a legalized civil union/domestic partnership

c. In a committed relationship with no legal recognition

d. Divorced

e. Separated

f. Widowed

g. Not currently in a committed relationship

10. Do you live in a state that currently allows legally recognized same-sex marriage?

a. Yes

b. No

c. I don't know

11. At which point on a continuum most accurately reflects who you are attracted to *in general*?

0	1	2	3	4	5	6
Exclusively the opposite sex			Equally individuals of both sexes			Exclusively the same sex

12. At which point on a continuum most accurately reflects who you are attracted to *physically*?

0	1	2	3	4	5	6
Exclusively the opposite sex			Equally individuals of both sexes			Exclusively the same sex

13. At which point on a continuum most accurately reflects who you are attracted to *emotionally*?

0	1	2	3	4	5	6
Exclusively the opposite sex			Equally individuals of both sexes			Exclusively the same sex

14. At which point on a continuum most accurately reflects with whom you have most recently had physical sexual activity?

0	1	2	3	4	5	6
Exclusively the opposite sex			Equally individuals of both sexes			Exclusively the same sex

15. If applicable, at what age did you disclose your sexual orientation to close family or friends: _____

16. If applicable, at what age did you begin disclosing your sexual orientation to others outside close family or friends: ____

Appendix D

Edited version of The Ageism Survey
(Palmore, 2000; permission to use scale given by author)

Please select the number that shows how often you have experienced that event. “Age” means older age.

0 = Never
1 = Event happened once in a while (less than 10% of the time)
2 = Event happened sometimes (10-25% of the time)
3 = Event happened a lot (26-49% of the time)
4 = Event happened most of the time (50-70% of the time)
5 = Event happened almost all of the time (more than 70% of the time)

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix E

Heterosexist Harassment, Rejection, and Discrimination Scale
(Szymanski, 2006; permission to use scale given by the author)

Please think carefully about your life as you answer the questions below. If the way you identity your sexual orientation does not fit with the options of gay/lesbian/bisexual, please switch "gay/lesbian/bisexual" with your chosen identity in your mind when reading each item. Read each question and then circle the number that best describes events in the PAST YEAR, using these rules.

- **Circle 1**—If the event has NEVER happened to you
- **Circle 2**—If the event happened ONCE IN A WHILE (less than 10% of the time)
- **Circle 3**—If the event happened SOMETIMES (10–25% of the time)
- **Circle 4**—If the event happened A LOT (26–49% of the time)
- **Circle 5**—If the event happened MOST OF THE TIME (50–70% of the time)
- **Circle 6**—If the event happened ALMOST ALL OF THE TIME (more than 70% of the time)

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix F

Outness Inventory
(Mohr & Fassinger, 2000; used by permission, see http://mason.gmu.edu/~jmohr/measures.html)

Use the following rating scale to indicate how open you are about your sexual orientation to the people listed below. Try to respond to all of the items. If an item does not apply to you, please choose "0."

1 = person definitely does NOT know about your sexual orientation status
2 = person might know about your sexual orientation status, but it is NEVER talked about
3 = person probably knows about your sexual orientation status, but it is NEVER talked about
4 = person probably knows about your sexual orientation status, but it is RARELY talked about
5 = person definitely knows about your sexual orientation status, but it is RARELY talked about
6 = person definitely knows about your sexual orientation status, and it is SOMETIMES talked about
7 = person definitely knows about your sexual orientation status, and it is OPENLY talked about

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

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix G

Internalized Homonegativity Subscale of the Lesbian, Gay, and Bisexual Identity Scale
(Mohr & Kendra, 2011; permission to use scale granted in original publication)

For each of the following questions, please mark the response that best indicates your current experience as an LGB person. Please be as honest as possible: Indicate how you really feel now, not how you think you should feel. There is no need to think too much about any one question. Answer each question using the following scale according to your initial reaction and then move on to the next.

1 = Strongly disagree
2 = Disagree
3 = Disagree somewhat
4 = Agree somewhat
5 = Agree
6 = Strongly agree

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix H

Multidimensional Scale of Perceived Social Support
(Zimet, Dahlem, Zimet, & Farley, 1988; scale available in public domain, see
http://www.parqol.com/page.cfm?id=123)

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement. The word "family" should describe whomever you consider to be part of your family at present.

1 = **Very Strongly Disagree**
2 = **Strongly Disagree**
3 = **Mildly Disagree**
4 = **Neutral**
5 = **Mildly Agree**
6 = **Strongly Agree**
7 = **Very Strongly Agree**

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix I

Sexual Minority and Older Adult Within-Group Social Network Assessment
(Based on Kuyper & Fokkema, 2010)

1. Do you have regular contact (at least once per month) with other adults 50 years of age or older who also who identify as non-heterosexual (i.e., other gay, lesbian, or bisexual individuals)?

