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Trans*forming understanding of sexual orientation and gender variant minorities: Testing the minority stress model with a diverse sample

by

Karen Elaine Bittner

A dissertation submitted to the graduate faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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for Sasha and Sam

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ABSTRACT

Over the decades, researchers and people in general have elaborated on distinctions regarding sexual orientation minorities. What was once classified as "homosexual" now distinguishes between gay men, lesbians, bisexual, and asexual individuals. Sexual orientation minorities experience unique stressors that negatively impact their psychological and physical health. Minority stressors, including perceptions that one's sexual orientation is stigmatized, internalized prejudicial attitudes about one's sexual orientation, and experiencing first-hand discrimination or violence as a result of one's sexual orientation can all contribute to greater distress.

While these associations have begun to be explored for sexual orientation minorities, less is known about these similar effects for transgender individuals. In more recent years, transgender has been used to describe those whose gender identity, or perception of the self as male or female, is inconsistent with their assigned sex or those whose appearance and behavior are not consistent with gender expectations. Early research defined transgender individuals with clinical samples of transsexual individuals; other studies defined transgender individuals as having a gender identity that is inconsistent with their sex assigned at birth. The current study defines transgender as a more inclusive, "umbrella" term that represents multiple subgroups, including gender incongruent individuals, such as transsexual individuals, and gender nonconforming individuals, including cross-dressers, drag queens, drag kings, genderqueer, and gender fluid individuals. Reports of shockingly high rates of distress in transgender populations—rates of suicide ideation as high as 70%—call for greater understanding of the underlying causes.

At this point in time, relatively little is known about the relative strength of associations between stressors—those that are specific to an identity—and distress for transgender, sexual orientation minority, and heterosexual and cisgender (non-transgender) people. The present study found that transgender individuals experienced the highest levels of minority stressors, followed by sexual orientation minorities; heterosexual and cisgender people reported the lowest levels. While transgender individuals experienced the strongest association between experiences with discrimination and violence and physical distress, sexual orientation minorities experienced the strongest association between internalized prejudice and distress. Not surprisingly, heterosexual and cisgender participants experienced the weakest associations between all minority stressors and distress.

This study also considered potential moderating variables, including perceptions of social support and the degree to which one's identity has been shared with others (outness). While outness was a significant moderator for transgender participants, buffering the associations between internalized prejudice and distress, it was not effective for other groups. Social support buffered the associations between perceptions of identity stigma and distress for heterosexual and cisgender participants and it buffered associations between perceptions of identity stigma and physical distress for sexual orientation minorities. Surprisingly, social support amplified the association between internalized prejudice and physical distress for sexual orientation minorities.

These findings advance toward the goal of understanding the relative prevalence of minority stressors for people who identify as sexual orientation or gender identity

minorities and the very real impact these stressors can have on minorities' psychological and physical well-being.

CHAPTER I. INTRODUCTION

Imagine you are boarding a bus to begin a journey. You are weighed down with luggage and are eager to drop your bags, take a seat, and relax. You finally take a seat by the window in order to watch the scenery. As other passengers begin to fill the bus, you notice that few make eye contact with you, and all are passing by the available seat next to you. You may wonder why the others are avoiding you and you may begin to feel somewhat distressed. If you are a member of the social majority, whether defined by race, gender, or sexual orientation, the other passengers' behavior may seem unusual to you. If you are a member of a social minority, you may attribute the other passengers' behavior to prejudice or discrimination. What message does this kind of treatment send, and what might be some consequences of the other passengers' treatment? You may wonder what about you is undesirable—is it something about your appearance? Your mannerisms? With an accumulation of these experiences, you may begin to notice long-term psychological distress.

Researchers have been interested in exploring the negative effects of various stressors on mental and physical well-being for decades. In general, the life stress and health paradigm (Ensel & Lin, 1991; Lin & Ensel, 1989) describes the negative impact that a range of stressors can have upon mental and physical well-being. For many members of minority groups, experiences such as the one described above are common and may be a result of their minority group membership (e.g., racial or ethnic minorities or sexual orientation minorities). For sexual orientation minorities, minority status is associated with a greater risk for depression (Cochran & Mays, 2000; Gonzalez, 2008; Kozee, Tylka, & Bauerband, 2012; Mickelson, 2001; Zamudio, 2005), for anxiety

(Bostwick, Boyd, Hughes, & McCabe, 2010), panic attacks (Cochran & Mays, 2000), and for drug and alcohol use and dependence (Cochran, Keenan, Schober, & Mays, 2000). Perhaps most concerning, some minority youth are at risk for suicidal ideation and suicide (Almeida, Johnson, Corliss, Molnar, & Azrael, 2009; Liu & Mustanski, 2012; Russell & Joyner, 2001). Rates of suicidal ideation and suicide attempts for sexual orientation minority (lesbian, gay, bisexual, and asexual) and gender variant (transgender) youth and adults are multiple times the rates typically occurring in the general population; in some research samples, sexual orientation minority and gender variant participants report rates of suicidal ideation as high as 50 or 70 percent (Terada et al., 2011; Xavier, Honnold, & Bradford, 2007), well above rates of suicidal ideation in the United States population (3.9% of adults, Substance Abuse and Mental Health Services Administration, 2014).

Building on the life stress and health tradition (e.g., Ensel & Lin, 1991; Lin & Ensel, 1989; Turner & Roszell, 1994), the minority stress model provides a theoretical explanation for the relationship between minority identity and distress by describing how stressors that are unique to minorities impact psychological and physical distress (Frost & Meyer, 2009; Meyer, 1995, 2003). The minority stress model has been applied to racial minorities, including Asian international undergraduate students (Wei, Heppner, Ku, & Yu-Hsin Liao, 2010) and African Americans (Williams, Yu, Jackson, & Anderson, 1997). The model has also been applied to some sexual orientation minority groups (e.g., Meyer, 1995, 2003). These groups all experience unique stressors pertinent to their identities; this idea can be generalized to other minority groups, including asexual and transgender individuals. Transgender individuals have typically been characterized by a

discrepancy between sex assigned at birth and gender identity (Byne et al., 2012;
National Center for Transgender Equality, 2014); gender identity is defined as the psychological sense of being male or female (Steensma, Kreukels, de Vries, & Cohen-Kettenis, 2013). Using this definition, a transgender individual who was assigned male at birth may psychologically identify as a female, or an assigned female may identify as a male. This characteristic has been termed *gender incongruence* (Van Caenegem et al., 2015). More recently, the transgender label has also included people who engage in gender nonconforming behaviors (National Center for Transgender Equality, 2014); gender nonconforming behaviors do not conform to stereotypical expectations. This more recent addition can be termed *gender nonconformity*.

Having a minority identity, including a sexual orientation minority identity or transgender identity, may be associated with unique stressors. Researchers have identified four potential minority stressors that face racial, ethnic, sexual orientation, and gender variant minorities: perceived stigma of group membership, internalized prejudicial attitudes regarding the group membership, experiences with discrimination or violence—the behavioral enactment of others' prejudicial attitudes toward those groups or characteristics, and the degree to which an individual has self-disclosed their minority status (outness). Originally exploring these effects for gay men, Meyer (1995) illustrated that the presence of these stressors increase psychological distress. Later studies included additional sexual orientation minorities, lesbians and bisexuals; Meyer (2003) reported similar effects of stressors on distress for these new populations. Although we are learning more about the impact of minority stressors on psychological distress for lesbians, gays, and bisexuals, we still know relatively little about the effects of the four

minority stressors (Perceived Stigma, Internalized Prejudice, Experiences with Discrimination and Violence, and outness) on psychological distress for those in the transgender community. Our general hypothesis is that transgender individuals will experience minority stressors to a greater degree than we have previously seen among sexual orientation minorities. This discrepancy will result in higher psychological distress for transgender individuals compared to sexual orientation minorities.

As sexual orientation minorities become increasingly visible in the media (Riggs, 2012) and as legislation in support of the sexual orientation minority community continues to pass in additional states, public attitudes toward sexual orientation minorities may become more accepting, or sexual orientation minorities may experience backlash. These social and legislative advances have not been as apparent for the transgender community. As a less-visible community, transgender individuals are likely aware of the greater stigma surrounding their group membership and any possible gender variant behaviors. Therefore, they may be less likely than other minority groups to publicly disclose their group membership to others, or "come out." This lack of visibility for the transgender community may result in greater ignorance about the characteristics and experiences of transgender individuals. Because social support has been found to help buffer the negative effects of stressors on psychological distress (Ensel & Lin, 1991; Lin & Ensel, 1989), this could have important consequences for transgender individuals.

The following chapters address some of these unknowns, including characteristics of sexual orientation and transgender individuals and the stressors they experience. Many terms that describe sexual orientation and gender variant groups are relatively new and are not well-understood. Chapter two will define important terms to provide a foundation

for the following chapters; this terminology will be used to describe the study sample. Chapter three describes the hypothesized associations between minority stressors and distress; it explains the minority stress model (Meyer, 1995, 2003) in detail, including its similarities to and differences from the life stress and health paradigm (Ensel & Lin, 1991; Lin & Ensel, 1989). Chapter four outlines the method for applying the minority stress model to a diverse sample, including lesbians, gay men, bisexuals, asexuals, and transgender people in addition to people who are heterosexual and cisgender.

This application of the minority stress model will measure similarities or differences in the strength of minority stressors and the magnitude of minority stressors on psychological and physical distress for various groups. We hypothesize that sexual orientation and gender variant minorities experience greater minority stressors than people who are heterosexual and cisgender. Within minority sexual orientation and transgender identity groups, transgender individuals likely experience greater minority stressors than sexual orientation minorities. Minority stressors will have a stronger association with psychological and physical distress for sexual orientation and gender variant minorities compared to people who are heterosexual and cisgender. Within minority sexual orientation and transgender identity groups, transgender individuals will report the strongest association between minority stressors and psychological and physical distress compared to sexual orientation minorities. The degree to which sexual orientation minorities and transgender people are out may influence the relationships between minority stressors and psychological and physical distress. Likewise, the quality and quantity of perceived social support may buffer the associations between minority stressors and psychological and physical distress.

CHAPTER II. MINORITY GROUP CLASSIFICATION

Sexual orientation is typically used to describe targets of sexual or romantic attraction, and gender variance describes variability in the way people think about themselves in terms of gender—their gender identity—and the gendered way people behave and present themselves—gender expression. Broadly, this study seeks to compare sexual orientation and gender variant minority individuals (lesbian, gay, bisexual, asexual, and transgender) to majority individuals (heterosexual and cisgender). Within minority groups, those with a minority sexual orientation (lesbian, gay, bisexual, or asexual) will be compared to gender variant (transgender) individuals.

Sexual orientation and gender variant groups may be less visible than other social groups, such as those defined by race or ethnicity. Because they are less visible, sexual orientation and gender variant minorities may not be as well-understood as the majority. In addition, the terminology associated with sexual orientation minorities and gender variant groups is evolving. Terminology has increased in precision and, necessarily, in complexity. Until the 1940s, non-majority groups, whether referring to sexual orientation or gender variance, were often lumped together in a single category. Transgender was synonymous with transsexual or homosexual (Unger, 2014). Since the 1940s, researchers and laypeople alike have made strides in differentiating between these terms. These differentiations began with refinements to terminology describing sexual orientation; more recently, efforts have begun to refine terminology that refers to gender variant groups. The first section in this chapter discusses sexual orientation groups, and the second section discusses gender variant groups. Each of the two sections provides a terminology history, definitions, etiology, and when available, prevalence estimates. The

conclusion of each section summarizes useful terminology referring to sexual orientation and gender variant groups and restates planned comparisons.

Sexual Orientation

Definitions of sexual orientation examine the overlap between assigned sex at birth (male or female) and attraction to other males and females. The earliest definitions of sexual orientation were dichotomous; people were considered either *heterosexual* (attracted to other-sex individuals) or *homosexual* (attracted to same-sex individuals; Ellis, 1936; Freud, 1922/1959) and sexual orientation was frequently determined by behavior. In addition to sexual behavior, Kinsey (1948, 1953) considered sexual thoughts and fantasies in the measurement of sexual orientation and measured the construct on a continuum. This unidimensional measurement acknowledged the existence of *bisexuality* (attraction to males and females) as the midpoint of the continuum (see Figure 1). Males who were attracted to males were defined as *gay men* and females who were attracted to females were defined as *lesbians*. Kinsey (1948, 1953) added an additional category, separate from the continuum, for people who had no sexual contacts with or sexual reactions to others (*asexuals*).

More recent definitions of sexual orientation separate attraction into two dimensions, attraction to men and attraction to women (Storms, 1980). This two-dimensional approach maintains the inclusion of asexuality; in addition, it allows for degrees of sexual orientation (asexuality, homosexuality, heterosexuality, and

X	0	1	2	3	4	5	6
No Sexual	Exclusively			Bisexual			Exclusively
Attraction	Heterosexual						Homosexual

Figure 1. Measuring sexual orientation with the Kinsey Scale (1948, 1950). Scoring: 1-5 = ranges of bisexuality; 3 = equivalent attraction to males and females.

bisexuality) rather than a strictly categorical approach (see Table 1). For example, a woman could report high attraction to men and moderate attraction to women (between heterosexual and bisexual), or a man could report very low attraction to men and low-to-moderate attraction to women (between asexual and heterosexual). Some individuals identify as *queer*; these individuals are not captured in Figure 1 or Table 1, as they do not feel that binary descriptions of assigned sex (male or female) adequately describe their sexual orientation.

Etiology. Two questions that often accompany discussions of sexual orientation are, What is the source of sexual orientation and What percent of the population is not heterosexual? Regarding the first question, a debate exists regarding the source of sexual orientation. Genetics may play an important role in determining sexual orientation; environmental influences may also influence sexual orientation. Evidence for either explanation has been mixed. Research exploring biological or genetic influences has focused on anatomy of the brain, such as the size of the anterior commissure (Allen &

Table 1
Sexual Orientation by Assigned Sex, Attraction to Women, and Attraction to Men

	Assigned Sex			
_	Male		Female	
_	Attraction to Women		Attraction to Women	
Attraction to Men	Low	High	Low	High
Low	Asexual	Heterosexual	Asexual	Lesbian
High	Gay man	Bisexual	Heterosexual	Bisexual

Gorski, 1992), which connects the two hemispheres and is involved in sexual behavior. Others have focused on genetic or chromosomal influences, specifically certain genes found on the X chromosome (e.g., Hamer, Hu, Magnuson, Hu, & Pattatucci, 1993; but see Bailey et al., 1999). Twin studies reveal three sources of influence: genetic influences, unique environmental influences (those not shared by twins), and shared environmental influences (Bailey et al., 1999; Långström, Rahman, Carlström, & Lichtenstein, 2010). Shared environmental influences are generally less influential, although some studies do report significant shared environmental influences for women but not men (Långström et al., 2010). Over time, findings regarding genetic and environmental influences on sexual orientation may help answer aspects of the nature-nurture debate. At this point in time, most researchers agree that sexual orientation is not a choice (Savin-Williams, 1988). Regardless of the etiology of sexual orientations, estimates of the prevalence of non-heterosexual orientations have remained fairly constant over time.

Prevalence. Estimates of the prevalence of sexual orientation minorities range from 1 to 10 percent of the population (Bird, Kuhns, & Garofalo, 2012; Kinsey, 1948, 1953; Remafedi, Resnick, Blum, & Harris, 1991); more specific estimates range from 3.5 percent to 8.2 percent of the United States population (Bird et al., 2012) and generally report larger proportions for women than men (e.g., Långström et al., 2010). Bogaert (2004) reports the prevalence rate for asexuality at approximately one percent of the population. Definitions and prevalence rates for sexual orientation groups that are based on sexual behavior may lead to underestimates of non-heterosexuality. Self-identification as a sexual orientation minority may not be associated with same-sex sexual behavior.

Those with no sexual experience typically do have a sexual orientation identity, and those who are attracted to same-sex others may not act on their impulses. Even individuals who engage in same-sex sexual behavior may not identify as a sexual minority, regardless of a single culture's definition of a sexual orientation minority (Meyer & Wilson, 2009). For example, some men who engage in sexual behavior with other men identify as heterosexual (Huber & Kleinplatz, 2002). Therefore, sexual behavior may not be the most reliable measure of sexual orientation. In addition to asking for self-identification with a sexual orientation or asking about sexual behavior, it is also important to ask individuals about their thoughts or fantasies.

Conclusion. Sexual orientation is often characterized by binary assigned sex and the presence or absence of attraction to same-sex and other-sex individuals. Males who are attracted to females and females who are attracted to males are characterized as heterosexual (see Table 1). Many males who are attracted to males (but not females) identify as gay, and many females who are attracted to females (but not males) identify as lesbian. Males and females who are attracted to both males and females are characterized as bisexual, and those who are attracted to neither males nor females are characterized as asexual. Some individuals may identify as queer if they do not identify with a binary description of sex or gender. In this study, sexual orientation comparisons will be made between heterosexual and non-heterosexual (lesbian, gay, bisexual, asexual, and queer) individuals.

Gender Variance

Gender variance is more complex than sexual orientation, and discussions regarding gender variance began more recently than discussions regarding sexual

orientation. Compared to terminology regarding sexual orientations, terminology regarding gender variant groups is less well-known and is still evolving. In order to define and differentiate between gender variant groups, it is important to first define the construct of gender in more detail, including how it differs from assigned sex. First, this section will differentiate between two often-conflated constructs: assigned sex and gender. Second, it will outline relevant components of gender. Third, two-dimensional definitions of gender will be compared to unidimensional definitions. Following the description of these methods of defining gender, the difference between the terms cisgender and transgender will be presented. This differentiation will also include a discussion of the marked variability within the transgender community. Because there is such variability within the transgender community, prevalence rates will first be presented for the group as a whole and then will be presented for each subgroup within the community.

Assigned sex and gender. Early definitions of gender often conflated assigned sex at birth with the social construction of gender. Many people assumed that assigned sex and gender identity were always consistent—that physical anatomy corresponded with psychological identity—and that assigned sex and gender expression were always consistent—that males were always masculine and females were always feminine. These early definitions have persisted to some degree. Even the title of the journal *Sex Roles*, which began publishing research articles in 1975, associates behaviors with assigned sex, not gender. Following the literary definition of gender (e.g., gendered pronouns), the online Merriam-Webster dictionary (2014) lists the definition of gender as *sex*.

Relevant components of gender. Gender is a complex construct that can be broken down into multiple components; variation in two of these components can be associated with a transgender identity: gender identity and gender expression. Gender identity is a persistent psychological sense of being a man, a woman, or both (Steensma et al., 2013; Van Caenegem et al., 2015). Children develop a sense of their gender identity as early as 24-31 months of age (Egan & Perry, 2001; Olson, Key, & Eaton, 2015). The most observable component of gender, gender expression, refers to aspects of appearance and behavior that may or may not conform to culturally stereotypical expectations for gender or assigned sex. Gender expression may include personality traits (e.g., assertiveness versus timidity) and clothing or appearance choices (e.g., pants versus skirts) stereotypically associated with gender. There is some evidence that gender expression may form in adolescence (Steensma et al., 2013). The majority of gender research has focused on gender expression; similar to sexual orientation, definitions of gender expression evolved from unidimensional measures to two-dimensional measures. Gender expression research has generally focused on personality trait dimensions and not appearance or clothing. Only very recently did researchers explore nonbinary measurement of gender identity.

Unidimensional measurement of gender expression. Some researchers measured gender expression by studying the degree to which individuals expressed their personality traits in a stereotypically feminine or masculine manner (e.g., Attitude Interest Analysis Survey, Terman & Miles, 1936). Similar to Kinsey's (1948, 1953) conceptualization of sexual orientation, Terman and Miles (1936) described gender expression on a unidimensional scale—scores ranged from feminine to masculine, with

the midpoint being equally feminine and masculine. According to early measurement tools such as the Attitude Interest Analysis Survey (Terman & Miles, 1936), it was not theoretically possible to be high on both femininity and masculinity.

Two-dimensional measurement of gender expression. Just as the measurement of sexual orientation was improved by reconceptualizing a unidimensional measure (heterosexual to bisexual to homosexual) as a two-dimensional measure, measurement of gender expression was also expanded to include two dimensions (Bem, 1974; Spence, Helmreich, & Stapp, 1975) and was reconceptualized to acknowledge the important distinction between assigned sex and gender expression. For example, Bakan (1966) termed the dimensions of gender expression *expressiveness* and *instrumentality*.

Expressiveness is defined as being affectionate, compassionate, gentle, sympathetic, aware of others' feelings, and emotional. Instrumentality encompasses behaviors like athleticism, independence, dominance, individualism, being interested in sex, acting like a leader, and being analytic (Bakan, 1966; Diehl, Owen, & Youngblade, 2004). Someone who listens to a friend's problems and offers emotional support would be expressive, while a college student who studies independently for many hours in order to receive the highest grade in class would be instrumental.

These more comprehensive, two-dimensional approaches recognized that people are frequently not only instrumental or expressive, but rather can simultaneously range from not instrumental to very instrumental and from not expressive to very expressive (see Table 2). Based on these two dimensions, individuals could be categorized as *expressive* (greater expressiveness and lower instrumentality), *instrumental* (greater instrumentality and lower expressiveness), or *androgynous* (high expressiveness and high

Table 2

Two-Dimensional Gender Expression of Personality Traits

	Instrumental			
Expressive	Low	High		
Low	Undifferentiated	Instrumental		
High	Expressive	Androgynous		

instrumentality). A fourth category of *undifferentiated* (Bem, 1981) was later added to reflect those who were low on expressiveness and instrumentality.

The two-dimensional measure of gendered personality traits can be extended to measure gendered appearance. Individuals with a feminine gender expression would have a stereotypically feminine appearance that does not include masculine aspects (e.g., long hair, make-up, a blouse, etc.). Those with a masculine gender expression would have a stereotypically masculine appearance that does not include feminine aspects (e.g., short hair and a three-piece suit, etc.). People with an androgynous appearance would show a combination of masculine and feminine aspects of appearance (e.g., short hair and a skirt). An undifferentiated appearance may include aspects that are not strongly associated with gender, such as unisex t-shirts.

Gender identity. Compared to the abundance of research studying gender expression, relatively less study has focused on gender identity. Only very recently did researchers develop a dimensional measure of gender identity (Van Caenegem et al., 2015); they acknowledged that individuals can be *gender congruent*, with corresponding assigned sex and gender identity (an assigned male with male gender identity, or an assigned female with female gender identity); *gender incongruent*, with an assigned sex

that is not consistent with gender identity (an assigned male with female gender identity, or an assigned female with male gender identity); or *gender ambivalent*, when an individual identifies as both male and female. Traditional definitions of a *transgender* identity have included gender incongruence as a correlate. As explained below, some individuals who are gender congruent may also identify as transgender if their gender expression does not conform to social expectations for assigned sex. Those who are gender ambivalent or *agender*, identifying with neither the male nor the female gender, may identify as transgender or *cisgender* (not transgender). Researchers have not had the opportunity to examine the intersection between transgender and agender or gender ambivalent gender identities.

Transgender. Transgender is currently used as an umbrella term to acknowledge a wide variety of gender variability. The prefix trans- has recently been used to refer to transcendence of binary definitions of sex or gender. Today, people with a transgender identity may include gender incongruent individuals, those whose gender identity does not correspond with their assigned sex; and gender nonconforming individuals, those whose appearance (e.g., hairstyle, clothing) and behavior does not fit traditional expectations for their assigned sex (Byne et al., 2012; Green, 2004). The overarching category of transgender can encompass multiple subgroups, including transsexual individuals, cross-dressers, drag queens and drag kings, genderqueer and gender fluid individuals, and those whose assigned sex is not clearly male or female at birth (National Center for Transgender Equality, 2014).

Gender incongruent individuals and those who are gender congruent but gender nonconforming are more likely to identify as transgender, while those who are gender

congruent and gender conforming are more likely to identify as *cisgender*. The newer term cisgender is used to describe those who are not transgender. Overall, prevalence rates for the inclusive transgender group may be as high as 1 in 100 (Olyslager & Conway, 2007). Incidence and prevalence estimates vary between the five subgroups described below and are provided when available. Tables 3, 4, and 5 show the intersection of assigned sex, gender identity, and gender expression for assigned males, assigned females, and those whose assigned sex was not clearly male or female at birth, respectively. Examples within the five transgender subgroups are linked to these three tables.

Transsexual individuals. Transsexual individuals differ from the rest of transgender individuals in that they are gender incongruent and are more likely to wish to seek medical (e.g., hormone treatment) and/or surgical assistance (e.g., sex reassignment surgery) in order to bring their physical sex in line with their psychological gender identity (but see Byne et al., 2012; Ekins & King, 2006; Nagoshi, Brzuzy, & Terrell, 2012; Valentine, 2007). This social and sometimes medical process is called *transitioning* (see Appendix A). The term MtF (male-to-female) represents individuals who were assigned the male sex at birth but who have a female gender identity (Kozee et al., 2012). The term FtM (female-to-male) represents individuals who were assigned female at birth but who have a male gender identity. Most studies report that MtFs are three times as prevalent as FtMs (e.g., Eklund, Gooren, & Bezemer, 1988).

Prevalence rates have increased along with greater acceptability and availability of gender identity clinics. In the late 1960s, the medical community estimated the prevalence of MtF transsexual individuals to be approximately 3.3 in 100,000; the

Table 3

Classification into Transgender Identity by Gender Identity and Gender Expression for Assigned Males

		Female Gender Identity			
		No		Yes	
		Feminine Gender Expression		Feminine Gender Expression	
Male Gender Identity	Masculine Gender Expression	Low	High	Low	High
No	Low	A ₁ : Undifferentiated assigned male with agender gender identity	A ₃ : Feminine assigned male with agender gender identity	C ₁ : Undifferentiated assigned male with incongruent gender identity	C ₃ : Feminine assigned male with incongruent gender identity
	High	A ₂ : Masculine assigned male with agender gender identity	A ₄ : Androgynous assigned male with agender gender identity	C ₂ : Masculine assigned male with incongruent gender identity	C ₄ : Androgynous assigned male with incongruent gender identity
Yes	Low	B ₁ : Undifferentiated assigned male with congruent gender identity	B ₃ : Feminine assigned male with congruent gender identity	D ₁ : Undifferentiated assigned male with ambivalent gender identity	D ₃ : Feminine assigned male with ambivalent gender identity
	High	B ₂ : Masculine assigned male with congruent gender identity	B ₄ : Androgynous assigned male with congruent gender identity	D ₂ : Masculine assigned male with ambivalent gender identity	D ₄ : Androgynous assigned male with ambivalent gender identity

Note. Descriptions in each cell list gender expression, assigned sex, and gender identity terms, in that order.

Table 4

Classification into Transgender Identity by Gender Identity and Gender Expression for Assigned Females

		Female Gender Identity				
		No		Yes		
		Feminine Gen	Feminine Gender Expression		Feminine Gender Expression	
Male Gender Identity	Masculine Gender Expression	Low	High	Low	High	
No	Low	E ₁ : Undifferentiated assigned female with agender gender identity	E ₃ : Feminine assigned female with agender gender identity	G ₁ : Undifferentiated assigned female with congruent gender identity	G ₃ : Feminine assigned female with congruent gender identity	
	High	E ₂ : Masculine assigned female with agender gender identity	E ₄ : Androgynous assigned female with agender gender identity	G ₂ : Masculine assigned female with congruent gender identity	G ₄ : Androgynous assigned female with congruent gender identity	
Yes	Low	F ₁ : Undifferentiated assigned female with incongruent gender identity	F ₃ : Feminine assigned female with incongruent gender identity	H ₁ : Undifferentiated assigned female with ambivalent gender identity	H ₃ : Feminine assigned female with ambivalent gender identity	
	High	F ₂ : Masculine assigned female with incongruent gender identity	F ₄ : Androgynous assigned female with incongruent gender identity	H ₂ : Masculine assigned female with ambivalent gender identity	H ₄ : Androgynous assigned female with ambivalent gender identity	

Note. Descriptions in each cell list gender expression, assigned sex, and gender identity terms, in that order.

Table 5

Classification into Transgender Identity by Gender Identity and Gender Expression for Assigned Intersex Individuals

		Female Gender Identity			
		No		Yes	
		Feminine Gender Expression		Feminine Gender Expression	
Male Gender Identity	Masculine Gender Expression	Low	High	Low	High
No	Low	I ₁ : Undifferentiated assigned intersex with agender gender identity	I ₃ : Feminine assigned intersex with agender gender identity	K ₁ : Undifferentiated assigned intersex with female gender identity	K ₃ : Feminine assigned intersex with female gender identity
	High	I ₂ : Masculine assigned intersex with agender gender identity	I ₄ : Androgynous assigned intersex with agender gender identity	K ₂ : Masculine assigned intersex with female gender identity	K ₄ : Androgynous assigned intersex with female gender identity
Yes	Low	J ₁ : Undifferentiated assigned intersex with male gender identity	J ₃ : Feminine assigned intersex with male gender identity	L ₁ : Undifferentiated assigned intersex with ambivalent gender identity	L ₃ : Feminine assigned intersex with ambivalent gender identity
	High	J ₂ : Masculine assigned intersex with male gender identity	J ₄ : Androgynous assigned intersex with male gender identity	L ₂ : Masculine assigned intersex with ambivalent gender identity	L ₄ : Androgynous assigned intersex with ambivalent gender identity

Note. Descriptions in each cell list gender expression, assigned sex, and gender identity terms, in that order.

prevalence of FtM transsexual individuals was estimated to be approximately one in 100,000 (Wålinder, 1968). More recent samples of transsexual individuals report MtF prevalence rates of 5.5 in 100,000 and FtM prevalence rates of 1.9 in 100,000 (Eklund et al., 1988). Although reported prevalence rates are increasing, estimates of the age at which individuals identify as transsexual have not changed. Approximately two-thirds of transsexual individuals identify as transsexual by the end of elementary school (Coates, 2008; Unger, 2014); the remaining third identify as transsexual in adolescence or adulthood.

In Tables 3 and 4, gender incongruent cells could include individuals with a transsexual identity. For example, cell F₃ could represent a transsexual individual who was assigned female at birth but has a male gender identity (gender incongruent); he¹ also presents with a feminine gender expression. He would have a physically female appearance and would be gender conforming, dressing in clothing that is culturally acceptable or expected of assigned females. His transsexual identity would therefore not be apparent to others. Cell F₂ represents an individual who was assigned female at birth and has a male gender identity; however, he presents with a masculine gender expression, with stereotypically masculine clothing and mannerisms. He would not only be gender incongruent but also gender nonconforming—his masculine gender expression would be inconsistent with sociocultural norms or expectations for the female sex.

Sampling methodology has influenced perceptions of transgender individuals.

Estimates of the number of transgender individuals in a population have often been based

¹Pronouns typically correspond with an individual's gender identity; someone with a male gender identity may be more likely to prefer male pronouns (i.e., he, him, and his) while an individual with a female gender identity may be more likely to prefer female pronouns (i.e., she, her, and hers). Others may prefer gender-neutral pronouns such as the plural "they" or pronouns beginning with the letter "z" (e.g., ze or zir).

on clinical samples of transsexual individuals (e.g., Stoller, 1968) who seek medical assistance to transition. Although plausibly the easiest subgroup of transgender individuals to reach, this sampling methodology likely underestimates the true numbers of all transgender individuals by only including those who have the desire and the means to seek medical assistance in order to transition. Recruiting research samples from medical or clinical facilities excludes those who cannot afford to seek medical treatment or who do not wish to seek medical treatment. Prevalence estimates that rely on clinical transsexual populations are likely a lower bound of actual prevalence rates of transsexual individuals due to a reliance on these restricted samples.

In addition to gender incongruent people (e.g., transsexual people), contemporary definitions of transgender also include gender nonconforming people, those whose gender expression is not consistent with stereotypical expectations for their assigned sex. Cross-dressers, drag queens, and drag kings may be gender nonconforming in their appearance as determined by their choice of clothing, make-up, and/or hair style.

Cross-dressers. Cross-dressers are gender nonconforming because they enjoy or prefer dressing in gender nonconforming clothing (Hill & Willoughby, 2005); they may be either gender congruent or gender incongruent. Identification of clothing choices as cross-dressing depends upon cultural norms. In the United States, a man wearing a skirt would be considered a cross-dresser, but the same man wearing a kilt in Scotland would not; he would likely be perceived as wearing traditional, socially acceptable formal attire. Cross-dressing has historically been stigmatized, even to the point of criminality. During the 1800s, French laws prohibited women from wearing trousers; women who wore trousers would have been considered cross-dressers and lawbreakers. Expectations for

women's gender expression have become less restrictive; behavior that was previously stigmatized for women, like wearing trousers, would seldom be defined as cross-dressing today (Reed, Rhodes, Schofield, & Wylie, 2009). However, expectations for men's gender expression have not significantly changed over time; men who dress in a manner that is stereotypically feminine, such as by wearing skirts, dresses, or make-up, are still considered cross-dressers in many cultures.

Estimates of cross-dressers are difficult to obtain; most prevalence estimates are between two and five percent (Conway, 2002). Assigned females who dress in a stereotypically masculine manner are not likely to be counted in prevalence estimates of cross-dressers because their appearance would be stigmatized to a lesser degree compared to gender nonconforming assigned males. From Tables 3 and 4, cells that represent individuals whose gender expression is inconsistent with their assigned sex—assigned males with a feminine gender expression and assigned females with a masculine gender expression—could include those who identify as cross-dressers. For example, an assigned male who dresses in a stereotypically feminine manner by wearing makeup and skirts or dresses could be classified as a cross-dresser, whether gender congruent (Table 3, cell B₃), as in British comedian Eddie Izzard, or gender incongruent (Table 3, cell C₃), as in transgender actress Laverne Cox of Netflix's *Orange is the New Black* (Kohan & Friedman, 2013).

Drag queens and drag kings. Although drag queens and kings also wear gendernonconforming clothing, they differ from cross-dressers in one important way: their motivation for gender nonconforming behavior. Drag queens and drag kings' gender nonconformity is a component of a stage performance (Willox, 2003); they may not wear gender nonconforming clothing when not performing on stage. These performance acts often include lip synching to popular songs. Drag queens are assigned males who dress and perform as women. For example, an assigned male may dress in an elaborate and very feminine stage costume, including flamboyant hair and makeup, and lip sync to a song by a popular musical artist. Television personality RuPaul, a gender congruent drag queen (see cell B₃ in Table 2), recently brought drag queens and drag kings to the popular media in the reality show *RuPaul's Drag Race* (Zacky et al., 2009) in which drag queen contestants competed for financial prizes.

Drag kings are assigned females who dress and perform as men. Musical artist Lady Gaga released a music video in 2011 in which she played both feminine and masculine characters (Germanotta, 2011). The masculine character's relatively short hair was styled into a messy pompadour and he wore a white t-shirt in the style of James Dean; this character was the musical artist performing "in drag" (see cell G₂ in Table 4). Prevalence rates for drag queens and drag kings have not been reliably estimated. Referring to Tables 3 and 4, the same cells that could contain individuals with a cross-dressing identity could also include individuals who perform as drag queens or drag kings. Similar to cross-dressers, drag queens and drag kings may be either gender congruent or gender incongruent.

Genderqueer and gender fluid. Transsexual individuals, drag queens, and drag kings can be easily defined by binary sex and gender categories. However, some individuals are not adequately described by the traditional sex or gender binary. Defining gender identity outside the binary or acknowledging the potential fluidity of gender leads to two additional subgroups. Those who identify as *genderqueer* do not feel their gender

identity or gender expression is adequately described with binary categories (Kozee et al., 2012) and those who identify as *gender fluid* acknowledge the potential flexibility and impermanence of gender expression. Gender fluid individuals may identify as more masculine at one point in time but may identify as more feminine at another point in time. By six or seven years of age, children achieve gender constancy, the idea that gender cannot be changed (Kohlberg, 1966; Ruble et al., 2007); in adulthood, this belief may relax somewhat, leading to a gender fluid identity. Some studies report that as many as 24 percent of transgender individuals identify as genderqueer or gender fluid (Kozee et al., 2012). Genderqueer or gender fluid individuals are not adequately captured in Tables 3, 4, and 5 because these tables rely on binary definitions of assigned sex and gender.

Intersex. The majority of transgender identities can be defined with variance in gender—gender identity or gender expression. Another subgroup that is sometimes subsumed under the transgender umbrella is associated with variance in assigned sex. Certain medical conditions do not conform to a binary sex division and are therefore included in the transgender umbrella. Formerly called hermaphroditism or pseudohermaphroditism, individuals who are intersex have a congenital condition with atypical chromosomal, gonadal, or genital development (Byne et al., 2012; MacKenzie, Huntington, & Gilmour, 2009). Assigned sex is determined by four factors: chromosomes, gonads (i.e., testes or ovaries), pelvic structures (i.e., a uterus), and external genitalia. If one of these four factors is known to differ from structures typically associated with males or females, an individual is categorized as intersex (Newbould, 2014). Between 373 and 1,000 in every 100,000 classifications of assigned sex at birth are not consistent with definitions of male or female as determined by these four factors;

some sex assignments at birth are revealed to be inaccurate later in life (Blackless et al., 2000; Hull, 2003). All cells in Table 5, regardless of gender identity or gender expression, include assigned intersex individuals. Intersex individuals may identify as transgender as they do not fit sociocultural expectations for binary assigned sex; some intersex individuals do not identify as transgender.

Conclusion. The umbrella term transgender can include people whose assigned sex, gender identity, and/or gender expression do not fit sociocultural expectations. Those with a transgender identity may be gender incongruent, gender nonconforming, or intersex. The umbrella term *transgender* includes those who identify as transgender, transsexual, cross-dresser, drag queen, drag king, genderqueer, or intersex (National Center for Transgender Equality, 2014); those who do not have a transgender identity are termed *cisgender*.

Although the transgender category is variable, it is different from the cisgender category in important ways. Cisgender people tend to have congruent assigned sex, gender identity, and gender expression; transgender people do not. These patterns of congruence or incongruence can lead people to perceive cisgender and transgender people differently. Perceptions of gender congruence and gender conforming behavior as typical or "normal" can be associated with increased prejudice against the atypical—people who are gender incongruent or gender nonconforming (Norton & Herek, 2013; Walch, Ngamake, Francisco, Stitt, & Shingler, 2012)—which in turn can be associated with discriminatory behavior (Rüsch, Angermeyer, & Corrigan, 2005). These resulting differences in attitudes and behavior will be explored in this study.

General Conclusion

This chapter delineated similarities and differences between sexual orientation groups and gender variant groups. Sexual orientation can be divided into six groups: lesbian, gay, bisexual, asexual, queer, and heterosexual people. Gender variance can be divided most parsimoniously into two groups: transgender people, who may be gender incongruent, gender nonconforming, or intersex; and cisgender (non-transgender) people. Broadly, two sets of comparisons will be made in this study. First, comparisons will be made between majority groups (people who identify as heterosexual and cisgender) and minority groups (people who identify as lesbian, gay, bisexual, asexual, queer, or transgender). Second, comparisons will be made within minority groups, between sexual orientation minorities (lesbian, gay, bisexual, asexual, and queer people) and transgender individuals.

The following chapter outlines some stressors that may be associated with sexual orientation or gender variant minority status and the associations between those stressors and psychological and physical distress. Multiple explanations for stressful experiences associated with minority status exist, ranging from psychological vulnerability to social constructionist explanations. One application of social constructionism, the minority stress model (Meyer, 1995, 2003), proposes that minority distress is caused by four stressors that are specific to minority status.

CHAPTER III. MINORITY STRESS AND DISTRESS

The previous chapter provided an overview of useful terminology and differentiated between sexual orientation (lesbian, gay, bisexual, asexual, queer, and heterosexual) and gender variant (transgender and cisgender) groups. This chapter begins by briefly reviewing literature that compares levels of distress for sexual orientation minority and transgender individuals to levels of distress for people who are heterosexual and cisgender. Much of the research describing minority stress and distress is atheoretical, simply aiming to measure the levels of distress or psychopathology that sexual orientation and gender variant groups experience. Following this review of the literature, this chapter presents theoretical explanations for the distress that these minority groups experience. One application of social constructionism, the minority stress model (Meyer, 1995, 2003), is discussed in detail.

Minority Distress: An Overview

Sexual orientation and gender variant minority identities have been associated with psychological distress. Generally speaking, compared to people who are heterosexual and cisgender, sexual orientation and gender variant minorities tend to report higher levels of psychological distress (Carolan & Redmond, 2003; Wright & Perry, 2006). This literature can be separated by age group, into comparisons within youth and comparisons within adults.

Distress in youth. Findings are mixed regarding the similarity or difference between transgender and cisgender youth in their levels of psychopathology. Wallien, Swaab, and Cohen-Kettenis (2007) noted that transgender children with a diagnosis of gender identity disorder (4th ed., text rev.; *DSM-IV-R*, American Psychiatric Association,

2000) often displayed symptoms of anxiety, mood, and disruptive disorders; others reported that transgender children diagnosed with gender identity disorder displayed more behavior and emotional problems than children without the diagnosis (Zucker & Bradley, 1995). A clinical sample of male children diagnosed with gender identity disorder reported high levels of psychological problems (Coates & Person, 1985; Zucker & Bradley, 1995), levels that were comparable to other clinic-referred children (Zucker & Bradley, 1995). Other researchers have found no differences in levels of psychopathology between transgender and cisgender youth (de Vries, Doreleijers, Steensma, & Cohen-Kettenis, 2011). de Vries and colleagues (2011) reported prevalence rates for adolescents diagnosed with gender identity disorder for anxiety disorders (21%), mood disorders (12.4%), and disruptive disorders (11.4%); these prevalence rates are comparable to or lower than those for cisgender youth (31.9% anxiety disorders, 14.3% mood disorders, and 19.4% disruptive disorders; Ries Merikangas et al., 2011).

The majority of studies measuring the psychopathology of transgender youth come from clinical samples. Comparisons between adolescents with and without a diagnosis of gender identity disorder may not accurately represent true differences between transgender and cisgender adolescents—clinical populations of transgender adolescents likely have higher psychological distress than nonclinical populations. It is difficult to know the proportion of transgender adolescents who do not display significant symptoms of psychological distress. Likewise, some youth may identify as transgender but do not have the financial means or the opportunity to seek professional help. These adolescents may not have disclosed their transgender identity to others and may not be gender nonconforming, so it may not be apparent to others that they are transgender.

Distress in adults. Findings regarding psychopathology or distress in adults who identify as a sexual orientation minority or as transgender are more consistent. Compared to adults who are heterosexual and cisgender, sexual orientation and gender variant minorities are at a greater risk for depression (Almeida et al., 2009; Birkett, Espelage, & Koenig, 2009; Cochran & Mays, 2000; Gonzalez, 2008; Kozee et al., 2012; Mickelson, 2001; Russell & Joyner, 2001; Zamudio, 2005; but see Simon, Zsolt, Fogd, & Czobor, 2011), anxiety (Bostwick et al., 2010; but see Simon et al., 2011), panic attacks (Cochran & Mays, 2000), and drug and alcohol use and dependence (Cochran et al., 2000).

Suicidal ideation and attempts. Perhaps most concerning, sexual orientation and gender variant minority youth and adults are at a greater risk for suicidal ideation and behavior compared to youth and adults who are heterosexual and cisgender (Almeida et al., 2009; Liu & Mustanski, 2012; Russell & Joyner, 2001). Although 3.9 percent of the general United States population reports suicidal ideation (Substance Abuse and Mental Health Services Administration, 2014), various reports of the rates of suicidal ideation in sexual orientation and gender variant minority research samples range from about 50 percent of the sample (Grossman & D'Augelli, 2007) to 61 (McDuffie & Brown, 2010) and 65 percent of the sample (Xavier et al., 2007). Terada and colleagues (2011, 2012) have reported rates of suicidal ideation as high as 70 (FtM transsexual individuals) and 75 (MtF transsexual individuals) percent of research samples.

In comparison, suicide attempts by sexual orientation and gender variant minority individuals are less prevalent, but clearly more concerning. Sexual orientation and gender variant individuals are much more likely to attempt or commit suicide compared to people who are heterosexual and cisgender (Goldblum et al., 2012; Russell & Joyner,

2001). Although less than one percent of the general United States population reports a suicide attempt (Substance Abuse and Mental Health Services Administration, 2014), multiple studies with sexual orientation and gender variant minority participants report suicide attempt rates ranging from 15 to 33 percent of study samples (Clements-Nolle, Marx, & Katz, 2006; Grossman & D'Augelli, 2007; Kenagy, 2005; Liu & Mustanski, 2012; Russell & Joyner, 2001; Terada et al., 2011). Rates of suicidal ideation and suicide attempts for sexual orientation and gender variant minorities are dramatically higher than the national average, and deserve immediate attention.

Explanations for Minority Distress

Descriptions of the distress associated with sexual orientation minority and transgender identities often focus on social origins, individual origins, or origins stemming from an interaction between society and the individual. Many social-focused explanations describe the source as social prejudice, including dominant attitudes and norms. Some individual-focused explanations attribute an individual's distress to their sexual orientation or psychological vulnerability. Other explanations focus on the interaction between society and the individual, acknowledging individual differences in psychological vulnerabilities while also recognizing the potential impact of sociocultural influences.

A focus on the individual. Theoretical explanations have focused on multiple explanations for minority distress from the perspective of the minority individual, including their development, personality, or genetic influences. First, psychoanalytic theories suggest that same-sex attraction in adulthood is a failure of the normal development process, a result of uncorrected targets of attraction in childhood (Bieber et

al., 1962; Dean & Lane, 2001). According to this theoretical explanation, homosexuals are at a greater risk for psychopathology than heterosexuals as a result of undeveloped or immature ego mechanisms. Many psychoanalytic theories propose that individuals whose development is halted—who do not redirect to an opposite-sex sexual object choice in early childhood—have undeveloped personalities in general; these undeveloped personalities are at a greater risk for psychopathology (e.g., Lewes, 1988; Muchnik & Raizman, 1999; Socarides, 1968). Although Freud (1962, 1964) acknowledged that a homosexual identity was not a necessary precursor to psychopathology, later theorists interpreted his work as offering an explanation for a link between homosexuality and psychopathology (e.g., Lewes, 1988; Socarides, 1968).

Prior to Hooker's (1957) revolutionary work on the psychological adjustment of gay men, homosexuality had become synonymous with "severe emotional disorder" (Committee on Cooperation with Governmental Agencies of the Group for the Advancement of Psychiatry, 1955, p. 2). During this period, the understanding of sexual orientation minorities grew dramatically. Substantial evidence began accumulating which showed that a homosexual identity alone is not a causal factor in psychopathology (Hooker, 1957). Genetic predispositions (e.g., major depressive disorder; Lohoff, 2010), a stressful environment, or the interaction of genetic and environmental influences (Kaufman et al., 2006) can also elicit psychopathological symptoms; a homosexual identity does not guarantee symptoms of psychopathology—many gay men and lesbians are well-adjusted members of society. Making a clear differentiation between sexual orientation and psychopathology was an important step in research. However, knowledge about the causes and outcomes of gender variance is relatively uncharted territory, but

evolving. For example, earlier versions of the *Diagnostic and Statistical Manual of Mental Disorders* (e.g., 2nd ed., *DSM-II*; American Psychiatric Association, 1968) included homosexuality as a mental disorder; as understanding of sexual orientation evolved, later versions of the *Diagnostic and Statistical Manual of Mental Disorders* (e.g., 3rd ed., *DSM-III*; American Psychiatric Association, 1980) omitted the diagnosis, and researchers shifted their search to other possible causes of distress.

While still focusing on individual variability, researchers transferred their focus from a sexual orientation minority identity to psychological vulnerability. Psychological vulnerabilities have been defined in various ways, ranging from dispositional traits to affective-cognitive vulnerabilities to genetics. Some dispositional traits have been linked to greater levels of psychological distress, such as the personality characteristics of high neuroticism, low conscientiousness, and low extroversion (Harkness, Finn, McNulty, & Shields, 2012; Lamers, Westerhof, Kovács, & Bohlmeijer, 2012; Malouff, Thorsteinsson, & Schutte, 2005; Suls & Martin, 2005). Likewise, affective-cognitive vulnerabilities have been linked to greater psychological distress, including tendencies to ruminate (Nolen-Hoeksema, 2000), infer negative consequences and negative self-views from negative events (Abramson, Metalsky, & Alloy, 1989; Haeffel et al., 2008), and misinterpret anxiety-related physical symptoms as symptoms of a serious or life-threatening illness (McNally, 1994). Research findings consistently show that genetics explain between one third and two thirds of the variability in symptoms of depression and worry that are consistent with neuroticism (Carey & DiLalla, 1994). Researchers who distinguish between the effects of genetics and environment on psychopathology emphasize the unique or interactive influence of the two factors—that mental health is not solely

determined by genetics (Carey & DiLalla, 1994). As a result of decades of research on various individual vulnerabilities, the scientific community generally agrees that individuals vary in their susceptibility to developing psychopathology.

Explanations for distress that focus solely on the existence of a minority identity as a causal factor of distress and that do not acknowledge the contributions of other individual difference variables are limiting. Although there is substantial evidence that personality characteristics (e.g., Harkness et al., 2012), affective-cognitive vulnerabilities (e.g., Hong & Paunonen, 2011), and genetic predispositions (e.g., Carey & DiLalla, 1994) may influence the development of psychological distress or psychopathology, these explanations exclude social or cultural factors. External sociocultural factors—those that do not develop or function internally within the individual—may also influence the likelihood that an individual would develop symptoms of distress or psychopathology.

A focus on others. The importance of societal prejudice in the etiology of distress has been emphasized by many theorists. For the purposes of this study, prejudice is defined as a widely-held attitude about a social category (e.g., Gassner & McGuigan, 2014) and can encompass positive and/or negative affect regarding a personal characteristic, such as group membership. Prejudicial social attitudes could include *heterosexism* (Goodrich, Selig, & Crofts, 2014), a belief that heterosexuality is the norm and non-heterosexuality is deviant and inferior; this attitude encompasses prejudice against sexual orientation minorities' behaviors, relationships, communities, and so on. The parallel prejudice against transgender individuals is *cisgenderism* (Kennedy, 2013)—a belief that being cisgender is the norm and that being transgender is deviant and

inferior; this attitude encompasses prejudice against transgender individuals' behavior, appearance, etc. These attitudes may influence people's behavior toward others. Behavior that is biased as a result of prejudice against a group membership is defined as discrimination (e.g., Allport, 1979).

Explanations for prejudice as a function of external, sociocultural variables focus on society—the person or people with the stereotypes. Varying greatly, these descriptions explain the origins of prejudice against minorities with principles consistent with social cognition or psychoanalytic theory. One way social cognition explains prejudice is by explaining how people use stereotypes. People categorize individuals into groups using predetermined schemas (ways of organizing information about things and ideas) in order to understand and interact with the world around them. These categorizations can lead to stereotypes, beliefs about group members' shared characteristics. Stereotypes are a key component of many explanations for prejudice, including essentialism (Rothbart & Taylor, 1992), heuristic failure (Blakemore, 2003), social identity theory (Tajfel & Turner, 1986/2004), normative influence (Crandall, Eshleman, & O'Brien, 2002; Sherif, Harvey, White, Hood, & Sherif, 1961), and generalized negative experience (Herek, 2000). Each explanation for prejudice includes a unique application of stereotypes, as described below.

Essentialism. Essentialist thinking is a tendency to think of socially or culturally constructed categories, like race or gender, as biologically disparate groups (Rothbart & Taylor, 1992). Inherent in this grouping process is the belief that these characteristics or identities cannot change and that conclusions can be drawn about those who belong to the group due to their membership (Rothbart & Taylor, 1992). This grouping process, also

called *natural kind* thinking, best exemplifies distinctions people make between gender categories. In addition to natural kinds, other researchers include a second factor, *entitativity* or *reification*, which includes an assumption of homogeneity within groups (Haslam, Rothschild, & Ernst, 2000). This second factor, which has also been termed the *outgroup homogeneity effect* (Ostrom & Sedikides, 1992), best exemplifies distinctions people make about sexual orientation (Haslam, Rothschild, & Ernst, 2002). The essentialist process of forming cognitive groups is similar to the general process by which people develop stereotypes about groups; the difference lies in the attributions made about that group.

Members in stereotyped groups are usually described or defined by discrete categories, despite the fact that these descriptions are most accurately described on a continuum (i.e., race, gender, and sexual orientation). Historically, the racial categories of Black and White were defined in the United States by whether or not a person had any African ancestry—the "one drop" rule (Murray, 1997). This essentialist rule oversimplified the socially constructed concept of race with a dichotomous categorization strategy. A person with essentialist beliefs would draw the same conclusions about a person with mostly European ancestry (except for one African great-great grandmother) as a person with entirely African ancestry. They would assume these two people held similar levels of intelligence, friendliness, and other personality characteristics. Likewise, stereotypes of gender are often defined by the two discrete categories of man and woman. Two important distinctions can be made between typical stereotypes and essentialist stereotypes. One, a person with essentialist beliefs would assume that gender is a static, unchanging construct (disregarding the gender fluid

identity) and would draw conclusions about people based on their membership in the man or woman category. Second, people with essentialist beliefs assert that certain groups of people are intrinsically different, and that these differences can be observable (e.g., Gelman, 2003) in appearance or behavior. A person with essentialist beliefs would assume that someone who appears feminine would also hold other characteristics associated with a stereotype of a woman.

Applied to sexual orientation minority and transgender individuals, people with psychological essentialist beliefs are likely to state that the specific characteristics of people who develop a transgender or sexual orientation minority identity are also the characteristics responsible for the development of comorbid psychiatric disorders. A person with essentialist beliefs may learn that someone with a sexual orientation minority identity reported or displayed symptoms of psychopathology. Because people with essentialist beliefs assume stereotyped groups are homogeneous, they may believe that all people with a sexual orientation minority identity experience symptoms of psychopathology. People with essentialist beliefs also consider group membership to be static or unchanging, so they would equate a sexual orientation minority identity with persistent psychopathology. Consistent with this essentialist belief, homosexuality was listed as a mental disorder in the Diagnostic and Statistical Manual of Mental Disorders until 1973 (2nd ed., *DSM-II*; American Psychiatric Association, 1968). Early conceptualizations of minority distress simply attributed distress to the broad category of homosexuality. Although essentialism is an application of the stereotype process applied to socially or culturally created categories, heuristics are an example of how stereotypes can be used to navigate the world around us.

Heuristic failure. Stereotypes can be used as mental shortcuts, also called heuristics, which reduce the amount of cognitive effort required in daily activities and interpersonal interactions (Gilovich, Griffin, & Kahneman, 2002). While mentally categorizing objects or people, exceptions to existing stereotypes are often lumped into a subtype—a group that shares similarities with the existing stereotype but that differs in an important way (e.g., Black athletes, assertive "ball-buster" women). When a person does not fit an existing stereotype or subtype, the resulting confusion may manifest in prejudicial attitudes toward the person violating the expectation. Blakemore (2003) applied the concept of heuristic failure to heuristics related to gender expression. In this application, an observer's stereotypically gendered expectations for a target's appearance were violated by the target's ambiguous or gender atypical appearance (Blakemore, 2003); the observer developed negative reactions toward the target as a result of these violated expectations. A recurring Saturday Night Live (Michaels, 1991) skit made light of heuristic failure by featuring a gender ambiguous character, Pat, with whom other characters struggled to interact. Without knowing whether Pat was a man or a woman, other characters could not follow typical gendered interaction patterns. In one skit, Pat signed up for a gym membership and requested a personal trainer. The personal trainer did not know whether to follow a social script stereotypically geared toward women, emphasizing weight loss, or a social script stereotypically geared toward men, emphasizing muscle mass gain. Although Saturday Night Live skits featuring Pat typically emphasized the comic side of uncertainty, some people have more negative reactions to this uncertainty; this negative reaction is consistent with heuristic failure.

Heuristic failure describes the difficulties that arise when our stereotypes fail—when our expectations are violated and we experience difficulty navigating the world around us. Social identity theory describes what happens when we apply these stereotypes to outgroups—why outgroups, groups people are not affiliated with, become the targets of prejudice. In social identity theory, the accuracy of stereotypes is not as important as the favorability of your group relative to others.

Social identity theory. According to social identity theory (Tajfel & Turner, 1986/2004), people are motivated to join groups that are perceived favorably. Social identity theory posits that people seek a positive self-image; this self-image is comprised of a personal self and social self. The social self is influenced by group membership; it can also influence perceptions of the personal self. Associations with favorably-perceived groups increase positive perceptions of the social self, which in turn increase positive perceptions of the personal self. Upon acquiring membership in a favorably-perceived group, people may wish to maintain or increase positive perceptions of their group's relative favorability by derogating other groups (outgroups). These derogations may be associated with prejudice and stereotypical views of outgroups.

Applied to gender dynamics, social identity theory (Tajfel & Turner, 1986/2004) helps explain why men engage in sexist humor about women. By derogating women as a group, men reinforce and legitimize their higher status and power in society. This theory can also be applied to prejudice against non-heterosexual people (heterosexism) and transgender people (cisgenderism)—by derogating or expressing prejudice against sexual orientation minorities and transgender people, heterosexual and cisgender people seek to maintain or increase the favorability of their social selves in comparison to their

outgroup. A central prediction of social identity theory is that people seek to elevate their group's status by expressing derogatory and sometimes prejudicial views against members of other groups, regardless of the characteristics used to define group membership (e.g., gender, race, sexual orientation). The acceptability of these derogatory or prejudicial expressions is likely to depend on how acceptable the individual's group finds the prejudicial beliefs—on the group's social norms.

Normative influence. People use social or group norms as a barometer of how acceptable it is to hold and express prejudicial views (Crandall et al., 2002; Sherif & Sherif, 1953). These prejudices are generally based on widely-held stereotypes rather than personal interactions with members of the stereotyped groups (Lasker, 1929; Sherif, 1936). Group norm theory (Sherif & Sherif, 1953) proposes three stages to adopting a group's prejudicial attitude: compliance, identification, and internalization. In the first stage, an individual wishes to identify with a valued group, so they conform to the group's social norms (Kelman, 1958). Compliance does not imply acceptance—at this stage, they may only wish to appear consistent with the rest of the group. In the second stage, identification, people begin to identify as a part of the group (Cantril, 1941; Sherif & Sherif, 1964). Following identification, the third and final stage is internalization of the group's social norms (Crandall et al., 2002). At this final stage, the group's social norms seem naturally and normally consistent with the individual's self-concept. In support of group norm theory, people are more likely to express prejudice against certain groups when the groups are normatively acceptable targets of prejudice than when they are not (Crandall et al., 2002).

Trends in self-reports of prejudicial attitudes toward people of different races or sexes have illustrated the long-term implications of this phenomenon. Self-reports of racist beliefs have declined across time (Case & Greeley, 1990; Dowden & Robinson, 1993; Firebaugh & Davis, 1988), which led researchers to consider whether these changes were due to an actual decline in racist beliefs or to a decline in respondents' comfort with reporting racist beliefs. As a result, researchers have compared responses on explicit, self-report measures to those on implicit tests (e.g., Implicit Association Test; Greenwald, McGhee, & Schwartz, 1998) and on measures with lower face validity than traditional self-report measures (e.g., Modern Racism Scale; McConahay, 1986). As a result of these comparisons, researchers have found that respondents' levels of prejudice as measured by implicit measures belied their true beliefs, despite their relatively lower levels of explicitly reported racism (McConnell & Liebold, 2001).

Much of the focus on changes in levels of prejudice has concentrated on racism (e.g., McConahay, 1986) and sexism (e.g., Swim, Aikin, Hall, & Hunter, 1995); these studies have measured responses from men and women and from multiple races.

Relatively fewer studies have approached changes in heterosexism or cisgenderism (e.g., Ansara & Hegarty, 2012), and fewer still have compared rates of heterosexism and cisgenderism across groups of varying sexual orientations and gender identities. This difference may be a result of the age of different civil rights campaigns. People have been aware of movements for women's rights and racial equality for hundreds of years, but sexual orientation and transgender civil rights campaigns are much newer in comparison. The gay rights movement gained momentum fewer than 50 years ago, following the Stonewall riots of 1969 (Garcia, 2012), and the transgender rights movement has just

recently begun gaining momentum. Given a decrease in the social acceptability of heterosexism and cisgenderism, the frequency of endorsing self-reported heterosexism or cisgenderism would likely decrease, similarly to the decreased frequency of endorsing racism or sexism.

Whether referring to prejudice toward race, gender, or sexual orientation, group norm theory predicts that people use social norms as an indicator of the acceptability of different prejudicial views (Sherif & Sherif, 1953). People use social or group norms as a barometer of how acceptable it is to hold and express prejudicial views (Crandall et al., 2002; Sherif & Sherif, 1953). According to this theory, a person's prejudicial attitudes are a result of internalizing their group's normative prejudices. Although increased interpersonal contact with a member of a stigmatized group can reduce prejudice against that group (Allport, 1954; Pettigrew & Tropp, 2006), it is possible that personally having a negative experience with a member of a stigmatized group can lead to a prejudicial view of that entire group.

Generalized negative experience. Having a single negative experience with a minority group member may lead an individual to generalize that experience to all other members of the aversive individual's group, leading to group-level prejudice (Herek, 2000). This interaction may result in stereotype modification—when forming a concept of a group, people are likely to assume the group is homogeneous (Ostrom & Sedikides, 1992). After experiencing an aversive or negative interaction with a group member, the observer is likely to extrapolate characteristics about the entire group based on that single, likely brief, and superficial interaction (Herek, 2000). Compared to a single, superficial interaction with a stigmatized individual, extended contact or interaction with

a member of a stigmatized group is more likely to reduce levels of prejudice (Allport, 1954, 1979; Pettigrew & Tropp, 2006).

Although essentialism, heuristic failure, social identity theory, normative influence, and generalized negative experience all provide valuable insight into the source of others' prejudice against minority individuals, they do not directly explain the distress of the stigmatized individuals. When describing sources of distress of stigmatized individuals, it is important to describe characteristics of both the individual and of observers—of others' prejudicial views and the stigmatized individual's reactions to those views. Comparing the relative influence of two factors on a third factor often results in learning that both factors are influential; sometimes an interaction between the two factors influences the third factor.

Interaction between the individual and others. A number of theories have examined the intersection between sociocultural prejudices toward stigmatized individuals and the stigmatized individuals' reactions to those prejudices. Two theories, identity threat and social constructionism, attribute minority distress to the minority individual's reaction to social context factors, whether context is defined as shared perceptions or situational information. These theories incorporate stereotyping processes into explanations for a stigmatized individual's distress.

Identity threat. Identity threat is determined by the relative demands of a situation and an individual's ability to cope with those demands. When the perceived demands of a situation subjectively exceed the individual's coping ability, identity threat occurs and can result in negative emotional reactions (Blascovich & Tomaka, 1996). Identity threat theory (Major & O'Brien, 2005) outlines four mechanisms by which stigmatized

individuals can develop distress: expectancy confirmation processes, behavior resulting from automatic stereotype activation, identity threat resulting from stigma, and prejudicial treatment or discrimination. First, stigmatized individuals may confirm others' negative stereotypes or prejudicial expectations for behavior; this confirming behavior can lead to changes in the stigmatized individual's self-perception (Fazio, Effrein, & Falender, 1981), such as decreased self-esteem. Second, even in situations where others' prejudicial expectations are not explicit or where prejudicial others are not present, widely-held stereotypes can influence behavior. This is evident in findings regarding stereotype threat—being asked to identify as an underrepresented group (e.g., defined by gender or race) at the beginning of a standardized test can activate negative stereotypes of those groups (Spencer, Steele, & Quinn, 1999; Steele & Aronson, 1995). This process can lead to a decrease in working memory capacity and a resulting decrease in test performance (Levy, 1996; Shih, Ambady, Richeson, Fujita, & Gray, 2002; Steele & Aronson, 1995). The third mechanism in identity threat theory describes the effect of stigma on an individual's social identity. Stigma can negatively influence social identity and psychological well-being indirectly, through awareness of societal prejudices and social contextual factors. Last, being the target of prejudice or discrimination can directly influence psychological distress (Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003); experiencing prejudice or discrimination has been associated with increased reports of symptoms of anxiety and depression in stigmatized groups.

Researchers have applied identity threat theory to the study of sexism and sexual orientation prejudice. In these two examples, identity threat theory predicts that the majority groups seek to maintain their dominant status in society and may choose to

engage in behaviors to that end. Identity threat theory can be applied to study a relatively subtle form of sexist behavior—sexist humor. By derogating women, sexist humor achieves the function of increasing men's group cohesiveness and maintaining the gender hierarchy (Thomae & Pina, 2015). In a same-sex group scenario, men's sexist humor expressed to other men could represent a coping mechanism that functions to stigmatize women. This behavior provides a clear contrast between men and women, elevating men's social status and leading to greater group cohesion (Thomae & Pina, 2015). In a mixed-sex scenario, this process is somewhat more explicit; hearing the derogatory comments first-hand would make women aware of the men's prejudicial attitudes. In this latter scenario, men's sexist jokes may serve to legitimize the gender hierarchy (Thomae & Pina, 2015), maintaining men's higher social status. Consistent with identity threat theory, being the target of sexism, whether defined as sexist humor or discrimination in the workplace, has been associated with negative psychological health for women (Klonoff, Landrine, & Campbell, 2000).

Others have applied social identity theory to sexual prejudice—specifically, support for gay marriage. According to social identity theory, heterosexual people seek to maintain their relative social dominance over sexual orientation minorities. Support of legislation that would provide sexual orientation minorities the right to marry may depend on an individual's social sexual orientation identity (Schmitt, Lehmiller, & Walsh, 2007). Heterosexual people desire to maintain the "positive distinctiveness" of their group identity; legalizing gay marriage may be perceived as a threat (Jetten, Spears, & Postmes, 2004), as it reduces the difference in status between the two groups. Indeed, heterosexual people were more willing to endorse legalization of civil unions for sexual

orientation minorities in lieu of gay marriage (Schmitt et al., 2007). This reluctance to provide sexual orientation minorities with equivalent rights to marry can have implications for sexual orientation minorities' well-being. As previously stated, sexual orientation minorities tend to report higher levels of anxiety, depression, and suicidal ideation and behavior compared to heterosexual people (Almeida et al., 2009; Birkett et al., 2009; Bostwick et al., 2010; Cochran & Mays, 2000; Gonzalez, 2008; Kozee et al., 2012; Mickelson, 2001; Russell & Joyner, 2001; Zamudio, 2005); this lack of equivalent legal rights may be a factor in that difference.

Although the identity threat model explains how widely-held and prejudicial stereotypes can influence minorities' well-being, it does not explain why or how these stereotypes are created. Another theory, social constructionism, provides an explanation of this process by examining the interaction between the stigmatized individual and others. Social constructionism explains how stigmatizing stereotypes contribute to prejudice against stigmatized groups and how that can lead to a stigmatized individual's distress.

Social constructionism. People with social constructionist views theorize that psychopathology in sexual orientation and gender variant minorities can be explained not only by internal characteristics such as psychological vulnerability, but also by external sociocultural factors, such as dominant prejudicial social norms and attitudes (Meyer, 1995, 2003; Russell & Bohan, 2006). Social constructionism contains five assumptions that explain the origins of social prejudice and how it impacts minority stress (DeLamater & Hyde, 1998). The first assumption incorporates theory on stereotyping processes by stating broadly that we organize concepts in the world to make sense of them. This

process of stereotyping is in part an attempt to organize and provide structure to our world. The second assumption states that we use language to create this structure— language helps us create labels for categories or groups of objects or people in our environments. By naming groups of objects or people, we are better able to identify and describe them. Third, the use of language to make sense of our individual experiences leads to a shared perception of reality. We share these descriptions and experiences with others using language; reality is therefore a product of the experiences and interactions we have with others (Gergen, 1985). Fourth, this shared perception of reality leads to habituation. Shared perceptions lead to similarity in people's expectations for behavior, facilitating interpersonal interactions (Mead, 1934). This habituation eventually leads to the institutionalization of social roles (DeLamater & Hyde, 1998). Last, with these habituated, common expectations, schemas or knowledge may become institutionalized at a higher level, within groups or within society as a whole.

When a subgroup's understanding of the world differs from society as a whole, conflict can arise (DeLamater & Hyde, 1998). This conflict can happen at the individual or at the group level. On the individual level, this conflict can manifest in a struggle between society's views of a group (i.e., negative or prejudicial views) and a group member's self-concept. For example, a transgender person may struggle between society's stigmatized view of transgender people and their own positive self-concept, resulting in a reluctance to identify as a transgender person. A societal definition of sexual orientation as dichotomous (heterosexual or homosexual), political ideologies, and gender role expectations can influence an individual's likelihood to identify as a sexual

orientation minority (Blumstein & Schwartz, 1977). The knowledge that a sexual minority identity is perceived negatively could inhibit self-identification with the group.

For those who do identify with the stigmatized group, this struggle between society's view of their group and their own self-concept may also result in internalization of society's prejudicial views of their group. This internalization can result in a negative self-view and symptoms of depression or anxiety (Meyer, 1995, 2003). Evidence supporting this theory has been found for individuals with concealable stigmatized identities (e.g., gay, bulimic, low socioeconomic status); having a concealable stigmatized identity was associated with lower levels of self-esteem and less positive affect compared to people with visible stigmatized identities or with no stigmatization (Frable, Platt, & Hoey, 1998). Identifying with a stigmatized group does not automatically imply poor psychological well-being; people with a concealable stigma who had contact with others who shared their identity did not show the same negative association between having a stigmatized identity and well-being (Frable et al., 1998).

An ongoing debate. The debate about the explanation for sexual orientation and gender variant minorities' well-being continues—some endorse an essentialist perspective, and others endorse a social constructionist perspective. Even a single group can contain divergent views. A recent task force was assembled at the request of the American Psychiatric Association in order to develop treatment recommendations for gender identity disorder. Although psychologists generally agree about possible origins for psychopathology in sexual orientation minorities, this task force could not come to a consensus regarding the source of psychopathology for transgender clients—whether psychopathology is inherent or socially influenced (Byne et al., 2012). Other

psychologists are confident that being gender nonconforming—transgender—is not evidence in itself of pathology (Cole, O'Boyle, Emory, & Meyer, 1997; Hepp, Kraemer, Schnyder, Miller, & Delsignore, 2005; Wallien et al., 2007). These latter researchers acknowledge multiple factors, whether psychological or sociocultural, that could influence the psychopathology of sexual orientation and gender variant minorities.

The Minority Stress Model

Meyer (1995, 2003) acknowledged the impact of sociocultural factors on minority distress by applying the life stress and health paradigm (Ensel & Lin, 1991; Lin & Ensel, 1989), a social constructionist explanation, to minority populations. In constructing the life stress and health paradigm, Lin and Ensel (1989) first reviewed hypotheses presented by Dohrenwend and Dohrenwend (1981) that offered multiple explanations for the effects of stressors (negative life events) on distress (an adverse health change). The first of these hypotheses, the victimization hypothesis, simply illustrated the direct effect of stressors upon distress. Second, the additive burden hypothesis stated that stressors, social situations, and personal dispositions exert separate direct effects upon distress. Third, the vulnerability hypothesis proposed that social situations and personal dispositions moderate or interact with stressors to affect distress. After researchers found support for the direct effect of stress on distress as illustrated in the victimization hypothesis (e.g., Zubin & Spring, 1977), efforts began in order to explain this effect.

Lin and Ensel (1989) combined the hypotheses into a single paradigm by isolating three components that lead to increased distress—social, psychological, and physiological circumstances—and by predicting that stressors and resources could be associated with each of these three components (see Figure 2). After testing each of the

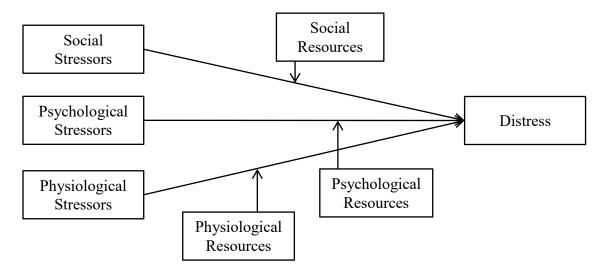


Figure 2. The life stress and health paradigm. Social, psychological, and physiological resources interact with social, psychological, and physiological stressors, respectively, to predict distress.

hypotheses Dohrenwend and Dohrenwend (1981) proposed, Lin and Ensel (1989) uncovered significant interaction effects. Social resources did not directly reduce distress, but social and psychological stress directly increased distress *unless* social resources were present to act as a buffer against social stressors.

With samples of sexual orientation minorities, Meyer and colleagues (Frost & Meyer, 2009; Meyer, 1995, 2003) developed the life stress and health paradigm into the minority stress model. Figure 3 shows a simplified version of the minority stress model (Meyer, 2003). After controlling for general life stressors, a cluster of stressors that are unique to sexual orientation minorities helps explain the impact of minority status on distress. These minority stressors include Perceived Stigma, Internalized Homophobia, Experiences with Discrimination and Violence, and outness.

Perceived Stigma. The first component of the minority stress model, Perceived Stigma, refers to the awareness that a characteristic is atypical (Goffman, 1963/1986) and often has a negative connotation. According to Meyer (1995), Perceived Stigma reflects

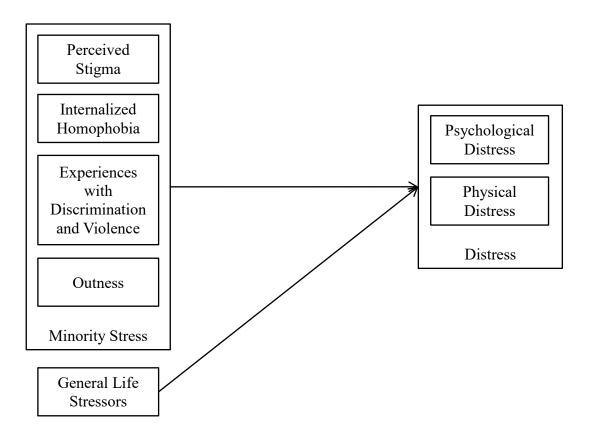


Figure 3. The minority stress model. Four minority stressors (Perceived Stigma, Internalized Homophobia, Experiences with Discrimination and Violence, and outness) increase psychological and physical distress above and beyond general life stressors.

the extent to which individuals perceive that society evaluates a certain characteristic negatively. Perceived Stigma has been associated with a number of deleterious psychological effects: increased anxiety (Goffman, 1963/1986), depression (Mickelson, 2001), emotional distress (e.g., Coffey, Leitenberg, Henning, Turner, & Bennett, 1996; Mansouri & Dowell, 1989), lowered self-regard (Gonsiorek, 1993), and decreased self-esteem (e.g., Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001; but see Crocker & Major, 1989). Compared to those with a low level of Perceived Stigma, those with a high level of Perceived Stigma may be more likely to expect others to react negatively to the knowledge of the stigmatized characteristic (Allport, 1954; for a meta-analysis, see Pettigrew & Tropp, 2006).

These expectations are not unfounded, as stigmatized characteristics can be associated with lower social acceptance (Link, 1987; Link, Cullen, Frank, & Wozniak, 1987). The knowledge of others' homophobic or prejudicial views may lead sexual orientation minorities to conceal their identity, which could result in increased distress (Lewis, Derlega, Griffin, & Krowinski, 2003). Sexual orientation minorities may also be more vigilant of others' behavior, anticipating prejudicial or discriminatory treatment (Meyer, 2003). Regardless of whether or not individuals have publicly identified or come out as a sexual orientation or gender variant minority, they still may experience Perceived Stigma and its correlates. Those who are aware of the stigma of their minority group membership may internalize the negative attitudes of others—resulting in Internalized Homophobia (Meyer, 1995, 2003)—and develop lower self-esteem (Crocker & Major, 1989; Szymanski, Kashubeck-West, & Meyer, 2008). The negative effect of Perceived Stigma has been seen for sexual orientation minorities (Gonsiorek, 1993), African Americans (Williams et al., 1997), and gender variant individuals (Mizock & Mueser, 2014).

No studies to date have compared sexual orientation and gender variant minorities' perceptions of sexual orientation stigma to those of people who are heterosexual and cisgender. Researchers also have not had the opportunity to compare sexual orientation minorities' perceptions of stigma to those of transgender individuals. These comparisons are important; differentiating between the experiences of transgender individuals, sexual orientation minorities, and people who are heterosexual and cisgender clarifies the relative magnitude of minority stressors for each group. Identifying the groups that report the highest minority stressors and the groups that experience the

strongest associations between minority stressors and distress is necessary to reduce levels of distress for the distressed groups. The group with the highest distress and highest minority stressors may need the most support.

With the goal of group comparison in mind, the minority stress model lends itself to a series of hypotheses. First, sexual orientation minorities will likely perceive that their minority sexual orientation identities are more stigmatized than the identities of heterosexual and cisgender individuals. Transgender individuals will likely report the highest levels of Perceived Stigma compared to sexual orientation minorities and people who are heterosexual and cisgender; Norton and Herek (2013) found that levels of transgender stigma are higher than levels of sexual orientation stigma.

Hypothesis 1: Sexual orientation minorities will report higher levels of Perceived Stigma than people who are heterosexual and cisgender; transgender individuals will report the highest levels of Perceived Stigma of all groups.

Likewise, no studies to date have compared the associations between Perceived Stigma and psychological and physical distress for sexual orientation and gender variant minorities to these associations for people who are heterosexual and cisgender.

Researchers have also not had the opportunity to compare the associations between Perceived Stigma and distress for sexual orientation minorities and transgender individuals. It is likely that sexual orientation minorities and transgender individuals will report stronger relationships between Perceived Stigma and psychological and physical distress compared to people who are heterosexual and cisgender. Due to their greater levels of Perceived Stigma (Norton & Herek, 2013; Walch et al., 2012), transgender individuals will likely report the strongest associations between Perceived Stigma and

psychological and physical distress compared to sexual orientation minorities and people who are heterosexual and cisgender.

Hypothesis 2: Sexual orientation minorities will report stronger associations between Perceived Stigma and psychological and physical distress compared to people who are heterosexual and cisgender; of all groups, transgender individuals will report the strongest associations (see Figure 4).

Internalized homophobia. The second component in the minority stress model, internalized homophobia, represents the degree to which an individual endorses negative social attitudes regarding their group membership (see Figure 3). Meyer (1995) began his research on minority stressors by studying homosexual men, so the measure was designed to assess the degree to which these men endorsed homophobic statements about

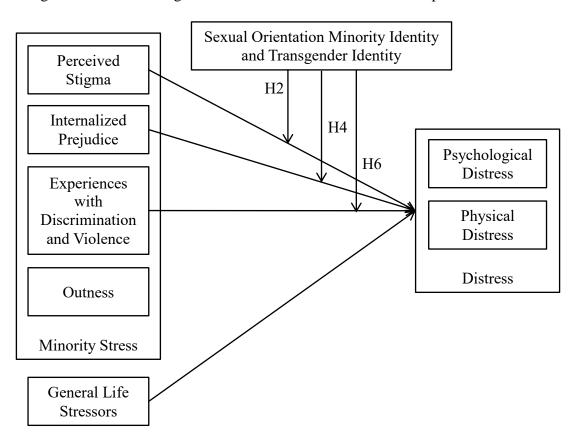


Figure 4. The minority stress model: Variations by identity. The strength of the associations between minority stressors and distress vary as a function of sexual orientation minority identity and transgender identity.

themselves. Even before an individual identifies as a homosexual, they may be exposed to and internalize others' prejudicial attitudes about homosexuality. Once a man identifies as gay, this internalized homophobia could create significant psychological distress (e.g., Thoits, 1985). The internalized attitude is not a personality trait or intrinsic characteristic; it is learned from being exposed to social attitudes (Russell & Bohan, 2006), beginning at a young age. Many internalized, implicit attitudes are resistant to change (Rudman, 2004; Wilson, Lindsey, & Schooler, 2000; for a review, see Gawronski & Boenhausen, 2006). Therefore, after a man identifies as gay, the internalized homophobia may continue to impart negative costs upon his psychological or physical health.

For other minority groups, including other sexual orientation minorities (lesbian, bisexual, asexual, and queer people) and transgender people, this construct could be inclusively termed *Internalized Prejudice* (see Figure 4). This more general term acknowledges that there is not one overarching form of prejudice that is applied to all sexual orientation and gender variant minorities; different minority groups are associated with different kinds of prejudice. For example, individuals may react to transgender people with cisgenderism (Kennedy, 2013) and may react to bisexual or asexual people with heterosexism (Goodrich et al., 2014). Internalized Prejudice is associated with multiple negative consequences, such as lower self-regard (Gonsiorek, 1993), lower self-esteem (Herek, Cogan, Gillis, & Glunt, 1998; for a review, see Szymanski et al., 2008), lower psychological well-being and poorer mental health (Allen & Oleson, 1999; Meyer & Dean, 1998; Rowen & Malcolm, 2003; Szymanski & Gupta, 2009), greater feelings of vulnerability (Meyer, 2003), more relationship problems (Frost & Meyer, 2009; Meyer & Dean, 1998), increased self-doubt (Garnets, Herek, & Levy, 1992), increased

hopelessness (Szymanski & Chung, 2001), and more depressive symptoms, including suicidal thoughts (Frost & Meyer, 2009; Igartua, Gill, & Montoro, 2003; Meyer, 1995, 2003; Szymanski, Chung, & Balsam, 2001).

Many individuals are members of more than one stigmatized group. Researchers have created two hypotheses to explain how these multiple group identities may influence psychological distress. Some propose that internalized prejudicial attitudes about multiple identities influence psychological distress directly, with an additive perspective; others propose an interactionist perspective (Mays & Cochran, 2001; Nelson & Probst, 2004; Szymanski & Kashubeck-West, 2008). The additive perspective proposes that internalized prejudicial attitudes about each group membership independently influence psychological distress (Szymanski & Kashubeck-West, 2008). The interactionist perspective proposes that attitudes about each group membership directly influence psychological distress, and the interaction between multiple attitudes also contributes to greater psychological distress (Greene, 1994; Landrine, Klonoff, Alcaraz, Scott, & Wilkins, 1995). These competing predictions were tested in a sample of Black sexual orientation minority women (Szymanski & Gupta, 2009; Szymanski & Meyer, 2008); findings supported the additive perspective. Comparing the influences of internalized racism and internalized homophobia on their psychological distress, only internalized homophobia significantly predicted psychological distress.

No studies to date have compared the degree to which sexual orientation and gender variant minorities internalize others' attitudes about their minority status to the degree to which people who are heterosexual and cisgender internalize others' attitudes about their heterosexual or cisgender identity. Likewise, researchers have not had the

opportunity to compare the degree to which sexual orientation minorities internalize heterosexism to the degree to which transgender individuals internalize cisgenderism. It is likely that sexual orientation minorities and transgender individuals will report higher levels of Internalized Prejudice than people who are heterosexual and cisgender.

Compared to sexual orientation minorities and people who are heterosexual and cisgender, transgender individuals will likely report the highest levels of Internalized Prejudice as a result of higher social stigma (Norton & Herek, 2013) compared to sexual orientation minorities.

Hypothesis 3: Sexual orientation minorities will report higher levels of Internalized Prejudice than people who are heterosexual and cisgender; transgender individuals will report the highest levels of all groups.

Likewise, no studies to date have compared the strength of the associations between Internalized Prejudice and distress for sexual orientation and gender variant minorities to the associations for people who are heterosexual and cisgender. Researchers have also not had the opportunity to compare the strength of the associations between internalized heterosexism and distress for sexual orientation minorities to the association for transgender individuals. It is likely that sexual orientation minorities will report stronger associations between Internalized Prejudice and psychological and physical distress compared to people who are heterosexual and cisgender. Compared to sexual orientation minorities and people who are heterosexual and cisgender, transgender individuals will likely report the strongest associations between Internalized Prejudice and distress as a result of higher social stigma (Norton & Herek, 2013) compared to sexual orientation minorities.

Hypothesis 4: Internalized Prejudice will be more strongly related to psychological and physical distress for sexual orientation minorities compared to

people who are heterosexual and cisgender; of all groups, these associations will be strongest for transgender individuals (see Figure 4).

Experiences with Discrimination and Violence. Discrimination is inherently biased; behaviors are discriminatory if one's positive or negative treatment of an individual is due to a particular characteristic of that individual (Allport, 1979). For example, discrimination could entail social exclusion, denial of housing or medical treatment, or acts of violence against someone because that person belongs to a particular group (i.e., hate crimes). The third component of minority stress, Experiences with Discrimination and Violence, captures minority individuals' actual experiences with others' discriminatory and violent behaviors (Meyer, 1995, 2003).

Sexual orientation and gender variant minorities are more likely to experience physical and sexual violence (Testa et al., 2012) compared to people who are heterosexual and cisgender. These experiences have adverse effects for the targets of violence; experiences of physical or sexual violence have been associated with alcohol abuse for FtM (female-to-male) transsexual individuals; for MtF (male-to-female) transsexual individuals, experiences of sexual violence have been associated with alcohol abuse and illegal drug use (Testa et al., 2012). Isolated experiences with discrimination or violence are not directly related to self-reported poor physical health (Williams et al., 1997). However, consistent with previous findings (Lepore, 1995), chronic, everyday experiences with discrimination negatively impact both psychological and physical health (Williams et al., 1997). In particular, chronic stressors such as ongoing financial problems or marital difficulties may be more detrimental to health than episodic, isolated stressors (Lepore, 1995; Lepore, Miles, & Levy, 1997). Sexual orientation and gender variant minority adolescents are vulnerable to chronic peer harassment and victimization

in school, at home, at work, and in the community (Pilkington & D'Augelli, 1995; Rivers, 2001). Regardless of prior experiences with discrimination or violence, sexual orientation and gender variant minority youth may conceal their minority identity to avoid experiencing discrimination or violence in the future (Lewis et al., 2003); this fear alone can increase symptoms of psychological distress (Sánchez & Vilain, 2009).

Quantifying sexual orientation minorities and transgender individuals'

Experiences with Discrimination and Violence can help illuminate the effects of these negative experiences on distress. Recent legislation (e.g., Hate Crimes Statistics Act of 1990; Matthew Shepard and James Byrd, Jr. Hate Crimes Prevention Act of 2009), requires the federal government and university campus authorities to keep statistics on hate crimes against sexual orientation minorities. On average, hate crimes motivated by the target's sexual orientation have generally increased since 1995 (Federal Bureau of Investigation [FBI], 2012). In 2012, government officials and campus authorities reported that 1,376 people were victimized because of their sexual orientation. These numbers are comparable to the number of victims targeted on the basis of their religion (1,340; FBI, 2012).

Competing theories attempt to explain rates of discrimination and violence.

Although intergroup contact theory (Allport, 1954; for a meta-analysis, see Pettigrew & Tropp, 2006) predicts that increased contact between members of different groups would improve intergroup relations, the statistics reported above may instead illustrate backlash against sexual orientation minorities as a result of their increased visibility. Because gender identity was only recently added to the list of legally protected classes, longitudinal statistics quantifying the victimization of transgender people are not

available. In order to determine the effects of discrimination and violence on transgender people, it is important to first measure rates of discrimination and violence in a transgender sample. Compared to people who are heterosexual and cisgender, sexual orientation minorities likely experience greater discrimination and violence as a result of their sexual orientation identities (FBI, 2012). Compared to sexual orientation minorities, transgender people may experience the highest rates of discrimination and violence of all groups.

Hypothesis 5: Sexual orientation minorities will report more Experiences with Discrimination and Violence than people who are heterosexual and cisgender; transgender individuals will report the highest number of Experiences with Discrimination and Violence of all groups.

If sexual orientation minority and transgender individuals experience more discrimination and violence than people who are heterosexual and cisgender, sexual orientation minority and transgender individuals will likely experience greater psychological and physical distress than people who are heterosexual and cisgender. Compared to other groups, the associations between Experiences with Discrimination and Violence and distress may be strongest for transgender individuals as a result of greater social stigma (Norton & Herek, 2013; Walch et al., 2012) and prejudice.

Hypothesis 6: Experiences with Discrimination and Violence will be more strongly related to psychological and physical distress for sexual orientation minorities compared to people who are heterosexual and cisgender; the associations will be strongest for transgender individuals (see Figure 4).

Outness. Newer conceptualizations of the minority stress model include a component of outness (Frost & Meyer, 2009), defined as the degree to which individuals have "come out," or disclosed their sexual orientation or transgender identity to others.

Multiple researchers theorize that the process of coming out follows a pattern, which can

be described as moving from covert to overt identification with a group (de Monteflores & Schulz, 1978). In the covert stage of the coming out process, sexual orientation minorities and transgender individuals first privately self-identify as a member of a minority group. Following this private identification, their second step may be to publicly share this identity with family and friends (Hencken & O'Dowd, 1977; Kozee et al., 2012; Lee, 1977). For sexual orientation minorities and some transgender individuals, publicly sharing an identity may be the third and final step in the coming out process. Some descriptions of the coming out process include an additional fourth step of coming out in the media (Lee, 1977). Transgender individuals may take additional steps beyond identifying publicly as transgender in order to make their daily lives consistent with their gender identity (see Appendix A; Ekins & King, 2006; Kozee et al., 2012). For the majority of sexual orientation minorities, these descriptions of the coming out process seem to fit well; however, there are age differences by generation or cohort.

Recent estimates of the age at which sexual orientation and gender variant minorities began coming out show that self-disclosure is occurring earlier than in previous decades (Savin-Williams & Rodriguez, 1993). In the mid- to late 1980s, most males reported self-identifying as homosexual between 19 and 21 years of age, and females reported self-identifying as homosexual between 21 and 23 years of age (Troiden, 1988); likewise, most males and females reported publicly coming out in their early to mid-20s (Kreiss & Patterson, 1997). More recent reports indicate male and females are coming out earlier in life, in the late teenage years (Kreiss & Patterson, 1997). There may be age or cohort effects—younger respondents are more likely to publicly identify as transgender compared to older respondents (Nuttbrock et al., 2009).

This drop in age of self-disclosure may be attributable to increased visibility of sexual orientation minorities (Kreiss & Patterson, 1997; Savin-Williams & Rodriguez, 1993) and transgender people in popular culture.

Researchers disagree somewhat about the number of steps taken in the coming out process (from two to three) and the stated end stage (sharing with friends and family or sharing with the media). Few, if any, have explored how this coming out process influences sexual orientation minority and transgender individuals' psychological and physical health. Understanding the process of coming out within the larger framework of the minority stress model (Meyer, 1995, 2003) may help reveal these mechanisms. The degree to which sexual orientation and gender variant minorities have disclosed their identity to others may be associated with varying degrees of other minority stressors, including Internalized Prejudice or the amount of discrimination and violence they experience (Mays & Cochran, 2001). Indeed, outness has been found to be related to each of the other components of minority stress.

Outness and Perceived Stigma. Most transgender individuals are more comfortable coming out to friends and family than to coworkers or the general community (Bockting, Benner, & Coleman, 2009). There is evidence that the choice to come out to others in social and work environments depends on minorities' perceptions of others' degree of acceptance (Frost & Meyer, 2009): the more accepting others seem, the more likely minorities are to come out to them. If individuals perceive that their sexual orientation or gender variant minority status is highly stigmatized, they may avoid publicly revealing their identity. If social prejudice subsides in society, those who would

be potential targets of the prejudicial attitudes or discriminatory behavior may feel more comfortable sharing their identities (Savin-Williams & Rodriguez, 1993).

Outness and Internalized Prejudice. The choice to come out may also be associated with an individual's level of Internalized Prejudice—sexual orientation minorities who are out at work tend to report lower levels of Internalized Prejudice (Frost & Meyer, 2009). This association between Internalized Prejudice and outness may also be present for transgender individuals—those who have publicly identified as transgender or who behave in a gender nonconforming manner may report lower levels of internalized cisgenderism. Eliason and Schope (2007) caution against collapsing outness and Internalized Prejudice into a single component; although outness may reflect a victory over Internalized Prejudice, lack of outness does not always imply high levels of Internalized Prejudice.

Outness and Experiences with Discrimination and Violence. Intergroup contact theory (Allport, 1954; Pettigrew & Tropp, 2006) predicts that greater exposure to minority group members leads to increased social acceptance of minority group members; the more individuals that publicly identify as a sexual orientation minority or as transgender, the more society will accept these identities as normal and valid.

Inconsistent with these predictions, public self-identification as a sexual orientation or gender variant minority seems to result in social backlash—greater reactions of prejudice, discrimination, or violence (FBI, 2012). Not surprisingly, external factors such as perceived acceptance or threat of discrimination are strong predictors of outness (Hill, 1997; Meyer & Wilson, 2009; Rostosky & Riggle, 2002). Sexual orientation minorities and transgender individuals may avoid coming out to others in order to reduce the

likelihood of a discriminatory or violent response (Hill, 1997). Those who have personal experience as a target of discrimination or violence may be especially unlikely to come out to others (Frost & Bastone, 2007; Schope, 2004).

Rather than interpreting these associations between outness and other minority stressors as correlations within predictor variables, some researchers instead propose that outness may be a moderating variable (e.g., Talley & Bettencourt, 2011), influencing the association between minority stressors and psychological well-being. The interactive role of outness may be a result of an individual's general coping style, whether approach-focused or avoidance-focused (Roth & Cohen, 1986; Talley & Bettencourt, 2011).

Consistent with coping literature, an approach-focused coping style—coming out to others in an attempt to actively deal with minority stressors—may be beneficial due to its active, problem-focused approach (Roth & Cohen, 1986). Alternately, coming out to others may lead to increased stigma visibility and a greater likelihood of prejudice and discrimination (D'Augelli, Hershberger, & Pilkington, 1998; Schope, 2002). An avoidant coping approach, concealing a stigmatized identity, could serve to prevent experiences of prejudice or discrimination (Schope, 2002). Others state that identity concealment may instead lead to increased stress for minority individuals (Miller & Major, 2000).