Yes No

1a. If so, with how many different non-heterosexual individuals do you have regular contact? _____

Appendix J

Single-Item Self Esteem Scale
(Robins, Hendin, & Trzesniewski, 2001; used with permission, see http://www.bsos.umd.edu/socy/research/rosenberg.htm)

Please respond to the following statement.

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix K

The UCLA Loneliness Scale
(Version 3; Russell, 1996; used with permission from the author)

The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by choosing the appropriate response:

1 = **Never** 2 = **Rarely** 3 = **Sometimes** 4 = **Always**

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix L

Satisfaction with Life Scale
(Diener, Emmons, Larsen, & Griffin, 1985; permission to use scale granted at http://internal.psychology.illinois.edu/~ediener/SWLS.html)

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree
- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix M

Quality of Life – Alzheimer's Disease (QOL-AD) Survey
(Logsdon et al., 1999, 2002; used with permission from first author)

Please consider each item as it relates to your quality of life. Then rate your current situation, as you see it, using one of the four response choices (poor, fair, good, excellent).

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

Appendix N

Kessler Psychological Distress Scale
(Kessler et al., 2003; used with permission, see
http://www.hcp.med.harvard.edu/ncs/k6_scales.php)

Please use this scale to respond to the following items:

1 = **None of the time**
2 = **A little of the time**
3 = **Some of the time**
4 = **Most of the time**
5 = **All of the time**

Copyrighted text removed from this page by the dissertation author.

See original article for the scale text.

BETHANY PERKINS DETWILER, M.ED.

217 Prairie Court
Quakertown, Pennsylvania 18951
(856) 343-9582
blp209@lehigh.edu

EDUCATION

Lehigh University, Bethlehem, PA
Ph.D. Counseling Psychology (APA-Accredited)
Degree expected September 2015
Dissertation: *Minority Stress and Sexual Minority Older Adults: Ageism, Heterosexism, and Quality of Life*

Lehigh University, Bethlehem, PA
M.Ed. Counseling and Human Services 2011

Allegheny College, Meadville, PA
B.S. Psychology, *Magna Cum Laude* 2009
Minor in English

James Cook University, Townsville, QLD, Australia
Semester Study Abroad 2007
Psychology and Australian Anthropology

AWARDS AND HONORS

Lehigh University Graduate Student Senate, Travel Grant 2010, 2011, 2012, 2014

Lehigh University College of Education, Travel Grant 2010, 2011, 2012, 2014

PPAGS Community Service Project Award, Competition Winner 2013

Allegheny College Psychology Department, Honors Thesis Award 2009

CLINICAL AND SUPERVISORY EXPERIENCE

College Counseling Centers

University of Pennsylvania, Philadelphia, PA
Predoctoral Intern 08/14 – Present
Supervisor: Michele Downie, Ph.D.

- Manage a caseload of 12-15 undergraduate and graduate students for individual therapy
- Co-lead a weekly interpersonal growth process therapy group
- Assist in the development and analysis of a campus-wide crisis-prevention program
- Provide weekly supervision to a doctoral student extern
- Provide formal case presentations to multidisciplinary treatment team

- Attend weekly seminar trainings focused on multiculturalism and social justice

University of Pennsylvania, Philadelphia, PA
Practicum Student Therapist 09/11 – 05/12
Supervisors: Margaret Fichter, Ph.D. and Batsirai Bvunzawabaya, Ph.D.

- Managed a caseload of 5-6 undergraduate and graduate students for individual therapy
- Co-led a process psychotherapy group for female students struggling with eating issues
- Provided formal case presentations to colleagues
- Served as a member of an interdisciplinary team of mental health professionals
- Received in-depth training in multicultural issues

Kutztown University, Kutztown, PA
Practicum Student Therapist 09/10 – 05/11
Supervisor: Lisa Coulter, Ph.D.

- Provided short- and long-term individual psychotherapy to undergraduate students
- Conducted initial assessments for new clients
- Administered and scored outcome assessments to track client progress
- Provided formal case presentations to colleagues
- Received weekly training in issues related to theoretical conceptualization and skills

Community, Private Practice, and Partial Hospital Programs

Community Voices Clinic, Bethlehem, PA
Program Coordinator/Supervisor 08/12 – 06/14
Supervisor: Arpana Inman, Ph.D.

- Launched and co-ran a school-based community mental health clinic
- Marketed the clinic to the local community and schools as an administrator
- Provided free therapy services to local Bethlehem children and families in need
- Provided four hours of supervision weekly for six Master's-level counseling students
- Developed multiculturally-informed outreach programming in the local community
- Worked with local agencies for outreach programming and therapy services
- Developed confidentiality agreements and other documentation

Dr. Robert M. Gordon's Private Practice, Allentown, PA
Practicum Student in Forensic Assessment 05/13 – 08/13
Supervisor: Robert M. Gordon, Ph.D.