Interaction Effects of Outness

Research findings on the effects of outness on mental health are mixed. Some describe outness as a susceptibility to prejudice and discrimination (e.g., D'Augelli et al., 1998; Schope, 2002), but others describe coming out as relieving a burden (e.g., Smart & Wegner, 2000). For sexual orientation and gender variant minorities, outness may

therefore moderate the relationship between minority stressors and psychological and physical distress in one of two ways.

One possibility is the *exposure hypothesis*. Outness may amplify or increase the strength of the association between minority stressors and distress. Those who are not out would show a typical stress-distress association—greater minority stress would be associated with greater distress (see Figure 5). Consistent with this exposure hypothesis, sexual orientation minority and transgender individuals who are out would be more visible than those who are not out. Greater visibility would increase the likelihood of being a target of prejudicial attitudes or discrimination (Comstock & Paik, 1991; FBI, 2012; Herek & Berrill, 1992) and experiencing distress. Consistent with this hypothesis, sexual orientation minority youth who come out to their families and classmates are more likely to experience verbal abuse (D'Augelli et al., 1998). In some research samples, over 90 percent of sexual orientation minorities indicate experiencing verbal harassment as a result of their sexual orientation (Herek, 2000). Outness has also been associated with negative outcomes for transgender people—transgender women who are out report greater socioeconomic discrimination than cisgender women (Mizuno, Frazier, Huang, &

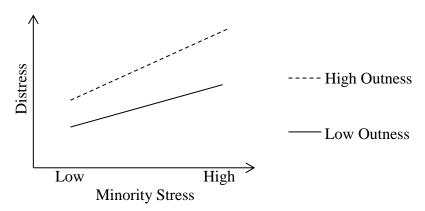


Figure 5. Exposure hypothesis: Exposure effects of outness on the association between minority stress and distress.

Skarbinski, 2015). According to the exposure hypothesis, outness would amplify the associations between minority stressors and associated distress.

Alternately, the *buffering hypothesis* predicts that outness decreases the strength of the associations between minority stressors and distress (see Figure 6). This reduction in stressors and distress may be a result of a positive reception to the self-disclosure (a reduction in Perceived Stigma), an increase in cognitive resources for the discloser, or a relatively lower level of sympathetic nervous system activation. First, individuals likely choose to come out to people they expect would be receptive. People who choose to come out and who are positively received would experience lower stress and distress (Talley & Bettencourt, 2011). Those whose identity disclosure is well-received may gain social support (Pachankis, 2007), an opportunity that would not be available for those who choose not to disclose their identity to others. Those who are not out would show a typical stress-distress association—greater minority stress would be associated with greater distress. Consistent with this hypothesis, concealing a minority identity has been associated with negative mental health indicators such as higher anxiety, greater depression, and lower self-confidence (Cole, 2006; Herek, 2004).

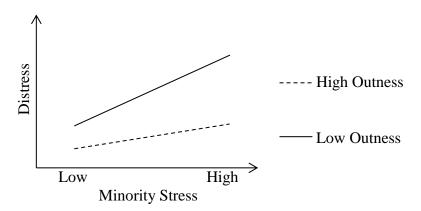


Figure 6. Buffering hypothesis: Buffering effects of outness on the association between minority stress and distress.

Second, those who come out may experience relief from the efforts to conceal their identity as an increase in availability of cognitive resources. Attempting to suppress or conceal an identity may lead to intrusive thoughts (Major & Gramzow, 1999; Wegner, 1992; Wegner, Schneider, Carter, & White, 1987), and intrusive thoughts can lead to distress (Major & Gramzow, 1999). Constraints on affective and cognitive resources caused by efforts to conceal an identity can be removed by publicly identifying with a minority identity (Pachankis, 2007; Smart & Wegner, 2000). A lesbian attending a work event while concealing her sexual orientation identity might experience anxiety about being discovered; she may experience a decline in cognitive resources as she formulates verbal scripts to avoid gendered pronouns.

The third way that outness may buffer the effects of stressors on distress is by reducing sympathetic nervous system activation. Identity concealment can be associated with suppression of emotions, and suppression of emotions has been associated with physical distress (e.g., greater activity in the sympathetic nervous system; Gross, 1998; Gross & Levenson, 1997). By disclosing emotions, sympathetic nervous system activity is likely to decline. This process may work similarly with the disclosure of stigmatized identities.

According to the buffering hypothesis, outness would buffer, or diminish, the strength of associations between of minority stressors and distress. Buffering effects may be likely when informed others are supportive of the minority individual, when cognitive resources are freed, or when physiological changes result in a more relaxed physical state. Alternately, exposure effects may be likely when informed others—those who discover or are told of the minority identity—are not supportive or are discriminatory

toward the minority individual. Whether consistent with a buffering hypothesis or exposure hypothesis, interaction effects of outness on the relationship between minority stressors and distress only exist for sexual orientation and gender variant minorities—they are irrelevant for cisgender and heterosexual people. As a result of heteronormative and cisnormative expectations—the expectation that people are heterosexual and cisgender—people who are heterosexual and cisgender do not have to come out to others (Warner, 1991). Therefore, outness will not influence the associations between minority stressors and distress for people who are heterosexual and cisgender.

Hypothesis 7: Outness will either amplify or buffer the associations between minority stressors and psychological and physical distress for sexual orientation and gender variant minorities; outness will not act as a moderator for people who are heterosexual and cisgender.

Minority stressors have been shown to significantly influence psychological distress. However, these stressors are likely more strongly associated with psychological and physical distress for sexual orientation minorities compared to people who are heterosexual and cisgender. Likewise, minority stressors are likely more strongly associated with distress for transgender people compared to sexual orientation minorities, resulting in part from higher levels of stigma for transgender people (Norton & Herek, 2013; Walch et al., 2012). For people with sexual orientation minority and transgender identities, the associations between minority stressors and distress may be moderated by outness. Researchers have explored additional explanations for the association between minority stressors and distress that has garnered substantial support in the literature is social support (Meyer, 1995, 2003).

Social Support

Based on the earlier work of Lin and Ensel (1989), Meyer (1995, 2003) and others proposed that social support would help buffer the effects of minority stressors upon psychological and physical distress. Shumaker and Brownell (1984) define the act of social support as one individual providing resources to another in order to improve the welfare of the recipient; this relationship is often reciprocal. Others define social support by its specific components, which often overlap between theories. Social support may be divided into structural and functional components (Callaghan & Morrisey, 1993; House, Landis, & Umberson, 1988); the structural component measures the size of the network and the frequency with which one interacts with it, and the functional component encompasses the purpose of the support. Social support could serve the purpose of expressing love and caring (emotional support), providing financial resources or help with tasks (tangible support), or providing knowledge or information about a topic or problem (informational support; Callaghan & Morrisey, 1993; Mickelson, 2001). Others also include the functions of boosting self-esteem (esteem support) and reinforcing or validating interests and concerns (social integration/network support; Cohen & Wills, 1985; Cutrona & Russell, 1990).

Certain components of social support may be especially beneficial in certain situations. Emotional support may be most beneficial for uncontrollable events (Cutrona, 1990) because it aids in emotional recovery. For controllable events, the most beneficial social support components aid in effective, problem-focused coping (Lazarus & Folkman, 1984), such as tangible support or informational support. Not surprisingly, when someone experiences a loss of tangible assets, such as being laid off or experiencing car trouble,

tangible aid is most helpful (Cohen & Wills, 1985). When a social role is lost or perceived to be threatened, network support may be particularly helpful (Cutrona, 1990). Network support may also be especially helpful when relationship loss is a stressor (Cohen & Wills, 1985); however, many situations are complex and may benefit from multiple components of social support.

Perceptions of support. People may not be explicitly aware of their support needs (Cutrona, 1990) and their perceptions of social support may not accurately depict the social support their networks actually provide. Perceived social support has been repeatedly shown to be more predictive of psychological distress than actual social support (Callaghan & Morrisey, 1993; Henderson, 1981; Serovich, Kimberly, Mosack, & Lewis, 2001; Wethington & Kessler, 1986).

Social support and health. Social support has been found to play a significant role in psychological and physical health—it can help reduce the negative effects of stressful life events on health (Barnett & Gotlib, 1988; Gómez-Gil et al., 2012; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). For example, social support can help new parents adjust to parenthood and can help adjustment to workplace stressors (Cutrona, 1990). Social support can buffer the effects of stressors on health for the chronically ill (Bennett et al., 2001; Uchino et al., 1996). Compared to support from others, support from romantic partners may have the strongest effect upon reductions of psychological distress (Thoits, 1995); individuals who do not perceive support from their romantic partners are more likely to exhibit symptoms of depression (Brown, Andrews, Harris, Adler, & Bridge, 1986; Munroe, Bromet, Connell, & Steiner, 1986). Social support also influences physical health—having greater social support is associated with reduced mortality risk

(Berkman & Syme, 1979; Blazer, 1982; Shoenbach, Kaplan, Fredman, & Kleinbaum, 1986). The effect of social support on mortality is quite strong; individuals with weak social support networks have mortality rates two to five times greater than those with larger social support networks (Berkman & Syme, 1979). This association has been found to be stronger for men than for women (House et al., 1988; but see Berkman & Syme, 1979; Orth-Gomér & Johnson, 1987).

Minorities and social support. As is true for heterosexual and cisgender people, social support also reduces psychological distress for sexual orientation minorities and transgender people. Having friends and family who are supportive or being involved in a group of like-minded individuals can provide a sense of community and can help individuals deal with the stressors associated with minority status (Crocker & Major, 1989; Lewis, Derlega, Clarke, & Kuang, 2006; Smith & Ingram, 2004). As evidence of the beneficial effects of social support for minorities, sexual orientation minority and transgender individuals with more social support tend to have lower levels of suicidality (Safren & Heimberg, 1999). Consistent with results from studies including heterosexual and cisgender people (e.g., Henderson, 1981; Serovich, Kimberly, Mosack, & Lewis, 2001), actual support from family or friends did not predict psychological distress in a minority sample (McDowell & Serovich, 2007); only perceptions of support significantly predicted distress.

Hypothesis 8: Perceptions of social support will buffer the associations between minority stressors and psychological and physical distress; individuals who perceive higher social support will report lower psychological and physical distress than those who perceive lower social support.

Social Support in the Minority Stress Model

The minority stress model includes Community Connectedness as a potential moderator between minority stress and psychological distress (Frost & Meyer, 2009; Meyer, 2003). In less visible populations such as sexual orientation minorities and transgender individuals, researchers do not define community with physical boundaries; community is instead defined by perceptions of connectedness to similar others (Frost & Meyer, 2009; Herek & Glunt, 1995). The usefulness of each of the components of social support may vary for sexual orientation minority and transgender individuals. Minority stressors like Perceived Stigma, Internalized Prejudice, and Experiences with Discrimination and Violence may be perceived as uncontrollable; for uncontrollable events, emotional support may be most beneficial (Cutrona, 1990). Perceived Stigma and Internalized Prejudice may influence a minority individual's perception of their role in society by decreasing the importance or value of the role. In this situation, network support or esteem support may be needed. Depending on the complexity of the minority stressors, multiple types of social support may be required to buffer or moderate the effects of stressors on distress. Social support may be especially beneficial in reducing distress for sexual orientation minority and transgender people compared to people who identify as heterosexual and cisgender. The buffering effect may be particularly strong for transgender participants, for whom minority stressors will likely be higher.

Hypothesis 9: Social support will buffer the relationships between minority stressors and psychological and physical distress more strongly for sexual orientation minority and transgender individuals than for people who identify as heterosexual and cisgender. Social support will have the strongest buffering effect for transgender individuals.

Perceived Stigma and social support. Most studies have found a negative relationship between Perceived Stigma and perceptions of social support (Crandall & Coleman, 1992; Devins, Stam, & Koopmans, 1994; Gibbons, 1985; Lennon, Link, Marbach, & Dohrenwend, 1989, but see Mansouri & Dowell, 1989; Mizuno, Moneyham, Sowell, Demi, & Seals, 1998); the more stigma an individual perceives, the less social support they perceive. Kaniasty and Norris (1993) propose that stressors erode social support; as Perceived Stigma continues, perceptions of social support or actual social support may suffer. Those who perceive greater social stigma may be more likely to rely on family members for social support (Lennon et al., 1989).

Internalized Prejudice and social support. Relatively fewer studies have specifically examined the moderating effects of social support on the relationship between Internalized Prejudice and psychological distress. Some researchers collapsed Internalized Prejudice, outness, and connection to the sexual orientation minority and transgender community as a single component (Mayfield, 2001; Shidlo, 1994; Williamson, 2000), but others conceptualized a theoretical difference between the three constructs (Frost & Meyer, 2009; Meyer, 1995, 2003). Frost and Meyer (2009) asserted that Community Connectedness is a moderator of the associations between minority stressors and psychological distress.

Experiences with Discrimination and Violence and social support. In childhood, assigned males with a diagnosis of gender identity disorder have fewer relationships with male peers (Coates, 2008). In fact, onset of gender identity disorder is typically associated with discrimination in the form of social ostracism, making coping with the stressors associated with gender identity disorder especially difficult (Coates,

2008). When individuals identify with a group, they tend to seek approval from the group and wish to be included (Cooper, Kelly, & Weaver, 2001; Terry & Hogg, 2001). This process may be especially difficult for transgender children due to the low visibility or low prevalence of other transgender children, high stigma, and a tendency for other children to perceive differences as negative characteristics (Aboud, 2003). Transgender adults may have a different experience—with the advent of the Internet, adults are able to seek out online communities with people who share similar experiences (Szymanski & Stewart, 2010). For less-visible populations, such as transgender individuals, this strategy may be especially effective in contributing to perceptions of available support. Liu and Mustanski (2012) found that although sexual orientation minority and transgender victimization did significantly predict psychological distress in the form of self-harm, social support was not a significant predictor of psychological distress.

Outness and social support. The degree to which sexual orientation minority and transgender individuals have disclosed their identity to others may impact Experiences with Discrimination and Violence (Mays & Cochran, 2001) and social support and as a result, psychological distress. Although privately identifying as a sexual orientation minority or as transgender may precede a sense of connectedness to the sexual orientation minority and transgender community, private identification may not necessarily be associated with community social support. Those who publicly identify as a sexual orientation minority or as transgender may have more genuine or authentic social support, as it may be more closely related to issues surrounding minority stressors.

General life stressors, those not specific to a minority identity, may still occur and could

be addressed by others in a support network even if the sexual orientation minority or transgender individual had not disclosed their identity.

Hypotheses

In summary, within the minority stress model, levels of Perceived Stigma (H1), Internalized Prejudice (H3), and Experiences with Discrimination and Violence (H5) will be greater for sexual orientation minority and transgender people compared to people who are heterosexual and cisgender; transgender individuals will report the highest levels of Perceived Stigma, Internalized Prejudice, and Experiences with Discrimination and Violence (see Table 6). These higher levels of Perceived Stigma (H2), Internalized Prejudice (H4), and Experiences with Discrimination and Violence (H6) for sexual orientation minority and transgender people will be associated with greater distress compared to people who are heterosexual and cisgender; these effects will be particularly strong for transgender individuals. It is possible that the fourth minority stressor, outness, interacts with other minority stressors. Outness may either buffer or amplify the associations between other minority stressors and distress (H7).

These detrimental effects of minority stressors on well-being for sexual orientation minority and transgender people are likely moderated, or buffered, by perceptions of available social support. Consistent with previous literature (e.g., Barnett & Gotlib, 1988; Gómez-Gil et al., 2012; Uchino et al., 1996), those with greater social support will experience lower distress (H8). Social support may have a stronger moderating effect on the relationship between minority stressors and distress for sexual orientation minority and transgender people compared to people who are heterosexual

Table 6

Brief Statement of Hypotheses

Hypothesis Levels of Perceived Stigma 1 2 Association between Perceived Stigma and distress 3 Levels of Internalized Prejudice Association between Internalized Prejudice and distress 4 5 Levels of Experiences with Discrimination and Violence Association between Experiences with Discrimination and Violence and 6 distress 7 Outness will amplify or buffer associations between minority stressors and distress for LGBAQT people but not heterosexual and cisgender people 8 Social support will buffer the associations between stressors and distress 9 Strength of buffering effect of social support will differ by group

Notes. LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. For all hypotheses but 7 and 8, hypothesized associations are: heterosexual and cisgender people < LGBAQ people < transgender people.

and cisgender (H9); this moderation effect may be especially strong for transgender individuals, for whom social prejudice may be the strongest.

CHAPTER IV. METHOD

Some measures used in this dissertation were adapted from existing measures, originally developed for use with gay or lesbian populations (Meyer, 1995). In addition to sexual orientation minorities, this dissertation focuses on transgender individuals and those who identify as heterosexual and cisgender. A pilot study verified the possibility of recruiting sufficient numbers of transgender participants and verified the usefulness of these adapted measures in the additional samples. The pilot study tested the minority stress measures on sexual orientation minority, transgender, cisgender, and heterosexual people. In addition to the minority stress measures, the full dissertation study included proposed moderator variables (i.e., outness and social support) and psychological and physical distress variables.

Participants

In the pilot and full studies, sexual orientation minority and transgender populations were oversampled to facilitate statistical analyses. Participants in the pilot study (N = 189) were recruited from a variety of sources: the online community (Facebook, Craigslist, and Google+), publicly-listed national sexual orientation and/or gender variant minority organizations, and regional postsecondary institutions (i.e., Iowa State University, Drake University, Marshalltown Community College, and Simpson College). All recruitment announcements, whether verbal or electronic, included a brief description of the study content and duration, relevant Iowa State University Institutional Review Board approval information, and contact information for the investigators and the Iowa State University Institutional Review Board.

Participants in the full study (*N* = 986) were recruited from the same sources as the pilot study, with some additional sources. Participants were recruited from the online community (the author's Facebook page, Facebook sexual orientation and gender variant groups, Google+ sexual orientation and gender variant groups, Amazon Mechanical Turk, and American Psychological Association members on the Division 44 email listserv), publicly-listed national sexual orientation and/or gender variant minority organizations, national PFLAG (formerly Parents, Families, and Friends of Lesbians and Gays) chapters, and regional postsecondary institutions (i.e., Iowa State University and Marshalltown Community College). All recruitment announcements, whether verbal or electronic, included a brief description of the study content and duration, relevant Iowa State University Institutional Review Board approval information, and contact information for the investigators and the Iowa State University Institutional Review Board. The number of participants recruited from each source is indicated parenthetically.

Online community members. A posted announcement on the author's personal Facebook ($n_{\text{pilot}} = 169$; $n_{\text{full}} = 237$) and Google+ ($n_{\text{pilot}} = 0$; $n_{\text{full}} = 0$) profile pages notified social media members of the research study. For the full study, announcements were posted in 86 Facebook ($n_{\text{full}} = 24$) and 114 Google+ ($n_{\text{full}} = 24$) groups—those pertinent to sexual orientation minorities and transgender people. Participants in the full study were recruited from an Amazon Mechanical Turk ($n_{\text{full}} = 244$) job post, regardless of workers' sexual orientation or transgender identity. Amazon Mechanical Turk participants were compensated with \$5.00 for acceptable completion of the survey; other online community members were not compensated for their participation.

Sexual orientation and gender variant minority organizations. The author compiled a list of national and collegiate sexual orientation and gender variant minority organizations, those whose contact information was readily available online (see Appendices B and C). One-quarter of the groups were recruited for the pilot study; the remaining three-quarters were recruited for the full dissertation study. For the full study, recruitment information was sent to 100 community organizations ($n_{\text{pilot}} = 2$; $n_{\text{full}} = 32$) and 104 organizations affiliated with national postsecondary institutions ($n_{\text{pilot}} = 5$; $n_{\text{full}} = 41$). Organization members were not compensated for their participation.

PFLAG chapter members. Members of 399 national PFLAG (formerly Parents, Families, and Friends of Gays and Lesbians) chapters were recruited for the full study via email or phone (see Appendix D). PFLAG chapter members ($n_{\text{full}} = 52$) were not compensated for their participation.

American Psychological Association Division 44 listserv members. Members of Division 44 of the American Psychological Association (APA), which was created to study issues relevant to lesbian, gay, bisexual, and transgender people, were recruited for the full study via the Division 44 email listserv ($n_{\text{full}} = 31$). APA Division 44 members were not compensated for their participation.

Regional postsecondary institutions. With permission from administrators and faculty members, students at regional postsecondary institutions (i.e., Iowa State University, Drake University, Marshalltown Community College, and Simpson College) were invited to participate in the research study. Iowa State University students in eligible undergraduate classes (Introduction to Psychology, Developmental Psychology, Social Psychology, and Communication Studies) viewed an announcement for the study in the

Iowa State University SONA research participation system. Iowa State University participants were compensated with one point of course credit for the pilot study ($n_{\text{pilot}} = 58$) and two points of course credit for the full study ($n_{\text{full}} = 294$); course credit could also be earned by reading a research article and taking a quiz over it. Marshalltown Community College undergraduate students ($n_{\text{pilot}} = 5$; $n_{\text{full}} = 7$) were recruited via classroom announcements. Marshalltown Community College students were not compensated for their participation.

Two institutions (i.e., Drake University and Simpson College) consented to participate in the pilot study but not the full study. Drake University undergraduate students ($n_{pilot} = 31$) viewed an announcement for the study in the Drake SONA research participation system. Participants were compensated with two points of course credit, not to exceed five percent of their final course grade; course credit could also be earned by reading a research article and taking a quiz over it or attending research-related seminars or talks. Simpson College undergraduate students ($n_{pilot} = 2$) were recruited via classroom announcements. Simpson College students were not compensated for their participation.

Procedure

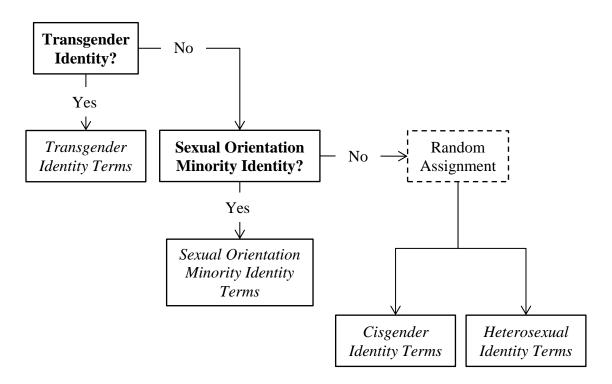
Following verbal or electronic recruitment, participants received a link to the online survey via Qualtrics that was unique to their recruitment source. Online administration may be more comfortable for participants with stigmatized identities because they were asked to reveal potentially stigmatized information about their sexual orientation and transgender identities (Institute of Medicine Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities, 2011). In order to verify that participants were 18 years of age or older, the online questionnaire

began by asking participants their age. Those younger than 18 years of age were thanked for their interest and redirected to a debriefing page.

The first set of survey items assessed participants' sexual orientation and cisgender/transgender identities. Participants reported their gender identity, assigned sex, gender expression, congruence between their assigned sex and gender identity, and sexual orientation with single-item and multiple-item measures. In the single-item measures, participants selected a single term that best fit their sexual orientation identity and a single term that best fit their transgender identity. They also indicated the degree to which they had shared these two identities with others. Multi-item measures assessed congruence between participants' gender identity and physical selves, gender expression across various situations, attraction to women, and attraction to men.

Because the projected duration of the full study (45-55 minutes) was longer than that of the pilot study (20-25 minutes), the full study included three items to verify that participants were carefully reading and responding to questions. The first of three attention check questions followed the outness questions and preceded the minority stress measures. The minority stress measures included Perceived Stigma, Internalized Prejudice, and Experiences with Discrimination and Violence. To control response burden, participants completed one set of minority stress measures specific to either their transgender identity or their sexual orientation identity. The wording in the minority stress measures was determined by the self-identifications participants provided in the first set of questions (see Figure 7).

To reduce participant response burden, all participants who identified as transgender completed minority stress measures referring to their transgender identity,



but not measures referring to their sexual orientation identity. Those who identified as cisgender and as a sexual orientation minority only completed minority stress measures with sexual orientation minority wording. For example, a participant who identified as transgender viewed items in the Perceived Stigma scale that referred to transgender stigma (e.g., "Most employers will pass over the application of a transgender and lesbian viewed items in the Perceived Stigma scale that referred to sexual orientation stigma (e.g., "Most employers will pass over the application of a lesbian in favor of another applicant"). Participants who identified as neither transgender nor a sexual orientation minority (cisgender and heterosexual) were randomly assigned to view measures with wording relevant to either a cisgender identity (e.g., "Most employers will pass over the application of a cisgender person in favor of another application of a cisgender person in favor of another applicant") or heterosexuality (e.g., "Most employers will pass over the application of a heterosexual person in favor of

another applicant"). Minority stress measures were counterbalanced with the general stress measure; half of participants received the minority stress measures first, and the other half received the general stress measure first.

The second attention check item followed the minority stressor and general stress measures. The next set of measures assessed perceptions of social support, followed by the final attention check item. The last set of measures assessed psychological and physical distress (i.e., anxiety, depression, suicide behaviors, and role limitations due to emotional problems) and demographics. Finally, participants were redirected to a debriefing page with general psychological resources and psychological resources for sexual orientation minorities and transgender individuals.

Identity and Outness Measures

Items within measures were presented in random order when possible to prevent methodological artifacts. Exceptions are noted.

Gender identity and assigned sex. Following the method developed by the Transgender Health Advocacy Coalition (Singer, Cochran, & Adamec, 1997), participants were asked their gender identity first, then their sex assigned at birth. Asking participants to indicate gender identity first reflects the relative importance of gender identity compared to sex assigned at birth for transgender individuals and has been found to more accurately identify transgender participants (GenIUSS Group, 2013). Using this methodology, participants first were asked their current gender identity by indicating the degree to which different terms (i.e., male/man, female/woman, agender/no gender, genderqueer/nonbinary, and other) describe them. If participants chose other, they had the option to provide a term. Second, participants were asked the sex they were assigned at

birth, meaning on their original birth certificate (i.e., female, male, or other). If participants selected other, they had the option to elaborate. Last, participants were asked to select the one gender identity term that fit them best (i.e., male/man, female/woman, agender/no gender, genderqueer/nonbinary, or other).

Gender expression. Gender expression measured the frequency with which participants dress and behave in a gendered manner in five different situations: when they are alone, with close friends, with family members, at work, and in public (see Appendix E). Feminine gender expression responses ranged from 1 (*always or almost always feminine*) to 4 (*never feminine*); masculine gender expression responses ranged from 1 (*always or almost always masculine*) to 4 (*never masculine*). This measure was created by the author. In the pilot study, the feminine gender expression scale ($\alpha_{overall} = .98$; $\alpha_{cis} = .99$; $\alpha_{trans} = .92$) and masculine gender expression scale ($\alpha_{overall} = .98$; $\alpha_{cis} = .99$; $\alpha_{trans} = .91$) showed excellent internal reliability. Likewise, in the full study, the feminine gender expression scale ($\alpha_{overall} = .98$; $\alpha_{cis} = .99$; $\alpha_{trans} = .90$) and masculine gender expression scale ($\alpha_{overall} = .98$; $\alpha_{cis} = .99$; $\alpha_{trans} = .90$) and masculine gender expression scale ($\alpha_{overall} = .98$; $\alpha_{cis} = .99$; $\alpha_{trans} = .90$) and masculine gender expression

Transgender identity and "outness." Because a transgender identity may overlap with any of the subgroups described in the second chapter, participants first were asked to indicate whether or not they identify as any of the following terms: not a transgender person (cisgender), transgender, transsexual, FTM/trans man, MTF/trans woman, genderqueer, bi-gendered, third gender, two-spirit, cross-dresser, gender nonconforming, drag queen or drag king, or other (see Appendix F). Choosing "other" allowed participants the option to describe their identity. In the pilot study, multiple

participants indicated a "gender fluid" identity; this term was added to the list of transgender identity options for the full study.

Next, participants were asked to indicate which of the transgender identity terms they chose fit them best. They indicated their age (in years) at which they first had that best-fitting identity, and whether or not anyone knew of this identity (yes/no). To determine the degree to which they had publicly disclosed their identity, participants responded to additional items adapted from the National Lesbian Health Care Survey (Bradford, Ryan, & Rothblum, 1994; see Appendix F). If they indicated that any other people knew of their identity, they were asked to indicate the proportion of people to whom they had self-disclosed their identity in each of seven categories: current or previous romantic and/or sexual partners, immediate family members, extended family members, cisgender (non-transgender) friends, all friends, religious or secular organization members, and classmates/work associates. For each of the seven categories, participants indicated the approximate percent of people (0 – 100%) who were aware of their identity.

Two questions assessed the importance of being out and fear of exposure.

Participants responded to, "It is important for me to 'be out' to cisgender people I know" on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). A brief definition of *cisgender* followed the question header. Participants also responded to, "Are you worried, concerned, or afraid that people will find out that you are [best-fitting identity term]?" on a scale from 1 (*not at all*) to 5 (*extremely*). The latter item was reverse coded so higher responses indicated more comfort with outness. Last, a behavioral measure of outness, which asked participants to provide their ZIP code, was added to the full study. Sharing

one's ZIP code has been shown to be associated with willingness to share a minority sexual orientation identity (Morris, Waldo, & Rothblum, 2001). However, in this study, the vast majority of participants provided their ZIP code. Because there was very little variability in whether or not participants provided their ZIP code, this variable was not included in future analyses.

With questions that referred to sexual orientation outness, Morris and colleagues (2001) reported good internal validity (α = .70) for the questions referring to outness to straight/heterosexual friends, family, and coworkers; the items assessing the importance of being out and fear of exposure; and the behavioral measure of outness. In the pilot study, the measure comprised of the seven percentage questions and the items assessing the importance of being out and fear of exposure had excellent internal reliability (α = .97). In the full study, the seven percentage questions had excellent reliability (α = .97). Future analyses will utilize an index of outness as measured by an average of the seven percentage questions.

Transgender Congruence Scale. The 12-item Transgender Congruence Scale (Kozee et al., 2012; see Appendix G) determined the degree of participants' comfort with their gender identity and gender expression over the past two weeks. The 9-item Appearance Congruence subscale included items such as, "My outward appearance represents my gender identity." The 3-item Gender Identity Acceptance subscale included items like, "I am not proud of my gender identity." All items were rated on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Applicable items were reverse scored so higher scores represented greater gender congruence.

Previous studies reported internal reliability estimates of α = .92 for the complete Transgender Congruence Scale (Kozee et al., 2012). Greater transgender congruence has been found to correlate positively with meaning of life and life satisfaction and negatively with anxiety, depression, and body dissatisfaction (Kozee et al., 2012). In the pilot study, internal reliability estimates were good (complete scale: α = .95; appearance congruence: α = .95; gender identity acceptance: α = .76). Internal reliability estimates were comparable for the full study (complete scale: α = .93; appearance congruence: α = .94; gender identity acceptance: α = .63).

Transgender transition. In the pilot study, participants who identified as transgender were asked to indicate what changes, if any, they had made or would like to make in order to make their daily experiences consistent with their gender identity (see Appendix H; adapted from Ekins & King, 2006). Items were generally listed according to the amount of effort required to make the change, from least to most effort. For example, participants indicated if they wished to or if they had come out as transgender to their family, adopted a name not given at birth that better represented their gender identity, worn clothing that matches their gender identity in social situations, and undergone hormone replacement theory. The second question carried forward options selected in the first question; it asked them to indicate which of the changes they had made as of that day. Last, they reported their level of satisfaction with their transition progress on a scale from 1 (very dissatisfied) to 7 (very satisfied) with an additional option of 8 (I do not wish to make any changes in order to make my appearance consistent with my gender identity). Kozee and colleagues (2012) reported good internal consistency reliability (KR20 = .91). A higher number of steps completed to transition has been found to be

positively associated with satisfaction with life and fewer depressive symptoms (Kozee et al., 2012).

Erotic Response and Orientation Scale. Participants rated the frequency of their sexual experiences and feelings within the last year using the 16-item Erotic Response and Orientation Scale (Storms, 1980; see Appendix I). Items formed two 8-item dimensions, attraction to women (gynoeroticism; e.g., "How often have you had any sexual feelings (even the slightest) while looking at a woman?") and attraction to men (androeroticism; e.g., "How often have you felt a desire to have a sexual experience with a particular man you know?"). Responses corresponded with frequency: 1 (0; never), 2 (1-2; once or twice), 3 (3-6; three to six times), 4 (7-12; seven to twelve times), 5 (monthly; an average of once or twice a month), 6 (weekly; an average of once or twice a week), or 7 (daily; almost daily or more). The gynoeroticism dimension was presented first, followed by the androeroticism dimension.

In previous studies, researchers reported internal reliability estimates of $\alpha = .92$ for gynoeroticism and $\alpha = .93$ for androeroticism (Storms, 1980). The overall scale has been found to correlate with sexual orientation identity and erotic fantasy (Storms, 1980). In the pilot study, the two dimensions had equivalent or greater internal reliability (gynoeroticism: $\alpha = .97$; androeroticism: $\alpha = .96$). In the full study, the two dimensions also had excellent internal reliability (gynoeroticism: $\alpha = .97$; androeroticism: $\alpha = .97$).

Sexual orientation identity and "outness." Participants first were asked to identify a single term to describe their sexual orientation identity. They indicated whether they identified as heterosexual/straight, gay, lesbian, bisexual/pansexual, queer, asexual, or other. If they chose "other," they had the option to describe their sexual orientation.

They next reported the age in years at which they first identified with their sexual orientation. To determine the degree to which they publicly disclosed their sexual orientation, participants responded to additional items adapted from the National Lesbian Health Care Survey (Bradford et al., 1994; see Appendix J). First, participants were asked whether anyone else knew of their sexual orientation identity (yes/no). If they answered yes, they indicated the proportion of people to whom they had self-disclosed their identity in each of seven categories: current or previous romantic and/or sexual partners, immediate family members, extended family members, straight/heterosexual friends, all friends, religious or secular organization members, and classmates/work associates. For each of the seven categories, participants indicated the approximate percent of people (0 – 100%) who were aware of their sexual orientation.

Two items assessed the importance of being out and fear of exposure. Participants responded to, "It is important for me to 'be out' to straight (heterosexual) people I know" on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*) and, "Are you worried, concerned, or afraid that people will find out that you are [sexual orientation identity]?" on a scale from 1 (*not at all*) to 5 (*extremely*). The latter item was reverse coded so higher responses indicated more comfort with outness. A behavioral measure of outness, which asked participants to provide their ZIP code, was added to the full study. Because there was very little variability in whether or not participants provided their ZIP code, this variable was not included in future analyses.

Morris and colleagues (2001) reported good internal reliability (α = .70) for the questions referring to degree of outness to straight/heterosexual friends, family, and coworkers; the items assessing the importance of being out and fear of exposure; and the

behavioral measure of outness. In the pilot study, a measure comprised of the seven percentage questions had excellent internal reliability (α = .94). The seven percentage questions had excellent internal reliability (α = .90) in the full study as well. Future analyses will utilize an index of outness as measured by an average of the seven percentage questions.

Attention check question. The first attention check question asked participants to select the third response option listed below from the following response options: blue, red, green, brown, and orange. All participants were allowed to continue the survey regardless of their response, with one exception—MTurk participants were redirected to a noncompliance debriefing form if they did not select the option "green."

Stress Measures

Three measures assessed minority stress. The fourth theorized component of minority stress, outness, was assessed with items described above. Minority stress question wording may have seemed unusual for participants who identified as heterosexual and cisgender. Therefore, scales with wording relevant to heterosexual or cisgender identities were prefaced with the header, "These questions may seem unusual, but please take them at face value. Please answer these questions as honestly as possible." In the full study, participants also completed a measure of general stress which was not specific to their transgender or sexual orientation identities; this measure was counterbalanced with the minority stress measures. Half of participants responded to the minority stress measures first, and half responded to the general stress measure first.

Perceived Stigma. The first component of minority stress assessed participants' Perceived Stigma of their sexual orientation or transgender identity with 11 items (Martin

& Dean, 1987), each rated on a scale from 1 (strongly agree) to 6 (strongly disagree). Participants completed measures with wording relevant to their sexual orientation or transgender identity (see Appendix K). For example, "Most employers will pass over the application of [a heterosexual person/a gay man/a lesbian/a bisexual person/an asexual person] in favor of another applicant" displayed the sexual orientation identity participants selected in an earlier question. Transgender participants completed items modified to reflect their transgender identity, such as, "Most employers will pass over the application of a transgender person in favor of another applicant." Participants completing measures with respect to transgender identity received brief definitions of transgender and cisgender following the general instructions.

Internal reliability estimates of questions referring to perceptions of sexual orientation stigma have been good (α = .86; Meyer, 1995). Perception of stigma has been found to correlate significantly and positively with Internalized Prejudice but has not been found to be related to Experiences with Discrimination and Violence (Meyer, 1995). Perception of stigma has also been associated with increased feelings of demoralization, guilt, and suicidal ideation and behavior (Meyer, 1995). In the pilot study, internal reliability estimates ranged from α = .73 to .91 across the four groups. In the full study, internal reliability estimates ranged from α = .72 to .91 across the four groups.

Internalized Prejudice. The second component of the minority stress measure assessed Internalized Prejudice (Martin & Dean, 1987) with 9 items, each rated on a scale from 1 (*often*) to 4 (*never*). The original scale was developed for gay men; lesbian, bisexual, asexual, queer, and transgender participants completed items that were reworded for this study (see Appendix L). Participants completing measures with respect

to transgender identity received brief definitions of *transgender* and *cisgender* following the general instructions. For transgender participants, items referred to their transgender identity instead of their sexual orientation. For example, gay male participants responded to, "I often feel it best to avoid personal or social involvement with other gay men" and transgender participants responded to, "I often feel it best to avoid personal or social involvement with other transgender individuals."

In previous studies, researchers reported internal reliability estimates of approximately α = .80 (α = .79, Meyer, 1995; α = .83, Lewis et al., 2003). The degree to which individuals internalize prejudice about their identity has been found to be associated with increased feelings of demoralization, guilt, and suicidal ideation and behavior; Internalized Prejudice has also been significantly associated with Experiences with Discrimination and Violence (Meyer, 1995). In the pilot study, internal reliability estimates ranged from α = .71 to .93 across the four groups. In the full study, internal reliability estimates ranged from α = .65 to .94 across the four groups.

Experiences with Discrimination and Violence. Two sets of questions differentiated between violent experiences and other discriminatory experiences (Dean, Wu, & Martin, 1992; see Appendix M). In the first set of questions, participants indicated whether or not they had been the victim of violence on the basis of their sexual orientation or gender identity in the past year (yes/no). If they responded with "yes" to this screening question, they were asked to report the number of times they were a victim of violence on the basis of their sexual orientation or gender identity and had an option to describe the event(s). In the second set of questions, participants indicated whether or not others had discriminated against them on the basis of their sexual orientation or gender

identity in the past year (yes/no). If they responded with "yes" to this screening question, they were asked to report the number of times others had discriminated against them on the basis of their sexual orientation or gender identity and had an option to describe the event(s). Question administration followed this sequence to help reduce response burden; only those who selected "yes" in the screening questions received the follow-up questions.

In a sample of gay men, reports of experiences of violence and experiences with discrimination did not overlap to a large degree (25% of a previous sample reported at least one experience with either discrimination or violence; 2-3% of participants reported Experiences with Discrimination and Violence; Meyer, 1995). Experiencing more discrimination and violence has been associated with feelings of demoralization, guilt, and suicidal ideation and behavior (Meyer, 1995). In the pilot study, participants who identified as cisgender and heterosexual did not report any experiences with discrimination or violence. Thirty-five percent of sexual orientation minorities and transgender participants reported at least one experience with discrimination or violence in the past year. In the full study, one percent of participants who identified as heterosexual and cisgender reported an experience of discrimination or violence, while 30 percent of sexual orientation minorities and transgender participants reported at least one experience with discrimination or violence, while 30 percent of sexual orientation minorities and transgender participants reported at least one experience with discrimination or violence in the past year.

General stress. Participants in the full study completed a measure of general stress, the revised version of the Social Readjustment Rating Scale (Hobson et al., 1998; Holmes & Rahe, 1967; see Appendix N). The scale includes a list of 51 personal stressors, such as "death of a spouse or partner," "change in sleeping habits," and

"trouble with boss." Participants indicated whether or not they had experienced each of the personal stressors within the past year. Responses were summed to create a total number of events for each participant.

Previous studies have reported temporal stability ratings of r = .89 to .86 for non-psychiatric control participants and r = .70 to .91 for psychiatric outpatient participants (Gerst, Grant, Yager, & Sweetwood, 1978). Higher scores have been found to be associated with hospitalization for physical reasons, hospitalization for psychological reasons, and consulting with a physician (Bieliauskas & Webb, 1974). In the full study, internal reliability estimates were acceptable ($\alpha = .75$).

Attention check question. The second attention check question asked participants to select the second response option listed from the following list: strongly disagree, disagree, agree, and strongly agree. All participants were allowed to continue the survey regardless of their response, with one exception—MTurk participants were redirected to a noncompliance debriefing form if they did not select the option "disagree."

Social Support Measures

In order to determine both the quality and size of participants' perceived social support networks, participants in the full study were asked to complete a measure of Community Connectedness (Frost & Meyer, 2012), the Social Provisions Scale (Cutrona & Russell, 1987) and to quantify the number of people in their social support networks.

Community Connectedness. Eight items assessed the degree to which participants were affiliated with or active in the sexual orientation minority and/or transgender community (Frost & Meyer, 2012; see Appendix O). Items such as, "You

feel a bond with the LGBAT community" and "You feel a bond with other [lesbians/gay men/bisexuals/asexuals/ transgender individuals]" were rated on a scale from 1 (agree strongly) to 4 (disagree strongly). All items were reverse coded so higher responses indicate greater connectedness to the community.

Scores on the original version of the scale had good internal reliability in various samples (α = .78 to .81; Frost & Meyer, 2012). The scale has demonstrated good convergent validity as it has shown significant correlations with collective self-esteem, sexual orientation minority group identity, internalized homophobia, and participation in the network (Frost & Meyer, 2012). Discriminant validity was evidenced by nonsignificant correlations with the size of participants' social networks and Black or Latino identity (Frost & Meyer, 2012). Community Connectedness predicted reports of depression symptoms and measures of psychological and social well-being (Frost & Meyer, 2012). The scale showed excellent internal reliability in the full study (α = .91).

Social Provisions Scale. To assess their perception of social support that is not specific to their minority status, participants in the full study responded to the 24-item Social Provisions Scale (Cutrona & Russell, 1987) which includes items such as, "There are people I can depend on to help me if I really need it" and "There is no one I can turn to for guidance in times of stress" (see Appendix P). All items were rated on a scale from 1 (*strongly disagree*) to 4 (*strongly agree*). The scale contains six dimensions, each with four items: Attachment, Social Integration, Reassurance of Worth, Reliable Alliance, Guidance, and Opportunity for Nurturance.

Previous studies reported internal reliability coefficients of α = .85 (Cutrona, 1986) to α = .93 (Nicholson, Brown, & Hoye, 2013) for the overall scale. Estimates of

Integration, α = .72; Reassurance of Worth, α = .74; Reliable Alliance, α = .74; Guidance, α = .76; and Opportunity for Nurturance, α = .70; Nicholson et al., 2013) were slightly lower than earlier estimates (α = .85 to .92; Cutrona, 1986), but within an acceptable range. The dimensions of Attachment, Social Integration, Reassurance of Worth, and Opportunities for Nurturance have been found to correlate with reports of loneliness in nursing home residents (Drageset, Kirkevold, & Espehaug, 2011). In the full study, the overall measure had excellent internal reliability (α = .95).

Social network size and list. Participants reported the size of their perceived social support network in a whole number (e.g., 0, 2, 24, etc.), with a network member being someone they could rely on in times of stress or difficulty, and/or someone who relies on them in times of stress or difficulty (see Appendix Q). Following Hirsch (1980), participants then listed up to 20 individuals with whom they have had contact in the past four to six weeks. Listed individuals could include romantic partners, family members, friends, coworkers, etc. Larger social network size has been found to be associated with greater positive affect and greater immune response to an influenza vaccination (Pressman, Cohen, Miller, Barkin, & Rabin, 2005).

Attention check question. The third and last attention check question asked participants to select the first option listed below from the following phrases: "I like bananas," "I like apples," "I like oranges," and "I like starfruit." All participants were allowed to continue the survey regardless of their response, with one exception—MTurk participants were redirected to a noncompliance debriefing form if they did not indicate a fondness for bananas.

Psychological and Physical Distress Measures

Participants in the full study completed five measures of distress. Measures of psychological distress included two subscales from the Symptom Checklist 90-Revised (Derogatis, 1983), a measure of suicide thoughts and behaviors, and one measure of role limitations due to emotional problems. Physical distress was measured by role limitations due to physical problems and a short measure of general health.

Symptom Checklist 90-Revised. To assess their psychological distress, participants completed the depression and anxiety subscales of the Revised Symptom Checklist-90 (SCL-90-R; Derogatis, 1983; see Appendix R). Twenty-three items, rated on a scale from 1 (not at all) to 5 (extremely), asked how much participants were distressed or bothered by a number of psychological symptoms within the past week. One subscale assessed anxious symptoms with 10 items like "feeling tense or keyed up" and "nervousness or shakiness inside." The second subscale assessed depressive symptoms with 13 items such as "feeling everything is an effort" and "feeling lonely."

Previous studies have reported internal reliability coefficients of α = .85 for the anxiety subscale and α = .90 for the depression subscale (Derogatis, 1983). Convergent validity has been demonstrated by a high correlation of scores on the SCL-90 depression subscale with scores on the MMPI depression dimension (Hathaway & McKinley, 1940) and, to a lesser degree, the MMPI anxiety dimension (Derogatis, Rickels, & Rock, 1976). Responses on the SCL-90 anxiety subscale demonstrate convergent validity through a moderately high correlation with scores on the MMPI anxiety dimension; higher scores on the SCL-90 anxiety subscale are also related to higher scores on the MMPI depression dimension (Derogatis et al., 1976). Schmitz and colleagues (2000) reported good

predictive validity of the SCL-90 depression and anxiety scales; the SCL-90-R discriminated between individuals who were and were not diagnosed with depression or anxiety disorders as indicated by the tenth edition of the *Manual of the International Statistical Classification of Diseases and Health Problems (ICD-10*; World Health Organization, 2010) and the revised third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; *DSM-III-R*; American Psychiatric Association, 1987). In the full study, the anxiety (α = .94) and depression (α = .94) subscales showed excellent internal reliability.

Suicide Behaviors Questionnaire-Revised. In a series of four questions, participants indicated the recency and severity of suicidal thoughts and behaviors (Osman et al., 2001; see Appendix S). For example, "How often have you thought about killing yourself in the past year" was rated on a scale from 1 (*never*) to 5 (*very often, 5 or more times*). "Have you ever thought about or attempted to kill yourself" was rated on a scale from 1 (*never*) to 6 (*I have attempted to kill myself, and really hoped to die*).

Osman and colleagues (2001) recommended a cutoff score of 7 or higher for the general population and 8 for clinical populations. The scale discriminated between suicidal and nonsuicidal subgroups at an inpatient psychiatric facility (ds 1.94 – 4.09 for total scores). In the full study, 19% of heterosexual participants scored above the general adult population cutoff score, along with 22% of cisgender participants, 43% of sexual orientation minority participants, and 69% of transgender participants. The scale had good internal reliability in previous studies (α = .76 to .88; Osman et al., 2001) and showed good internal reliability in the full study (α = .85).

Role limitations. Participants completed two subscales of the 36-item short-form health survey (Ware & Sherbourne, 1992), role limitations due to physical problems and role limitations due to emotional problems (see Appendix T). Both subscales measured the extent to which participants' daily functioning had been limited as a result of problems. Examples of daily functioning were prefaced by, "During the past four weeks, have you had any of the following problems with your work or other regular daily activities as a result of [any emotional problems (such as feeling depressed or anxious) / your physical health]? Did you..." Participants were asked about ways in which they were limited by emotional problems with five items such as, "spend less time doing enjoyable things with friends or family" and "not do work, school, or other activities as carefully as usual." Participants were asked about ways in which they were limited by physical problems with four items such as, "Did you accomplish less than you would like?" and "Were you limited in the kind of work or other activities?" Participants indicated whether or not they experienced each of the problems or limitations with a 1 (yes) or 2 (no).

Previous studies reported internal reliability coefficients of α = .82 for emotional role limitations and α = .89 for physical role limitations (Ware, Kosinski, & Keller, 1994). Responses on the emotional role limitations subscale (r = .17 and .78, respectively) and responses on the physical role limitations subscale (r = .81 and .27, respectively) have been found to differentially correlate with higher-order factors of a physical component summary (e.g., physical functioning, bodily pain, and general health) and a mental component summary (e.g., vitality, social functioning, and mental health), demonstrating both convergent and discriminant validity (Ware, 2004). In the current

study, the physical ($\alpha = .83$) and emotional ($\alpha = .86$) role limitations subscales showed good internal reliability.

General physical health. Four items assessed general physical health: "I seem to get sick a little easier than other people," "I am as healthy as anybody I know," "I expect my health to get worse," and "My health is excellent" (see Appendix U; Conger, Elder, Lorenz, Simons, & Whitbeck, 1994). All four items were rated on a scale from 1 (definitely true) to 5 (definitely false). Applicable items were reverse coded so higher scores represent perceptions of better health.

Previous internal reliability estimates of the scale have been good (α = .80; Conger et al., 1994). Convergent validity has been evidenced by a negative correlation between general physical health and physical role limitations; demonstrating predictive validity, perceptions of better physical health were found to be associated with lower scores on anxiety, depression, and hostility measures and higher scores on positive affect, self-esteem, and mastery measures (Burzette, 1997). In the full study, the four items showed comparably good internal reliability (α = .79).

Demographics

Participants provided potentially relevant demographic information (see Appendix V), including age in years, household income in U.S. dollars, political affiliation, religious affiliation, educational attainment, race (Black/African American, Asian/Asian American, White/European American, Native American/Alaskan Native, Native Hawaiian/Pacific Islander, other, unknown, and prefer not to answer), ethnicity (Hispanic/Latino/a, non-Hispanic/Latino/a, unknown, and prefer not to answer), U.S. state of residence, relationship status (married/civil union, engaged, cohabiting full-time,

cohabiting part-time, steady romantic relationship/partnered, dating, not dating/single, separated, divorced, widowed, other, or prefer not to answer), and relationship duration in years and months if applicable. In the "other" category of relationship status, multiple participants indicated being in polyamorous relationships (long-term romantic or sexual relationships with two or more individuals).

Analytical Approach

Data sets for each recruitment source (postsecondary institutions, national organizations, and social media/online communities) in the full study were aggregated into a single data set. Similar recruitment sources were combined together to create four groups—participants from postsecondary institutions (i.e., Iowa State University students, Marshalltown Community College students, and collegiate sexual orientation minority and transgender organization members; n = 342), community participants (i.e., community sexual orientation minority and transgender organization members, PFLAG chapter members, and American Psychological Association Division 44 members; n = 115), and social media participants (i.e., those recruited from the author's Facebook profile page, sexual orientation minority and transgender Facebook groups, the author's Google+ profile page, and sexual orientation minority and transgender Google+ groups; n = 285). Workers from Amazon Mechanical Turk (n = 244) were their own unique group.

Identity validation. Administering a survey with self-report measures includes the risk that participants will not be honest about their identities, particularly when those identities are stigmatized and participants do not have a personal connection with the researcher (Quinn, 2006; Quinn & Earnshaw, 2013). Ensuring anonymity maximizes honesty in responses (Ong & Weiss, 2000); due to the nature of online data collection,

anonymity is not always possible. Prior to examining associations within the minority stress model, I validated participants' self-reported transgender and sexual orientation identities by comparing them to participants' responses on multi-item measures (e.g., the Transgender Congruence Scale, masculine and feminine gender expression scales, and the Erotic Response Orientation Scale). Establishing relevant differences between groups validated the gender and sexual orientation identities that participants reported.

To verify transgender identities, I compared self-reported cisgender or transgender identity with responses on the Transgender Congruence Scale (Kozee et al., 2012). I next examined the patterns of feminine and masculine gender expression (i.e., undifferentiated, feminine, masculine, or androgynous) in comparison to self-reported cisgender or transgender identity and assigned sex. To verify sexual orientation identities, I compared assigned sex, gender identity, and self-reported sexual orientation identity to responses on the gynoeroticism (attraction to women) and androeroticism (attraction to men) dimensions of the Erotic Response and Orientation Scale (Storms, 1980).

Hypothesized associations. After validating participant identities, I tested Hypotheses 1, 3, and 5 with sets of two comparisons: a comparison of participants who identified as cisgender and heterosexual with sexual orientation minority and transgender participants, and a comparison of sexual orientation minority participants with transgender participants. Utilizing an Analysis of Variance (ANOVA) in SPSS (version 23; IBM Corp., 2014), I determined whether levels of the three minority stressors differed across groups by examining the degree of variability across groups relative to the degree of variability within groups. I concluded that variables that showed a larger proportion of variability across groups compared to variability within groups, as measured by *F*-test,

were significantly different. Post hoc comparisons with Bonferroni corrections determined which group had the highest levels of the minority stressor and which group had the lowest levels.

The third analysis step addressed Hypotheses 2, 4, and 6. I utilized a multi-group analysis with multiple regression in Mplus (Muthén & Muthén, 2010) to compare the strength of the associations between the three minority stressors and psychological and physical distress while controlling for general stressors and other statistically significant covariates. I conducted simultaneous contrasts of path coefficients to determine if path coefficients significantly differed by group. Similar to the previous analyses, I tested hypothesized associations with sets of two comparisons: a comparison between cisgender and heterosexual participants and sexual orientation minority and transgender participants, and a comparison between sexual orientation minority participants and transgender participants. Statistically significant contrasts indicated that the comparison groups had unequal path coefficients.

The fourth analysis step tested the remaining hypotheses: 7, 8, and 9. I tested the moderation hypotheses with interaction terms that were created by multiplying centered minority stress and centered moderator variables together. For example, the Perceived Stigma x outness interaction term was a product of the centered scores on the Perceived Stigma scale and the centered scores for outness. I created nested models in order to make model comparisons possible. Models were examined in a three-step process. First, I included general stress and relevant covariates as predictors of distress. Next, I added predictor variables. Third, I added interaction terms to the model. To test Hypothesis 7, I examined the interactions between outness and minority stressors on levels of

psychological and physical distress. Last, I examined the effects of the interaction between social support and minority stressors on levels of psychological and physical distress (H8 and H9). Statistically significant interaction term coefficients and a significant improvement in model fit with the addition of the interaction terms indicated that the interaction terms were significant predictors in the model. According to a power analysis utilizing G*Power version 3.1.9.2 (Faul, Erdfelder, Buchner, & Lang, 2009), 266 to 377 participants per group (i.e., a total sample size of 1064 to 1508 participants) would be necessary to detect a small to medium effect of the interaction terms on the outcome variables.

CHAPTER V. RESULTS

Summary tables for pilot study results are in Appendix W. Results from the full study are summarized in the text; supplemental information for the full study can be found in Appendix X.

Participation by Recruitment Source

For the full study (N = 986), the majority of participants were recruited from a post on the author's personal Facebook profile page (n = 237), regional colleges and universities (Iowa State University, n = 294; Marshalltown Community College, n = 7) and Amazon Mechanical Turk (MTurk; n = 244). Members from 399 national PFLAG chapters (n = 52), 104 collegiate sexual orientation minority and transgender organizations (n = 41), and 100 community-level sexual orientation minority and transgender organizations (n = 32) were invited to participate. Posts in social media groups (86 Facebook groups, n = 24; 114 Google+ groups, n = 24) also recruited online participants. Academics belonging to Division 44 of the American Psychological Association were recruited by email (n = 31). Recruitment efforts in one source did not result in participants in the full study (i.e., the author's Google+ profile page).

Demographics and descriptive statistics include participants 18 years of age or older. General demographics are presented across the six groups created by the intersection of assigned sex and gender identity. Next, group demographics are reported by transgender identities and sexual orientation identities. Finally, descriptive statistics for minority stress measures are presented within the context of two comparisons: participants who identified as heterosexual and cisgender compared to sexual orientation minority or transgender identities, and sexual orientation minorities compared to those

with a transgender identity. Gender congruence is displayed as a crosstabulation of gender identity by assigned sex in Table 7 (see Appendix W for pilot study information). Eighty-nine percent of participants indicated having a congruent assigned sex and gender identity (n = 757; $n_{\text{male}} = 328$; $n_{\text{female}} = 429$). About five percent of participants indicated they were gender incongruent—19 assigned males identified as women, and 23 assigned females identified as men. The remaining participants (n = 60) did not identify in the gender binary.

General Demographics

See Appendix W for pilot study demographics. Demographics for the full study can be found in Appendix X. As shown in Table X1 in Appendix X, the average age of participants across all groups was just under 30 years of age (M = 29.45, SD = 11.63, range 18 to 77 years). Median household income in U.S. dollars was in the \$41,000 to \$50,000 interval. As shown in Table X2 of Appendix X, about half of participants who

Table 7

Gender Identity by Assigned Sex for Participants in the Full Study

	Assigned Sex										
,	Male (r	<i>i</i> = 363)	Female $(n = 496)$								
Gender Identity	n	%	n	%							
Man	328	90	23	5							
Woman	19	5	429	86							
Other	16	4	44	9							

Notes. Two participants reported "Other" assigned sex. Future descriptives exclude these participants for confidentiality reasons. "Other" gender identity category includes genderqueer/nonbinary, agender/no gender, and write-in options. Total N = 986.

reported their educational attainment had a Bachelor's degree or higher (n = 238). The most common religious affiliation was no religious affiliation (n = 92), followed by Catholic (n = 87), atheist (n = 81), and agnostic (n = 67).

Table X3 in Appendix X shows political affiliation and census region information. Most participants identified as Democrats (n = 227); other common responses were an affiliation as an Independent (n = 105), not being affiliated with a political party (n = 82), or affiliating as a Republican (n = 73). According to the region guidelines set by the United States Census Bureau (2015), the majority of participants (n = 314) lived in the Midwest; the remainder lived in the South (n = 82), West (n = 76), and Northeast (n = 48).

Race, ethnicity, and relationship status information is in Table X4 in Appendix X. Most participants identified as White (n = 459), while others identified as Asian/Asian American (n = 33), a race not specified in the list (n = 24), Black/African American (n = 23), Native American/Alaska Native (n = 14), did not know their race (n = 3), or identified as a Native Hawaiian/Pacific Islander (n = 1). Eleven participants declined to indicate their race. The majority of the sample was not Hispanic or Latino/a (n = 471); 23 participants identified as Hispanic or Latino/a, 25 declined to indicate their ethnicity, and 17 reported not knowing their ethnicity. The two most common relationship status categories were not dating/single (n = 213) and married/in a civil union (n = 90). The majority of participants who provided relationship status information reported being in a committed relationship (i.e., married/civil union, engaged, cohabiting full-time, or steady romantic relationship/partnered; n = 235).

Identity Demographics

Tables 8 and 9 show the distribution of transgender and sexual orientation identities for assigned males and assigned females, respectively.

Transgender identity. The majority of the sample identified as cisgender (n_{males} = 298, n_{females} = 376). Those who did identify as transgender varied in the identity that fit them best. The most common transgender identities for assigned males were transgender (n = 10) and gender fluid (n = 9). For assigned females, the most commonly reported transgender identities were gender fluid (n = 18), gender nonconforming (n = 16), and genderqueer (n = 14).

Transgender identity validation. Administering a survey with self-report measures includes the risk that participants will not be honest about their identities, particularly when those identities are stigmatized and participants do not have a personal connection with the researcher (Quinn, 2006; Quinn & Earnshaw, 2013). Two measures were used to validate participants' transgender identities, the Transgender Congruence Scale (Kozee et al., 2012) and a dimensional measure of gender expression, created by the author (see Appendix E). Table 10 displays the magnitude of differences between transgender and cisgender participants in their reports of gender congruence (see Table W6 in Appendix W for pilot study information). As expected, cisgender participants reported higher congruence between their bodies and gender identities than did transgender participants in the overall scale, t(149.51) = 15.00, p < .001, 95% CI [1.09, 1.31], d = 1.62, the appearance congruence subscale, t(142.24) = 15.64, p < .001, 95% CI [1.22, 1.58], d = 1.75, and indicated greater gender identity acceptance in the gender identity acceptance subscale, t(719) = 5.76, p < .001, 95% CI [0.26, 0.56], d = 0.54.

Table 8

Transgender and Sexual Orientation Identities by Gender Identity for Assigned Males

	Gender Identity									
	Ma	an	Wor	man	Otl	ner				
Characteristic	n	%	n	%	n	%				
Transgender identity										
Cisgender	297	91	1	5	0	0				
Transgender	1	0	7	37	2	13				
Transsexual	0	0	2	11	0	0				
FTM/trans man	1	0	0	0	0	0				
MTF/trans woman	0	0	7	37	0	0				
Genderqueer	4	1	0	0	3	19				
Bi-gender	0	0	1	5	1	6				
Third gender	0	0	0	0	0	0				
Two-spirit	0	0	0	0	2	13				
Cross-dresser	2	1	0	0	0	0				
Gender nonconforming	0	0	0	0	3	19				
Gender fluid	6	2	1	5	2	13				
Other	1	0	0	0	1	6				
Sexual orientation										
Heterosexual/straight	217	66	2	11	2	13				
Gay	38	12	0	0	1	6				
Lesbian	0	0	3	16	1	6				
Bisexual/pansexual	25	8	6	32	4	25				
Queer	5	2	1	5	2	13				
Asexual	1	0	2	11	2	13				
Other	0	0	0	0	1	6				

Notes. Percentages do not sum to 100 due to missing data. *N* assigned males = ; *n* identified men = 328, *n* identified women = 19, *n* identified other = 16.

Table 9

Transgender and Sexual Orientation Identities by Gender Identity for Assigned Females

	Gender Identity									
-	M	an	Woı	man	Oti	her				
Characteristic	n	%	n	%	n	%				
Transgender identity										
Cisgender	2	9	371	86	3	7				
Transgender	5	22	0	0	4	9				
Transsexual	1	4	0	0	0	0				
FTM/trans man	12	52	0	0	0	0				
MTF/trans woman	0	0	0	0	0	0				
Genderqueer	1	4	1	0	12	27				
Bi-gender	0	0	0	0	1	2				
Third gender	0	0	0	0	0	0				
Two-spirit	1	4	5	1	1	2				
Cross-dresser	0	0	0	0	0	0				
Gender nonconforming	0	0	7	2	9	20				
Gender fluid	0	0	7	2	11	25				
Other	0	0	5	1	2	5				
Sexual orientation										
Heterosexual/straight	7	30	227	53	1	2				
Gay	3	13	3	1	5	11				
Lesbian	2	9	32	7	5	11				
Bisexual/pansexual	4	17	67	16	9	20				
Queer	1	4	12	3	14	32				
Asexual	3	13	4	1	2	5				
Other	0	0	5	1	0	0				

Notes. Percentages do not sum to 100 due to missing data. *N* assigned females = 496; n identified men = 23, n identified women = 429, n identified other = 44.

Table 10

Validation of Transgender Identity Responses

			Cisgender $(n = 600)$		Transgende	r (n = 121)				
Scale	Min	Max	M	SD	M	SD	t	df	p	Cohen's d
TCS	1	5	4.49	0.61	3.34	0.80	15.00	149.51	< .001	1.62
AC	1	5	4.50	0.63	3.10	0.94	15.64	142.24	< .001	1.75
GIA	1	5	4.47	0.69	4.07	0.80	5.76	719	< .001	0.54

Notes. TCS = transgender congruence scale; AC = appearance congruence subscale; GIA = gender identity acceptance. Degrees of freedom for TCS and AC significance tests were adjusted due to unequal variances for cisgender and transgender groups.

Table X5 in Appendix X illustrates the variability in feminine and masculine gender expression for participants by binary assigned sex (male or female) and binary transgender identity (cisgender or transgender). Figures X1 through X4 in Appendix X show the patterns in variability in feminine and masculine gender expression. Consistent with Bem's (1981) approach, a plot of expressive/feminine by instrumental/masculine gender expression could be divided into four quadrants: low expressive/feminine and low instrumental/masculine (undifferentiated), high instrumental/masculine and low expressive/feminine (instrumental/masculine), high expressive/feminine and low instrumental/masculine (expressive/feminine), and high expressive/feminine and high instrumental/masculine (androgynous). A series of χ^2 tests of independence evaluated whether or not transgender and cisgender participants were equally distributed across gender expression categories.

For cisgender participants, gender expression significantly differed across assigned sex categories, $\chi^2(3, n=667)=561.67, p<.001$. Compared to assigned males who identified as transgender (n=20, 43%), assigned males who identified as cisgender were more likely to report a stereotypically masculine gender expression (n=269, 91%). Similarly, assigned females who identified as cisgender were more likely to report a stereotypically feminine gender expression (n=326, 88%) than were assigned females who identified as transgender (n=26, 31%). In contrast, for transgender participants, gender expression did not significantly differ across assigned sex categories, $\chi^2(3, n=132)=2.14, p=.544$. Assigned males who identified as transgender were much more likely to report undifferentiated (n=10, 21%) or stereotypically feminine (n=15, 32%) gender expression than were assigned males who identified as cisgender (n=21, 7%; n=1)

2, 1%, respectively). Likewise, assigned females who identified as transgender were much more likely to report undifferentiated (n = 25, 29%) or stereotypically masculine (n = 33, 39%) gender expression compared to assigned females who identified as cisgender (n = 30, 8%; n = 10, 3%, respectively).

Cisgender participants reported overwhelmingly congruent assigned sex and gender identities, and congruent assigned sex and gender expression. Transgender participants were more varied—they were more likely to report incongruence between their assigned sex and gender identity and between their assigned sex and gender expression. These important differences validate the contrasts between cisgender and transgender people and support the differentiation between these of two groups (cisgender versus transgender) for the purposes of analyses.

Sexual orientation identity. As shown earlier in Tables 8 and 9, most participants reported a heterosexual identity (n = 456, 63%). Others reported a bisexual or pansexual identity (n = 115), a gay identity (n = 510), a lesbian identity (n = 43), a queer identity (n = 35), and an asexual identity (n = 14). Six participants selected "other" to best describe their sexual orientation.

Sexual orientation identity validation. Sexual orientation identities were validated with assigned sex, gender identity, and scores on the attraction to women and attraction to men subscales of the Erotic Response and Orientation Scale (Storms, 1980). See Tables W7 and W8 in Appendix W for pilot study information. As shown in Table X6 in Appendix X, heterosexual participants who were assigned male at birth reported more attraction to women, t(122.14) = 10.01, p < .001, 95% CI [1.84, 2.75], d = 1.35, and less attraction to men, t(100.59) = -18.08, p < .001, 95% CI [-3.79, -3.04], d = 2.59, than

their non-heterosexual counterparts. This pattern also held for heterosexual participants who identified as men; they reported more attraction to women, t(105.83) = 10.58, p < .001, 95% CI [2.01, 2.93], d = 1.50, and less attraction to men, t(88.39) = -19.85, p < .001, 95% CI [-3.94, -3.22], d = 3.00, than their non-heterosexual counterparts.

Conversely, Table X7 (see Appendix X) shows that heterosexual assigned females reported less attraction to women, t(290.42) = -20.71, p < .001, 95% CI [-3.11, -2.57], d = 2.14, and more attraction to men, t(315.49) = 6.80, p < .001, 95% CI [0.83, 1.51], d = 0.70, than their non-heterosexual counterparts. Heterosexual participants who identified as women showed the same pattern; they reported less attraction to women, t(206.66) = -20.05, p < .001, 95% CI [-3.22, -2.64], d = 2.28, and more attraction to men, t(220.50) = 5.92, p < .001, 95% CI [0.73, 1.46], d = 0.67, than their non-heterosexual counterparts.

Heterosexual participants' sexual attraction presented a clear pattern—they reported high other-sex attraction and low same-sex attraction. In contrast, sexual orientation minority participants reported more same-sex attraction than did heterosexual people, but also reported other-sex attraction. These important differences validate the planned contrasts between heterosexual people and sexual orientation minorities and support the differentiation between these two groups (heterosexual versus sexual orientation minority) for the purposes of analyses.

Groups Comparisons of Levels of Minority Stressors

Using the methodology described in Figure 7, participants were assigned to one of four groups based on their transgender identity and sexual orientation identity: cisgender (n = 299), heterosexual (n = 206), sexual orientation minority (n = 169), or transgender (n = 206)

= 134). Table 11 shows the distribution of participants across the four groups for transgender identities, sexual orientation identities, and age ranges. Members of the transgender group reported variability within identities; the most common identities were gender fluid (n = 27), genderqueer (n = 21), transgender (n = 19), and gender nonconforming (n = 19). Likewise, the sexual orientation minority group showed variability within sexual orientations; the most common identity was bisexual/pansexual (n = 80), with gay (n = 40) and lesbian (n = 33) being the next most common identities. Illustrating the variability within the transgender population, the transgender group also showed variability across sexual orientations; most identified as bisexual or pansexual (n = 36), queer (n = 25), or heterosexual (n = 21). Participants who identified as cisgender (n = 27.83, n = 11.15) or heterosexual (n = 26.00, n = 9.96) were somewhat younger than participants who identified as transgender (n = 32.92, n = 13.25) or a sexual orientation minority (n = 31.13, n = 30.11).

The following analyses refer to these four groups: cisgender, heterosexual, sexual orientation minority, and transgender. Statistics for measures are displayed separately by each of the four groups. In the hypothesis tests, two sets of comparisons differentiated between groups; the first broadly compared majority participants, those who identified as heterosexual and cisgender, to minority participants, those who identified as either a sexual orientation minority or as transgender. The second comparison differentiated between those with sexual orientation minority identities and those with transgender identities.

As shown in Table 12, levels of minority stressors tended to follow the predicted patterns—sexual orientation minority and transgender participants reported higher levels

Table 11

Transgender Identity, Sexual Orientation Identity, and Age Range by Group

	Group								
Characteristic	Cisgender	Heterosexual	LGBAQ	Transgender					
Transgender identity									
Cisgender	299	206	169	0					
Transgender	0	0	0	19					
Transsexual	0	0	0	3					
FTM/trans man	0	0	0	13					
MTF/trans woman	0	0	0	7					
Genderqueer	0	0	0	21					
Bi-gendered	0	0	0	3					
Third gender	0	0	0	1					
Two-spirit	0	0	0	9					
Cross-dresser	0	0	0	2					
Gender non-conforming	0	0	0	19					
Gender fluid	0	0	0	27					
Other	0	0	0	10					
Sexual orientation identity									
Heterosexual	299	206	0	21					
Gay	0	0	40	11					
Lesbian	0	0	33	10					
Bisexual/pansexual	0	0	80	36					
Queer	0	0	10	25					
Asexual	0	0	6	8					
Other	0	0	5	1					
Age (years)									
18-24	146	123	61	44					
25-34	88	39	63	38					
35-44	33	32	24	23					
45-54	18	3	14	14					
55-64	5	6	7	11					
65+	5	1	3	2					

Notes. LGBAQ = sexual orientation minority (lesbian, gay, bisexual/pansexual, asexual, or queer). $N_{\text{cis}} = 299$, $n_{\text{het}} = 206$, $n_{\text{LGBAQ}} = 169$, and $n_{\text{trans}} = 134$. Numbers do not represent 100% of participants due to missing data.

Table 12
Comparison of Mean Levels of Minority Stressors between Sexual Orientation and Transgender Identity Groups

			_	ender 168)	Hetero (n =	sexual 171)		BAQ 150)	•	gender 89)			Coh	en's
Variable	Min	Max	M	SD	M	SD	M	SD	M	SD	F	p	d^{a}	d^{b}
PS ^{ab}	1	6	2.31	0.70	1.48	0.87	3.12	0.87	4.08	0.95	264.73	< .001	1.69	1.05
IP ^{ab}	1	4	1.11	0.36	1.61	0.43	1.52	0.59	1.75	0.75	49.86	< .001	0.44	0.35
EDV (dichot) ^a	0	1	0.01	0.12	0.01	0.12	0.27	0.44	0.30	0.46	42.89	< .001	0.81	0.08
EDV (counts) ^{ab}	0	365	0.01	0.12	0.05	0.49	2.65	16.50	8.84	49.97	4.83	.002	0.21	0.17
SRRS-R (count)ab	0	51	3.83	2.62	4.02	3.27	5.10	3.92	6.74	4.94	18.03	< .001	0.49	0.37
Outness (percent) ^a	0	100	91.37	23.05	95.47	12.04	54.75	33.33	57.44	35.02	126.79	< .001	1.35	0.08
SPS^{ab}	1	4	3.31	0.50	3.31	0.48	3.27	0.54	3.05	0.52	6.29	< .001	0.24	0.41
CC	1	4	2.92	0.66	2.83	0.69	3.02	0.60	2.89	0.59	2.39	.068	0.15	0.23
Anxiety ^a	1	5	1.71	0.81	1.58	0.78	1.92	0.80	2.25	1.03	13.77	< .001	0.48	0.36
Depression ^{ab}	1	5	1.85	0.88	1.76	0.81	2.19	0.92	2.58	1.00	19.82	< .001	0.59	0.40
SBQ-R ^{ab}	3	18	5.03	3.10	4.76	2.55	6.77	3.63	8.94	4.05	38.08	< .001	0.80	0.56
ERL ^a	0	5	1.71	1.89	1.42	1.67	2.33	1.88	2.75	1.84	13.21	< .001	0.51	0.22
PRL ^a	0	4	0.91	1.34	0.88	1.27	1.47	1.58	1.67	1.60	9.40	< .001	0.45	0.13
GPH ^a	1	5	3.76	0.92	3.70	0.86	3.25	1.02	3.06	1.08	15.35	< .001	0.57	0.18

Notes. LGBAQ = sexual orientation minority (lesbian, gay, bisexual/pansexual, asexual, or queer). PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SRRS-R = Revised Social Readjustment Rating Scale; SPS = Social Provisions Scale; CC = Community Connectedness; SBQ-R = Revised Suicide Behaviors Questionnaire; ERL = emotional role limitations; PRL = Physical Role Limitations; GPH = General Physical Health. Degrees of freedom were adjusted for statistical comparisons between groups with unequal variances.

^a = group means significantly different for planned contrast 1 (heterosexual/cisgender versus LGBAQT). ^b = group means significantly different for planned contrast 2 (LGBAQ versus transgender).

of all stressors than those who identified as cisgender and heterosexual (see Table W9 in Appendix W for pilot study information). Prior to conducting paired comparisons, an ANOVA confirmed that there were differences across the four groups in levels of Perceived Stigma, F(3, 681) = 264.73, p < .001, Internalized Prejudice, F(3, 671) = 49.86, p < .001, and Experiences with Discrimination and Violence, F(3, 672) = 42.89, p < .001.

Perceived Stigma. Support for Hypothesis 1 was evident in a difference in levels of Perceived Stigma between majority and minority groups. As shown in Table 12, participants who identified as cisgender (M = 2.31, SD = 0.70) and heterosexual (M = 1.48, SD = 0.87) reported much lower levels of Perceived Stigma on average than those who identified as a sexual orientation minority (M = 3.12, SD = 0.87) or as transgender (M = 4.08, SD = 0.95), t(529.46) = -21.30, p < .001, 95% CI [-1.75, -1.46], d = 1.69. There was also support for a difference within minority identities—sexual orientation minority participants reported lower Perceived Stigma than did transgender participants, t(271) = -8.60, p < .001, 95% CI [-1.18, -0.74], d = 1.05.

Internalized Prejudice. Hypothesis 3 proposed that levels of Internalized Prejudice differ between majority and minority groups and within minority groups. Consistent with Hypothesis 3, sexual orientation minorities and transgender individuals reported higher levels of Internalized Prejudice than did participants who identified as heterosexual and cisgender, t(438.32) = -5.38, p < .001, 95% CI [-0.34, -0.16], d = 0.44. Likewise, sexual orientation minorities reported significantly lower levels of Internalized Prejudice than did transgender participants, t(183.71) = -2.74, p = .007, 95% CI [-0.41, -0.07], d = 0.35.

Experiences with Discrimination and Violence. Hypothesis 5 predicted that Experiences with Discrimination and Violence would differ between majority and minority groups as well as within minority groups. Among the heterosexual and cisgender participants who completed the experiences with discrimination and violence measure (n = 205), none reported any experiences of violence as a result of their gender identity or sexual orientation. Three cisgender participants (1%) described one experience of gender identity discrimination each. For sexual orientation minority participants, experiences with discrimination ranged from one experience in the past year (n = 11, 7%) to 200 experiences in the past year (n = 1, 1%). About a third (30%) of transgender participants experienced violence or discrimination in the previous year; experiences with violence ranged from one experience in the past year (n = 4, 4%) to five experiences in the past year (n = 1, 1%). For transgender participants, the number of experiences with discrimination ranged from one in the past year (n = 2, 2%) to 365 (n = 1, 1%); one participant (1%) reported "countless" experiences of discrimination in the past year.

Operationalizing the measure as dichotomous (no experience with discrimination or violence versus any experience with discrimination or violence), there was partial support for Hypothesis 5 (see Table 12). Majority groups were less likely to have experienced discrimination and violence in the past year compared to minority groups, t(292.35) = -9.43, p < .001, 95% CI [-0.32, -0.21], d = 0.81, but there was no evidence of a significant difference between sexual orientation minority and transgender groups, t(266) = -0.65, p = .517, 95% CI [-0.15, 0.07], d = 0.08. Further exploration revealed significant differences with more specific operationalizations of the variable. Separating the frequency of experiences with violence from the frequency of experiences with

discrimination revealed that transgender participants (M = 0.17, SD = 0.72) experienced significantly more experiences with violence than did majority participants (M = 0.00, SD = 0.00), p < .001, 95% CI [0.09, 0.25], d = 0.33, or sexual orientation minorities (M = 0.02, SD = 0.14), p < .001, 95% CI [0.06, 0.24], d = 0.29. Likewise, transgender participants (M = 9.67, SD = 52.72) reported significantly more experiences with discrimination than did majority participants (M = 0.03, SD = 0.36), p < .001, 95% CI [3.73, 15.54], d = 0.26, or sexual orientation minorities (M = 2.77, SD = 16.92), p = .044, 95% CI [0.14, 13.66], d = 0.18.

In addition to quantitative information, participants provided qualitative information about their experiences with discrimination and violence. Examining the written descriptions of experiences with discrimination and violence showed that groups reported fairly similar experiences that followed three themes: competition for resources, disregard for identity, and derogation.

Competition for resources. Participants expressed frustration or dissatisfaction with a limit on financial resources. One transgender participant reported losing a scholarship due to their transgender identity. Other transgender participants reported difficulty getting a job, receiving commensurate pay, or receiving promotions. A sexual orientation minority participant was unable to attend their preferred graduate school due to their sexual orientation. A heterosexual and cisgender participant felt limited in the type of scholarships for which they qualified due to requirements of sexual orientation minority status.

Disregard for identity. Participants described others communicating to them, explicitly or implicitly, that their identity was not valid or that they should change their

identity. One sexual orientation minority participant reported others being dismissive of their identity; another described a conversation with their mother in which they were told that the bisexual identity was "made up" by their generation. One sexual orientation minority participant was told they needed to seek professional help because they were told their sexual orientation was a mental disorder. Multiple transgender participants reported being *misgendered*—when others use incorrect gender pronouns in reference to them (e.g., being called "he" when "she" or "they" is preferred); another described comments they received online challenging the validity of a transgender identity. A cisgender participant reported being told that cisgender is not a valid identity, and a participant who identified as heterosexual reported being insistently told they were "a little bi."

Derogation. Multiple sexual orientation minorities and transgender participants reported experiences of derogation, being called names (e.g., "greedy," "bi-slut," "faggot," "confused," etc.). One cisgender participant expressed hurt feelings stemming from an experience of gay friends mocking heterosexual people, a group with which the participant identified.

Summary. Hypotheses 1, 3, and 5 proposed that there would be differences between majority and minority participants in their levels of minority stressors (Perceived Stigma, Internalized Prejudice, and Experiences with Discrimination and Violence, respectively), and that transgender participants would report the highest levels of the stressors. Hypotheses 1 and 3 were fully supported. Participants who identified as heterosexual and cisgender reported significantly less Perceived Stigma and Internalized Prejudice than participants who identified as a sexual orientation minority or as

transgender; transgender participants reported the highest levels of Perceived Stigma and Internalized Prejudice. Hypothesis 5 was not supported with a dichotomous operationalization of Experiences with Discrimination and Violence (none or at least one), but was supported with the use of a continuous operationalization. With the dichotomous operationalization of Experiences with Discrimination and Violence, participants who identified as heterosexual and cisgender were less likely to report experiences than were sexual orientation minority participants, but transgender participants were not more likely to report experiences than were sexual orientation minority participants. However, separating the frequency of experiences with violence from the frequency of experiences with discrimination revealed that transgender participants experienced significantly more violence and more discrimination compared to participants who identified as heterosexual and cisgender or sexual orientation minorities.

Correlations

Correlations for cisgender participants and transgender participants are reported in Table 13, and correlations for heterosexual participants and sexual orientation minority participants are reported in Table 14. See Tables W10 and W11 in Appendix W for correlations for pilot study participants.

Cisgender and transgender groups. Table 13 shows correlations for model variables within cisgender participants and within transgender participants.

Stressor variables. Within minority stress variables, Perceived Stigma significantly correlated with Internalized Prejudice for both cisgender (r = .33, p < .001) and transgender participants (r = .32, p = .002). Perceived Stigma trended toward a

Table 13

Correlations of Model Variables within Cisgender Participants and within Transgender Participants

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PS		.32**	$.17^{\dagger}$.11	01	06	.21*	.18 [†]	.25*	.30**	.29**	.22*	15
2. IP	.33**	_	05	.14	19*	09	.01	.03	.14	.10	.06	.10	10
3. EDV	13 [†]	.04		$.17^{\dagger}$.07	01	.38**	.11	.14	.15	$.17^{\dagger}$.29**	33**
4. SRRS-R	.03	.05	04		.02	07	.26**	.37**	.35**	.34**	.35	$.18^{\dagger}$	17
5. Outness	28**	60**	02	01		.24*	.05	01	13	10	16	.02	.07
6. SPS	35**	40**	02	16^{\dagger}	.29**		.08	22*	37**	18^{\dagger}	36**	27**	.38**
7. CC	23*	13	.01	08	.00	.22*		.06	01	.26**	01	.00	11
8. Anxiety	.29**	.32**	08	.35**	22*	44**	06		.80**	.40**	.42**	.24*	38**
9. Depression	.19*	.31**	06	.43**	16 [†]	45**	11	.77**		.48**	.63**	.35**	46**
10. SBQ-R	05	.09	06	.44**	05	23*	10	.32**	.56**		.42**	.33**	.32**
11. ERL	.02	.06	08	.38**	07	13	04	.49**	.64**	.39**		.42**	32**
12. PRL	.04	01	.07	$.17^{\dagger}$	08	03	09	.14	.30**	.30**	.37**		54**
13. GPH	08	15 [†]	15 [†]	23**	.20*	.32**	.16†	34**	46**	35**	32**	49**	

Notes. Correlations for cisgender participants are shown below the diagonal; correlations for transgender participants are shown above the diagonal. PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SRRS-R = Revised Social Readjustment Rating Scale; SPS = Social Provisions Scale; CC = Community Connectedness; SBQ-R = Revised Suicide Behaviors Questionnaire; ERL = emotional role limitations; PRL = Physical Role Limitations; GPH = general physical health. ** p < .01. * p < .05. † .05

Table 14

Correlations of Model Variables within Heterosexual Participants and within LGBAQ Participants

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PS		.19*	.26**	.04	25**	10	17*	.24**	.20*	.25**	.21**	.13	26**
2. IP	.35**		06	$.16^{\dagger}$	30**	36**	36**	.40**	.46**	$.15^{\dagger}$.24**	$.14^{\dagger}$	23**
3. EDV	.02	06		$.20^{*}$.22**	.08	.16*	.10	.06	.10	$.15^{\dagger}$.05	02
4. SRRS-R	.15*	.12	07		.10	15 [†]	.01	.27**	.28**	.22**	.28**	.31**	20*
5. Outness	18**	26**	.04	17*	_	.27**	.32**	19*	31**	15 [†]	13	05	.19*
6. SPS	23**	28**	.00	.11	.17*	_	.26**	21*	42**	36**	18*	05	.27**
7. CC	.05	.20*	04	.07	$.14^{\dagger}$.04	_	07	08	10	.00	.04	.11
8. Anxiety	.18*	.37**	.01	.04	04	05	.01	_	.71**	.28**	.56**	.21*	28**
9. Depression	.21**	.22**	.02	.07	07	26**	07	.70**	_	.51**	.66**	.24**	39**
10. SBQ-R	10	01	01	.08	.09	14^{\dagger}	03	$.20^{*}$.34**		.22**	.09	31**
11. ERL	.10	.21*	.02	.19*	03	13	10	.48**	.65**	.25**		.50**	40**
12. PRL	.03	.04	.17*	.12	05	18*	03	.31**	.38**	.33**	.41**		41**
13. GPH	07	19*	.01	10	.10	.36**	.10	17*	28**	16^{\dagger}	24**	30**	_

Notes. LGBAQ = lesbian, gay, bisexual, asexual, and queer. Correlations for heterosexual participants are shown below the diagonal; correlations for LGBAQ participants are shown above the diagonal. PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SRRS-R = Revised Social Readjustment Rating Scale; SPS = Social Provisions Scale; CC = Community Connectedness; SBQ-R = Revised Suicide Behaviors Questionnaire; ERL = emotional role limitations; PRL = Physical Role Limitations; GPH = general physical health.

^{**} p < .01. * p < .05. † .05 .

significant correlation with Experiences with Discrimination and Violence for cisgender (r=-.13, p=.058) and transgender participants (r=.17, p=.076), albeit in opposite directions. The associations between Internalized Prejudice and Experiences with Discrimination and Violence were similarly nonsignificant for cisgender (r=.04, p=.578) and transgender (r=-.05, p=.647) participants. General stress was typically not associated with minority stress for either cisgender or transgender participants; however, there was some evidence that transgender participants who experienced more general stress were also more likely to experience discrimination or violence (r=.17, p=.087).

Overall, minority stress was more strongly related to the psychological and physical distress measures for transgender participants than for cisgender participants. Perceived Stigma and Internalized Prejudice were significantly correlated with only the anxiety (r = .29, p = .001; r = .32, p < .001) and depression (r = .19, p = .035; r = .31, p < .001) measures for cisgender participants. Perceived Stigma was significantly related to all but two of the psychological and physical distress measures for transgender participants (see Table 13), while transgender participants' Internalized Prejudice was not significantly related to any of the distress measures. For transgender participants, Experiences with Discrimination and Violence was significantly correlated with the two physical distress measures, physical role limitations (r = .29, p = .004) and general physical health (r = -.33, p = .001). As expected, general stress was significantly related to the majority of psychological and physical distress measures for both cisgender and transgender participants.

Moderator variables. Surprisingly, the moderator variables were more strongly related to minority stress for cisgender participants than for transgender participants. For

cisgender participants, outness, Social Provisions, and Community Connectedness were generally significantly related to Perceived Stigma (rs -.23 to -.35, ps .011 to < .001) and Internalized Prejudice (rs -.13 to -.60, ps = .149 to < .001). For transgender participants, Community Connectedness showed the strongest associations with minority stress (Perceived Stigma: r = .21, p = .032; Experiences with Discrimination and Violence: r = .38, p < .001), while outness was only significantly related to Internalized Prejudice (r = -.19, p = .048).

Responses on the Social Provisions Scale were significantly related to the majority of distress outcomes for cisgender participants, and were related to all distress outcomes for transgender participants (see Table 13). For cisgender participants, outness was significantly related to anxiety (r = -.22, p = .013) and general physical health (r = .20, p = .025); outness was not significantly related to any distress outcomes for transgender participants. Community Connectedness was not significantly related to any distress outcomes for cisgender participants, but was significantly related to Suicide Behaviors for transgender participants (r = .26, p = .009).

Distress outcome variables. Supporting the use of a latent factor of psychological distress, the psychological distress outcomes show significant multicollinearity. Anxiety and depression symptoms were particularly highly correlated for both cisgender (r = .77, p < .001) and transgender (r = .80, p < .001) participants. Depression symptoms were also fairly highly correlated with emotional role limitations for cisgender (r = .64, p < .001) and transgender (r = .63, p < .001) participants. Future analyses combine psychological distress outcome variables into a latent factor. Unlike the psychological

distress measures, the two physical distress measures were more moderately correlated for cisgender (r = -.49, p < .001) and transgender (r = -.54, p < .001) participants.

Heterosexual and sexual orientation minority groups. Table 14 shows correlations for model variables within heterosexual participants and within sexual orientation minority participants.

Stressor variables. Perceived Stigma was significantly related to Internalized Prejudice for both heterosexual (r = .35, p < .001) and sexual orientation minority participants (r = .19, p = .014). Perceived Stigma was not significantly related to Experiences with Discrimination and Violence for heterosexual participants (r = .02, p = .817), but the two variables were related for sexual orientation minority participants (r = .26, p = .002). Internalized Prejudice was not significantly related to Experiences with Discrimination and Violence for either heterosexual (r = -.06, p = .430) or transgender (r = -.06, p = .440) participants. General stress was significantly related to Perceived Stigma for heterosexual participants (r = .15, p = .037) and was significantly related to Experiences with Discrimination and Violence for sexual orientation minorities (r = .20, p = .016).

Moderator variables. For sexual orientation minorities, outness and Community Connectedness were significantly related to all three minority stressors. Those who reported higher levels of Perceived Stigma (r = -.25, p = .001) and Internalized Prejudice (r = -.30, p < .001) reported less outness; those who were more out were more likely to have reported at least one experience of discrimination or violence (r = .22, p = .006). Reports of Community Connectedness showed a similar pattern with the minority stressors (see Table 14). Higher reports of Internalized Prejudice were associated with

lower reports of Social Provisions (r = -.36, p < .001). For heterosexual participants, Internalized Prejudice was significantly associated with all three moderator variables; Perceived Stigma was significantly associated only with outness (r = -.18, p = .009) and Social Provisions (r = -.23, p = .005). For heterosexual participants, Experiences with Discrimination and Violence were not significantly associated with any moderator variables.

Heterosexual participants who reported more Social Provisions tended to report less distress; they reported fewer depression symptoms (r = -.26, p = .001), fewer physical role limitations (r = -.18, p = .029), and better overall health (r = .36, p < .001). Outness and Community Connectedness were not significantly associated with any distress outcomes for heterosexual participants. For sexual orientation minorities, being more out was associated with fewer anxiety (r = -.19, p = .016) and depression (r = -.31, p < .001) symptoms and better overall health (r = .19, p = .022). Sexual orientation minorities who reported more Social Provisions also reported fewer anxiety (r = -.21, p = .010) and depression (r = -.42, p < .001) symptoms, fewer suicide behaviors (r = -.36, p < .001), fewer emotional role limitations (r = -.18, p = .023), and better overall health (r = .27, p = .001). Similar to heterosexual participants, sexual orientation minorities did not show any significant associations between Community Connectedness and distress outcomes.

Distress outcome variables. For heterosexual and sexual orientation minority participants, the psychological distress measures showed moderate to high correlations with each other. Anxiety and depression symptoms were particularly highly correlated for both heterosexual (r = .70, p < .001) and sexual orientation minority (r = .71, p < .001)

participants. Depression symptoms were also fairly highly correlated with emotional role limitations for heterosexual (r = .65, p < .001) and sexual orientation minority (r = .66, p < .001) participants. This additional evidence of multicollinearity supports combining psychological distress outcome variables into a single latent factor. Future analyses will include a latent factor of psychological distress: a combination of anxiety symptoms, depression symptoms, suicide behaviors, and emotional role limitations. The magnitude of the correlations between the two physical distress measures did not show the same degree of multicollinearity for heterosexual (r = -.30, p < .001) and sexual orientation minority (r = -.41, p < .001) participants.

Group Differences in Associations between Minority Stressors and Distress

The discussion of the remaining hypotheses is structured by minority stressor, beginning with Perceived Stigma, followed by Internalized Prejudice, and concluding with Experiences with Discrimination and Violence. The summary of results for each minority stressor addresses four hypotheses. The first hypothesis compares the strength of associations between the minority stressor and psychological and physical distress for three groups—participants who identified as heterosexual and cisgender, sexual orientation minority participants, and transgender participants (Hypotheses 2, 4, and 6). For each minority stressor, significance of group differences between path coefficients was determined with simultaneous contrasts within each of the six multi-group, multi-stressor models, described below. I concluded that the magnitudes of path coefficients for the two groups were significantly different if the contrasts were statistically significant.