- Conducted assessments for custody hearings, competency to stand trial, and lawsuits
- Scored assessments and wrote full assessment reports
- Completed document reviews and summaries for personal injury claims
- Assisted in research related to the Psychodynamic Diagnostic Chart

Lenape Valley Foundation, Doylestown, PA
Practicum Student Therapist 08/12 – 07/13
Supervisor: Philip Braun, Ph.D.

- Provided group therapy in an acute partial hospital or transitional outpatient program
- Ran process psychotherapy and psycho-educational groups
- Maintained an individual therapy caseload
- Developed and maintain treatment plans for clients
- Completed progress notes, billing forms, and other case management responsibilities

Lehigh University, Bethlehem, PA
Doctoral Seminar in Supervision 09/11 – 05/12
Supervisor: Arpana Inman, Ph.D

- Supervised four Master's students from Counseling and International programs
- Provided supervision to students working in Asia through online webcam sessions
- Supervised students working in community, partial hospital, and school settings
- Co-led weekly group supervision of four first-year Master's students

OTHER PROFESSIONAL EXPERIENCE

Lehigh University, Bethlehem, PA
Graduate Assistant 08/09 – 05/10
Supervisor: Grace Caskie, Ph.D.

- Assisted with research, publications, conference presentations, and class preparation
- Managed the Ph.D. admissions process for incoming doctoral students

Active Aging, Inc., Meadville, PA
Community Senior Center Manager 08/05 – 07/09

- Planned and organized creative, stimulating events at a local senior community center
- Organized public transportation and daily meals for the center visitors

Child to Family Connections, Meadville, PA
Child Mentor 05/08 – 10/08

- Mentored a local child facing emotional and behavioral challenges
- Focused on behavioral modification, emotional expression, and life skill development

Bethesda Children's Home, Meadville, PA
Child Care Counselor 05/08 – 10/08

- Provided behavioral interventions to adolescents at a youth placement center
- Co-led group therapy activities
- Hired out of student internship

Bethesda Children's Home, Meadville, PA
Student Psychotherapy Intern 01/08 – 05/08

- Administered diagnostic assessments for adolescents at a youth placement center
- Participated in therapy sessions and designed treatment plans

RESEARCH EXPERIENCE

Lehigh University, Bethlehem, PA
Research Assistant 01/13 – 06/14
Supervisor: Arpana Inman, Ph.D.

- Utilized participatory action research to give a voice to underserved populations
- Worked on a qualitative research team studying the mental health needs of Bethlehem
- Encouraged local community members to be active participants in research
- Organized and ran focus groups with local residents and school staff to collect data

University of Albany, Bethlehem, PA
Research Team Member 01/13 – 6/13
Supervisor: Michael Ellis, Ph.D.

- Worked on a team performing a meta-analysis of counseling supervision research
- Critiqued articles and provide feedback on study findings
- Examined statistical and research design rigor and report threats to validity or reliability

Center for Adolescent Research in Schools (CARS; Grant: 13580-FA84), Lehigh University, Bethlehem, PA
Mental Health Facilitator/Graduate Assistant 02/11 – 06/12
Supervisors: Lee Kern, Ph.D. and Talida State, Ph.D.

- Worked on a national grant funded by the Department of Education
- Tested a set of interventions for students with Emotional or Behavioral Disorders
- Conducted group therapy focused on anxiety, depression, and social skills
- Administered psychological and intellectual assessments of adolescents and adults

Lehigh University, Bethlehem, PA
Research Apprentice 09/10 – 08/11
Supervisor: Grace Caskie, Ph.D.

- Assisted with research on the distribution of medications in a sample of older adults
- Researched and coded a set of prescription medications for use in statistical analyses
- Provided assistance with data cleanup and analysis

PUBLICATIONS

Gordon, R., Stoffey, R. & **Perkins, B. L.** (2013). Comparing the sensitivity of the MMPI-2 Clinical Scales and the MMPI-RC Scales to clients rated as psychotic, borderline or neurotic on the Psychodiagnostic Chart. *Psychology, 4*(9A1), 12-16. doi: 10.4236/psych.2013.49A1003

DeBlaere, C. & **Perkins, B. L.** (2013). Workplace Sexual Identity Management Measure (A Review). In C. Wood and D. G. Hays (Eds.) *A counselor's guide to career assessment instruments* (6th ed). Broken Arrow, OK: National Career Development Association.

Perkins, B. L. & Caskie, G. I. L. (2012). Predicting Interpersonal Trust and Post-Traumatic Stress Disorder Symptoms Following Hurricane Katrina. (Unpublished doctoral qualifying project).