A discussion of significant interaction effects follows the discussion of group differences in path coefficients. The second hypothesis discussed in this section

addressed interaction effects of outness and each minority stressor on distress (Hypothesis 7); the next hypothesis addressed interaction effects of social support and each minority stressor on distress (Hypothesis 8), and the last hypothesis proposed group differences in the moderation effects of social support (Hypothesis 9). These latter three hypotheses are addressed with two sets of interaction models. First, a set of individual interaction models established effects of each individual minority stressor (Perceived Stigma, Internalized Prejudice, or Experiences with Discrimination and Violence) and interaction term (outness, Social Provisions, or Community Connectedness) on each individual outcome variable (depressive symptoms, anxiety symptoms, Suicide Behaviors, emotional role limitations, Physical Role Limitations, and general physical health) for each group (heterosexual/cisgender, sexual orientation minority, or transgender participants), resulting in 162 individual interaction models (see Appendices Y through BZ on pages 265 through 318). The second set of interaction models—the six multi-group, multi-stressor models—simultaneously estimated the associations between all three minority stressors and distress for all three groups. Table 15 displays the six models and lists the tables corresponding to multi-group model results (Tables 16 through 24) and tables corresponding to group comparisons (Tables 25 through 27). Similarities and differences between the individual interaction models and multi-group, multi-stressor models are discussed relative to each predictor variable.

Individual interaction model approach. I examined effects of each combination of stressor variables and moderator variables on each outcome variable to establish effects of stressors and interaction terms on distress outcomes and to verify that the estimates were stable. Each model followed the same three-step analysis strategy—first,

Table 15

Models Testing Associations between Minority Stressors, Moderators, and Distress

#	Multi- Group Analysis Table	Distress Variable	Moderator Variable	Minority Stressors	Group Comparison Table
1	16	Psychological Distress	Outness	PS IP EDV	25 26 27
2	17	Psychological Distress	SPS	PS IP EDV	25 26 27
3	18	Psychological Distress	CC	PS IP EDV	25 26 27
4	19 20	Physical Role Limitations General Physical Health	Outness	PS IP EDV	25 26 27
5	21 22	Physical Role Limitations General Physical Health	SPS	PS IP EDV	25 26 27
6	23 24	Physical Role Limitations General Physical Health	CC	PS IP EDV	25 26 27

Notes. Models 1, 2, and 3 included a latent outcome variable of psychological distress, measured by anxiety symptoms, depression symptoms, suicide behaviors, and emotional role limitations. Models 4, 5, and 6 simultaneously predicted two physical distress variables, Physical Role Limitations and general physical health. Results for physical distress outcomes are presented separately. SPS = Social Provisions Scale; CC = Community Connectedness; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence.

the outcome variable was predicted by general stress (SRRS-R). Second, one minority stressor variable (Perceived Stigma, Internalized Prejudice, or Experiences with Discrimination and Violence) and one moderator variable (outness, Social Provisions, or

Community Connectedness) were added to the model. Last, the interaction term for the minority stressor and moderator variable was added to the model. As shown in Appendices Y through BZ (see pages 265 through 318), the estimates for each individual interaction model appear to be stable—the addition of the interaction terms did not significantly change the valence or magnitude of path coefficients.

For example, refer to the model predicting emotional role limitations for transgender participants (see Table BF1 in Appendix BF). Although the initial standardized coefficient for general stress (β = .35, t = 3.90, p < .001) slightly decreased in magnitude with the addition of Perceived Stigma and Social Provisions (β = .30, t = 3.54, p < .001) and again slightly with the addition of the interaction term (β = .29, t = 3.54, p < .001), its function in the model did not significantly change. It remained a moderately strong predictor of emotional role limitations. Likewise, the initial standardized coefficients for Perceived Stigma (β = .25, t = 2.93, p = .003) and Social Provisions (β = -.29, t = -3.47, p = .001) did not significantly change (β = .23, t = 2.75, p = .006 and β = -.32, t = 3.87, p < .001, respectively) with the addition of the interaction term.

Multi-group and multi-stressor model approach. After verifying the stability of the path estimates and establishing effects of each stressor and interaction term on each outcome variable for each group, I simultaneously measured the associations between minority stressors and distress, and interaction effects, for all three groups. Parameters were allowed to vary across groups to estimate the relative strength of associations; latent factor indicator loadings (see Tables CA1 through CA3 in Appendix CA), magnitudes of coefficients, and correlations between variables varied across the three groups.

Step 1. Each of the six multi-group, multi-stressor models was tested with a similar three-step approach: first, the psychological or physical distress variables were predicted by general stress (SRRS-R) and other significant covariates. Significant covariates were generally consistent across models; some variability occurred relative to outcome or moderator variables. Age and a dichotomous measure of Amazon Mechanical Turk sample membership—whether or not participants were from the MTurk sample—were significant covariates in all six models. Overall, MTurk participants were less psychologically and physically distressed than other participants. Older participants were less psychologically distressed but more physically distressed than younger participants.

For the three physical distress models, MTurk membership, age, and census region were significant covariates. The physical distress models with social support variables as moderators included additional covariates; with Social Provisions, race was a covariate, and with Community Connectedness, race and educational attainment were covariates. Psychological distress models and physical distress models with all significant covariates are presented in the text, and physical distress models with restricted covariates (e.g., only MTurk participation and age) are presented in Appendix CA. Physical distress models with restricted covariates showed only minor differences from those with the inclusion of all significant covariates. For example, in the physical distress models with restricted covariates, all associations between Experiences with Discrimination and Violence and general physical health became statistically significant for transgender participants. For sexual orientation minorities, the associations between Internalized Prejudice and physical distress varied. The association between Internalized Prejudice and general physical health became significant for the model with outness as a

moderator. However, for sexual orientation minorities, the association between Internalized Prejudice and Physical Role Limitations became nonsignificant for the model with Social Provisions as a moderator. Models with all significant covariates included are discussed in detail—these models conservatively estimate the associations between minority stressors and psychological and physical distress because they parcel out the shared variance between potentially confounding variables and distress, leaving only the shared variance between minority stressors and distress.

Step 2. After including general stress and covariates, the second step in the approach involved the addition of the three centered minority stressor variables and one centered moderator variable to each model.

Step 3. In the third and last step, three interaction terms, each created by the product of the centered moderator variable and a centered minority stressor, were added to the model.

As shown in Table 15, the first three of the six multi-group, multi-stressor models were measurement models with a latent psychological distress variable outcome. See Tables DA1 through DA3 in Appendix DA for factor loadings for the latent psychological distress factor. Each model included a different moderator variable—Model 1 included a moderator of outness (see Table 16), Model 2 included a moderator of Social Provisions (see Table 17), and Model 3 included a moderator of Community Connectedness (see Table 18). For example, as shown in Table 16, general stress and covariates were added in Step 1, minority stressors and moderator variables in Step 2, and interaction terms in Step 3. In each multi-group, multi-stressor results table, participants who identified as heterosexual and cisgender are listed first, sexual orientation minorities

Table 16

Model 1 – Multi-Group Analysis of the Effect of Outness on the Association between Minority Stressors and a Latent Factor of Psychological Distress

-		Step 1			Step 2	2		Step 3	3
Variable	β	t	p	β	t	p	β	t	p
Heterosexual	and Cis	sgender							
SRRS-R	.27	3.96	<.001	.25	3.71	<.001	.25	3.70	<.001
MTurk	16	-2.16	.031	13	-1.70	.090	12	-1.62	.105
Age	03	-0.44	.662	03	-0.34	.732	05	-0.60	.546
PS				.15	2.19	.028	.15	2.07	.038
IP				.13	1.80	.072	.15	1.91	.056
EDV				.03	0.37	.709	08	-0.61	.541
Out				02	-0.23	.819	05	-0.40	.687
PS*Out							.06	0.56	.577
IP*Out							.04	0.41	.681
EDV*Out							.13	0.92	.356
\mathbb{R}^2		.12			.16			.16	
LGBAQ									
SRRS-R	.35	4.25	< .001	.25	3.24	.001	.24	3.11	.002
MTurk	02	-0.24	.813	07	-1.00	.319	06	-0.89	.372
Age	24	-2.98	.003	07	-0.99	.320	06	-0.82	.415
PS				.07	0.92	.357	.08	0.99	.323
IP				.34	4.66	<.001	.37	4.86	<.001
EDV				.08	1.05	.292	.10	1.22	.224
Out				25	-3.08	.002	25	-3.14	.002
PS*Out							04	-0.50	.618
IP*Out							.13	1.66	.097
EDV*Out							01	-0.18	.860
\mathbb{R}^2		.17			.36			.38	

Table 16 continued

-	Step 1				Step 2		Step 3			
Variable	β	t	p	β	t	p	β	t	p	
Transgender										
SRRS-R	.34	3.36	.001	.30	3.07	.002	.27	2.80	.005	
MTurk	34	-3.49	< .001	30	-3.10	.002	31	-3.29	.001	
Age	16	-1.63	.103	24	-2.52	.012	22	-2.33	.020	
PS				.26	2.61	.009	.26	2.61	.009	
IP				.00	0.02	.986	.00	0.03	.976	
EDV				.09	0.91	.364	.13	1.34	.179	
Out				24	-2.54	.010	20	-2.07	.039	
PS*Out							.02	0.21	.835	
IP*Out							21	-2.04	.041	
EDV*Out							.00	-0.00	.999	
\mathbb{R}^2		.32			.45			.47		
RMSEA		.09			.08			.08		
CFI		.84			.89			.89		
	χ^2	df	p	χ^2	df	p	χ^2	df	p	
Model Fit	279.28	126	< .001	218.43	114	< .001	209.81	105	< .001	
$\Delta\chi^2$				60.85	12	< .001	8.62	9	.473	

Notes. Psychological distress is a latent factor comprised of Depressive Symptoms, Anxiety Symptoms, Suicide Behaviors, and emotional role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; Out = outness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 487 ($n_{\text{het/cis}} = 249$; $n_{\text{LGBAQ}} = 144$; $n_{\text{trans}} = 95$).

Table 17

Model 2 – Multi-Group Analysis of the Effect of Social Provisions on the Association between Minority Stressors and a Latent Factor of Psychological Distress

		Step	1		Step	2		Step 3	3
Variable	β	t	p	β	t	p	β	t	p
Heterosexual a	and Cis	sgender							
SRRS-R	.27	3.96	<.001	.24	3.78	<.001	.24	3.78	<.001
MTurk	16	-2.16	.031	15	-2.07	.039	13	-1.86	.064
Age	03	-0.44	.663	03	-0.48	.634	03	-0.45	.652
PS				.07	0.99	.320	.06	0.92	.360
IP				.05	0.69	.488	.05	0.64	.522
EDV				.02	0.28	.778	.01	0.09	.929
SPS				33	-5.22	<.001	35	-4.98	<.001
PS*SPS							08	-1.12	.261
IP*SPS							.04	0.56	.576
EDV*SPS							05	-0.69	.493
\mathbb{R}^2		.12			.24			.25	
LGBAQ									
SRRS-R	.35	4.29	<.001	.18	2.45	.014	.18	2.40	.016
MTurk	02	-0.24	.810	14	-1.83	.067	13	-1.80	.071
Age	24	-3.02	.003	14	-1.98	.048	14	-2.02	.043
PS				.14	1.89	.059	.14	1.98	.047
IP				.28	3.68	<.001	.22	2.74	.006
EDV				.04	0.58	.560	.03	0.41	.685
SPS				31	-4.14	<.001	33	-4.36	< .001
PS*SPS							.12	1.55	.122
IP*SPS							19	-2.42	.016
EDV*SPS							01	-0.16	.871
\mathbb{R}^2		.18			.40			.42	

Table 17 continued

	Step 1				Step 2		Step 3		
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	.34	3.36	.001	.28	2.99	.003	.26	2.85	.004
MTurk	34	-3.49	< .001	27	-2.91	.004	28	-3.05	.002
Age	16	-1.63	.103	23	-2.54	.011	23	-2.56	.010
PS				.23	2.47	.013	.24	2.51	.012
IP				.01	0.05	.962	.00	-0.00	.997
EDV				.10	1.09	.275	.09	0.98	.329
SPS				39	-4.50	< .001	41	-4.72	< .001
PS*SPS							.09	0.94	.347
IP*SPS							05	-0.58	.563
EDV*SPS	}						09	-0.97	.334
\mathbb{R}^2		.32			.53			.55	
RMSEA		.10			.08			.08	
CFI		.79			.88			.88	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	336.31	126	< .001	233.82	114	< .001	223.84	105	< .001
$\Delta \chi^2$				102.49	12	< .001	9.98	9	.352

Notes. Psychological distress is a latent factor comprised of Depressive Symptoms, Anxiety Symptoms, Suicide Behaviors, and emotional role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SPS = Social Provisions Scale; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. $N = 488 \ (n_{\text{het/cis}} = 249; n_{\text{LGBAQ}} = 144; n_{\text{trans}} = 95).$

Table 18

Model 3 – Multi-Group Analysis of the Effect of Community Connectedness on the Association between Minority Stressors and a Latent Factor of Psychological Distress

		Step 1			Step 2	,		Step 3				
Variable	β	t	p	β	t	p	β	t	p			
Heterosexual a	Heterosexual and Cisgender											
SRRS-R	.27	3.88	<.001	.25	3.72	<.001	.26	3.90	<.001			
MTurk	17	-2.21	.027	14	-1.74	.082	14	-1.79	.074			
Age	02	-0.23	.822	01	-0.15	.881	02	-0.28	.782			
PS				.14	2.15	.032	.16	2.47	.013			
IP				.14	2.15	.032	.23	3.28	.001			
EDV				.02	0.29	.773	.03	0.48	.630			
CC				13	-2.06	.040	10	-1.48	.140			
PS*CC							09	-1.44	.151			
IP*CC							24	-3.44	.001			
EDV*CC							.03	0.45	.656			
\mathbb{R}^2		.13			.18			.23				
LGBAQ												
SRRS-R	.35	4.28	<.001	.23	2.99	.003	.24	3.12	.002			
MTurk	02	-0.24	.808	05	-0.64	.522	06	-0.84	.404			
Age	24	-3.02	.003	14	-1.93	.054	11	-1.52	.128			
PS				.16	2.11	.035	.17	2.15	.032			
IP				.40	5.25	<.001	.44	5.36	<.001			
EDV				.01	0.15	.881	.02	0.22	.824			
CC				.08	1.01	.313	.02	0.26	.798			
PS*CC							09	-1.11	.267			
IP*CC							.15	1.73	.084			
EDV*CC							.14	1.93	.053			
\mathbb{R}^2		.17			.33			.38				

Table 18 continued

	Step 1				Step 2			Step 3			
Variable	β	t	p	β	t	p	β	t	p		
Transgender	•										
SRRS-R	.34	3.36	.001	.32	3.17	.002	.32	3.07	.002		
MTurk	34	-3.49	<.001	28	-2.80	.005	28	-2.80	.005		
Age	16	-1.63	.103	20	-2.06	.039	22	-2.13	.033		
PS				.27	2.60	.009	.26	2.54	.011		
IP				.04	0.39	.698	.00	0.03	.973		
EDV				.12	1.11	.267	.16	1.38	.168		
CC				11	-1.02	.307	16	-1.39	.166		
PS*CC							06	-0.59	.554		
IP*CC							10	-0.92	.356		
EDV*CC							06	-0.56	.578		
\mathbb{R}^2		.32			.40			.42			
RMSEA		.09			.08			.08			
CFI		.82			.86			.88			
	χ^2	df	p	χ^2	df	p	χ^2	df	p		
Model Fit	293.64	126	< .001	242.31	114	< .001	221.57	105	< .001		
$\Delta\chi^2$				51.33	12	< .001	20.75	9	.014		

Notes. Psychological distress is a latent factor comprised of Depressive Symptoms, Anxiety Symptoms, Suicide Behaviors, and emotional role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; CC = Community Connectedness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 476 ($n_{\text{het/cis}} = 249$; $n_{\text{LGBAQ}} = 144$; $n_{\text{trans}} = 95$).

are listed second, and transgender participants are listed third. Model fit indices are listed for each step in each model; separate estimates of R^2 are listed for each group at each step, and overall χ^2 and change in χ^2 ($\Delta\chi^2$) for each of the three steps are at the end of the table. For example, the addition of interaction terms in Step 3 in Model 3 (see Table 18) resulted in a significant improvement in model fit compared to the Step 2 model, which included covariates and minority stress variables, $\Delta\chi_9^2 = 20.75$, p = .014.

The last three multi-group, multi-stressor models were observed variable models, simultaneously predicting physical role limitations and general physical health. Statistics are reported separately for physical role limitations and general physical health for simplicity. Each of these three models included a different moderator variable—Model 4 included a moderator of outness (see Table 19 for results involving Physical Role Limitations and Table 20 for results involving general physical health), Model 5 included a moderator of Social Provisions (see Table 21 for results involving Physical Role Limitations and Table 22 for results involving general physical health), and Model 6 included a moderator of Community Connectedness (see Table 23 for results involving Physical Role Limitations and Table 24 for results involving general physical health).

Perceived Stigma and distress. Hypotheses 2, 7, 8, and 9 included predictions about the relationship between perceptions of identity stigma and psychological and physical distress. Hypothesis 2 predicted that people who identified as heterosexual and cisgender would report weaker associations between Perceived Stigma and psychological and physical distress compared to sexual orientation minorities, and transgender individuals would report the strongest associations of all groups. Hypotheses 7 predicted that these associations would be buffered or amplified by outness; Hypothesis 8 predicted

Table 19

Model 4 – Multi-Group Analysis of the Effect of Outness on the Association between Minority Stressors and Physical Distress (Physical Role Limitations)

-		Step	1		Step	2		Step	3
Variable	β	t	p	β	t	p	β	t	p
Heterosexual an	d Cisgo	ender							
SRRS-R	.09	1.44	.149	.10	1.64	.101	.10	1.70	.089
MTurk	38	-4.09	< .001	38	-4.03	< .001	38	-4.12	<.001
Age	.37	5.75	< .001	.35	5.26	<.001	.34	4.93	<.001
NERegion	.08	0.94	.350	.07	0.90	.368	.08	0.97	.336
MWRegion	02	-0.13	.898	03	-0.25	.805	04	-0.36	.721
SRegion	.05	0.66	.507	.05	0.65	.515	.05	0.66	.506
PS				.00	0.07	.948	.01	0.22	.830
IP				03	-0.38	.701	01	-0.10	.917
EDV				.08	1.43	.152	.11	0.92	.357
Out				03	-0.39	.697	10	-0.93	.353
PS*Out							.02	0.20	.841
IP*Out							.08	0.85	.394
EDV*Out							03	-0.25	.804
\mathbb{R}^2		.16			.17			.17	
LGBAQ									
SRRS-R	.27	3.42	.001	.24	2.97	.003	.24	2.89	.004
MTurk	08	-0.93	.351	11	-1.38	.166	11	-1.41	.158
Age	.15	1.85	.065	.22	2.78	.005	.24	2.91	.004
NERegion	.08	0.84	.401	.09	0.99	.322	.10	1.08	.282
MWRegion	13	-1.30	.193	14	-1.42	.156	15	-1.49	.138
SRegion	17	-1.66	.097	21	-2.02	.043	21	-2.08	.038
PS				.09	1.05	.293	.10	1.10	.274
IP				.15	1.79	.073	.17	1.89	.059
EDV				03	-0.38	.707	07	-0.77	.442
Out				13	-1.41	.159	12	-1.33	.183
PS*Out							.10	1.17	.243
IP*Out							03	-0.39	.699
EDV*Out							.03	0.37	.714
R ²		.18			.24			.25	

Table 19 continued

		Step 1			Step	2		Step 3	3
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	.13	1.17	.244	.06	0.54	.593	.03	0.26	.799
MTurk	16	-1.42	.156	10	-0.95	.340	11	-0.99	.320
Age	.09	0.87	.384	.03	0.23	.815	.03	0.27	.788
NERegion	03	-0.24	.808	.02	0.19	.849	.05	0.42	.674
MWRegion	19	-1.47	.141	11	-0.89	.375	09	-0.69	.492
SRegion	00	-0.03	.977	.03	0.27	.791	.02	0.19	.850
PS				.07	0.65	.513	.08	0.73	.464
IP				.13	1.26	.208	.17	1.54	.123
EDV				.27	2.39	.017	.31	2.74	.006
Out				00	-0.01	.993	.01	0.12	.901
PS*Out							.10	0.86	.388
IP*Out							09	-0.88	.381
EDV*Out							16	-1.51	.132
\mathbb{R}^2		.09			.18			.20	
RMSEA		.06			.02			.00	
CFI		.90			1.00			1.00	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	63.17	42	.019	18.77	18	.406	0.00	0	< .001
$\Delta \chi^2$				44.40	24	.007	18.77	18	.406

Notes. Physical role limitations model ran in conjunction with model predicting general physical health. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; NERegion = resident of Northeast U.S. (1) or not (0); MWRegion = resident of Midwest U.S. (1) or not (0); SRegion = resident of Southern U.S. (1) or not (0); PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; Out = outness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 470 ($n_{\text{het/cis}} = 249$; $n_{\text{LGBAQ}} = 135$; $n_{\text{trans}} = 86$).

Table 20

Model 4 – Multi-Group Analysis of the Effect of Outness on the Association between Minority Stressors and Physical Distress (General Physical Health)

		Step 1			Step 2			Step 3	
Variable	β	t	p	β	t	p	β	t	p
Heterosexual ar	nd Cisge	ender							
SRRS-R	12	-1.99	.047	13	-2.06	.040	13	-2.07	.038
MTurk	.16	1.59	.112	.13	1.30	.194	.13	1.30	.195
Age	22	-3.21	.001	23	-3.22	.001	25	-3.43	.001
NERegion	02	-0.27	.790	.01	0.06	.952	.00	0.05	.959
MWRegion	.01	0.06	.954	.00	-0.00	.999	01	-0.07	.941
SRegion	.07	0.78	.433	.06	0.70	.483	.06	0.70	.486
PS				.00	0.06	.951	.00	0.01	.989
IP				14	-2.02	.043	14	-2.06	.039
EDV				06	-1.02	.306	27	-2.13	.033
Out				.07	0.99	.321	.13	1.22	.221
PS*Out							.01	0.11	.913
IP*Out							.01	0.08	.939
EDV*Out							.25	1.86	.063
\mathbb{R}^2		.07			.10			.12	
LGBAQ									
SRRS-R	19	-2.29	.022	17	-1.96	.050	16	-1.93	.053
MTurk	.07	0.73	.463	.11	1.25	.211	.09	1.14	.257
Age	04	-0.52	.604	13	-1.49	.136	14	-1.71	.087
NERegion	19	-1.90	.058	20	-2.14	.032	20	-2.09	.037
MWRegion	21	-1.95	.051	22	-2.09	.037	22	-2.17	.030
SRegion	14	-1.29	.198	10	-0.92	.356	10	-0.97	.330
PS				22	-2.60	.009	25	-2.88	.004
IP				13	-1.48	.140	16	-1.73	.083
EDV				.08	0.85	.395	.06	0.61	.544
Out				.13	1.42	.157	.14	1.57	.117
PS*Out							01	-0.15	.882
IP*Out							12	-1.45	.146
EDV*Out							.08	0.90	.366
\mathbb{R}^2		.08			.20			.22	

Table 20 continued

	Step 1				Step 2			Step 3	
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	09	-0.88	.381	03	-0.27	.787	.00	0.02	.987
MTurk	.23	2.15	.032	.17	1.59	.113	.17	1.66	.096
Age	.12	1.19	.234	.19	1.88	.060	.18	1.78	.075
NERegion	.21	1.90	.058	.20	1.70	.090	.20	1.69	.091
MWRegion	.18	1.47	.143	.11	0.89	.375	.10	0.80	.423
SRegion	.04	0.32	.753	.02	0.14	.893	.05	0.42	.678
PS				15	-1.32	.186	17	-1.61	.108
IP				08	-0.76	.450	07	-0.63	.532
EDV				20	-1.88	.061	24	-2.21	.027
Out				.06	0.59	.555	.04	0.36	.722
PS*Out							12	-1.13	.258
IP*Out							.20	1.95	.052
EDV*Out							.03	0.24	.813
\mathbb{R}^2		.16			.23			.27	
RMSEA		.06			.02			.00	
CFI		.90			1.00			1.00	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	63.17	42	.019	18.77	18	.406	0.00	0	< .001
$\Delta \chi^2$				44.40	24	.007	18.77	18	.406

Notes. General physical health model ran in conjunction with model predicting physical role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; NERegion = resident of Northeast U.S. (1) or not (0); MWRegion = resident of Midwest U.S. (1) or not (0); SRegion = resident of Southern U.S. (1) or not (0); PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; Out = outness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 470 ($n_{\text{het/cis}} = 249$; $n_{\text{LGBAQ}} = 135$; $n_{\text{trans}} = 86$).

Table 21

Model 5 – Multi-Group Analysis of the Effect of Social Provisions on the Association between Minority Stressors and Physical Distress (Physical Role Limitations)

-		Step 1			Step 2	2		Step	3
Variable	β	t	p	β	t	\overline{p}	β	t	p
Heterosexual a	and Cis	gender		-					
SRRS-R	.09	1.52	.129	.10	1.72	.085	.10	1.68	.094
MTurk	36	-4.91	< .001	36	-4.96	< .001	37	-4.97	< .001
Race	.11	1.90	.057	.13	2.02	.043	.13	2.06	.040
Age	.39	6.37	< .001	.37	6.03	<.001	.37	5.80	< .001
NERegion	.04	0.59	.555	.04	0.66	.512	.05	0.74	.459
PS				05	-0.85	.397	04	-0.53	.593
IP				07	-1.15	.252	05	-0.62	.533
EDV				.08	1.39	.165	.07	1.18	.239
SPS				13	-2.14	.033	14	-2.06	.040
PS*SPS							.03	0.44	.660
IP*SPS							.04	0.49	.627
EDV*SPS							02	-0.35	.728
\mathbb{R}^2		.17			.19			.20	
LGBAQ									
SRRS-R	.28	3.52	< .001	.25	3.01	.003	.26	3.16	.002
MTurk	12	-1.49	.135	15	-1.80	.073	16	-1.86	.063
Race	.14	1.73	.083	.18	2.31	.021	.17	2.06	.040
Age	.16	2.00	.046	.22	2.73	.006	.23	2.87	.004
NERegion	.17	2.16	.031	.21	2.64	.008	.22	2.77	.006
PS				.12	1.55	.120	.13	1.60	.110
IP				.19	2.16	.031	.19	2.11	.035
EDV				10	-1.23	.220	12	-1.40	.161
SPS				.03	0.33	.745	.02	0.20	.846
PS*SPS							.04	0.42	.674
IP*SPS							.01	0.08	.939
EDV*SPS							.08	0.91	.365
\mathbb{R}^2		.18			.24			.25	

Table 21 continued

		Step 1			Step 2	2		Step 3	3
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	.14	1.21	.225	.00	0.02	.981	.00	0.01	.996
MTurk	14	-1.30	.194	08	-0.77	.444	09	-0.88	.381
Race	.18	1.77	.078	.16	1.64	.101	.15	1.52	.128
Age	.10	0.96	.339	.01	0.05	.962	.00	0.03	.973
NERegion	.02	0.19	.847	.04	0.39	.694	.05	0.45	.655
PS				.04	0.36	.720	.03	0.23	.821
IP				.19	1.77	.076	.18	1.75	.080
EDV				.27	2.62	.009	.27	2.57	.010
SPS				26	-2.82	.005	29	-3.01	.003
PS*SPS							.09	0.83	.408
IP*SPS							01	-0.08	.939
EDV*SPS							08	-0.86	.388
\mathbb{R}^2		.10			.26			.27	
RMSEA		.10			.00			.06	
CFI		.74			1.00			.90	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	107.40	42	< .001	8.17	18	.976	0.00	0	< .001
$\Delta \chi^2$				99.24	24	< .001	8.17	18	.976

Notes. Physical role limitations model ran in conjunction with model predicting general physical health. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; Race = White (0) or person of color (1); NERegion = resident of NE U.S. (1) or not (0); PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SPS = Social Provisions Scale; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 462 ($n_{het/cis} = 245$; $n_{LGBAQ} = 134$; $n_{trans} = 83$).

Table 22

Model 5 – Multi-Group Analysis of the Effect of Social Provisions on the Association between Minority Stressors and Physical Distress (General Physical Health)

		Step 1			Step 2	2		Step 3	3
Variable	β	t	p	β	t	p	β	t	p
Heterosexual a	and Cis	gender							
SRRS-R	12	-1.92	.054	12	-2.00	.045	12	-1.98	.047
MTurk	.20	2.54	.011	.20	2.72	.006	.21	2.80	.005
Race	03	-0.54	.589	.02	0.27	.787	.01	0.22	.828
Age	22	-3.22	.001	22	-3.45	.001	20	-3.12	.002
NERegion	04	-0.56	.576	03	-0.38	.701	03	-0.37	.712
PS				.10	1.65	.100	.10	1.57	.117
IP				06	-1.03	.305	05	-0.64	.526
EDV				05	-0.84	.402	03	-0.54	.593
SPS				.38	6.47	< .001	.40	6.10	<.001
PS*SPS							07	-1.11	.267
IP*SPS							.07	0.97	.334
EDV*SPS							.05	0.72	.475
\mathbb{R}^2		.07			.22			.22	
LGBAQ									
SRRS-R	19	-2.22	.027	11	-1.27	.205	11	-1.27	.205
MTurk	.05	0.59	.553	.16	1.86	.064	.17	1.92	.055
Race	.07	0.89	.376	.08	0.98	.329	.08	0.96	.338
Age	03	-0.38	.706	08	-0.94	.345	07	-0.88	.381
NERegion	08	-0.98	.327	07	-0.90	.371	07	-0.84	.401
PS				23	-2.87	.004	23	-2.83	.005
IP				10	-1.06	.288	08	-0.83	.409
EDV				.04	0.48	.634	.05	0.55	.581
SPS				.24	2.68	.007	.24	2.67	.008
PS*SPS							.00	0.00	.999
IP*SPS							.05	0.59	.557
EDV*SPS							03	-0.33	.742
\mathbb{R}^2		.06			.20			.21	

Table 22 continued

		Step 1			Step 2	2		Step	3
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	18	-1.69	.092	08	-0.78	.433	08	-0.74	.459
MTurk	.20	1.91	.056	.13	1.36	.175	.13	1.31	.192
Race	11	-1.11	.268	07	-0.74	.458	07	-0.73	.464
Age	.10	0.94	.347	.17	1.84	.066	.19	1.95	.052
NERegion	.16	1.51	.130	.17	1.74	.082	.17	1.71	.087
PS				11	-1.04	.300	13	-1.18	.236
IP				06	-0.64	.523	07	-0.66	.511
EDV				19	-1.87	.061	19	-1.93	.054
SPS				.33	3.74	<.001	.31	3.40	.001
PS*SPS							.06	0.62	.533
IP*SPS							03	-0.33	.738
EDV*SPS							.03	0.33	.742
\mathbb{R}^2		.17			.33			.34	
RMSEA		.10			.00			.06	
CFI		.74			1.00			.90	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	107.40	42	< .001	8.17	18	.976	0.00	0	< .001
$\Delta \chi^2$				99.24	24	< .001	8.17	18	.976

Notes. General physical health model ran in conjunction with model predicting physical role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; Race = White (0) or person of color (1); NERegion = resident of NE U.S. (1) or not (0); PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SPS = Social Provisions Scale; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 462 ($n_{\text{het/cis}} = 245$; $n_{\text{LGBAQ}} = 134$; $n_{\text{trans}} = 83$).

Table 23

Model 6 – Multi-Group Analysis of the Effect of Community Connectedness on the Association between Minority Stressors and Physical Distress (Physical Role Limitations)

		Step 1			Step	2		Step 3	3
Variable	β	t	p	β	t	p	β	t	p
Heterosexual	and Cis	gender							
SRRS-R	.11	1.80	.071	.13	2.05	.041	.13	2.14	.033
Media	.06	0.58	.561	.03	0.36	.723	.05	0.50	.616
MTurk	33	-3.35	.001	33	-3.34	.001	32	-3.24	.001
Educ	06	-0.81	.418	07	-0.86	.391	06	-0.83	.408
Race	.10	1.65	.100	.12	1.92	.055	.12	1.80	.072
Age	.38	4.14	< .001	.38	4.13	< .001	.37	4.04	< .001
NERegion	.05	0.64	.522	.04	0.57	.572	.05	0.66	.509
PS				03	-0.48	.630	02	-0.28	.782
IP				03	-0.50	.616	02	-0.24	.809
EDV				.08	1.36	.175	.10	1.52	.129
CC				08	-1.25	.212	06	-0.88	.377
PS*CC							13	-2.14	.032
IP*CC							02	-0.24	.808
EDV*CC							.04	0.66	.513
\mathbb{R}^2		.18			.19			.21	
LGBAQ									
SRRS-R	.27	3.53	< .001	.24	3.00	.003	.27	3.57	< .001
Media	11	-1.31	.190	09	-1.16	.247	07	-0.84	.401
MTurk	16	-1.74	.082	19	-2.17	.030	21	-2.51	.012
Educ	01	-0.10	.924	02	-0.22	.826	10	-1.09	.278
Race	.13	1.65	.098	.19	2.38	.017	.22	2.81	.005
Age	.16	1.80	.072	.20	2.34	.019	.25	3.04	.002
NERegion	.19	2.32	.021	.22	2.76	.006	.20	2.60	.009
PS				.13	1.67	.095	.14	1.86	.062
IP				.20	2.32	.021	.26	2.88	.004
EDV				11	-1.36	.174	07	-0.90	.367
CC				.08	0.94	.348	.06	0.66	.507
PS*CC						-	19	-2.42	.016
IP*CC							.26	3.01	.003
EDV*CC							10	-1.26	.209
\mathbb{R}^2		.19			.25		-	.32	

Table 23 continued

		Step 1			Step 2			Step 3	3
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	.14	1.28	.201	.07	0.61	.541	.08	0.66	.508
Media	.14	1.25	.213	.12	1.17	.241	.15	1.39	.166
MTurk	11	-0.96	.335	03	-0.28	.783	02	-0.16	.877
Educ	03	-0.26	.794	08	-0.71	.479	09	-0.81	.418
Race	.19	1.81	.071	.16	1.55	.121	.15	1.43	.154
Age	.09	0.77	.449	.04	0.39	.694	.05	0.42	.676
NERegion	.02	0.14	.890	.03	0.26	.797	.01	0.07	.944
PS				.13	1.13	.257	.13	1.15	.249
IP				.17	1.55	.122	.11	0.95	.343
EDV				.33	3.00	.003	.36	3.12	.002
CC				23	-2.04	.041	29	-2.46	.014
PS*CC							.02	0.18	.857
IP*CC							16	-1.42	.154
EDV*CC							06	-0.52	.600
\mathbb{R}^2		.11			.25			.27	
RMSEA		.07			.06			.06	
CFI		.72			.84			.90	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	159.28	90	< .001	105.59	66	< .001	72.98	48	< .001
$\frac{\Delta \chi^2}{N}$			1.1	53.69	24	.001	32.61	18	.019

Notes. Physical role limitations model ran in conjunction with model predicting general physical health. SRRS-R = Revised Social Readjustment Rating Scale; Media = social media participants; MTurk = Amazon Mechanical Turk participants; Educ = education; Race = White (0) or person of color (1); NERegion = resident of NE U.S. (1) or not (0); PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; CC = Community Connectedness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 450 ($n_{\text{het/cis}} = 233$; $n_{\text{LGBAQ}} = 134$; $n_{\text{trans}} = 83$).

Table 24

Model 6 – Multi-Group Analysis of the Effect of Community Connectedness on the Association between Minority Stressors and Physical Distress (General Physical Health)

		Step 1			Step 2			Step 3	
Variable	β	t	p	β	t	р	β	t	p
Heterosexual a	and Cis	gender							
SRRS-R	14	-2.20	.028	14	-2.23	.026	15	-2.30	.021
Media	07	-0.67	.504	07	-0.74	.462	08	-0.77	.443
MTurk	.15	1.40	.160	.10	0.95	.342	.10	0.92	.356
Educ	.15	1.90	.058	.16	2.03	.042	.16	1.97	.049
Race	01	-0.22	.826	.02	0.35	.728	.03	0.45	.651
Age	23	-2.29	.022	23	-2.39	.017	22	-2.29	.022
NERegion	05	-0.72	.475	02	-0.24	.808	02	-0.31	.760
PS				.01	0.08	.939	00	-0.07	.944
IP				18	-2.79	.005	20	-3.01	.003
EDV				05	-0.76	.448	08	-1.13	.257
CC				.12	1.86	.063	.08	1.22	.221
PS*CC							.05	0.76	.447
IP*CC							.06	0.86	.392
EDV*CC							08	-1.15	.250
\mathbb{R}^2		.09			.13			.14	
LGBAQ									
SRRS-R	19	-2.28	.023	13	-1.59	.111	16	-1.96	.050
Media	08	-0.86	.392	10	-1.15	.249	16	-1.94	.052
MTurk	.11	1.12	.264	.14	1.59	.112	.16	1.83	.068
Educ	.21	2.08	.037	.23	2.38	.017	.27	2.85	.004
Race	.03	0.40	.691	00	-0.05	.962	02	-0.31	.759
Age	11	-1.24	.214	19	-2.13	.034	24	-2.81	.005
NERegion	11	-1.26	.206	14	-1.68	.093	10	-1.31	.191
PS				26	-3.19	.001	25	-3.24	.001
IP				17	-1.90	.057	24	-2.61	.009
EDV				.06	0.63	.527	.01	0.17	.866
CC				.01	0.10	.921	.07	0.84	.402
PS*CC							.25	3.14	.002
IP*CC							28	-3.28	.001
EDV*CC							07	-0.88	.379
\mathbb{R}^2		.09			.20			.29	

Table 24 continued

		Step 1			Step 2				Step 3	
Variable	β	t	p	β	t	p	•	β	t	p
Transgender										
SRRS-R	20	-1.91	.056	11	-0.97	.330		12	-0.98	.327
Media	18	-1.76	.078	15	-1.48	.139		18	-1.69	.092
MTurk	.15	1.36	.174	.11	1.03	.303		.10	0.92	.358
Educ	05	-0.43	.667	00	-0.03	.977		.01	0.08	.937
Race	12	-1.19	.233	09	-0.93	.352		09	-0.86	.392
Age	.15	1.34	.180	.18	1.69	.092		.17	1.57	.118
NERegion	.16	1.62	.106	.17	1.65	.098		.19	1.86	.063
PS				14	-1.30	.195		15	-1.33	.182
IP				07	-0.62	.533		01	-0.07	.947
EDV				16	-1.39	.164		19	-1.65	.099
CC				00	-0.04	.971		.06	0.52	.602
PS*CC								03	-0.24	.813
IP*CC								.17	1.53	.126
EDV*CC								.08	0.75	.451
\mathbb{R}^2		.20			.25				.28	
RMSEA		.07			.06				.06	
CFI		.72			.84				.90	
	χ^2	df	p	χ^2	df	p		χ^2	df	p
Model Fit	159.28	90	< .001	105.59	66	< .001		72.98	48	< .001
$\frac{\Delta \chi^2}{N_{\rm total} - C_{\rm constant}}$	-111		1.1	53.69	24	.001		32.61	18	.019

Notes. General physical health model run in conjunction with model predicting physical role limitations. SRRS-R = Revised Social Readjustment Rating Scale; Media = social media participants; MTurk = Amazon Mechanical Turk participants; Educ = education; Race = White (0) or person of color (1); NERegion = resident of NE U.S. (1) or not (0); PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SPS = Social Provisions Scale; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 450 ($n_{het/cis} = 233$; $n_{LGBAQ} = 134$; $n_{trans} = 83$).

that these associations would be buffered by social support. Hypothesis 9 predicted that social support would be least effective as a moderator for participants who identified as heterosexual and cisgender, that sexual orientation minority participants would experience a moderation effect, and that transgender participants would experience the strongest moderation effect.

Table 25 shows the group contrasts results for associations between Perceived Stigma and distress. The left-hand side of the table displays the statistical significance statistics for the paired contrasts, and the right-hand side of the table shows the path coefficients for each of the three groups. Each row represents a set of model results, and significant paired contrasts and significant path coefficients are bolded. For example, the first row in Table 25 represents results from Model 1 (see Table 16 for full model results), which includes an outcome of psychological distress and a moderator of outness. As shown on the right side of Table 25, although the association between Perceived Stigma and psychological distress was significant for the majority group—participants who identified as heterosexual and cisgender ($\beta = .15$, t = 2.07, p = .038)—and for transgender participants ($\beta = .26$, t = 2.61, p = .009), it was not significant for sexual orientation minority participants ($\beta = .08$, t = 0.99, p = .323). As shown on the left side of Table 25, the strength of the associations between Perceived Stigma and psychological distress were not significantly different in paired comparisons of the majority group and sexual orientation minorities, t = -0.42, p = .673, the majority group and transgender participants, t = 1.00, p = .319, or sexual orientation minority and transgender participants, t = 1.25, p = .210.

Table 25

Models to Test Regression Coefficient Differences in Associations between Perceived Stigma and Distress (Hypothesis 2)

			Sta	tistical C	omparison	s of Gro	up Differen	nces			Sta	ındardiz	ed Path	Coeffici	ents	ents			
			H/C	C vs	H/C	C vs	LGB	AQ vs	•	H/C		LGBAQ)		Trans			
			LGE	BAQ	Tra	ans	Tr	Trans											
#	Outcome	Moderator	t	p	t	p	t	p	β	t	p	β	t	p	β	t	p		
1	PsychD	Outness	-0.42	.673	1.00	.319	1.25	.210	.15	2.07	.038	.08	0.99	.323	.26	2.61	.009		
2	PsychD	SPS	0.96	.337	1.52	.128	0.61	.545	.06	0.92	.360	.14	1.98	.047	.24	2.51	.012		
3	PsychD	CC	0.29	.771	0.89	.372	0.58	.562	.16	2.47	.013	.17	2.15	.032	.26	2.54	.011		
4	PRL	Outness	0.83	.409	0.57	.571	-0.11	.914	.01	0.22	.830	.10	1.10	.274	.08	0.73	.464		
4	GPH	Outness	-2.41	.016	-1.42	.156	0.59	.552	.00	0.01	.989	25	-2.88	.004	17	-1.61	.108		
5	PRL	SPS	1.62	.106	0.44	.660	-0.77	.443	04	-0.53	.593	.13	1.60	.110	.03	0.23	.821		
5	GPH	SPS	-3.18	.001	-1.76	.078	0.78	.434	.10	1.57	.117	23	-2.83	.005	13	-1.18	.236		
6	PRL	CC	1.72	.086	1.16	.246	-0.13	.895	02	-0.28	.782	.14	1.86	.062	.13	1.15	.249		
6	GPH	CC	-2.63	.009	-1.17	.240	0.77	.441	00	-0.07	.944	25	-3.24	.001	15	-1.33	.182		

Notes. # = model number (see Table 15). Models 1, 2, and 3 predicted psychological distress (PsychD, measured by a latent factor of depression, anxiety, suicide behaviors, and emotional role limitations). PRL = physical role limitations; GPH = general physical health. Models 4, 5, and 6 predicted physical health; both physical role limitations and general physical health were included as outcome variables. Statistics for each physical distress outcome variable are reported separately. H/C = heterosexual and cisgender; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, or queer; Trans = transgender; SPS = Social Provisions Scale; CC = Community Connectedness. Statistically significant differences and standardized path coefficients are bolded.

Direct effects of Perceived Stigma on distress. There was partial support for Hypothesis 2—significant differences emerged in associations between Perceived Stigma and physical distress, but not in associations between Perceived Stigma and psychological distress. The associations between perceptions of stigma and psychological distress were strongest for transgender participants, as shown in the right-hand three columns of Table 25; however, the magnitudes of these associations were not significantly larger than those of other groups. For example, as shown in the first row of Table 25 (Model 1, outcome: psychological distress, moderator: outness), Perceived Stigma was more strongly associated with physical distress for transgender participants (β = .26) than for participants who identified as heterosexual and cisgender (β = .15), but this difference was not statistically significant, t = 1.00, p = .319 (see Table 16 for full model results).

However, the associations between Perceived Stigma and physical distress were strongest for sexual orientation minorities. As shown in the fifth row of Table 25 (Model 4; outcome: general physical health; moderator: outness), Perceived Stigma was more strongly associated with physical health for sexual orientation minorities (β = -.25) than for participants who identified as heterosexual and cisgender, who reported no relationship between Perceived Stigma and general physical health (β = .00), t = -2.41, p = .016 (see Table 20 for full model results).

The second half of Hypothesis 2, which stated that transgender participants would experience the strongest association between Perceived Stigma and psychological and physical distress, was not statistically supported (see Table 25). However, the associations between Perceived Stigma and psychological distress were objectively larger

in magnitude for transgender participants than for sexual orientation minorities and participants who identified as heterosexual and cisgender (see Tables 16 through 18 for full model results). In contrast, transgender participants did not experience stronger associations between perceptions of stigma and amount of physical distress compared to sexual orientation minorities and participants who identified as heterosexual and cisgender. In fact, sexual orientation minorities reported the strongest associations between Perceived Stigma and physical distress than did transgender participants.

Interactions with Perceived Stigma predicting distress. In addition to examining the direct effects of Perceived Stigma on distress (Hypothesis 2), Hypotheses 7, 8, and 9 examined how outness and social support influence the associations between Perceived Stigma and psychological and physical distress. Half of the six effects that surfaced in the individual interaction models replicated in the multi-group, multi-stressor models; the remaining three did not.

The three nonreplicating effects that surfaced in the individual interaction models indicated significant interaction effects of Social Provisions on associations between Perceived Stigma and psychological distress; the three effects that did replicate indicated significant interaction effects of Community Connectedness on associations between Perceived Stigma and physical distress. In the first two nonreplicating effects, having greater social support buffered associations for participants who identified as heterosexual and cisgender—the association between Perceived Stigma and anxiety (see Table AQ1 in Appendix AQ) and that between Perceived Stigma and depression (see Table AR1 in Appendix AR). Participants who perceived that their heterosexual or cisgender identities were more stigmatized and who had higher social support were less

likely to report anxiety symptoms than those with lower social support (see Figure 8). Participants who perceived that their heterosexual or cisgender identities were less stigmatized did not report varying degrees of anxiety as a function of their amount of social support.

The second nonreplicating effect showed that participants who perceived that their heterosexual or cisgender identities were more stigmatized and who had higher social support were less likely to report depression symptoms than those with lower social support (see Figure 9). Participants who perceived that their heterosexual or cisgender identities were less stigmatized did not report varying degrees of depression as a function of their amount of social support.

For transgender participants, having greater social support buffered the association between Perceived Stigma and emotional role limitations (see Table BF1 in Appendix BF), especially for those who perceived that their transgender identities were less stigmatized. Participants who perceived that their transgender identities were more

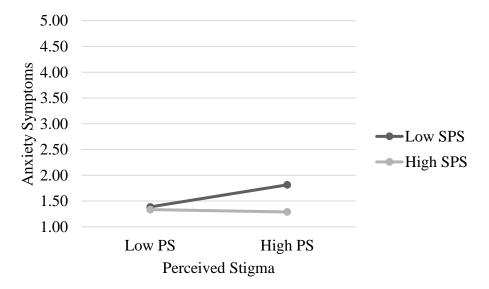


Figure 8. Associations between Perceived Stigma, Social Provisions, and anxiety symptoms for heterosexual and cisgender participants. Tests Hypotheses 8 and 9.

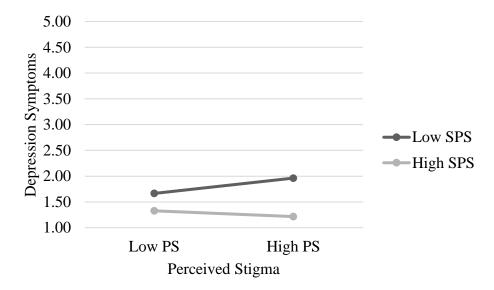


Figure 9. Associations between Perceived Stigma, Social Provisions, and depression symptoms for heterosexual and cisgender participants. Tests Hypotheses 8 and 9. stigmatized and who had higher social support had fewer limitations in their daily activities as a result of emotional problems compared to those with lower social support (see Figure 10). Participants who perceived that their transgender identities were less stigmatized and who reported higher social support had significantly fewer limitations in

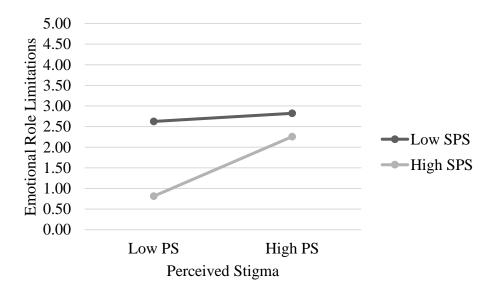


Figure 10. Associations between Perceived Stigma, Social Provisions (SPS), and emotional role limitations for transgender participants. Tests Hypotheses 8 and 9.

their daily lives as a result of emotional problems compared to those with less social support.

While the effects of social support on the association between Perceived Stigma and psychological distress did not replicate for any groups, the interaction effects of social support on the association between Perceived Stigma and physical distress did replicate for two groups. The three individual interaction models that did replicate in the multi-group, multi-stressor models assessed the associations between the interaction between Perceived Stigma and Community Connectedness and physical distress.

The majority of the replicating interaction effects occurred for the sexual orientation minority participants. In the individual interaction models, Community Connectedness significantly buffered the associations between Perceived Stigma and physical role limitations (see Table BT1 in Appendix BT). As shown in Model 6 of the multi-group, multi-stressor models (see Table 23), sexual orientation minority participants who were less connected to the sexual orientation minority community and who perceived that their identities were more stigmatized reported more limitations due to physical problems than those who perceived lower stigma, b = .62, t = 0.26, p = .794. Those who were more connected to the sexual orientation minority community did not vary in limitations due to physical problems as a result of perceptions that their identities were stigmatized (see Figure 11), b = -.08, t = -0.03, p = .974.

Similarly, Community Connectedness showed a tendency to buffer the associations between Perceived Stigma and general physical health in the individual interaction models (see Table BS1 in Appendix BS). Sexual orientation minority participants who were more connected to the sexual orientation minority community did

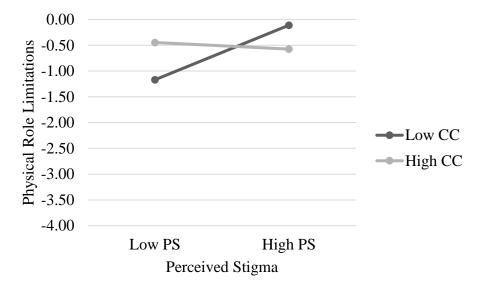


Figure 11. Associations between Perceived Stigma, Community Connectedness (CC), and physical role limitations for sexual orientation minority participants. Tests Hypotheses 8 and 9.

not significantly differ in general physical health as a function of their perceptions of stigma, b = -.01, t = -0.01, p = .996. Those who were less connected to the sexual orientation minority community and who perceived that their identities were more stigmatized were less physically healthy than those who perceived less stigma (see Figure 12), b = -.61, t = -0.38, p = .702.

The last of the three replicating interactions emerged for participants who identified as heterosexual and cisgender (see Table BN1 in Appendix BN and Table 24). Heterosexual and cisgender participants who were more connected to a community that shared their identity and who perceived that their heterosexual or cisgender identities were more stigmatized had fewer daily limitations due to physical problems than those who perceived less stigma (see Figure 13), b = -.21, t = -0.11, p = .912. Heterosexual and cisgender participants who were less connected to a community that shared their identity and who perceived that their heterosexual or cisgender identities were more stigmatized

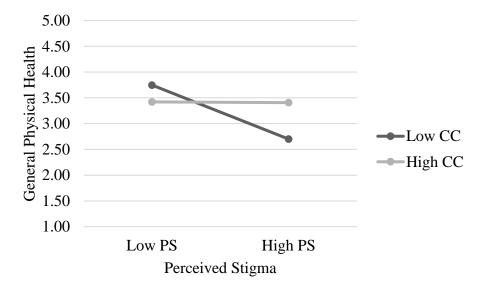


Figure 12. Associations between Perceived Stigma, Community Connectedness (CC), and general physical health for sexual orientation minority participants. Tests Hypotheses 8 and 9.

had more daily limitations due to physical problems than those who perceived that their identities were less stigmatized, b = .14, t = 0.08, p = .938.

Summary. Relative to Perceived Stigma, Hypotheses 2, 7, 8, and 9 all received partial support. Perceived Stigma was most strongly associated with distress for sexual

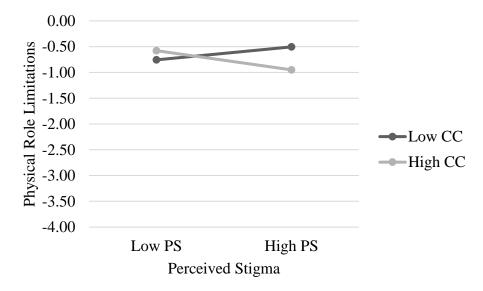


Figure 13. Associations between Perceived Stigma, Community Connectedness (CC), and physical role limitations for heterosexual and cisgender participants. Tests Hypotheses 8 and 9.

orientation minority participants, providing partial support for Hypothesis 2. Perceiving that their sexual orientation minority identities were more stigmatized was associated with poorer general physical health compared to those who perceived less stigma. For transgender participants, perceiving that their identities were more stigmatized was associated with significantly more psychological distress than those who perceived less stigma, but comparing the strength of these associations to those of sexual orientation minorities and participants who identified as heterosexual and cisgender did not show significant differences.

Hypotheses 7 through 9 predicted that the associations between Perceived Stigma and distress were moderated by outness and social support, and that social support (measured by the Social Provisions Scale or Community Connectedness) differentially moderated the associations for different groups. Hypothesis 7 was partially supported for Perceived Stigma. Although outness did not moderate the associations between Perceived Stigma and distress for participants who identified as heterosexual and cisgender as predicted, it also did not moderate the associations for sexual orientation minority or transgender participants.

Hypothesis 8 was partially supported—in comparing the individual interaction models with the multi-group, multi-stressor models, three interactions replicated and three did not. The nonreplicating interaction effects suggested that having more Social Provisions buffered associations between Perceived Stigma and psychological distress in one model for transgender participants and in two models for participants who identified as heterosexual and cisgender. The three interaction effects that did replicate in the multi-group, multi-stressor models described buffering effects of Community Connectedness

on the associations between perceptions of stigma and physical distress in two models for sexual orientation minority participants and in one model for participants who identified as heterosexual and cisgender.

Hypothesis 9 was partially supported with multiple buffering effects of social support—in the models that replicated across the individual interaction models and multigroup, multi-stressor models, social support was more effective at buffering the associations between Perceived Stigma and physical distress for sexual orientation minority participants than it was for participants who identified as heterosexual and cisgender. Contrary to predictions, social support was not most effective for transgender participants.

Internalized Prejudice and distress. Hypotheses 4, 7, 8, and 9 included predictions about the relationship between Internalized Prejudice and psychological and physical distress. Hypothesis 4 predicted that people who identified as heterosexual and cisgender would report weaker associations between Internalized Prejudice and psychological and physical distress compared to sexual orientation minorities, and transgender individuals would report the strongest associations of all groups. Hypotheses 7 and 8 predicted that these associations would be moderated by outness and social support (respectively). Hypothesis 9 predicted that social support would be least effective as a moderator for participants who identified as heterosexual and cisgender, that sexual orientation minority participants would experience a moderation effect, and that transgender participants would experience the strongest moderation effect.

Direct effects of Internalized Prejudice on distress. Consistent with Hypothesis 4, sexual orientation minority participants experienced stronger associations between

Internalized Prejudice and physical distress than did participants who identified as heterosexual and cisgender. For example, as shown in the sixth row of Table 26 (Model 5, outcome: physical role limitations; moderator: Social Provisions), sexual orientation minority participants experienced stronger associations between Internalized Prejudice and physical role limitations (β = .19) than did participants who identified as heterosexual and cisgender (β = -.05), t = 2.00, p = .045 (see Table 21 for full model results). The differences in the strength of associations between Internalized Prejudice and psychological distress for sexual orientation minorities compared to participants who identified as heterosexual and cisgender were in the expected direction, but did not reach statistical significance. The associations between Internalized Prejudice and general physical health were not significantly different for sexual orientation minority participants compared to participants who identified as heterosexual and cisgender.

Regarding the second half of Hypothesis 4, transgender participants did not experience the greatest associations between Internalized Prejudice and distress. Although the magnitude of the associations between Internalized Prejudice and psychological distress were significantly different for sexual orientation minorities and transgender participants, the direction of the difference was opposite to predictions—sexual orientation minorities experienced stronger associations compared to transgender participants. For example, as shown in the first row of Table 26 (Model 1, outcome: psychological distress, moderator: outness), sexual orientation minority participants experienced stronger associations between Internalized Prejudice and psychological distress ($\beta = .37$) than did transgender participants, who experienced no association

Table 26

Models to Test Regression Coefficient Differences in Associations between Internalized Prejudice and Distress (Hypothesis 4)

			Sta	atistical C	omparisor	up Differe	nces		Standardized Path Coefficients								
			H/C	Cvs	H/C	C vs	LGB	AQ vs		H/C			LGBAG	Q		Trans	
			LGE	BAQ	Tra	ans	T1	ans									
#	Outcome	Moderator	t	p	t	p	t	p	β	t	р	β	t	p	β	t	p
1	PsychD	Outness	1.90	.057	-1.32	.189	-3.21	.001	.15	1.91	.056	.37	4.86	< .001	.00	0.03	.976
2	PsychD	SPS	1.40	.162	-0.48	.628	-1.99	.047	.05	0.64	.522	.22	2.74	.006	.00	-0.00	.997
3	PsychD	CC	1.67	.094	-2.12	.034	-3.58	< .001	.23	3.28	.001	.44	5.36	<.001	.00	0.03	.973
4	PRL	Outness	1.54	.123	1.26	.206	-0.26	.797	01	-0.10	.917	.17	1.89	.059	.17	1.54	.123
4	GPH	Outness	-0.05	.957	0.86	.390	0.83	.409	14	-2.06	.039	16	-1.73	.083	07	-0.63	.532
5	PRL	SPS	2.00	.045	1.72	.086	-0.33	.745	05	-0.62	.533	.19	2.11	.035	.18	1.75	.080
5	GPH	SPS	-0.24	.808	-0.06	.950	0.18	.860	05	-0.64	.526	08	-0.83	.409	07	-0.66	.511
6	PRL	CC	2.45	.014	0.92	.360	-1.28	.201	02	-0.24	.809	.26	2.88	.004	.11	0.95	.343
6	GPH	CC	-0.28	.777	1.68	.092	1.74	.082	20	-3.01	.003	24	-2.61	.009	01	-0.07	.947

Notes. # = model number (see Table 15). Models 1, 2, and 3 predicted psychological distress (PsychD, measured by a latent factor of depression, anxiety, suicide behaviors, and emotional role limitations). PRL = physical role limitations; GPH = general physical health. Models 4, 5, and 6 predicted physical health; both physical role limitations and general physical health were included as outcome variables. Statistics for each physical distress outcome variable are reported separately. H/C = heterosexual and cisgender; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, or queer; Trans = transgender; SPS = Social Provisions Scale; CC = Community Connectedness. Statistically significant differences and standardized path coefficients are bolded.

between Internalized Prejudice and psychological distress (β = .00), t = -3.21, p = .001 (see Table 16 for full model results).

Interactions with Internalized Prejudice predicting distress. Hypotheses 7, 8, and 9 examined how outness and social support influence the associations between Internalized Prejudice and psychological and physical distress. The six significant interaction effects that surfaced in the individual interaction models replicated in the multi-group, multi-stressor models. Results showed some support for Hypothesis 7, that outness would either amplify or buffer the associations between Internalized Prejudice and psychological and physical distress, but not for participants who identified as heterosexual and cisgender. Consistent with Hypothesis 7, outness was not a significant moderator of the association between Internalized Prejudice and distress for participants who identified as heterosexual and cisgender. Outness was most effective for transgender participants—it buffered associations between Internalized Prejudice and psychological distress (see Table AL2 in Appendix AL for significant effects on depression). As shown in Table 16 (Model 1), transgender participants who were more out and who had higher Internalized Prejudice were less psychologically distressed than those with lower Internalized Prejudice (see Figure 14), b = .23, t = 0.16, p = .877. Those who were less out and who had higher Internalized Prejudice were more psychologically distressed than those with lower Internalized Prejudice, b = -.25, t = -0.16, p = .874.

Similarly, but not statistically significant, outness showed a tendency to buffer the associations between Internalized Prejudice and physical distress for transgender participants (see Tables BY2 in Appendix BY and BZ2 in Appendix BZ for nonsignificant individual interaction models). As shown in Table 20 (Model 4),

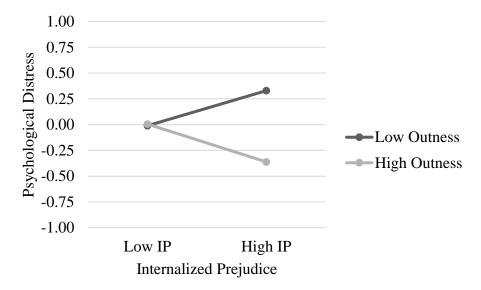


Figure 14. Associations between Internalized Prejudice, outness, and psychological distress for transgender participants. Tests Hypothesis 7.

transgender participants with higher Internalized Prejudice who were more out tended to have better general physical health than those with lower Internalized Prejudice (see Figure 15), b = .19, t = 0.10, p = .919. For those who were less out, having higher Internalized Prejudice tended to be associated with poorer general physical health compared to those with lower Internalized Prejudice, b = -.36, t = -0.19, p = .846.

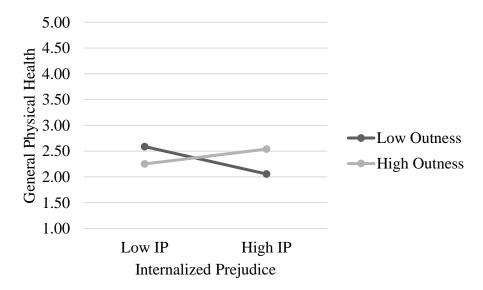


Figure 15. Associations between Internalized Prejudice, outness, and general physical health for transgender participants. Tests Hypothesis 7.

Hypothesis 8 predicted that social support would buffer the associations between minority stressors and psychological and physical distress. Hypothesis 9 predicted that social support would have a stronger buffering effect on the associations between minority stressors and distress for the minority group (sexual orientation minority and transgender participants) than the majority group (participants who identified as heterosexual and cisgender), and that transgender participants would experience the greatest buffering effect.

Social Provisions only moderated one association in the multi-group, multistressor models—the association between Internalized Prejudice and psychological distress for sexual orientation minority participants. This finding was not replicated in the individual interaction models for sexual orientation minority participants (see Tables AW2 in Appendix AW, AX2 in Appendix AX, AY2 in Appendix AY, and AZ2 in Appendix AZ). According to Model 2 (see Table 17), sexual orientation minorities who were less socially supported and who had higher Internalized Prejudice were more psychologically distressed than those with lower Internalized Prejudice (see Figure 16), b= .60, t = 0.37, p = .714. For those who were more socially supported, psychological distress did not differ as a function of level of Internalized Prejudice, b = .04, t = 0.02, p= .982.

In contrast, Community Connectedness was a significant moderator of associations between minority stressors and distress for sexual orientation minority participants and participants who identified as heterosexual and cisgender. Contrary to its buffering effects on the associations between Perceived Stigma and physical distress, Community Connectedness had an amplifying effect on the associations between

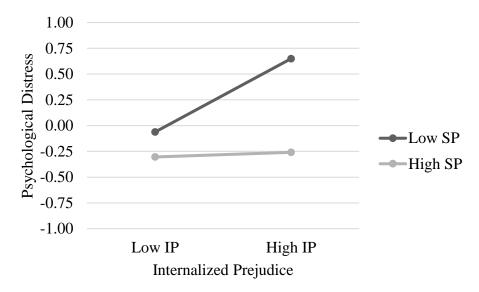


Figure 16. Associations between Internalized Prejudice, Social Provisions (SP), and psychological distress for sexual orientation minority participants. Tests Hypotheses 8 and 9.

Internalized Prejudice and physical distress for sexual orientation minorities. These effects were mixed in relation to the individual interaction models; Community Connectedness did not significantly moderate the association between Internalized Prejudice and physical role limitations (see Table BT2, Appendix BT), but did significantly moderate the association between Internalized Prejudice and general physical health (see Table BS2, Appendix BS). As seen in Table 23 (Model 6), sexual orientation minorities who were more connected to the sexual orientation minority community and who had higher Internalized Prejudice experienced more daily limitations due to physical problems than those with lower Internalized Prejudice (see Figure 17), b = .80, t = 0.23, p = .819. Those who were less connected to the sexual orientation minority community and who had higher Internalized Prejudice experienced fewer limitations due to physical problems than those with lower Internalized Prejudice, b = -.31, t = -0.09, p = .931.

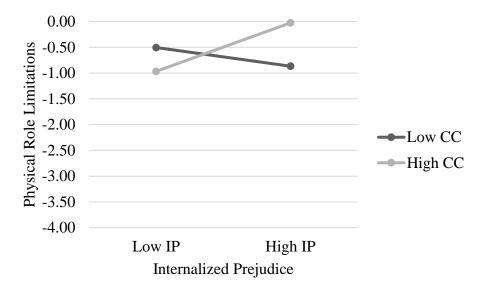


Figure 17. Associations between Internalized Prejudice, Community Connectedness (CC), and physical role limitations for sexual orientation minority participants. Tests Hypotheses 8 and 9.

Similarly, sexual orientation minority participants who were more connected to the sexual orientation minority community and who reported higher Internalized Prejudice experienced poorer physical health than those with lower Internalized Prejudice, b = -.81, t = -0.34, p = .732 (see Table 24 for Model 6 results), while those who were less connected to the sexual orientation minority community did not show a difference in general physical health depending on their level of Internalized Prejudice (see Figure 18), b = .00, t = 0.00, p = .999.

As shown in Table 18 (Model 3), heterosexual and cisgender participants who were less connected to a community that shared their identity and who reported higher Internalized Prejudice were more psychologically distressed than those with lower Internalized Prejudice (see Tables BI2 in Appendix BI and BJ2 in Appendix BJ), b = .68, t = 0.30, p = .766, while those who were more connected to a community that shared their identity did not differ in levels of psychological distress as a function of Internalized Prejudice, b = -.04, t = -0.02, p = .988 (see Figure 19).

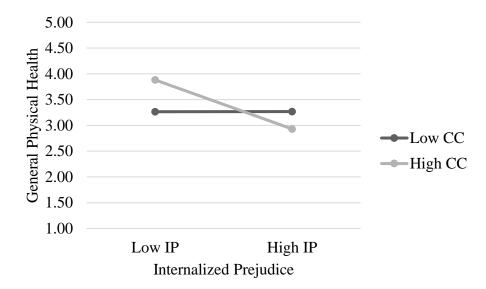


Figure 18. Associations between Internalized Prejudice, Community Connectedness (CC), and general physical health for sexual orientation minority participants. Tests Hypotheses 8 and 9.

Summary. Hypothesis 4 suggested that compared to participants who identified as heterosexual and cisgender, sexual orientation minorities would report stronger associations between Internalized Prejudice and distress and that transgender participants

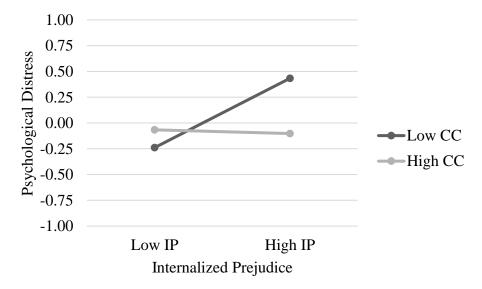


Figure 19. Associations between Internalized Prejudice, Community Connectedness (CC), and psychological distress for heterosexual and cisgender participants. Tests Hypotheses 8 and 9.

would experience the strongest associations. Hypothesis 4 was partially supported; the associations between Internalized Prejudice and distress were typically larger for sexual orientation minorities than for participants who identified as heterosexual and cisgender. However, transgender participants did not report significantly larger associations between Internalized Prejudice and distress compared to other groups.

Hypotheses 7, 8, and 9 proposed moderation effects for outness and social support. All significant interaction effects in the individual interactions models replicated in the multi-group, multi-stressor models. Hypothesis 7 stated that outness would either amplify or buffer the associations between minority stressors and psychological and physical distress for sexual orientation minority and transgender participants, but not participants who identified as heterosexual and cisgender. In support of the buffering hypothesis, transgender participants who had higher Internalized Prejudice and who were more out reported lower psychological distress than those who were less out. As predicted, outness was not a significant moderator for participants who identified as heterosexual and cisgender; however, contrary to predictions, outness was also not a significant moderator for sexual orientation minority participants.

Hypothesis 8 stated that Social Provisions or Community Connectedness would buffer the associations between Internalized Prejudice and distress. As predicted, Social Provisions buffered the association between Internalized Prejudice and psychological distress for sexual orientation minority participants. Interestingly, Community Connectedness did not buffer—but instead amplified—the associations between Internalized Prejudice and physical distress for sexual orientation minority participants.

Hypothesis 9 suggested that social support would have a stronger moderating effect on the relationship between minority stressors and distress for sexual orientation minority participants compared to participants who identified as heterosexual and cisgender, and that the moderating effects would be strongest for transgender participants. Operationalizing social support as Social Provisions resulted in partial support for Hypothesis 9. Social Provisions buffered the association between Internalized Prejudice and psychological distress for sexual orientation minorities but not participants who identified as heterosexual and cisgender. Contrary to predictions, it was not most effective for transgender participants. Operationalizing social support as Community Connectedness resulted in no support for Hypothesis 9. Community Connectedness amplified the associations between Internalized Prejudice and physical distress for sexual orientation minorities. Against predictions, social support was not a significant moderator of the association between Internalized Prejudice and distress for transgender participants.

Experiences with Discrimination and Violence and distress. Hypotheses 6, 7, 8, and 9 included predictions about the relationships between Experiences with Discrimination and Violence and psychological and physical distress. Hypothesis 6 predicted that people who identified as heterosexual and cisgender would report weaker associations between Experiences with Discrimination and Violence and distress compared to sexual orientation minorities, and transgender individuals would report the strongest associations of all groups. Hypotheses 7 and 8 predicted that these associations would be moderated by outness and social support (respectively). Hypothesis 9 predicted that social support would be least effective as a moderator for participants who identified

as heterosexual and cisgender, that sexual orientation minority participants would experience a moderation effect, and that transgender participants would experience the strongest moderation effect.

Direct effects of Experiences with Discrimination and Violence on distress. The first half of Hypothesis 6 was not supported. Sexual orientation minorities did not report stronger associations between Experiences with Discrimination and Violence and physical distress than did participants who identified as heterosexual and cisgender (see Table 27). The second half of Hypothesis 6, that transgender participants would experience the strongest associations between Experiences with Discrimination and Violence and distress compared to other groups, was supported. The magnitude of the associations between Experiences with Discrimination and Violence and psychological and physical distress were typically largest for transgender participants; however, the differences between transgender and other participants were not statistically significant in the models with psychological distress as an outcome (see Tables 16 through 18 for full model results). Consistent with predictions, associations between Experiences with Discrimination and Violence and physical distress were significantly stronger for transgender participants than for sexual orientation minority participants. For example, as shown in the fourth row of Table 27 (Model 4; outcome: physical role limitations; moderator: outness), transgender participants who experienced more discrimination and violence also experienced more daily limitations due to physical problems ($\beta = .31$), while there was no significant relationship between Experiences with Discrimination and Violence and physical role limitations for sexual orientation minority participants ($\beta = -$.07), t = 2.57, p = .010 (see Table 19 for full model results).

Table 27

Models to Test Regression Coefficient Differences in Associations between Experiences with Discrimination and Violence and Distress (Hypothesis 6)

Statistical Cor					parisons of Group Differences				Standardized Path Coefficients								
		H/C	C vs	H/C	Cvs	LGB	AQ vs		H/C			LGBAQ)		Trans		
		LGE	BAQ	Tra	ans	T1	ans										
# Outcome	Moderator	t	p	t	p	t	p	β	t	p	β	t	p	β	t	p	
1 PsychD	Outness	0.80	.425	0.85	.393	0.24	.808	08	-0.61	.541	.10	1.22	.224	.13	1.34	.179	
2 PsychD	SPS	0.03	.974	0.26	.799	0.50	.618	.01	0.09	.929	.03	0.41	.685	.09	0.98	.329	
3 PsychD	CC	-0.39	.694	0.12	.904	1.00	.316	.03	0.48	.630	.02	0.22	.824	.16	1.38	.168	
4 PRL	Outness	-1.06	.290	-0.32	.836	2.57	.010	.11	0.92	.357	07	-0.77	.442	.31	2.74	.006	
4 GPH	Outness	2.19	.028	1.54	.124	-2.06	.039	27	-2.13	.033	.06	0.61	.544	24	-2.21	.027	
5 PRL	SPS	-1.61	.108	0.07	.946	2.84	.005	.07	1.18	.239	12	-1.40	.161	.27	2.57	.010	
5 GPH	SPS	0.70	.482	-0.35	.724	-1.82	.069	03	-0.54	.593	.05	0.55	.581	19	-1.93	.054	
6 PRL	CC	-1.73	.083	0.15	.879	3.01	.003	.10	1.52	.129	07	-0.90	.367	.36	3.12	.002	
6 GPH	CC	1.12	.262	0.23	.821	-1.45	.148	08	-1.13	.257	.01	0.17	.866	19	-1.65	.099	

Notes. # = model number (see Table 15). Models 1, 2, and 3 predicted psychological distress (PsychD, measured by a latent factor of depression, anxiety, suicide behaviors, and emotional role limitations). PRL = physical role limitations; GPH = general physical health. Models 4, 5, and 6 predicted physical health; both physical role limitations and general physical health were included as outcome variables. Statistics for each physical distress outcome variable are reported separately. H/C = heterosexual and cisgender; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, or queer; Trans = transgender; SPS = Social Provisions Scale; CC = Community Connectedness. Statistically significant differences and standardized path coefficients are bolded.

Interactions with Experiences with Discrimination and Violence predicting distress. Neither outness nor social support moderated the associations between Experiences with Discrimination and Violence and distress for participants who identified as heterosexual and cisgender, sexual orientation minorities, or transgender.

Summary. There was partial support for Hypothesis 6. Sexual orientation minorities did not report stronger associations between Experiences with Discrimination and Violence and distress than participants who identified as heterosexual and cisgender. However, in support of Hypothesis 6, transgender participants typically experienced the strongest associations between Experiences with Discrimination and Violence and distress compared to other groups; four of these differences with respect to sexual orientation minority participants were statistically significant. There were no significant interaction effects on the associations between Experiences with Discrimination and Violence and distress.

General Summary

Table 28 shows a summary of the results with respect to the nine hypotheses.

Group differences in levels of minority stressors. Hypotheses 1, 3, and 5 proposed that there would be differences between majority (heterosexual and cisgender) and minority (sexual orientation minority and transgender) participants in Perceived Stigma, Internalized Prejudice, and Experiences with Discrimination and Violence, respectively. Hypotheses 1, 3, and 5 also proposed that transgender participants would report the highest levels of Perceived Stigma, Internalized Prejudice, and Experiences with Discrimination and Violence of all groups. These three hypotheses were fully supported; participants who identified as heterosexual and cisgender reported

Table 28
Summary of Hypotheses and Findings

#	Hypothesis	Conclusions
1	Levels of Perceived Stigma	Heterosexual and cisgender < minority; LGBAQ < transgender
2	Association between Perceived Stigma and distress	Heterosexual and cisgender < LGBAQ for psychological distress
3	Levels of Internalized Prejudice	Heterosexual and cisgender < minority; LGBAQ < transgender
4	Association between Internalized Prejudice and distress	Heterosexual and cisgender < LGBAQ for physical role limitations
5	Levels of Experiences with Discrimination and Violence	Heterosexual and cisgender < minority; LGBAQ < transgender
6	Association between Experiences with Discrimination and Violence and distress	LGBAQ < transgender for physical distress
7	Outness will either amplify or buffer associations between minority stressors and distress for LGBAQT people but will not moderate for heterosexual and cisgender people	Outness buffered the associations between IP and distress for transgender group. No effects for other groups.
8	Social support will buffer the associations between stressors and distress	CC buffered Perceived Stigma and psychological distress for heterosexual and cisgender
		CC buffered Perceived Stigma and physical distress for LGBAQ and heterosexual and cisgender
		SP buffered but CC amplified Internalized Prejudice and physical distress for LGBAQ
9	Strength of buffering effect of social support will differ by group	Mixed results

Notes. LGBAQ = lesbian, gay, bisexual/pansexual, asexual, or queer; CC = Community Connectedness; SP = Social Provisions. H1, H3, and H5: hypothesized associations are heterosexual and cisgender < LGBAQ and transgender, LGBAQ < transgender. H2, H4, and H6: hypothesized associations are heterosexual and cisgender < LGBAQ < transgender. H9: hypothesized associations are: heterosexual and cisgender < LGBAQ < transgender.

significantly lower Perceived Stigma, Internalized Prejudice, and Experiences with Discrimination and Violence than participants who identified as a sexual orientation minority or as transgender; transgender participants reported the highest levels of the minority stressors.

Group differences in associations between minority stressors and distress. Hypotheses 2, 4, and 6 focused on the strength of the associations between minority stressors and distress. These hypotheses proposed that compared to participants who identified as heterosexual and cisgender, sexual orientation minorities would report stronger associations between Perceived Stigma (H2), Internalized Prejudice (H4), Experiences with Discrimination and Violence (H6), and distress, and that transgender participants would experience the strongest associations (see Table 28).

Hypothesis 2 was partially supported with regards to psychological distress.

Perceived Stigma was more strongly associated with psychological distress for sexual orientation minorities than for participants who identified as heterosexual and cisgender.

Although the associations between Perceived Stigma and psychological distress appeared to be largest in magnitude for transgender participants, the associations were not significantly larger than the associations for other groups.

Hypothesis 4 was also partially supported—the associations between Internalized Prejudice and physical role limitations were typically significantly larger for sexual orientation minorities than for participants who identified as heterosexual and cisgender. However, transgender participants did not report significantly stronger associations between Internalized Prejudice and distress compared to other groups.

There was partial support for Hypothesis 6. Sexual orientation minorities did not report stronger associations between Experiences with Discrimination and Violence and distress than participants who identified as heterosexual and cisgender. However, transgender participants experienced the strongest association between Experiences with Discrimination and Violence and distress compared to other groups; four of the six comparisons with sexual orientation minority participants were statistically significant.

Interactions with minority stressors and distress. Hypotheses 7, 8, and 9 focused on the moderation effects of outness and social support on the associations between minority stressors and distress. Hypothesis 7 stated that outness would amplify or buffer the associations between minority stressors and psychological and physical distress for sexual orientation minority and transgender participants, but not for participants who identified as heterosexual and cisgender. Hypothesis 8 stated that social support would buffer the associations between stressors and distress; Hypothesis 9 stated that social support would have a stronger moderating effect for sexual orientation minority participants compared to participants who identified as heterosexual and cisgender, and that the effect would be strongest for transgender participants.

The buffering hypothesis in Hypothesis 7 was supported; the exposure hypothesis was not. Outness buffered the association between Internalized Prejudice and physical distress for transgender participants, and was not a significant moderator for participants who identified as heterosexual and cisgender. Counter to predictions, outness did not significantly moderate the associations between Perceived Stigma and distress or Experiences with Discrimination and Violence and distress, and was not a significant moderator for sexual orientation minorities. As predicted in Hypothesis 8, for sexual

orientation minority participants, Community Connectedness buffered the association between Perceived Stigma and physical distress and Social Provisions buffered the association between Internalized Prejudice and psychological distress. Community Connectedness also buffered the association between Perceived Stigma and psychological and physical distress for participants who identified as heterosexual and cisgender. Inconsistent with predictions, Community Connectedness amplified the association between Internalized Prejudice and physical distress for sexual orientation minority participants.

Hypothesis 9 stated that social support would have a stronger buffering effect on the relationship between minority stressors and distress for sexual orientation minority participants compared to participants who identified as heterosexual and cisgender, and that the effect would be strongest for transgender participants. While social support did buffer the effects of stressors on distress in three models for sexual orientation minority participants, it also buffered the effects of stressors on distress in two models for participants who identified as heterosexual and cisgender and amplified the effects of a minority stressor on distress for sexual orientation minority participants. The second half of Hypothesis 9 was not supported; social support was not a significant moderator between minority stress and distress for transgender participants.

CHAPTER VI. DISCUSSION

Minority stressors, by definition, were hypothesized to be unique to minority groups (Meyer, 1995, 2003); by understanding minorities' experiences with these stressors, researchers, practitioners, and members of minority groups themselves can identify ways to reduce minorities' distress and improve well-being. This study was designed to increase understanding of minority groups' experiences of minority stressors and the effects those stressors have on minority groups' psychological and physical well-being. Recruiting sufficient numbers of transgender and sexual orientation minority participants enabled separate analyses of transgender, sexual orientation minority, heterosexual, and cisgender participants, providing insight into important group differences. Examining moderator variables like outness and social support provided information about when minority stressors are more strongly associated with distress, and for which groups.

Nine hypotheses tested these predictions; Hypotheses 1, 3, and 5 examined group differences in levels of minority stressors. Hypotheses 2, 4, and 6 examined group differences in the strength of associations between minority stressors and distress. Hypotheses 7, 8, and 9 tested moderation effects of outness and social support. A discussion of mean level differences, comparing levels of minority stressors across three groups of people (heterosexual and cisgender, sexual orientation minority, and transgender), summarizes the findings addressing Hypotheses 1, 3, and 5. The remaining hypotheses are presented by minority stressor, beginning with a discussion of significant findings and followed by implications and suggestions for future research.

First, Hypotheses 2, 7, 8, and 9 addressed the relative strength of the associations between Perceived Stigma and distress for different groups, and the interaction effects of outness and social support on the associations between Perceived Stigma and distress.

Second, Hypotheses 4, 7, 8, and 9 addressed the relative strength of the associations between Internalized Prejudice and distress for different groups, and the interaction effects of outness and social support on the associations between Internalized Prejudice and distress. Last, Hypotheses 6, 7, 8, and 9 addressed the relative strength of the associations between Experiences with Discrimination and Violence and distress for different groups, and the interaction effects of outness and social support on the associations between Experiences with Discrimination and Violence and distress. Next, a discussion of potential limitations and advances precedes the final conclusions.

The results of this study could be summarized with three major findings. First, transgender participants experienced the highest levels of all stressors, including minority stressors and general life stressors. Second, different minority stressors were associated with distress for different minority groups. For sexual orientation minorities, Perceived Stigma and Internalized Prejudice were most strongly associated with distress. For transgender participants, Experiences with Discrimination and Violence were most strongly associated with distress. The third major finding was that the moderators influence associations between minority stressors and distress differently for different groups. Outness was an effective moderator for one group—it buffered the association between Internalized Prejudice and distress for transgender participants. Individual-level and community-level social support worked differently for sexual orientation minorities. Social Provisions buffered the association between Internalized Prejudice and

psychological distress, and Community Connectedness buffered the association between Perceived Stigma and physical distress. However, Community Connectedness amplified the association between Internalized Prejudice and physical distress. This chapter discusses these three main findings in detail.

Mean Level Differences in Stressors across Groups

The first main finding of this study was that transgender participants had the highest levels of stressors of all groups. Consistent with predictions, participants who identified as heterosexual and cisgender reported lower levels of Perceived Stigma (H1), Internalized Prejudice (H3), and Experiences with Discrimination and Violence (H5) than did minority participants, and transgender participants reported the highest levels. These findings are consistent with the minority stress model (Meyer, 1995, 2003) and with recent findings on heterosexual and cisgender people's attitudes toward sexual orientation minority and transgender identities (Norton & Herek, 2013).

These findings have important implications for sexual orientation minorities and transgender people. Societal prejudice does exist against sexual orientation minorities and transgender people (e.g., Norton & Herek, 2013; Walch et al., 2012) and minority participants in this study detected this prejudice. In fact, perceptions of stigma coincided with patterns from previous research (Norton & Herek, 2013)—transgender participants reported higher perceptions of stigma than did sexual orientation minority participants. According to the minority stress model (Meyer, 1995, 2003), these societal stigmas or prejudice can be internalized, leading to a negative self-concept and psychological distress. In addition to the direct effects of stigma on distress, indirect effects may also occur. A behavioral manifestation of prejudice is discrimination or violence; about one-

third of minorities reported at least one experience with violence or discrimination in the previous year. Prejudicial and discriminatory behaviors directed at sexual orientation minority or transgender people are consistent with predictions by social identity theory (Tajfel & Turner, 1986/2004; Testa et al., 2012). In order to maintain a positive self-image, some people derogate members of outgroups. By derogating an outgroup, an individual's ingroup is perceived more favorably. Perceptions of the social self, influenced by the association with the relatively favorably perceived ingroup, translate to favorable perceptions of the personal self. Whether in the context of competition for resources, disregard for identity, or derogation, experiences of discrimination and violence can increase psychological and physical distress; these effects are discussed later in the context of Hypotheses 6, 7, 8, and 9.

Associations between Minority Stressors and Distress

The remaining hypotheses focused on the associations between minority stressors and distress, including the interaction effects of outness and social support on these associations. Compared to participants who identified as heterosexual and cisgender, sexual orientation minorities were predicted to experience stronger associations between Perceived Stigma (H2), Internalized Prejudice (H4), Experiences with Discrimination and Violence (H6), and distress, and transgender participants were predicted to experience the strongest associations. The remaining hypotheses made predictions about interaction effects. Hypothesis 7 proposed that outness would either amplify or buffer the associations between minority stressors and distress. Hypothesis 8 proposed that social support would buffer the associations between minority stressors and distress, and Hypothesis 9 proposed that the buffering effects of social support would be strongest for

transgender participants, weaker for sexual orientation minority participants, and weakest for participants who identified as heterosexual and cisgender.

The second main finding of this study was that different minority stressors were associated with distress for different minority groups. For sexual orientation minorities, Perceived Stigma and Internalized Prejudice were most strongly associated with distress. For transgender participants, Experiences with Discrimination and Violence were most strongly associated with distress. The third main finding of this study was that the moderators influence associations between stressors and distress differently for different groups. Outness was an effective moderator for one group—it buffered the association between Internalized Prejudice and distress for transgender participants. Individual-level and community-level social support worked differently for sexual orientation minorities. Social Provisions buffered the association between Internalized Prejudice and psychological distress, and Community Connectedness buffered the association between Perceived Stigma and physical distress. However, Community Connectedness amplified the association between Internalized Prejudice and physical distress. The following sections discuss the second and third main findings with respect to the remaining hypotheses.

Perceived Stigma and distress. Hypothesis 2 was partially supported; for sexual orientation minorities, Perceived Stigma was a stronger predictor of physical distress than it was for participants who identified as heterosexual and cisgender. Although the associations between Perceived Stigma and psychological distress were objectively larger in magnitude for transgender participants than for other groups, the differences were not statistically significant.

These associations between perceptions of identity stigma and distress for transgender participants have very real implications. As described by earlier research (Norton & Herek, 2013), people tend to stigmatize transgender identities to an even greater degree than sexual orientation minority identities. Perception of identity stigma was associated with greater psychological distress and poorer physical health for transgender people and sexual orientation minorities. Specifically, greater perception of stigma was associated with more daily limitations due to emotional problems for sexual orientation minorities and transgender participants. Limitations included spending less time on and being less careful with school or work activities. This reduction in the amount and quality of academic or professional work translates to lost productivity for educators and employers, lower academic performance for students, and losses in wages for hourly workers—situations that could have financial consequences for students, employees, and employers. Reducing stigma and prejudice toward sexual orientation minority and transgender people could not only improve their daily functioning and psychological well-being, it could also prevent losses in wages and productivity.

Replicating these effects in another, larger sample would further validate the practical significance of the findings. Lack of statistical significance may be a result of low power; in order to detect small effects, a sample of 266 to 377 participants per group would be necessary. The smallest group, the transgender participants, did not reach the numbers needed to detect small but statistically significant effects. However, the magnitude of the effects is not small enough to be meaningless. The associations between perceptions of stigma and psychological distress for the transgender group were approximately one and a half times the magnitude of the associations for the sexual

orientation minority group, while the associations between perceptions of stigma and physical distress for the transgender group were less than half the magnitude of the associations for the sexual orientation minority group. These associations between perceptions of stigma and distress were moderated for two of the three groups.

Interactions with Perceived Stigma predicting distress. Predictions for moderating effects of outness were partially supported. For participants who identified as heterosexual and cisgender, outness did not affect the relationship between perceptions that their identities were stigmatized and their levels of distress, as predicted in Hypothesis 7. People typically assume that others belong to the majority group—that they are both heterosexual and cisgender (Warner, 1991), so outness is not a relevant construct for the majority group. Heterosexual and cisgender people do not have to correct these heteronormative and cisnormative assumptions in order to talk about their sexual orientation or gender identity. Inconsistent with predictions, outness did not buffer the associations between perceptions of identity stigma and distress for sexual orientation minority or transgender participants. This may be because experiences that contribute to perceptions of stigma, like hearing others call individuals derogatory names, are not dependent on others' knowledge of the individual's identity. Sexual orientation minority identity and gender incongruence are "invisible" stigmas (Crocker, Major, & Steele, 1998)—unless someone chooses to share these identities with others, others may be unaware of the identity. People who stigmatize sexual orientation minority or transgender identities may express those prejudices without the awareness that others within earshot belong to the stigmatized group. These behaviors or statements may be directed toward other members of the nonstigmatized (majority) group or toward another member of the

stigmatized group. Asking stigmatized individuals to describe where their perceptions of stigma originated, whether through first-hand experiences or observed interactions, may bring this process to light.

Hypothesis 8 predicted that social support would buffer the associations between perceptions of stigma and distress; Hypothesis 9 predicted that this buffering effect would be weakest for participants who identified as heterosexual and cisgender, stronger for sexual orientation minority participants, and strongest for transgender participants. Relative to Perceived Stigma, results were counter to predictions—Community Connectedness was an effective moderator for sexual orientation minorities but was more effective for participants who identified as heterosexual and cisgender; it had no effect for transgender participants. These findings imply that being connected to a community of people who share their identity can reduce the association between perceptions of stigma and distress for sexual orientation minorities. Those considering sharing their sexual orientation minority identity with others and those who have already shared their identity should seek a community of similar individuals to reap the benefits of the supportive experience. Mental and physical health care practitioners should encourage sexual orientation minorities to take that protective step prior to sharing their identity with others.

Two possible explanations for these unexpected findings regarding transgender participants and participants who identified as heterosexual and cisgender relate to scale development. First, the Perceived Stigma scale was originally developed on a population of gay men (Meyer, 1995) and was later applied to lesbians and bisexual people (Frost, Lehavot, & Meyer, 2015; Frost & Meyer, 2009). The Perceived Stigma scale had not

been applied to cisgender, heterosexual, or transgender samples. While heterosexual participants reported low perceptions of stigma, as anticipated, cisgender participants reported unexpectedly high perceptions. (These reports were still lower than those of sexual orientation minority and transgender participants.) Analyzing the heterosexual and cisgender participants separately may provide some insight into this surprising finding variability in cisgender participants' relatively higher perceptions of stigma may have provided the variance needed for the significant interaction effect. Second, the social support measures differed in one important way, which may have influenced their effectiveness as moderators. While Community Connectedness (Frost & Meyer, 2012) referred to the degree to which the individual participated in groups or organizations that were relevant to their identity, the Social Provisions Scale (Cutrona & Russell, 1987) referred to reciprocal, individual-level social support. A measure that combines those two aspects of social support—being involved in a community of individuals who engage in reciprocal support—may be more relevant and influential for people with stigmatized identities.

While the moderation findings relative to Perceived Stigma were counter to predictions, findings regarding Internalized Prejudice more closely matched hypothesized effects. The discussion of these moderation findings follows the discussion of the direct effects of Internalized Prejudice on distress.

Internalized Prejudice and distress. Consistent with the minority stress model (Meyer, 1995, 2003), sexual orientation minority participants reported significant associations between Internalized Prejudice and distress, supporting Hypothesis 4.

Surprisingly, transgender participants experienced no association between Internalized

Prejudice and psychological distress; they did report small, nonsignificant associations between Internalized Prejudice and limitations in daily activities due to physical problems. As the group with the strongest associations between Internalized Prejudice and distress, the implications of these findings are especially relevant for sexual orientation minorities. Internalizing heterosexist attitudes was associated with greater psychological distress and more daily limitations due to physical problems for sexual orientation minorities. Daily limitations due to physical health problems include working less, being limited in the kind of work that could be done, and having difficulty completing tasks. Completing less academic or professional work, especially when the quality of that work suffers, can translate to productivity losses, lower student grades, and losses in wages for hourly workers—situations that could have real financial consequences. Because internalized prejudice is theorized to be a result of societal stigma and prejudice, reducing stigma and prejudice toward sexual orientation minorities could not only improve their daily functioning and psychological well-being, it could also prevent losses in wages and productivity.

The unexpected differences between sexual orientation minority and transgender participants may be due to either an age effect or scale development. First, the age effect may be due to the amount of time minority people have had to internally process their identities. Consistent with theories of gender identity development (see Bussey, 2011), many transgender people identify as transgender before or during elementary school (Egan & Perry, 2001; Olson et al., 2015), while sexual orientation theories explain that sexual orientation identity development occurs around puberty (see Floyd & Stein, 2002). Because many transgender people have had more time to process their identity than

sexual orientation minorities, they may have been able to more successfully resolve the impact that prejudice has on their self-concept or their level of distress. Future research should account for the amount of time that has elapsed since identity awareness. The current study asked participants to report the age at which they identified with their sexual orientation and as transgender or cisgender; these reports were different for majority and minority groups. Almost half of heterosexual and cisgender participants reported awareness of their heterosexual identity before age five, and about a third reported awareness of their cisgender identity before age one. In contrast, no sexual orientation minorities reported awareness of their identity prior to age five, but about half reported awareness prior to age 18; two percent of transgender participants reported awareness of their identity prior to age one, and about a third reported awareness prior to age 13.