Perkins, B. L. (2008). The relationship between parental divorce and adult children's feelings toward intimacy. (Unpublished undergraduate honors thesis).

PRESENTATIONS

Detwiler, B. P. & Caskie, G. I. L. (2014, November). *Minority Stress and Sexual Minority Older Adults: Ageism, Heterosexism, and Quality of Life.* Paper presented at the annual meeting of the Gerontological Society of America, Washington, D.C.

Inman, A.G., **Perkins, B. L.**, Kwon, O., & Vogler, W. (2014, October). *Addressing Latina/o Mental Health Disparities through School Based Services.* Paper presented at the National Latino/a Psychological Association Biennial Conference, Albuquerque, NM.

Inman, A. G., **Perkins, B. L.**, Kwon, O., & Vogler, W. (2014, March). *Addressing Youth Mental Health Disparities through School Based Services*. Symposium presented at the Society for Research in Child Development Special Topic Meeting, Alexandria, VA.

Inman, A. G. & **Perkins, B. L.** (2013, August). *School-Based Mental Health Clinics.* Roundtable presented at the annual meeting of the American Psychological Association, Honolulu, HI.

Perkins, B. L. & Caskie, G. I. L. (2012, August). *Interpersonal Trust and PTSD Symptoms Moderated by Hurricane Katrina-Related Distress*. Poster presented at the annual meeting of the American Psychological Association, Orlando, FL.

Perkins, B. L. & Caskie, G. I. L. (2011, November). *Predicting PTSD Symptoms, Trust, and Life Satisfaction Following Hurricane Katrina*. Poster presented at the annual meeting of the Gerontological Society of America, Boston, MA.

Caskie, G. I. L., **Perkins, B. L.**, & DeBlaere, C. (2010, November). *Acculturation and self-esteem for older Mexican Americans: Differences by ethnic self-identification*. Paper presented at the annual meeting of the Gerontological Society of America, New Orleans, LA.

Caskie, G. I. L., Margrett, J. A., Bremer, J. D., & **Perkins, B. L.** (2009, November). *Objective and subjective health as predictors of daily functioning of Hispanic older adults.* Poster presented at the annual meeting of the Gerontological Society of America, Washington, DC.

CERTIFICATIONS AND TRAININGS

Certified Positive Discipline Parenting Educator 2013
Positive Discipline Association

Training, Recognizing and Reporting Child Abuse 2013
Pennsylvania Family Support Alliance

PPF Ethics Workshop, "Ethical Issues in Diagnosing a Person: Review of the DSM-5, ICD-10, and the PDM" 2013
Robert Gordon, Ph.D. and Alan Tjeltveit, Ph.D.

PPF Ethics Workshop, "The Birth of Countertransference as an Ethics Issue With Scenes from the Recent Film 'A Dangerous Method'" 2012
Robert Gordon, Ph.D. and Alan Tjeltveit, Ph.D.

Training, "Human Trafficking in PA Communities: Indicators, Outreach, and Response 2012
Pennsylvania Coalition Against Rape

Training Course in Protecting Human Research Participants 2009
National Institutes of Health Office of Extramural Research

TEACHING EXPERIENCE

Lehigh University, Bethlehem, PA
Teaching Assistant 01/14-05/14
Graduate Course: Helping Skills
Professor: Chris Liang, Ph.D.

- Lectured on counseling theory and techniques for Master's students in counseling
- Provided direct supervision of weekly small-group role play counseling sessions

Lehigh University, Bethlehem, PA
Teaching Assistant 01/12 – 05/12
Graduate Course: Theory and Practice of Group Counseling
Professor: Bruce Sharkin, Ph.D.

- Lectured on theories of group counseling and led role plays of group counseling skills
- Developed lesson plans, exams, and project assignments

PROFESSIONAL MEMBERSHIPS

American Psychological Association, **Student Affiliate** since 2009
Division 17: Society of Counseling Psychology
Division 20: Adult Development and Aging
Division 44: Lesbian, Gay, Bisexual, and Transgender Concerns

Gerontological Society of America, **Student Member** since 2009

Pennsylvania Psychological Association, **Student Member** since 2012

Psi Chi Psychology Honors Society, **Member** since 2006

SERVICE

Counseling Psychology Program
Student Representative, 2012 – 2014

College of Education Statistics and Research Faculty Member Search
Student Representative, 2012 – 2013

Pennsylvania Psychological Association of Graduate Students Community Service Project
Coordinator, Winter 2013

Lehigh University Graduate Student Senate
Program Representative, 2010 – 2011

LGBTQIA Retreat, Lehigh University
Counselor, Fall 2011

St. Bernard Project, New Orleans, LA
Home Builder, Fall 2010

Allentown Women's Center, Allentown, PA
Patient Escort, Summer 2010