Theories of gender identity development (see Bussey, 2011) and sexual orientation identity development (see Floyd & Stein, 2002) correspond closely with the timeline of minority participants' reports, but majority participants' reports of identity awareness were at much younger ages. Majority participants' responses were likely biased by heteronormativity and cisnormativity (Warner, 1991). When an individual is a part of the majority group, especially when that identity is assumed by society, they do not go through the same explicit, conscious process of self-discovery. Not having an explicit, episodic memory of the moment when they identified as heterosexual or cisgender may lead many majority group members to estimate that the process or moment occurred very early in life, perhaps earlier than their actual first memory. Rather than asking participants to explicitly provide the age at which they were aware of their

identity, modifying question wording could resolve this issue. Relative to sexual orientation, questions that ask about the timeline of specific sexual thoughts or behaviors (e.g., first infatuation/crush or first kiss) may capture the timeline of sexual orientation identity development more accurately. Questions that ask an individual's parents or caregivers to estimate the age at which the individual expressed knowledge of their sexual orientation and gender identity could corroborate self-reports.

Second, scale development may have influenced these unexpected results. The Internalized Prejudice scale was initially developed to measure homophobic feelings about the self (Meyer, 1995), and may not accurately assess aspects of prejudice that are specific to a transgender identity. Surveying a sample of transgender people to understand what a transgender identity means to them and why or how it may or may not threaten their positive sense of self could help determine the appropriateness of the measure as it was used in the current study.

Interactions with Internalized Prejudice predicting distress. Hypothesis 7 predicted that outness would either amplify or buffer the associations between Internalized Prejudice and psychological and physical distress. Only the buffering hypothesis was supported, and only for transgender participants. For these participants, outness buffered the associations between Internalized Prejudice and distress. Outness was not a significant moderator for other groups. This evidence for the buffering hypothesis has implications for a transgender individuals' choice to come out to others. These findings suggest that the coming out process, although potentially fraught with uncertainty, may be protective for transgender people. According to these findings, mental and physical health professionals should encourage transgender people to share

their identities with others. Establishing social support resources for transgender people who come out would be an important first step in the coming out process. Not only does coming out reduce the association between internalized cisgenderism and distress for transgender people, it could also increase social awareness of the prevalence of transgender people, effectively reducing social stigma related to a transgender identity.

These findings raise the question, Why is coming out associated with greater well-being for transgender people? The buffering hypothesis suggests that this may be a result of an increase in identity-specific social support resources—by sharing their identity with others, transgender people may learn that others share their identity or discover that others are supportive of their identity. In addition to increasing social support, hearing supportive messages may indirectly reduce internalized prejudice by reducing perceptions of social stigma. A longitudinal study examining the degree of change in perceived stigma, internalized prejudice, and social support over time following a public coming out would address this possibility. Another explanation of the buffering hypothesis is that coming out frees cognitive resources; by not having to conceal their identities, transgender people are free to expend their mental energy on the task of their choice. Comparing working memory performance for transgender people who are more out with that of transgender people who are less out would begin to address this possible explanation.

While outness is an effective moderator for transgender participants, social support is an effective moderator for sexual orientation minority participants. However, the two measures of social support had conflicting effects for sexual orientation minority participants—Social Provisions buffered the association between Internalized Prejudice

and physical distress but Community Connectedness amplified the association.

Implications of these findings necessarily differ as a function of the type of social support. If the difference between social support measures (i.e., individual-level or community-level) explains their conflicting effects on the association between Internalized Prejudice and distress, then sexual orientation minorities who have internalized heterosexism to a greater degree should spend time with supportive individuals of any sexual orientation rather than engaging in community activities with other sexual orientation minorities. Partnering with a counselor to work through internalized heterosexist attitudes may be especially beneficial for sexual orientation minorities who enjoy or seek out community-level activities with other sexual orientation minorities.

The differences between the two social support measures may explain the conflicting effects for sexual orientation minorities—while participating in an organized group with a shared identity (Community Connectedness), sexual orientation minorities may engage in activities or events that increase their feelings of self-efficacy or mastery. A need to activate the individual-level social support measured with the Social Provisions Scale may be a result of a salient negative situation or problem; reciprocating to assist another sexual orientation minority individual may likewise increase the salience of negative issues specific to minority groups, increasing negative affect or distress.

Gathering more information regarding the types of activities in which a sexual orientation minority individual engages with respect to organization- or individual-level social support would be informative, as would assessing reactions following support network involvement.

Experiences with Discrimination and Violence and discress. Not only did transgender participants report more experiences with violence and discrimination than other participants, they also experienced the strongest associations between Experiences with Discrimination and Violence and distress compared to other groups, providing evidence to support Hypothesis 6. The associations between Experiences with Discrimination and Violence and physical distress for transgender participants were particularly noteworthy and have unique implications. Being the target of violent and discriminatory behavior—being the target of a hate crime—is directly associated with physical distress for transgender people. Differentiating between experiences with violence and experiences with discrimination may help determine why transgender people are more likely to experience poorer physical health and more daily limitations due to physical health problems.

If transgender people's experiences with violence include physical assault, physical distress would be a very plausible direct consequence. Multiple transgender participants reported having bottles thrown at them; another had been repeatedly assaulted in grocery stores, airport bathrooms, and other public bathrooms. Experiences with discrimination may also influence physical distress, albeit indirectly. Chronic experiences with discrimination likely contribute to chronic stress, which has been associated with increased distress (Sellers et al., 2003). Discrimination in a medical setting may be especially impactful on physical distress for transgender people. Feeling uncomfortable in a doctor's office or being treated by a provider who is not trained in effectively addressing the needs of transgender people may result in the transgender person not receiving adequate medical care. Providing relevant training for medical

professionals, whether in a receptionist or doctor role, may help transgender people receive the medical care they need to maintain their physical health.

Interactions with Experiences with Discrimination and Violence predicting distress. Neither outness nor social support moderated the associations between Experiences with Discrimination and Violence for any of the groups. This may be due to construct operationalization or model specification. An operationalization of social support as a combination of Social Provisions and Community Connectedness, as previously described, may function as an effective buffer for the association between Experiences with Discrimination and Violence and distress. Being engaged in a reciprocal, supportive organization may help reduce the effects of negative experiences, such as experiences with discrimination and violence, on distress.

Alternately, these variables may more accurately fit in a mediation model, rather than a moderation model. The sequence of events may influence the selection of predictor and mediator variables. With respect to outness, experiences with discrimination and violence may discourage minority individuals from coming out to others, leading to increased distress; however, coming out instead may reveal an individual as a target, leading to an increase in experiences with discrimination or violence and therefore distress. Regarding social support, experiences with discrimination and violence may discourage other minority individuals from offering social support in an attempt to avoid being targets themselves, leading to decreased perceptions of social support and increased distress. On the other hand, becoming more engaged in a community that shares a minority identity may lead to increased visibility and vulnerability and potentially an increase in experiences with discrimination or violence.

Limitations and Contributions

The current study was limited by virtue of studying a relatively small, potentially stigmatized population. Effortful recruiting of transgender, sexual orientation minority, heterosexual, and cisgender participants facilitated comparisons between groups, providing important perspective regarding the severity of stressors for minority groups. Sample sizes of the current study, including the approximately 100 transgender people, can make significant contributions to literature focusing on a hard-to-reach population. Gender identity and transgender identity are not routinely asked as part of large-scale (census or state-level) data collection; researchers often rely on online data collection to gather information (Institute of Medicine Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities, 2011). In order to maximize the representation of individuals with diverse characteristics, the author recruited participants from an extensive number of community, collegiate, and national organizations. Because the sample cannot be assumed to be representative of the United States population, generalizability is limited and sample demographics (e.g., proportion of individuals with certain sexual orientation or transgender identities) should not be taken as representative of sexual orientation minority or transgender populations.

Online data collection typically results in recruitment of a younger-than-average sample; older adults may not have access to the Internet or may not have the inclination to complete an online survey. Including older adults in a similar study would shed light on possible generational or cohort effects—older adults may have greater perceptions of stigma or greater internalized prejudice, leading to higher distress. However, the sexual orientation minority and transgender participants' ages in the current sample were closer

to the national average than were the ages of the heterosexual and cisgender participants. In addition to greater variability in age, increased diversity in culture and ethnicity would be informative. The current study recruited mainly White participants from the United States; recruiting a greater proportion of participants from other races and countries would provide a more complete and nuanced picture of the levels of minority stressors in different groups, and the effects of those stressors on individuals' distress.

Some analyses were not explored within the scope of the current project.

Controlling for the influence of general life stressors on distress led to the discovery that groups differed in the amount of general life stressors. Transgender participants reported the highest number of general life stressors, followed by sexual orientation minorities, heterosexual participants, and cisgender participants. Some stressors likely relate to a minority identity, such as healthcare issues. For example, transgender participants reported experiences with discrimination within the context of medical experiences. It would be worthwhile to examine the relative influence of individual life stressors or types of general life stressors (e.g., financial/economic issues, family-related issues, healthcare issues, etc.) on different groups' distress. The current study began addressing this issue by collecting qualitative and quantitative information regarding participants' experiences with discrimination and violence. The sheer number of experiences that sexual orientation minority and transgender participants reported brings the importance of this topic to the forefront.

Conclusions

You boarded a bus to begin your journey. As other passengers filled the bus, their averted gaze and avoidance of the seat next to you may have led you to perceive that they

disliked you. If you identify as a stigmatized group, such as a member of a sexual orientation or gender identity minority, you may have attributed this behavior to your stigmatized identity. You may have begun to believe that the other passengers were behaving in a prejudiced manner toward you. Over time, you may internalize this prejudice, developing a negative sense of self. You may have experienced other subtle or blatant experiences of discrimination, or even violence. Stressors such as these are associated with increased psychological and physical distress.

This topic is timely. The media is currently experiencing a surge in the coverage of transgender issues (e.g., Laverne Cox and Caitlyn Jenner) and continued coverage of sexual orientation minority issues. One main finding of this study was that transgender participants experience the highest levels of stressors of all groups—about one third of transgender participants in the current study reported at least one experience with discrimination or violence in the past year. The second main finding of this study contributes to greater understanding of the associations between stressors and distress that minority individuals experience. For sexual orientation minorities, distress was most strongly associated with perceptions of societal heterosexism and internalized heterosexism. This topic is urgent. In addition to experiencing the highest levels of minority stressors, transgender participants reported the highest levels of distress. Almost 70 percent of transgender participants in this study met or surpassed the clinical cut-off value for suicidal ideation and behavior.

Regarding interaction effects, the third main finding of this study showed that outness had a buffering effect for transgender participants, and that individual-level and community-level social support worked differently for sexual orientation minorities.

Reducing levels of minority stressors for sexual orientation minority and transgender people and reducing the impact of these stressors on distress are two very important and time-sensitive goals.

APPENDIX A. COMMON TRANSITION STEPS

Adapted from Ekins and King (2006)

- 1. Come out as transgender to family
- 2. Come out as transgender to friends
- 3. Come out as transgender to coworkers or fellow students
- 4. Adopted a name not given at birth that better represents gender identity
- 5. Currently called adopted name by family
- 6. Currently called adopted name by friends
- 7. Currently called adopted name by coworkers/fellow students
- 8. Legally had name changed to adopted name
- 9. Wear clothing that matches gender identity in social situations
- 10. Wear clothing that matches gender identity at work/school
- 11. Legally changed sex on birth certificate (if live in state where this is possible)
- 12. Driver's license changed to reflect gender identity
- 13. Had surgery to alter genitalia
- 14. Undergoing hormone replacement therapy
- 15. Used or had a nonsurgical cosmetic procedure (e.g., electrolysis) to alter physical appearance in order to make it more congruent with gender identity
- 16. Had non-genital surgery (e.g., breast removal, breast implants, facial feminization surgery, vocal cord surgery) to alter appearance (or presence) in order to make it more congruent with gender identity

APPENDIX B. COMMUNITY SEXUAL ORIENTATION AND GENDER VARIANT MINORITY ORGANIZATIONS

Retrieved from http://www.centerlink.org

Community Organization	City	State
LMH Youth Center for LGBTQ and Ally Youth	Little Rock	AR
one•n•ten	Phoenix	AZ
Wingspan	Tucson	AZ
Pacific Center for Human Growth	Berkeley	CA
Rainbow Community Center of Contra Costa County	Concord	CA
ASI LGBT/Queer Resource Center	Fullerton	CA
The Outreach Center - Antelope Valley	Lancaster	CA
The Gay & Lesbian Center of Greater Long Beach	Long Beach	CA
Los Angeles LGBT Center	Los Angeles	CA
Los Angeles LGBT Center	Los Angeles	CA
Los Angeles LGBT Center	Los Angeles	CA
North County LGBTQ Resource Center	Oceanside	CA
Sacramento LGBT Community Center	Sacramento	CA
The Center Inland Empire	San Bernadino	CA
The San Diego Lesbian, Gay, Bisexual, Transgender		
Community Center	San Diego	CA
San Francisco LGBT Community	San Francisco	CA
Spectrum Center for Lesbian, Gay, Bisexual &	~ ~ ~ .	~ .
Transgender Concerns	San Rafael	CA
Pacific Pride Foundation	Santa Barbara	CA
The Diversity Center: The Santa Cruz LGBT Community	Canta Cour	$C\Lambda$
Center	Santa Cruz	CA
Outboulder	Boulder	CO
New Haven Pride Center	New Haven	CT
Triangle Community Center	Norwalk	CT
Prism Youth Initiative	Bradenton	FL
The Center of SWFL-LGBTQ Community Centers	Fort Myers	FL
Compass - GLCC of Palm Beach County	Lake Worth	FL
Pridelines Youth Services - Miami	Miami	FL
The Alliance for GLBTQ Youth - Miami	North Miami	FL
The Center - Orlando	Orlando	FL
The Phillip Rush Center - Atlanta	Atlanta	GA
Des Moines Pride Center	Des Moines	IA
All Under One Roof LGBT Centers of S.E.	Pocatello	ID
Center on Halsted	Chicago	IL
The Phoenix Center	Springfield	IL
Rainbow Serenity	Highland Park	IN
GLBT Resource Center of Michiana, Inc.	South Bend	IN

Community Organization	City	State
Open Roads LGBT Community Center	Hays	KS
Gay & Lesbian Service Organization Pride Center -	•	
Lexington	Lexington	KY
BAGLY	Boston	MA
Gay, Lesbian, Bisexual & Transgender Community Center		
of Baltimore	Baltimore	MD
The Frederick Center	Frederick	MD
Karibu House	Detroit	MI
LGBT Detroit	Detroit	MI
Affirmations	Ferndale	MI
Transgender Michigan	Ferndale	MI
Ruth Ellis Center	Highland Park	MI
KGLRC	Kalamazoo	MI
The Center Project	Columbia	MO
Gay and Lesbian Community Center of the Ozarks	Springfield	MO
LGBT Center of St. Louis	St. Louis	MO
Saint Louis Community College-Forest Park	St. Louis	MO
Western Montana Gay & Lesbian Community Center	Missoula	MT
WNC LGBTQ Community Center	Asheville	NC
Youth Outright, WNC	Asheville	NC
Outright Youth of Catawba Valley, Inc.	Hickory	NC
LGBT Center of Raleigh	Raleigh	NC
LGBT Community Center of Wilmington	Wilmington	NC
outline	Lincoln	NE
Hudson Pride Connections Center	Jersey City	NJ
Newark LGBT Community Center	Newark	NJ
Transgender Resource Center of New Mexico	Albuquerque	NM
Gay and Lesbian Community Center of Southern Nevada	Las Vegas	NV
Build Our Center, Inc.	Reno	NV
In Our Own Voices	Albany	NY
The Pride Center of the Capital Region	Albany	NY
Brooklyn Community Pride Center	Brooklyn	NY
Gay & Lesbian Youth Services	Buffalo	NY
FAIRNY	Dewitt	NY
The Center of the Finger Lakes	Geneva	NY
Hudson Valley LGBTQ Community Center	Kingston	NY
Hudson Valley LGBTQ Community Center	Kingston	NY
Gay Alliance of the Genesee Valley	Rochester	NY
The Staten Island LGBT Community Center	Staten Island	NY
LGBTQ Center of the Warwick Valley	Warwick	NY

Community Organization	City	State
LGBT Community Center of Greater Cleveland	Cleveland	ОН
The Loft: LGBT Community Services Center	White Plains	NY
Oklahomans for Equality	Tulsa	OK
Q Center	Portland	OR
Upper Delaware GLBT Center	Milford	PA
The Attic Youth Center	Philadelphia	PA
Delta Foundation	Pittsburgh	PA
NEPA Rainbow Alliance, Inc.	Wilkes-Barre	PA
Youth Pride, Inc.	Providence	RI
Harriet Hancock LGBT Center	Columbia	SC
Centers for Equality	Sioux Falls	SD
Memphis Gay and Lesbian Community Center	Memphis	TN
Outcentral - Nashville's GLBTQIF Cultural Center	Nashville	TN
LHI-Houston	Houston	TX
The Montrose Center	Houston	TX
Project TAG	Tyler	TX
Utah Pride Center	Salt Lake City	UT
The LGBT Center of Hampton Roads	Norfolk	VA
ROSMY	Richmond	VA
Roanoke Diversity Center	Roanoke	VA
Outright Vermont	Burlington	VT
RU12? Queer Community Center	Winooski	VT
Queer Youth Space	Seattle	WA
The Rainbow Center	Tacoma	WA
7 Rivers LGBT Resource Center	La Crosse	WI
MKE LGBT Community Center	Milwaukee	WI
LGBT Center of SE Wisconsin	Racine	WI

APPENDIX C. COLLEGIATE SEXUAL ORIENTATION AND GENDER VARIANT MINORITY ORGANIZATIONS

Collegiate Organization	City	State
PRISM Alliance	Conway	AK
SafeZone	Juneau	AK
Spectrum	Auburn	AL
Spectrum	Mobile	AL
Unity	Conway	AR
P.R.I.D.E.	Fayetteville	AR
P.R.I.D.E. Club	Phoenix	ΑZ
Pride Alliance	Tucson	ΑZ
LGBT Resource Center	Los Angeles	CA
LGBT Resource Center	Riverside	CA
Dean of Students	San Diego	CA
LGBT Community Resource Center	Stanford	CA
GLBTQ Resource Center	Boulder	CO
LGBTQIA+ Life	Colorado Springs	CO
Rainbow Center	Mansfield	CT
CCSU LGBT Center	New Britain	CT
Office of LGBTQ Resources	New Haven	CT
Kleist Health Education Center	Fort Myers	FL
LGBT Affairs	Gainesville	FL
LGBTQ+ Services	Orlando	FL
PRIDE Student Union	Tallahassee	FL
LGBT Life	Atlanta	GA
Director of Diversity Programs	Decatur	GA
LGBT Student Services	Honolulu	HI
LGBTQA President	Ames	IA
Queer* Graduate Student Association	Ames	IA
uniproud	Cedar Falls	IA
Lesbian, Gay, Bisexual, Transgender Resource		
Center	Iowa City	IA
LGBTQA Office	Moscow	ID
ISU GBTSA	Pocatello	ID
LGBT Resource Center	Carbondale	IL
PRIDE	Normal	IL
GLBT Student Support Services	Bloomington	IN
Butler Alliance	Indianapolis	IN
Sexuality and Gender Diversity Center	Lawrence	KS
LGBT Resource Center	Manhattan	KS
Spectrum: LGBTQ & Allies	Wichita	KS
Office for Institutional Diversity	Lexington	KY

Collegiate Organization	City	State
Office for Institutional Diversity	Lexington	KY
UK College of Public Health	Lexington	KY
LGBT Center	Louisville	KY
Spectrum	Baton Rouge	LA
Stonewall Center	Amherst	MA
LGBT@MIT	Cambridge	MA
QSA	Cambridge	MA
Lesbian, Gay, Bisexual, and Transgender Equity	_	
Center	College Park	MD
LGBT Student Development	Towson	MD
Resource Center for Sexual & Gender Diversity	Brunswick	ME
Center for Sexualities and Gender Diversity	Portland	ME
Spectrum Center	Ann Arbor	MI
Alliance of Queer and Ally Students	East Lansing	MI
GLBT Services Director	Duluth	MN
GLBT Ally Programs Office	Minneapolis	MN
Lesbian, Gay, Bisexual, Transgender, Questioning,		
Intersex, and Asexual (LGBTQIA) Student		
Services	Minneapolis	MN
Gender & Sexuality Resource Center	St. Paul	MN
LGBTQ Resource Center	Colombia	MO
JSU Students for Equality	Jackson	MS
QSA (Queer-Straight Alliance)	Bozeman	MT
GSA (Gay Straight Alliance)	Helena	MT
Outfield Alliance	Missoula	MT
Ten Percent Society (TPS)	Grand Forks	ND
Lesbian, Gay, Bisexual, Transgender, Supporters,		
and Questioning	Minot	ND
LGBTQA + Programs & Services Resource	*	
Center	Lincoln	NE
S.A.G.E. Center	Plymouth	NH
LGBTQ Center	Montclair	NJ
Delta Lambda Phi	New Brunswick	NJ
GLAM	New Brunswick	NJ
LLEGO: LGBTQQIA People of Color Alliance	New Brunswick	NJ
oSTEM	New Brunswick	NJ
Queer and Asian	New Brunswick	NJ
Queer Student Alliance	New Brunswick	NJ
Transmissions	New Brunswick	NJ
LGBTQ Resource Center	Albuquerque	NM
Sexual & Gender Diversity Resource Center	Las Cruces	NM

Collegiate Organization	City	State
Students for Equality - Gay Straight Alliance	Portales	NM
Pride Collaborative	Reno	NV
Center for LGBT Education, Outreach, & Services	Ithaca	NY
NYU Lesbian, Gay, Bisexual, Transgender and		
Queer Student Center	New York City	NY
LGBT Center	Cleveland	OH
LGBTQ Initiatives	Columbus	OH
Kinsey 1-5 and Queer Peers	Oberlin	OH
Queers and Allies of Faith	Oberlin	OH
Transgender Advocacy Group	Oberlin	OH
LGBTQ@OSU	Corvallis	OR
U OUT	Eugene	OR
Queer Resource Center	Portland	OR
Rainbow Center	Pittsburgh	PA
LGBTA Student Resource Center	University Park	PA
Lesbian, Gay, Bisexual, Transgender, Queer		
(LGBTQ) Center	Kingston	RI
Yves-Ollivier Mandereau	Providence	RI
Gay Straight Alliance (GSA)	Brookings	SD
OUTReach	Knoxville	TN
Gender and Sexuality Center	Austin	TX
GLBTQ Resource Center	College Station	TX
LGBT Resource Center	Houston	TX
Spectrum at UVU	Orem	UT
LGBT Resource Center	Salt Lake City	UT
LGBTA and Diversity Resource Center	Blacksburg	VA
Office of Common Ground	Richmond	VA
QVM	Burlington	VT
Spectrum Alliance	Lyndon	VT
Gender Identity/Expression and Sexual		
Orientation Resource Center	Pullman	WA
Q Center	Seattle	WA
Rainbow Resource Center	Laramie	WY

APPENDIX D. NATIONAL PFLAG CHAPTERS

PFLAG Chapter	City	State
Anchorage/South Central AK	Anchorage	AK
Fairbanks	Fairbanks	AK
Juneau	Juneau	AK
Anniston	Anniston	AL
Auburn	Auburn	AL
Birmingham	Birmingham	AL
Dothan	Dothan	AL
Florence/Shoals	Florence	AL
Huntsville	Meridianville	AL
Mobile	Mobile	AL
Montgomery	Montgomery	AL
Fayetteville/Northwest Arkansas	Fayetteville	AR
Little Rock	Little Rock	AR
Russellville	Russellville	AR
Flagstaff	Flagstaff	AZ
Phoenix	Phoenix	AZ
Phoenix Native American	Phoenix	AZ
Sedona/Verde Valley	Sedona	AZ
Sierra Vista	Sierra Vista	AZ
Tucson	Tucson	AZ
Yuma	Yuma	AZ
Pasadena	Altadena	CA
Greater Placer County	Auburn	CA
Bakersfield	Bakersfield	CA
San Gabriel Valley/API	Chino Hills	CA
El Centro	El Centro	CA
Placerville/El Dorado County	El Dorado	CA
Fresno	Fresno	CA
Hayward/East Bay	Hayward	CA
Eureka/Arcata	Hydesville	CA
South Orange County/Laguna Hills	Laguna Beach	CA
Lancaster/Antelope Valley	Lancaster	CA
Lompoc	Lompoc	CA
Long Beach	Los Angeles	CA
Los Angeles	Los Angeles	CA
Merced	Merced	CA
Modesto/Oakdale	Modesto	CA
Columbia Basin/Moses Lake	Moses Lake	CA
Napa	Napa	CA
Grass Valley/Nevada City	Nevada City	CA

PFLAG Chapter	City	State
Oak Park/Ventura County	Oak Park	CA
Oakhurst	Oakhurst	CA
Oakland/East Bay	Oakland	CA
Palm Springs/Desert Communities	Palm Springs	CA
Santa Clarita	PFLAG Santa Clarita	CA
Riverside	Riverside	CA
Sacramento	Sacramento	CA
San Diego	San Diego	CA
San Francisco	San Francisco	CA
San Luis Obispo/Central Coast	San Luis Obispo	CA
Danville/San Ramon Valley	San Ramon	CA
Orange County	Santa Ana	CA
Santa Barbara	Santa Barbara	CA
Santa Cruz County	Santa Cruz	CA
Santa Rosa	Santa Rose	CA
Simi Valley	Simi Valley	CA
San Jose/Peninsula	Sunnyvale	CA
Tehachapi	Tehachapi	CA
Temecula	Temecula	CA
Ukiah	Ukiah	CA
Vallejo	Vallejo	CA
Ventura	Ventura	CA
Tulare-Kings Counties	Visalia	CA
Boulder	Boulder	CO
Highlands Ranch South Suburban	Centennial	CO
Colorado Springs	Colorado Springs	CO
Denver	Denver	CO
Fort Collins/Northern Colorado	Fort Collins	CO
Pueblo	Pueblo	CO
Greater New Haven/Shoreline	Guilford	CT
Hampton	Hampton	CT
Hartford	Hartford	CT
Southeastern CT	Noank	CT
Norwalk/Fairfield Co. SWCT	Norwalk	CT
Washington D.C./Metropolitan Area	Washington	DC
Rehoboth Beach	Rehoboth Beach	DE
Wilmington/North Delaware	Wilmington	DE
Gainesville	Alachua	FL
Lakeland/Polk County	Auburndale	FL
Dunedin	Dunedin	FL

PFLAG Chapter	City	State
Ft. Lauderdale	Fort Lauderdale	FL
Fort Myers	Ft. Myers	FL
Jacksonville	Jacksonville	FL
Palm Beach	Lake Worth	FL
Lecanto	Lecanto	FL
Florida Keys	Marathon Shores	FL
Melbourne	Melbourne	FL
Naples/Collier County	Naples	FL
New Smyrna Beach/Volusia	New Smyrna Beach	FL
Orlando/Central Florida	Orlando	FL
Panama City	Panama City	FL
Pensacola/Emerald Coast	Pensacola	FL
Hernando	Spring Hill	FL
St. Augustine	St. Augustine	FL
Tallahassee	Tallahassee	FL
Tampa	Tampa	FL
Lady Lake	The Villages	FL
Vero Beach	Vero Beach	FL
Atlanta	Atlanta	GA
Blairsville	Blairsville	GA
Brunswick	Brunswick	GA
Johns Creek	Johns Creek	GA
Marietta	Marietta	GA
Savannah	Savannah	GA
Valdosta	Valdosta	GA
Macon	Warner Robins	GA
Maui	Lahaina	HI
Kauai	Lihue	HI
Ames	Ames	IA
Burlington	Burlington	IA
Cedar Rapids	Cedar Rapids	IA
Decorah	Decorah	IA
Des Moines	Des Moines	IA
Quad Cities	Donahue	IA
Dubuque/Tri- State	Dubuque	IA
Mason City	Mason City	IA
Siouxland	Sioux City	IA
Moscow	Moscow	ID
Sandpoint	Sandpoint	ID
Boise/Treasure Valley	Boise	ID

PFLAG Chapter	City	State
Coeur d'Alene	Coeur d'Alene	ID
Idaho Falls/Eastern Idaho	Idaho Falls	ID
Aurora/Fox Valley	Aurora	IL
Belleville	Belleville	IL
Bloomington/Normal	Bloomington	IL
Chicago Metro	Chicago	IL
Deerfield	Deerfield	IL
DeKalb County	DeKalb	IL
Sauk Valley	Dixon	IL
Downers Grove	Downers Grove	IL
Hinsdale	Hinsdale	IL
Kankakee	Kankakee	IL
McHenry	McHenry	IL
Oak Park Area	Oak Park	IL
Palatine	Palatine	IL
Greater Joliet	Plainfield	IL
Hannibal/Quincy	Quincy	IL
Springfield	Springfield	IL
Tinley Park	Tinley Park	IL
Champaign/Urbana	Urbana	IL
Clark/Champaign County	Urbana	IL
Dupage	Wheaton	IL
Greenwood	Bargersville	IN
Lafayette/Tippecanoe County	Battle Ground	IN
Greater Evansville	Evansvillie	IN
Hanover	Hanover	IN
Indianapolis	Indianapolis	IN
Munster	Munster	IN
Fort Wayne	New Haven	IN
Seymour	Seymour	IN
South Bend/Michiana	South Bend	IN
White River Valley	Spencer	IN
Hutchinson	Hutchinson	KS
Flint Hills/Manhattan KS	Manhattan	KS
Lawrence/Topeka	Topeka	KS
Wichita	Wichita	KS
Bowling Green	Bowling Green	KY
Lexington	Lexington	KY
Louisville	Louisville	KY
Owensboro	Owensboro	KY

PFLAG Chapter	City	State
Baton Rouge	Baton Rouge	LA
New Orleans	New Orleans	LA
Shreveport	Shreveport	LA
Attleboro	Attleboro	MA
Brewster/Cape Cod	Orleans	MA
Franklin-Hampshire	Shelburne Falls	MA
Boston/Greater Boston	Waltham	MA
Worcester	Worcester	MA
Bel Air	Bel Air	MD
Chestertown	Chestertown	MD
Columbia/Howard County	Columbia	MD
Central Maryland/Frederick	Knoxville	MD
Baltimore County	Lutherville	MD
Westminster/Carroll County	Sykesville	MD
Machias	Machiasport	ME
Portland	Portland	ME
Ann Arbor	Ann Arbor	MI
Tri-Cities (Bay City, Saginaw, Midland)	Bay City	MI
Clinton Township	Clinton Township	MI
Family Reunion/Detroit	Detroit	MI
Lenawee	Dexter	MI
Fenton	Fenton	MI
Genesse County/Flint	Flint	MI
Holland/Lakeshore	Holland	MI
Keweenaw	Houghton	MI
Livingston County	Howell	MI
Jackson	Jackson	MI
Greater Lansing	Lansing	MI
Manistee	Manistee	MI
Owosso Area	Owosso	MI
Plymouth/Canton	Plymouth	MI
Detroit	Royal Oak	MI
Anoka	Anoka	MN
Mankato	Mankato	MN
Marshall/Buffalo Ridge	Marshall	MN
St. Paul/Minneapolis	Minneapolis	MN
Morris Area	Morris	MN
New Prague Area	New Prague	MN
Mora Area	Ogilvie	MN
Red Wing	Red Wing	MN

PFLAG Chapter	City	State
St. Cloud	Saint Cloud	MN
Thief River Falls	Thief River Falls	MN
Kansas City	Kansas City	MO
St. Charles	St. Charles	MO
St. Joseph	St. Joseph	MO
St. Louis	St. Louis	MO
Oxford/North Mississippi	Oxford	MS
Tupelo	Tupelo	MS
Bozeman/Gallatin Valley	Belrade	MT
Butte	Butte	MT
Great Falls/Golden Triangle	Great Falls	MT
Hamilton/Bitterroot	Hamilton	MT
Flathead Valley	Kalispell	MT
Charlotte	Charlotte	NC
Raleigh-Durham/Triangle	Durham	NC
Alamance	Elon	NC
Flat Rock/Hendersonville	Flat Rock	NC
Gaston	Gastonia	NC
Greensboro	Greensboro	NC
High Point	High Point	NC
Cornelius	Huntersville	NC
Concord/Kannapolis	Kannapolis	NC
Lenoir	Lenoir	NC
Carteret & Craven Counties	New Bern	NC
Rocky Mount	Rocky Mount	NC
Salisbury/Rowan	Salisbury	NC
Wilmington/Cape Fear	Wilmington	NC
Winston-Salem	Winston Salem	NC
Hastings	Hastings	NE
Kearney	Kearney	NE
Lincoln/Cornhusker	Lincoln	NE
Omaha	Omaha	NE
New Hampshire State Council	Concord	NH
Concord	Concord	NH
Keene	Keene	NH
Collingswood	Collingswood	NJ
Hunterdon County	Flemington	NJ
Jersey Shore	Howell	NJ
Princeton	Princeton	NJ
Bergen County/Ridgewood	Ridgewood	NJ

PFLAG Chapter	City	State
North Jersey	Wayne	NJ
Albuquerque	Albuquerque	NM
Gallup	Gallup	NM
Las Cruces/Dona Ana	Las Cruces	NM
Los Alamos	Los Alamos	NM
Santa Fe	Santa Fe	NM
Silver City	Silver City	NM
Socorro	Socorro	NM
Taos	Taos	NM
Carson Region	Carson City	NV
Las Vegas	Las Vegas	NV
Reno/Sparks	Sparks	NV
Binghamton	Bible School Park	NY
Buffalo/Niagara Area	Buffalo	NY
Canton/St. Lawrence County	Canton	NY
Chautauqua	Chautauqua	NY
Oneonta/Otsego County	Colliersville	NY
Spring Valley/Rockland County	Congers	NY
Long Island	Deep Park	NY
Queens	Forest Hills	NY
Ithaca/Cortland	Ithaca	NY
New York City	New York	NY
Kingston	NewPaltz	NY
Rochester	Rochester	NY
Staten Island	Staten Island	NY
Westchester County	White Plains	NY
Akron	Akron	ОН
Elyria/Lorain County	Amherst	ОН
Athens Area	Athens	ОН
Cleveland	Berea	ОН
Cincinnati	Cincinnati	ОН
Columbus	Columbus	ОН
Dayton	Dayton	ОН
Lima	Lima	ОН
Oxford	Oxford	ОН
Sandusky/Firelands	Sandusky	ОН
Toledo	Toledo	ОН
Urbana Area	Urbana	ОН
Wooster	Wooster	ОН
Youngstown	Youngstown	ОН

PFLAG Chapter	City	State
Bartlesville	Bartleville	OK
Norman	Norman	OK
Oklahoma City	Oklahoma City	OK
Stillwater	Stillwater	OK
Tahlequah	Tahlequah	OK
Tulsa	Tulsa	OK
Bend/Central Oregon	Bend	OR
Corvallis/Albany	Corvallis	OR
Florence	Florence	OR
Gold Beach/Curry Co.	Gold Beach	OR
Grants Pass/Josephine County	Grants Pass	OR
Hermiston	Hermiston	OR
Union County	La Grande	OR
Oregon Central Coast	Newport	OR
Clackamas County	Oregon City	OR
Pendleton	Pendleton	OR
Media	Broomall	PA
Butler County	Butler	PA
Erie/Erie and Crawford Counties	Eried	PA
Greensburg	Greensburg	PA
Indiana	Indiana	PA
Allentown/Eastern PA	Macungie	PA
Harrisburg/Central Pennsylvania	Mechanicsburg	PA
Bucks County	PennsPark	PA
Philadelphia	Philadelphia	PA
Pittsburgh	Pittsburgh	PA
West Chester/Chester County	West Chester	PA
York	York	PA
San Juan	San Juan	PR
Greater Providence	Providence	RI
Aiken	Aiken	SC
Charleston	Charleston	SC
Columbia	Columbia	SC
Greenville	Greer	SC
Spartanburg	Spartanburg	SC
Sioux Falls	Sioux Falls	SD
Spearfish	Spearfish	SD
Yankton	Yankton	SD
Nashville	Antioch	TN
Chattanooga	Chattanooga	TN

PFLAG Chapter	City	State
Cookeville	Cookeville	TN
Franklin	Franklin	TN
Johnson City/Tri-Cities	Johnson City	TN
Knoxville	Knoxville	TN
Memphis	Memphis	TN
Oak Ridge	Oak Ridge	TN
Crossville/Cumberland County	Pleasant Hill	TN
Maryville	Rockford	TN
Abilene/Big Country	Abilene	TX
Austin	Austin	TX
Beaumont	Beaumont	TX
Boerne	Boerne	TX
Dallas	Dallas	TX
El Paso	El Paso	TX
Fort Worth	Fort Worth	TX
Harlingen	Harlingen	TX
Houston	Houston	TX
Kerr County	Kerrville	TX
Denton	Lewisville	TX
Longview	Longview	TX
Lubbock	Lubbock	TX
Odessa	Odessa	TX
San Antonio	San Antonio	TX
San Marcos	San Marcos	TX
Seguin	Seguin	TX
Tyler/East Texas	Tyler	TX
Logan/Cache Valley	Logan	UT
Ogden	Ogden	UT
Price	Price	UT
Provo/Utah County	Provo	UT
St. George	Saint George	UT
Salt Lake City	Salt Lake City	UT
Ephraim/Sanpete County	Spring City	UT
Blacksburg/New River Valley	Blacksburg	VA
Charlottesville/Blue Ridge	Charlottesville	VA
Danville	Danville	VA
Floyd	Floyd	VA
Fredericksburg	Fredericksburg	VA
Norfolk/South Hampton Roads	Norfolk	VA
Richmond	Richmond	VA

PFLAG Chapter	City	State
Roanoke	Roanoke	VA
Virginia Beach	Virginia Beach	VA
Winchester/Lower Shenandoah Valley	Winchester	VA
Dorset	Dorset	VT
Aberdeen/Harbor Area	Aberdeen	WA
Bellevue	Bellevue	WA
Bellingham/Whatcom County	Bellingham	WA
Bremerton/Kitsap County	Bremerton	WA
Chehalis/Centralia	Centralia	WA
Colville/Northeast Washington	Colville	WA
Kittitas County	Ellensburg	WA
Ellensburg/Kittitas County	Ellensurg	WA
Everett/Snohomish	Everett	WA
Whidbey Island	Freeland	WA
Friday Harbor	Friday Harbor	WA
Lower Columbia	Longview	WA
Olympia	Olympia	WA
Benton/Franklin	Richland	WA
Seattle	Seattle	WA
Sedro-Woolley/Skagit County	Sedro Woolley	WA
Spokane	Spokane	WA
Tacoma	Tacoma	WA
Vancouver/SW Washington	Vancouver	WA
Walla Walla	Walla Walla	WA
Appleton	Appleton	WI
Madison	Madison	WI
Manitowoc County	Manitowoc	WI
Milwaukee	Milwaukee	WI
Oconomowoc	Oconomowoc	WI
River Falls	River Falls	WI
Sheboygan	Sheboygan	WI
Steven's Point	Stevens Point	WI
Sturgeon Bay/Door County	Sturgeon Bay	WI
Sun Prairie	Sun Prairie	WI
Washburn	Washburn	WI
Charleston/Huntington	Charleston	WV
Casper	Casper	WY
Gillette	Gillette	WY

APPENDIX E. GENDER EXPRESSION

Appendix E1. Feminine Gender Expression

Gender expression is the way you dress and behave in private or public, whether it's feminine, masculine, or somewhere in between. What is your appearance and behavior like in different settings?

Always or almost always feminine	Mostly feminine	Occasionally feminine	Never or almost never feminine
1	2	3	4

- 1. By yourself
- 2. With close friends
- 3. With family
- 4. At work/school
- 5. In public

Appendix E2. Masculine Gender Expression

Gender expression is the way you dress and behave in private or public, whether it's feminine, masculine, or somewhere in between. What is your appearance and behavior like in different settings?

Always or almost always masculine	Mostly masculine	Occasionally masculine	Never or almost never masculine
1	2	3	4

- 6. By yourself
- 7. With close friends
- 8. With family
- 9. At work/school
- 10. In public

APPENDIX F. TRANSGENDER IDENTITY AND OUTNESS ITEMS

Adapted from Bradford, Ryan, and Rothblum (1994)

- 1. Do you identify as any of the following? (Select all that apply.)
 - a. transgender
 - b. transsexual
 - c. FtM / trans man
 - d. MtF / trans woman
 - e. genderqueer
 - f. bi-gendered
 - g. third gender
 - h. two-spirit
 - i. cross-dresser
 - j. gender nonconforming
 - k. drag queen or drag king
 - 1. gender fluid
 - m. other (please describe)
 - n. not a transgender person (none of the above)
- 2. [If at least one term (a. k.) selected in #1] Which fits you best?
 - a. transgender
 - b. transsexual
 - c. FtM/trans man
 - d. MtF/trans woman
 - e. genderqueer
 - f. bi-gendered
 - g. third gender
 - h. two-spirit
 - i. cross-dresser
 - j. gender nonconforming
 - k. drag queen or drag king
 - l. gender fluid
 - m. other (please describe)
 - n. not a transgender person (none of the above)
- 3. [If a term, a. -1., is selected in #1] How old were you when you first identified as [term selected in #2]? (age in years)
- 4. [If a term, a. -1., is selected in #1] Does anyone know that you identify as [term selected in #2]? (yes/no)

5. Indicate the percent of people in each category that you have told about your gender identity. 0 = nobody; 100 = everyone

Please click and move each of the sliding bars until they turn blue and register a number. [Participants manipulate a sliding scale ranging from 0 (*none*) to 100 (*everyone*) to indicate the percent of people in each category.]

- a. current or previous romantic and/or sexual partner(s)
- b. immediate family (mother, father, siblings, children)
- c. extended family (aunts, uncles, cousins, grandparents, etc.)
- d. cisgender (non-transgender) friends
- e. all friends
- f. religious or secular organization members (clubs, bible study, etc.)
- g. classmates/work associates
- 6. It is important for me to "be out" to cisgender people I know—that others know my gender identity. (Cisgender people experience congruent gender identities and assigned sex; for example, an assigned male who identifies as male or an assigned female who identifies as female is cisgender.)

Rated on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*)

7. Are you worried, concerned, or afraid that people will find out that you are [term selected in #2]?

Rated on a scale from 1 (not at all) to 5 (extremely)

8. Please provide your ZIP code: [text entry]

APPENDIX G. TRANSGENDER CONGRUENCE SCALE

Kozee, Tylka, and Bauerband (2012)

Gender identity is defined as the gender(s) that you experience yourself as; it is not necessarily related to your assigned sex at birth. For the following items, please indicate the response that best describes your experience over *the past two weeks*.

Rate each statement on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

- 1. My outward appearance represents my gender identity.
- 2. I experience a sense of unity between my gender identity and my body.
- 3. My physical appearance adequately expresses my gender identity.
- 4. I am generally comfortable with how others perceive my gender identity when they look at me.
- 5. My physical body represents my gender identity.
- 6. The way my body currently looks does <u>not</u> represent my gender identity.*
- 7. I am happy with the way my appearance expresses my gender identity.
- 8. I do not feel that my appearance reflects my gender identity.*
- 9. I feel that my mind and body are consistent with one another.
- 10. I am not proud of my gender identity.*
- 11. I am happy that I have the gender identity that I do.
- 12. I have accepted my gender identity.

^{*} Reverse coded

APPENDIX H. TRANSGENDER TRANSITION AND SATISFACTION WITH TRANSITION ITEMS

Adapted from Ekins and King (2006)

- 1. What changes, if any, have you made *or would you like to make* in order to make your daily experiences consistent with your gender identity? *Please mark all that apply*.
 - a. no changes
 - b. come out as transgender to family
 - c. come out as transgender to friends
 - d. come out as transgender to coworkers or fellow students
 - e. adopted a name not given at birth that better represents gender identity
 - f. currently called adopted name by family
 - g. currently called adopted name by friends
 - h. currently called adopted name by coworkers/fellow students
 - i. legally had name changed to adopted name
 - j. purchase clothing to make appearance consistent with gender identity
 - k. wear clothing that matches gender identity in social situations
 - 1. wear clothing that matches gender identity at work/school
 - m. change hairstyle (longer/shorter, different cut, different color)
 - n. change use of makeup (start/stop wearing mascara, eyeshadow, lipstick, etc.)
 - o. legally changed sex on birth certificate (if live in state where this is possible)
 - p. driver's license changed to reflect gender identity
 - q. had surgery to alter genitalia
 - r. undergoing hormone replacement therapy
 - s. used or had a nonsurgical cosmetic procedure (e.g., electrolysis)
 - t. had non-genital surgery (e.g., breast removal, breast implants, facial feminization surgery, vocal cord surgery) to alter appearance (or presence) in order to make it more congruent with gender identity
 - u. other (please specify)
- 2. [If b. t. selected in #1] Please mark all of the following changes you have made as of today. *Please mark all that apply*. [*Note:* Only choices selected in the previous question will appear.]
 - a. no changes
 - b. come out as transgender to family
 - c. come out as transgender to friends
 - d. come out as transgender to coworkers or fellow students
 - e. adopted a name not given at birth that better represents gender identity
 - f. currently called adopted name by family
 - g. currently called adopted name by friends
 - h. currently called adopted name by coworkers/fellow students
 - i. legally had name changed to adopted name
 - j. purchase clothing to make appearance consistent with gender identity
 - k. wear clothing that matches gender identity in social situations
 - 1. wear clothing that matches gender identity at work/school

- m. change hairstyle (longer/shorter, different cut, different color)
- n. change use of makeup (start/stop wearing mascara, eyeshadow, lipstick, etc.)
- o. legally changed sex on birth certificate (if live in state where this is possible)
- p. driver's license changed to reflect gender identity
- q. had surgery to alter genitalia
- r. undergoing hormone replacement therapy
- s. used or had a nonsurgical cosmetic procedure (e.g., electrolysis)
- t. had non-genital surgery (e.g., breast removal, breast implants, facial feminization surgery, vocal cord surgery) to alter appearance (or presence) in order to make it more congruent with gender identity
- u. other (please specify)
- 3. How satisfied are you with your transition progress?
 - a. Very dissatisfied
 - b. Dissatisfied
 - c. Somewhat dissatisfied
 - d. Neutral
 - e. Somewhat satisfied
 - f. Satisfied
 - g. Very satisfied
 - h. I do not wish to make any changes in order to make my daily experiences consistent with my gender identity

APPENDIX I. EROTIC RESPONSE AND ORIENTATION SCALE

Storms (1980)

The following questions ask about your sexual experiences and feelings toward [men/women] over the last 12 months. Please read each question carefully and indicate whether you have had the experience or feeling being asked about, from never (0), only once or twice (1-2), three to six times (3-6), seven to twelve times (7-12), an average of once or twice a month (monthly), an average of once or twice a week (weekly), to almost daily or more (daily), during the *past 12 months*.

[Questions about women are administered first, followed by questions about men.]

- 1. How often have you noticed that a woman you've seen or met for the first time is physically attracted to you?
- 2. How often have you had any sexual feelings (even the slightest) while looking at a woman?
- 3. How often have you felt some sexual arousal from touching or being touched by a woman?
- 4. How often have you thought about what it would be like to have a sexual experience with a woman?
- 5. How often have you felt a desire to have a sexual experience with a particular woman you know?
- 6. How often have you daydreamed about having a sexual experience with a woman?
- 7. How often have you dreamed at night about having a sexual experience with a woman?
- 8. How often have you masturbated while fantasizing a sexual experience with a woman?
- 9. How often have you noticed that a man you've seen or met for the first time is physically attracted to you?
- 10. How often have you had any sexual feelings (even the slightest) while looking at a man?
- 11. How often have you felt some sexual arousal from touching or being touched by a man?
- 12. How often have you thought about what it would be like to have a sexual experience with a man?
- 13. How often have you felt a desire to have a sexual experience with a particular man you know?
- 14. How often have you daydreamed about having a sexual experience with a man?
- 15. How often have you dreamed at night about having a sexual experience with a man?
- 16. How often have you masturbated while fantasizing a sexual experience with a man?

APPENDIX J. SEXUAL ORIENTATION IDENTITY AND OUTNESS ITEMS

Adapted from Bradford, Ryan, and Rothblum (1994)

- 1. Which sexual orientation do you identify with the most?
 - a. heterosexual/straight
 - b. gay
 - c. lesbian
 - d. bisexual/pansexual
 - e. queer
 - f. asexual
 - g. other (please describe)
- 2. How old were you when you first identified as [term selected in #1]? (age in years)
- 3. Does anyone know what your sexual orientation is? (yes/no)
- 4. Indicate the percent of people in each category that you have told about your sexual orientation. 0 = nobody; 100 = everyone

Please click and move each of the sliding bars until they turn blue and register a number. [Participants manipulate a sliding scale ranging from 0 (*none*) to 100 (*everyone*) to indicate the percent of people.]

- a. current or previous romantic and/or sexual partner(s)
- b. immediate family (mother, father, siblings, children)
- c. extended family (aunts, uncles, cousins, grandparents, etc.)
- d. straight/heterosexual friends
- e. all friends
- f. religious or secular organization members (clubs, bible study, etc.)
- g. classmates/work associates
- 5. It is important for me to "be out" to straight (heterosexual) people I know. Rated on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*)
- 6. Are you worried, concerned, or afraid that people will find out that you are [term chosen in #1]?

Rated on a scale from 1 (not at all) to 5 (extremely)

7. Please provide your five-digit ZIP code: [text entry]

APPENDIX K. PERCEIVED STIGMA SCALE

Adapted from Link (1987)

Appendix K1. Perceived Stigma: Sexual Orientation

Indicate the degree to which you agree or disagree with the following statements.

[For heterosexual participants:] These questions may seem unusual, but please take them at face value. Please answer these questions as honestly as possible.

Strongly	Somewhat	Slightly	Slightly	Somewhat	Strongly
agree	agree	agree	disagree	disagree	disagree
1	2	3	4	5	6

- 1. Most people would willingly accept a [heterosexual person/gay man/lesbian/bisexual person/asexual person] as a close friend.
- 2. Most people believe that a person who is [heterosexual/gay/lesbian/bisexual/asexual] is just as intelligent as the average person.
- 3. Most people believe that a [heterosexual person/gay man/lesbian/bisexual person/asexual person] is just as trustworthy as the average citizen.
- 4. Most people would accept a [heterosexual person/gay man/lesbian/bisexual person/asexual person] as a teacher of young children in a public school.
- 5. Most people feel that being a [heterosexual person/gay man/lesbian/bisexual person/asexual person] is a sign of personal failure.
- 6. Most people would not hire a [heterosexual person/gay man/lesbian/bisexual person/asexual person] to take care of their children.
- 7. Most people think less of a person who is [heterosexual/gay/lesbian/bisexual/asexual].
- 8. Most employers will hire a [heterosexual person/gay man/lesbian/bisexual person/asexual person] if they are qualified for the job.
- 9. Most employers will pass over the application of a [heterosexual person/gay man/lesbian/bisexual person/asexual person] in favor of another applicant.
- 10. Most people in my community would treat a [heterosexual person/gay man/lesbian/bisexual person/asexual person] just as they would treat anyone.
- 11. Most young [men/women] would be reluctant to date someone who is [heterosexual/gay/lesbian/bisexual/asexual].

Appendix K2. Perceived Stigma: Transgender Identity

Indicate the degree to which you agree or disagree with the following statements.

Transgender people may have a gender identity that is different from their biological sex or an appearance that is not stereotypical for their sex (e.g., Caitlin Jenner is transgender).

Cisgender people have a gender identity that is the same as their biological sex. For example, a biological male who identifies as a man is cisgender, and a biological female who identifies as a woman is cisgender.

[For cisgender participants:] These questions may seem unusual, but please take them at face value. Please answer these questions as honestly as possible.

- 1. Most people would willingly accept a [cisgender/transgender] person as a close friend.
- 2. Most people believe that a person who is [cisgender/transgender] is just as intelligent as the average person.
- 3. Most people believe that a [cisgender/transgender] person is just as trustworthy as the average citizen.
- 4. Most people would accept a [cisgender/transgender] person as a teacher of young children in a public school.
- 5. Most people feel that being a [cisgender/transgender] person is a sign of personal failure.
- 6. Most people would not hire a [cisgender/transgender] person to take care of their children.
- 7. Most people think less of a person who is [cisgender/transgender].
- 8. Most employers will hire a [cisgender/transgender] person if they are qualified for the iob.
- 9. Most employers will pass over the application of a [cisgender/transgender] person in favor of another applicant.
- 10. Most people in my community would treat a [cisgender/transgender] person just as they would treat anyone.
- 11. Most young adults would be reluctant to date someone who is [cisgender/transgender].

APPENDIX L. INTERNALIZED PREJUDICE SCALE

Adapted from Martin and Dean (1987)

Appendix L1. Internalized Prejudice: Heterosexism

Rate the frequency with which you have experienced these thoughts in the past year.

[For heterosexual participants:] These questions may seem unusual, but please take them at face value. Please answer these questions as honestly as possible.

- 1. I have tried to stop being attracted to [men/women/men and women/men or women] in general. [only displayed for those with sexual attraction]
- 1. I have tried to start being attracted to [men/women] in general. [only displayed for asexual participants]
- 2. If someone offered me the chance to be completely heterosexual, I would accept the chance.
- 3. I wish I weren't [heterosexual/gay/lesbian/bisexual/asexual].
- 4. I feel that being [heterosexual/gay/lesbian/bisexual/asexual] is a personal shortcoming for me.
- 5. I would like to get professional help in order to change my sexual orientation from [heterosexual/gay/lesbian/bisexual/asexual] to straight. [not displayed to heterosexual participants]
- 6. I have tried to become more sexually attracted to [women/men].
- 7. I often feel it best to avoid personal or social involvement with other [heterosexual/gay/lesbian/bisexual/asexual] [men/women/people/people].
- 8. I feel alienated from myself because of being [heterosexual/gay/lesbian/bisexual/asexual].
- 9. I wish that I could develop more erotic feelings about [women/men].

Appendix L2. Internalized Prejudice: Cisgenderism

Rate the frequency with which you have experienced these thoughts in the past year.

Transgender people may have a gender identity that is different from their biological sex or an appearance that is not stereotypical for their sex (e.g., Caitlin Jenner is transgender).

Cisgender people have a gender identity that is the same as their biological sex. For example, a biological male who identifies as a man is cisgender, and a biological female who identifies as a woman is cisgender.

[For cisgender participants:] These questions may seem unusual, but please take them at face value. Please answer these questions as honestly as possible.

- 1. I have tried to stop being [transgender/cisgender] in general.
- 2. If someone offered me the chance to be completely [cisgender/transgender], I would accept the chance.
- 3. I wish I weren't [transgender/cisgender].
- 4. I feel that being [transgender/cisgender] is a personal shortcoming for me.
- 5. I would like to get professional help in order to change my transgender identity from [transgender/cisgender] to [cisgender/transgender].
- 6. I have tried to become more [cisgender/transgender].
- 7. I often feel it best to avoid personal or social involvement with other [transgender/cisgender] people.
- 8. I feel alienated from myself because of being [transgender/cisgender].
- 9. I wish that I could develop more [cisgender/transgender] feelings about myself.

APPENDIX M. EXPERIENCES WITH DISCRIMINATION AND VIOLENCE SCALE

Adapted from Dean, Wu, and Martin (1992)

Appendix M1. Experiences with Discrimination: Sexual Orientation Identity

- 1. In the past year, have you been the victim of violence on the basis of your sexual orientation identity? That is, was an attempt made to harm you or were you harmed because you were [heterosexual/gay/lesbian/bisexual/asexual/text entry]? (no/yes)
- 2. [If "yes" selected in #1] How many times were you the victim of violence on the basis of your sexual orientation identity? Please provide a description of the event(s) if you wish.
- 3. In the past year, have you been discriminated against in any way on the basis of your sexual orientation identity? That is, did someone treat you differently because you were [heterosexual/gay/lesbian/bisexual/asexual/text entry]? (no/yes)
- 4. [If "yes" selected in #3] How many times were you discriminated against? Please provide a description of the event(s) if you wish.

Appendix M2. Experiences with Discrimination: Transgender Identity

- 1. In the past year, have you been the victim of violence on the basis of your gender identity? That is, was an attempt made to harm you or were you harmed because you identify as [term selected in identity question]?? (no/yes)
- 2. [If "yes" selected in #1] How many times were you the victim of violence on the basis of your gender identity? Please provide a description of the event(s) if you wish.
- 3. In the past year, have you been discriminated against in any way on the basis of your gender identity? That is, did someone treat you differently because you identify as [term selected in identity question]? (no/yes)
- 4. [If "yes" selected in #3] How many times were you discriminated against? Please provide a description of the event(s) if you wish.

APPENDIX N. SOCIAL READJUSTMENT RATING SCALE-REVISED

Hobson, Kamen, Szostek, and Wojnarowicz (1998); Holmes and Rahe (1967)

Indicate whether or not you have experienced the life event mentioned below in the past year. To identify life events you have experienced in the past year, mark the box next to the applicable event(s).

- 1. Death of spouse or partner
- 2. Death of close family member
- 3. Major injury/illness to self
- 4. Detention in jail or other institution
- 5. Major injury/illness to close family member
- 6. Foreclosure on loan/mortgage
- 7. Divorce
- 8. Being a victim of crime
- 9. Being the victim of police brutality
- 10. Infidelity
- 11. Experiencing domestic violence/sexual abuse
- 12. Separation from or reconciliation with romantic partner
- 13. Being fired/laid-off/unemployed
- 14. Experiencing financial problems/difficulties
- 15. Death of a close friend
- 16. Surviving a disaster
- 17. Becoming a single parent
- 18. Assuming responsibility for sick or elderly loved one
- 19. Loss of or major reduction in health insurance/benefits
- 20. Self/close family member being arrested for violating the law
- 21. Major disagreement over child support/custody/visitation
- 22. Experiencing/involved in auto accident
- 23. Being disciplined at work/demoted
- 24. Dealing with unwanted pregnancy
- 25. Adult child moving in with parent/parent moving in with adult child
- 26. Child developed behavior or learning problem
- 27. Experiencing employment discrimination/sexual harassment
- 28. Attempting to modify addictive behavior of self
- 29. Discovering/attempting to modify addictive behavior of close family member
- 30. Employer reorganization/downsizing
- 31. Dealing with infertility/miscarriage
- 32. Marriage/remarriage/civil union/commitment ceremony
- 33. Changing employers/careers

- 34. Failure to obtain/qualify for a mortgage
- 35. Pregnancy of self/spouse/partner
- 36. Experiencing discrimination/harassment outside the workplace
- 37. Release from jail
- 38. Spouse/partner begins/ceases work outside the home
- 39. Major disagreement with boss/co-worker
- 40. Change in residence
- 41. Finding appropriate child care/day care
- 42. Experiencing a large unexpected monetary gain
- 43. Changing positions (transfer, promotion)
- 44. Gaining a new family member
- 45. Changing work responsibilities
- 46. Child leaving home
- 47. Obtaining a home mortgage
- 48. Obtaining a major loan other than home mortgage
- 49. Retirement
- 50. Beginning/ceasing formal education
- 51. Receiving a ticket for violating the law

APPENDIX O. COMMUNITY CONNECTEDNESS SCALE

Frost and Meyer (2012)

These are questions about the [LGBAT/heterosexual] community. By [LGBAT/heterosexual] community, I don't mean any particular neighborhood or social group, but in general, groups of [gay men, bisexual men and women, lesbians, asexual men and women, and transgender / heterosexual] individuals.

Agree	Agree	Disagree	Disagree
strongly	0		strongly
1	2	3	4

- 1. You feel you're a part of the [LGBAT/heterosexual] community.
- 2. Participating in the [LGBAT/heterosexual] community is a positive thing for you.
- 3. You feel a bond with the [LGBAT/heterosexual] community.
- 4. You are proud of the [LGBAT/heterosexual] community.
- 5. It is important for you to be politically active in the [LGBAT/heterosexual] community.
- 6. If we work together, [lesbian, gay, bisexual, asexual, transgender / heterosexual] people can solve problems in the [LGBAT/heterosexual] community.
- 7. You really feel that any problems faced by the [LGBAT/heterosexual] community are also your own problems.
- 8. You feel a bond with other [lesbian/gay/bisexual/asexual/transgender/heterosexual people].

APPENDIX P. SOCIAL PROVISIONS SCALE

Cutrona and Russell (1987)

For these questions, think about your current relationships with friends, family members, coworkers, community members, and so on. To what extent do you agree that each statement describes your current relationships with other people?

Strongly	Disagree	Agree	Strongly
disagree	2 130.6.00	110.00	agree
1	2	3	4

- 1. There are people I can depend on to help me if I really need it.
- 2. I feel that I do not have close personal relationships with other people. (R)
- 3. There is no one I can turn to for guidance in times of stress. (R)
- 4. There are people who depend on me for help.
- 5. There are people who enjoy the same social activities I do.
- 6. Other people do not view me as competent. (R)
- 7. I feel personally responsible for the well-being of another person.
- 8. I feel part of a group of people who share my attitudes and beliefs.
- 9. I do not think other people respect my skills and abilities. (R)
- 10. If something went wrong, no one would come to my assistance. (R)
- 11. I have close relationships that provide me with a sense of emotional security and well-being.
- 12. There is someone I could talk to about important decisions in my life.
- 13. I have relationships where my competence and skills are recognized.
- 14. There is no one who shares my interests and concerns. (R)
- 15. There is no one who really relies on me for their well-being. (R)
- 16. There is a trustworthy person I could turn to for advice if I were having problems.
- 17. I feel a strong emotional bond with at least one other person.
- 18. There is no one I can depend on for aid if I really need it. (R)
- 19. There is no one I feel comfortable talking about problems with. (R)
- 20. There are people who admire my talents and abilities.
- 21. I lack a feeling of intimacy with another person. (R)
- 22. There is no one who likes to do the things I do. (R)
- 23. There are people I can count on in an emergency.
- 24. No one needs me to care for them. (R)

Subscale scoring indicated below. Items with a (R) indicate reverse-coded items.

Attachment: 2, 11, 17, and 21 Social Integration: 5, 8, 14, and 22 Reassurance of Worth: 6, 9, 13, and 20 Reliable Alliance: 1, 10, 18, and 23

Guidance: 3, 12, 16, and 19

Opportunity for Nurturance: 4, 7, 15, and 24

APPENDIX Q. SOCIAL NETWORK SIZE AND LIST

Hirsch (1980)

- 1. How many people are in your social support network? A network member is someone you can rely on in times of stress or difficulty and/or someone who relies on you in times of stress or difficulty.
- 2. Which members of your social support network have you had contact with in the past four to six weeks? Please list them by first name (e.g., Wanda, Terry) or by relation to you (e.g., sister, cousin, friend). Please list up to 20 members of your social support network with whom you have had contact in the past four to six weeks.

APPENDIX R. SYMPTOM CHECKLIST-90-REVISED

Derogatis (1983)

Appendix R1. Anxiety Subscale

During the past week, including today, how much were you distressed or bothered by:

Not at all	A little bit	A moderate amount	Quite a bit	Extremely
1	2	3	4	5

- 1. Nervousness or shakiness inside
- 2. Trembling
- 3. Suddenly scared for no reason
- 4. Feeling fearful
- 5. Heart pounding or racing
- 6. Feeling tense or keyed up
- 7. Spells of terror or panic
- 8. Feeling so restless you couldn't sit still
- 9. The feeling that something bad is going to happen to you
- 10. Thoughts and images of a frightening nature

Appendix R2. Depression Subscale

During the past week, including today, how much were you distressed or bothered by:

Not at all	A little bit	A moderate	Quite a bit	Extremely		
woi ai aii	11 titile bit	amount	Quite a bu	Lattemety		
1	2	3	4	5		

- 1. Loss of sexual interest or pleasure
- 2. Feeling low in energy or slowed down
- 3. Thoughts of ending your life
- 4. Crying easily
- 5. Feelings of being trapped or caught
- 6. Blaming yourself for things
- 7. Feeling lonely
- 8. Feeling blue
- 9. Worrying too much about things
- 10. Feeling no interest in things
- 11. Feeling hopeless about the future
- 12. Feeling everything is an effort
- 13. Feelings of worthlessness

APPENDIX S. SUICIDE BEHAVIORS QUESTIONNAIRE-REVISED

Osman, Guitierrez, Konick, Kooper, and Barrios (2001)

Please select the statement or phrase that best applies to you.

- 1. Have you ever thought about or attempted to kill yourself?
 - a. Never
 - b. It was just a brief passing thought
 - c. I have had a plan at least once to kill myself but did not try to do it
 - d. I have had a plan at least once to kill myself and really wanted to die
 - e. I have attempted to kill myself, but did not want to die
 - f. I have attempted to kill myself, and really hoped to die
- 2. How often have you thought about killing yourself in the past year?
 - a. Never
 - b. Rarely (1 time)
 - c. Sometimes (2 times)
 - d. Often (3-4 times)
 - e. Very Often (5 or more times)
- 3. Have you ever told someone that you were going to commit suicide, or that you might do it?
 - a. No
 - b. Yes, at one time, but did not really want to die
 - c. Yes, at one time, and really wanted to die
 - d. Yes, more than once, but did not want to do it
 - e. Yes, more than once, and really wanted to do it
- 4. How likely is it that you will attempt suicide someday?
 - a. Never
 - b. No chance at all
 - c. Rather unlikely
 - d. Unlikely
 - e. Likely
 - f. Rather likely
 - g. Very likely

Participants who selected responses b-f for question 1, b-e for question 2, b-e for question 3, and/or c-g for question 4 were automatically shown the following message after question 4:

If you are experiencing personal distress, please call the toll-free National Suicide Prevention Lifeline at 1-800-273-8255 to receive immediate help. You can also log on to http://locator.apa.org/ to identify practicing psychologists in your area.

APPENDIX T. MEDICAL OUTCOMES STUDY 36-ITEM SHORT-FORM HEALTH SURVEY

Ware and Sherbourne (1992)

Appendix T1. Role Limitations Due to Physical Health Problems Subscale

During the past four weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? (yes/no)

- 1. Did you cut down the amount of time you spent on work, school, or other activities?
- 2. Did you accomplish less than you would like?
- 3. Were you limited in the kind of work or other activities?
- 4. Did you have difficulty performing work or other activities (for example, it took extra effort)?

Appendix T2. Role Limitations Due to Personal or Emotional Problems Subscale

During the past four weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)? (yes/no)

- 1. Did you cut down on the amount of time you spent on work, school, or other activities?
- 2. Did you accomplish less than you would like?
- 3. Did you not do work, school, or other activities as carefully as usual?
- 4. Did you not exercise as much as usual?
- 5. Did you spend less time doing enjoyable things with friends or family?

APPENDIX U. GENERAL PHYSICAL HEALTH

Conger, Elder, Lorenz, Simons, and Whitbeck (1994)

Rate each of the following statements on a scale from definitely true to definitely false.

Definitely	Somewhat	Neutral	Somewhat	Definitely
true	true	reurai	false	false
1	2	3	4	5

- 1. I seem to get a little sick a little easier than other people.
- 2. I am as healthy as anybody I know.
- 3. I expect my health to get worse.
- 4. My health is excellent.

APPENDIX V. DEMOGRAPHIC ITEMS

- 1. What is your household income?
 - a. \$0 \$10,000
 - b. \$11,000 \$20,000
 - c. \$21,000 \$30,000
 - d. \$31,000 \$40,000
 - e. \$41,000 \$50,000
 - f. \$51,000 \$60,000
 - g. \$61,000 \$70,000
 - h. \$71,000 \$80,000
 - i. \$81,000 \$90,000
 - j. \$91,000 \$100,000
 - k. \$100,000 +
 - 1. prefer not to answer
- 2. What is your current relationship status?
 - a. married / civil union
 - b. engaged
 - c. cohabiting full-time
 - d. cohabiting part-time
 - e. steady romantic relationship / partnered
 - f. dating
 - g. not dating / single
 - h. separated
 - i. divorced
 - j. widowed
 - k. other (please specify)
 - 1. prefer not to answer
- 3. [If a. k. selected in #2] How long have you been with your current partner? [Participants indicate duration of relationship in years and months]
- 4. What is your political affiliation?
 - a. Democratic Party
 - b. Republican Party
 - c. Libertarian Party
 - d. Independent
 - e. Green Party
 - f. Constitution Party
 - g. America First Party
 - h. American Conservative Party
 - i. American Freedom Party
 - j. American Populist Party
 - k. Americans Elect
 - 1. America's Party

- m. Christian Liberty Party
- n. Citizens Party of the United States
- o. Communist Party USA
- p. Freedom Socialist Party
- q. Independent American Party
- r. Justice Party
- s. Modern Whig Party
- t. National Socialist Movement
- u. Objectivist Party
- v. Party for Socialism and Liberation
- w. Peace and Freedom Party
- x. Pirate Party
- y. Prohibition Party
- z. Reform Party of the United States of America
- aa. Socialist Action
- bb. Socialist Alternative
- cc. Socialist Equality Party
- dd. Socialist Party USA
- ee. Socialist Workers Party
- ff. United States Marijuana Party
- gg. United States Pacifist Party
- hh. Unity Party of America
- ii. Workers World Party
- ij. Other
- kk. No political affiliation
- ll. Prefer not to answer

5. What is your religious affiliation?

- a. Christian Evangelical Protestant
- b. Christian Protestant
- c. Christian Catholic
- d. Christian Mormon
- e. Christian Jehovah's Witness
- f. Christian Greek Orthodox
- g. Christian Russian Orthodox
- h. Christian Other
- i. Jewish Reform
- j. Jewish Conservative
- k. Jewish Orthodox
- 1. Jewish Other
- m. Buddhist Zen Buddhist
- n. Buddhist Theravada Buddhist
- o. Buddhist Tibetan Buddhist
- p. Buddhist Other Buddhist

- q. Muslim Sunni
- r. Muslim Shia
- s. Muslim Other
- t. Hindu
- u. Wiccan
- v. Atheist
- w. Agnostic
- x. Other
- y. No religious affiliation
- z. Prefer not to answer
- 6. What is the highest level of education you have completed?
 - a. Less than high school diploma
 - b. High school diploma / GED
 - c. 1 year of college / vocational/trade school
 - d. 2 years of college / Associate's degree from junior college or vocational/trade school
 - e. 4 years of college / Bachelor's degree
 - f. Master's degree
 - g. Medical degree, PhD, or other professional degree
 - h. Prefer not to answer
- 7. What is your race? *Please select all that apply*.
 - a. Black / African American
 - b. Asian / Asian American
 - c. White / European American
 - d. Native American / Alaska Native
 - e. Native Hawaiian / Pacific Islander
 - f. Other
 - g. Unknown
 - h. Prefer not to answer
- 8. What is your ethnicity?
 - a. Hispanic / Latino/a
 - b. Not Hispanic / Latino/a
 - c. Unknown
 - d. Prefer not to answer
- 9. In which state do you currently live?
 - a. Alabama
 - b. Alaska
 - c. Arizona
 - d. Arkansas
 - e. California

- f. Colorado
- g. Connecticut
- h. Delaware
- i. Florida
- j. Georgia
- k. Hawaii
- 1. Idaho
- m. Illinois
- n. Indiana
- o. Iowa
- p. Kansas
- q. Kentucky
- r. Louisiana
- s. Maine
- t. Maryland
- u. Massachusetts
- v. Michigan
- w. Minnesota
- x. Mississippi
- y. Missouri
- z. Montana
- aa. Nebraska
- bb. Nevada
- cc. New Hampshire
- dd. New Jersey
- ee. New Mexico
- ff. New York
- gg. North Carolina
- hh. North Dakota
- ii. Ohio
- jj. Oklahoma
- kk. Oregon
- ll. Pennsylvania
- mm. Rhode Island
- nn. South Carolina
- oo. South Dakota
- pp. Tennessee
- qq. Texas
- rr. Utah
- ss. Vermont
- tt. Virginia
- uu. Washington
- vv. West Virginia
- ww. Wisconsin

- xx. Wyomingyy. Prefer not to answer
- Do not live in the United States

APPENDIX W. DESCRIPTIVE STATISTICS FOR PILOT STUDY DATA

Table W1

Assigned Sex by Gender Identity Crosstabulation

	Assigned Sex								
	Male (n = 102)	Female ($n = 124$						
Gender Identity	n	%	n	%					
Man	85	83	1	1					
Woman	13	13	116	94					
Genderqueer	2	2	3	2					
Other	2	2	4	3					

Table W2

Demographic Characteristics of Pilot Participants: Age, Income, and Education

Characteristic	n	%
Age		
18-24	68	36
25-34	69	37
35-44	26	14
45-54	12	6
55-64	4	2
65+	1	1
Household income		
\$0 - \$10,000	12	6
\$11,000 - \$20,000	7	4
\$21,000 - \$30,000	10	5
\$31,000 - \$40,000	8	4
\$41,000 - \$50,000	10	5
\$51,000 - \$60,000	7	4
\$61,000 - \$70,000	4	2
\$71,000 - \$80,000	2	1
\$81,000 - \$90,000	5	3
\$91,000 - \$100,000	3	2
\$100,000 +	18	10
Educational attainment		
High school diploma/GED	16	9
1 year of college/trade school	17	9
2 years of college/Associate's degree	15	8
4 years of college/Bachelor's degree	36	19
Master's degree	13	7
Medical degree, PhD, or other professional degree	11	6
Prefer not to answer	3	2

Table W3

Demographic Characteristics of Pilot Participants: Religious and Political Affiliation

Characteristic	n	%
Religious affiliation		
Christian - Evangelical Protestant	2	1
Christian - Protestant	7	4
Christian - Catholic	21	11
Christian - Mormon	1	1
Christian - Other	16	9
Jewish - Reform	2	1
Jewish - Other	2	1
Buddhist - Tibetan Buddhist	1	1
Buddhist - Other Buddhist	1	1
Muslim - Sunni	1	1
Atheist	23	12
Agnostic	15	8
Other	5	3
No religious affiliation	13	7
Prefer not to answer	1	1
Political affiliation		
Democratic Party	40	21
Republican Party	13	7
Libertarian Party	5	3
Independent	15	8
Green Party	3	2
Peace and Freedom Party	1	1
Other	4	2
No political affiliation	27	14
Prefer not to answer	2	1

Table W4

Demographic Characteristics of Pilot Participants: Race, Ethnicity, and Relationship Status

Characteristic	n	%
Race		
Asian American	3	2
White	100	53
Native American/Alaska Native	4	2
Native Hawaiian/Pacific Islander	3	2
Other	10	5
Prefer not to answer	2	1
Ethnicity		
Hispanic/Latino/a	6	3
Not Hispanic/Latino/a	95	50
Unknown	3	2
Prefer not to answer	7	4
Relationship status		
Married/civil union	26	14
Engaged	2	1
Cohabiting full-time	13	7
Cohabiting part-time	4	2
Steady romantic relationship	12	6
Dating	14	7
Not dating/single	32	17
Separated	2	1
Divorced	3	2
Other	2	1
Prefer not to answer	1	1

Table W5

Demographic Characteristics of Pilot Participants: Gender, Sexual Orientation, and Transgender Identity

Characteristic	n	%
Gender identity		
Male/man	62	323
Female/woman	107	567
Genderqueer	4	2
Other	5	3
Sexual orientation identity		
Heterosexual	56	30
Gay man	17	9
Lesbian	3	2
Bisexual/pansexual	26	14
Queer	5	3
Asexual	5	3
Other	3	2
Transgender identity		
Not transgender	136	72
Transgender		
Transgender	5	3
Transsexual	1	1
FTM/trans man	3	2
MTF/trans woman	6	3
Genderqueer	4	2
Bi-gendered	1	1
Gender nonconforming	5	3
Drag queen or drag king	2	1
Other	7	4

Table W6

Validation of Transgender Identity Responses from Pilot Study

			Cisgende	Cisgender $(n = 41)$ Transgender $(n = 32)$						
Scale	Min	Max	M	SD	M	SD	t	df	p	Cohen's d
TCS	1	5	4.62	0.72	3.23	1.02	6.52	53.57	< .001	1.57
AC	1	5	4.62	0.73	2.99	1.12	7.10	50.60	< .001	1.72
GIA	1	5	4.63	0.81	3.96	1.08	3.02	71	.004	0.70

Notes. TCS = transgender congruence scale; AC = appearance congruence subscale; GIA = gender identity acceptance subscale. Degrees of freedom for significance test were adjusted due to unequal variances for cisgender and transgender groups.

Table W7

Validation of Sexual Orientation Identity Responses from Pilot Study for Assigned Males and Identified Men

			Heteros	exual	LGBAQ					
Scale	Min	Max	M	SD	 M	SD	t	df	p	Cohen's d
Assigned Ma	les									
fEROS	1	7	5.67	0.87	2.83	2.03	7.57	42.96	< .001	1.82
mEROS	1	7	1.13	0.23	5.20	1.48	-15.88	34.27	< .001	3.84
Identified Me	en									
fEROS	1	7	5.66	0.87	2.62	2.00	7.20	29.62	< .001	1.97
mEROS	1	7	1.13	0.23	5.39	1.49	-14.16	24.67	< .001	4.00

Notes. LGBAQ = lesbian, gay, bisexual, asexual, and queer. fEROS = attraction to women. mEROS = attraction to men. Degrees of freedom for significance test were adjusted due to unequal variances for heterosexual and LGBAQ groups. N heterosexual assigned males = 41; n LGBAQ assigned males = 34; n heterosexual identified men = 41; n LGBAQ identified men = 25.

Table W8

Validation of Sexual Orientation Identity Responses from Pilot Study for Assigned Females and Identified Women

			Heterosexual		LGB	AQ				
Scale	Min	Max	M	SD	M	SD	t	df	p	Cohen's d
Assigned Fem	nales									
fEROS	1	7	1.66	0.98	4.18	1.98	-6.76	42.85	< .001	1.61
mEROS	1	7	5.33	1.11	4.21	1.88	3.06	47.17	.004	0.73
Identified Wo	men									
fEROS	1	7	1.66	0.98	3.98	2.08	-6.01	43.32	< .001	1.43
mEROS	1	7	5.33	1.11	4.28	1.83	2.99	49.98	< .001	0.69

Notes. LGBAQ = lesbian, gay, bisexual, asexual, and queer. fEROS = attraction to women. mEROS = attraction to men. Degrees of freedom for significance test were adjusted due to unequal variances for heterosexual and LGBAQ groups. *N* heterosexual assigned females = 48; *n* LGBAQ assigned females = 33; *n* heterosexual identified women = 48; *n* LGBAQ identified women = 34.

Table W9

Comparison of Mean Levels of Minority Stressors between Sexual Orientation and Transgender Identity Groups in the Pilot Study

			Cisge	gender Heterosexual		LGB	LGBAQ Transgend		gender					
			(n =	41)	(n =	44)	(n =	(n = 40) (n		(n = 33)		Cohe		n's d
Variable	Min	Max	M	SD	M	SD	M	SD	M	SD	F	p	d^{a}	d^{b}
PS ^{ab}	1	6	1.85	1.00	1.34	0.51	2.89	0.91	3.92	0.60	10.716	< .001	1.88	1.33
IP ^a	1	4	1.12	0.35	1.64	0.51	1.59	0.67	1.72	0.70	9.009	< .001	0.41	0.18
EDV (dichotomous) ^a	0	1	0.00	0.00	0.00	0.00	0.43	0.68	0.40	0.50	13.029	< .001	0.96	0.04
EDV (count) ^a	0	25	0.00	0.00	0.00	0.00	1.45	3.15	2.28	5.27	5.808	.001	0.61	0.19
Outness (percent) ^{ab}	0	100	91.21	26.49	91.74	22.33	77.00	37.14	49.74	34.93	15.116	< .001	0.86	0.76

Notes. LGBAQ = sexual orientation minority (lesbian, gay, bisexual, asexual, or queer). PS = Perceived Stigma; IP = Internalized Prejudice; EDV (dichotomous) = dichotomous measure of Experiences with Discrimination and Violence; EDV (count) = number of Experiences with Discrimination and Violence.

a = group means significantly different for planned contrast 1 (heterosexual/cisgender versus LGBAQT). b = group means significantly different for planned contrast 2 (LGBAQ versus transgender).

Table W10

Correlations between Minority Stress Measures for Cisgender and Transgender Participants in the Pilot Study

Measure	1	2	3	4
1. Perceived Stigma		.27	.18	.10
2. Internalized Prejudice	.39*	_	$.41^{\dagger}$	29
3. Experiences with Discrimination and Violence (dichotomous)	N/A	N/A	_	16
4. Outness (percent)	09	40*	N/A	

Notes. Correlations for cisgender individuals (n = 41) are shown below the diagonal; correlations for transgender individuals (n = 22) are shown above the diagonal. N/A = correlation could not be computed because Experiences with Discrimination and Violence variable is constant.

^{**} p < .01. † .05 .

Table W11

Correlations between Minority Stress Measures for Heterosexual and LGBAQ
Participants in the Pilot Study

Measure	1	2	3	4
1. Perceived Stigma		.17	.38**	28*
2. Internalized Prejudice	.12	—	.42**	22
3. Experiences with Discrimination and Violence (dichotomous)	N/A	N/A		04
4. Outness (percent)	13	29*	N/A	_

Notes. LGBAQ = lesbian, gay, bisexual, asexual, and queer. Correlations for heterosexual individuals (n = 87) are shown below the diagonal; correlations for LGBAQ individuals (n = 62) are shown above the diagonal. N/A = correlation could not be computed because Experiences with Discrimination and Violence variable is constant.

** p < .01. † .05 .

APPENDIX X. DEMOGRAPHIC CHARACTERISTICS FOR PARTICIPANTS IN THE FULL STUDY

Table X1

Age and Income

						Assig	gneo	d Sex					
			Ma	ale						Fem	ale		
		Ge	ender	Identi	ity		•	Gender Identity					
	Ma	an	Wor	nan	Otl	ner	•	Ma	an	Wor	nan	Other	
Characteristic	n	%	n	%	n	%	•	n	%	n	%	n	%
Age													
18-24	147	45	5	26	4	25		10	43	212	49	15	34
25-34	98	30	4	21	5	31		5	22	114	27	16	36
35-44	49	15	3	16	0	0		1	4	59	14	10	23
45-54	17	5	2	11	3	19		4	17	23	5	1	2
55-64	9	3	5	26	2	13		1	4	10	2	2	5
65+	5	2	0	0	1	6		2	9	5	1	0	0
Household inco	ome (i	n tho	usand	s of d	ollars)							
0 - 10	16	5	2	11	2	13		6	26	39	9	2	5
11 - 20	22	7	3	16	1	6		3	13	15	3	12	27
21 - 30	19	6	2	11	0	0		0	0	24	6	3	7
31 - 40	20	6	0	0	1	6		2	9	13	3	1	2
41 - 50	11	3	0	0	0	0		0	0	19	4	3	7
51 - 60	9	3	2	11	2	13		1	4	13	3	3	7
61 - 70	14	4	0	0	0	0		2	9	13	3	3	7
71 - 80	7	2	0	0	1	6		1	4	9	2	0	0
81 - 90	11	3	0	0	0	0		0	0	15	3	0	0
91 - 100	10	3	0	0	0	0		0	0	16	4	1	2
100 +	35	11	1	5	3	19		1	4	42	10	4	9

Notes. Percentages do not sum to 100 due to missing data. $N_{\text{males}} = 363$. Within males, $n_{\text{men}} = 328$, $n_{\text{women}} = 19$, $n_{\text{other}} = 16$. $N_{\text{females}} = 496$. Within females, $n_{\text{men}} = 23$, $n_{\text{women}} = 429$, $n_{\text{other}} = 44$.

Table X2 *Education and Religious Affiliation for Participants in the Full Study*

				•		Assig	ned Sex						
			Ma	ale					Fen	nale			
		Ge	nder	Identi	ty			Gender Identity					
	M			man	Otl	ner	M	an	Wo	man	Otl	ner	
Characteristic	n	%	n	%	n	%	\overline{n}	%	n	%	n	%	
Educational attainment													
Less than high school diploma	0	0	0	0	0	0	1	4	0	0	0	0	
High school diploma/GED	58	18	3	16	0	0	2	9	71	17	2	5	
1 year of college/trade school	28	9	0	0	0	0	3	13	38	9	1	2	
2 years of college/Associate's	37	11	6	32	3	19	4	17	39	9	4	9	
4 years of college/Bachelor's	57	17	3	16	4	25	4	17	57	13	15	34	
Master's degree	14	4	1	5	3	19	4	17	33	8	10	23	
Medical/professional degree	7	2	0	0	1	6	1	4	17	4	3	7	
Prefer not to answer	4	1	0	0	0	0	0	0	0	0	0	0	
Religious affiliation													
Evangelical Protestant	5	2	0	0	0	0	0	0	12	3	0	0	
Protestant	16	5	1	5	1	6	4	17	27	6	0	0	
Catholic	40	12	2	11	0	0	1	4	44	10	0	0	
Greek Orthodox	1	0	0	0	0	0	0	0	1	0	0	0	
Other Christian	18	5	1	5	1	6	1	4	43	10	1	2	
Reform Jewish	0	0	0	0	0	0	0	0	5	1	0	0	
Conservative Jewish	0	0	0	0	0	0	0	0	0	0	1	2	
Orthodox Jewish	1	0	0	0	0	0	0	0	0	0	0	0	
Other Jewish	1	0	0	0	0	0	1	4	1	0	1	2	
Zen Buddhist	0	0	0	0	0	0	0	0	2	0	0	0	
Theravada Buddhist	0	0	0	0	0	0	0	0	1	0	0	0	
Other Buddhist	2	1	0	0	0	0	0	0	1	0	0	0	
Sunni Muslim	0	0	0	0	0	0	0	0	2	0	0	0	
Other Muslim	1	0	0	0	0	0	0	0	0	0	0	0	
Hindu	2	1	0	0	0	0	0	0	3	1	0	0	
Wiccan	1	0	0	0	0	0	0	0	1	0	1	2	
Atheist	44	13	2	11	2	13	1	4	24	6	8	18	
Agnostic	27	8	1	5	2	13	3	13	27	6	7	16	
Other	8	2	2	11	3	19	3	13	14	3	4	9	
No religious affiliation	31	9	4	21	2	13	4	17	41	10	10	23	
Prefer not to answer	6	2	0	0	0	0	1	4	5	1	1	2	
Notes Within each category											- 36		

Notes. Within each category, percentages do not sum to 100 due to missing data. $N_{\text{males}} = 363$. Within males, $n_{\text{men}} = 328$, $n_{\text{women}} = 19$, $n_{\text{other}} = 16$. $N_{\text{females}} = 496$. Within females, $n_{\text{men}} = 23$, $n_{\text{women}} = 429$, $n_{\text{other}} = 44$.

Appendix X continued

Table X3

Political Affiliation and Census Region for Participants in the Full Study

						Assign	ned Sex						
	Male								Fem	ale			
		Gender Identity						Gender Identity					
	Ma	an	Wo	man	Otl	her	M	an Wo		man Otl		ner	
Characteristic	\overline{n}	%	n	%	n	%	\overline{n}	%	n	%	n	%	
Political affiliation													
Democratic Party	76	23	2	11	3	19	12	52	119	28	15	34	
Republican Party	36	11	2	11	0	0	0	0	35	8	0	0	
Libertarian Party	3	1	1	5	1	6	0	0	6	1	0	0	
Independent	50	15	3	16	3	19	1	4	44	10	4	9	
Green Party	0	0	0	0	1	6	0	0	2	0	0	0	
America First Party	1	0	0	0	0	0	0	0	0	0	0	0	
Freedom Socialist Party	1	0	0	0	0	0	0	0	0	0	0	0	
Independent American Party	1	0	0	0	0	0	0	0	1	0	0	0	
National Socialist Movement	1	0	0	0	0	0	0	0	0	0	0	0	
Reform Party of the USA	0	0	0	0	0	0	0	0	1	0	0	0	
Socialist Action	0	0	0	0	0	0	0	0	1	0	0	0	
Socialist Party USA	1	0	0	0	0	0	0	0	0	0	1	2	
United States Marijuana Party	1	0	0	0	0	0	0	0	0	0	0	0	
Other	2	1	0	0	1	6	0	0	2	0	4	9	
No political affiliation	25	8	4	21	1	6	6	26	39	9	7	16	
Prefer not to answer	5	2	1	5	1	6	0	0	2	0	2	5	
Census region													
Northeast	24	7	1	5	1	6	2	9	18	4	2	5	
Midwest	125	38	4	21	4	25	9	39	164	38	8	18	
South	27	8	3	16	3	19	6	26	36	8	7	16	
West	25	8	4	21	2	13	2	9	31	7	12	27	

Notes. Within each category, percentages do not sum to 100 due to missing data. $N_{\text{males}} = 363$. Within males, $n_{\text{men}} = 328$, $n_{\text{women}} = 19$, $n_{\text{other}} = 16$. $N_{\text{females}} = 496$. Within females, $n_{\text{men}} = 23$, $n_{\text{women}} = 429$, $n_{\text{other}} = 44$.

Table X4

Race, Ethnicity, and Relationship Status for Participants in the Full Study

					A	Assig	ned S	Sex					
			Mal	e						Fem	ale		
	Gender Identity						G	ender l	ldenti	ity			
	M	Man		man	Ot	her		M	an	Won	nan	Ot	her
Characteristic	\overline{n}	%	n	%	n	%		n	%	n	%	n	%
Race													
Black/African American	8	2	0	0	0	0		1	4	12	3	2	5
Asian/Asian American	14	4	0	0	1	6		0	0	14	3	4	9
White/European American	170	52	11	58	10	63		17	74	222	52	29	66
Native American/ Alaska Native	3	1	1	5	0	0		0	0	6	1	4	9
Native Hawaiian/ Pacific Islander	0	0	0	0	1	6		0	0	0	0	0	0
Other	6	2	1	5	0	0		1	4	12	3	4	9
Unknown	1	0	0	0	0	0		1	4	0	0	1	2
Prefer not to answer	6	2	1	5	0	0		0	0	2	0	1	2
Ethnicity													
Hispanic/Latino/a	10	3	0	0	0	0		1	4	11	3	1	2
Not Hispanic/Latino/a	174	53	11	58	10	63		18	78	227	53	31	70
Unknown	10	3	0	0	0	0		0	0	7	2	0	0
Prefer not to answer	11	3	2	11	0	0		0	0	9	2	3	7
Relationship status													
Married/civil union	20	6	6	32	2	13		4	17	53	12	5	11
Engaged	5	2	0	0	1	6		1	4	10	2	1	2
Cohabiting full-time	8	2	1	5	2	13		0	0	16	4	1	2
Cohabiting part-time	0	0	0	0	0	0		0	0	4	1	0	0
Steady relationship/ partnered	32	10	0	0	2	13		4	17	44	10	10	23
Polyamorous (write-in)	1	0	0	0	0	0		0	0	1	0	1	2
Dating	33	10	1	5	0	0		1	4	29	7	3	7
Not dating/single	96	29	4	21	4	25		8	35	91	21	10	23
Separated	2	1	0	0	0	0		1	4	2	0	1	2
Divorced	4	1	1	5	0	0		0	0	3	1	0	0
Widowed	0	0	0	0	0	0		0	0	0	0	1	2
Other	0	0	0	0	0	0		0	0	1	0	0	0
Prefer not to answer	5	2	0	0	0	0		0	0	1	0	1	2

Notes. Some percentages do not sum to 100 due to missing data. $N_{\text{males}} = 363$. Within males, $n_{\text{men}} = 328$, $n_{\text{women}} = 19$, $n_{\text{other}} = 16$. $N_{\text{females}} = 496$. Within females, $n_{\text{men}} = 23$, $n_{\text{women}} = 429$, $n_{\text{other}} = 44$. Participants could select multiple racial identities.

Table X5

Gender Expression by Transgender Identity and Assigned Sex in the Full Study

		Gender Exp	pression	
Identity	Undifferentiated	Instrumental/ Masculine	Expressive/ Feminine	Androgynous
Assigned Male				
Cisgender	21 (7%)	269 (91%)	2 (1%)	3 (1%)
Transgender	10 (21%)	20 (43%)	15 (32%)	2 (4%)
Assigned Female	.			
Cisgender	30 (8%)	10 (3%)	326 (88%)	6 (2%)
Transgender	25 (29%)	33 (39%)	26 (31%)	1 (1%)

Notes. Numbers in each category are presented with proportions in parentheses. Undifferentiated = low instrumental/masculine gender expression, low expressive/feminine gender expression; Instrumental/Masculine = high instrumental/masculine, low expressive/feminine; Expressive/Feminine = low instrumental/masculine, high expressive/feminine; Androgynous = high instrumental/masculine, high expressive/feminine.

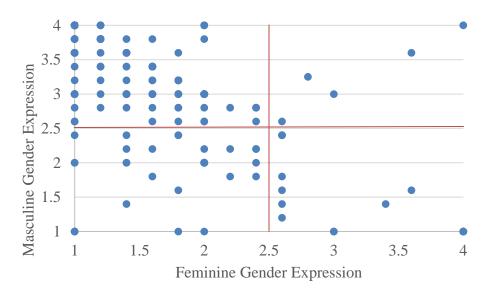


Figure X1. Feminine and masculine gender expression for cisgender assigned males (n = 356) in the full study.

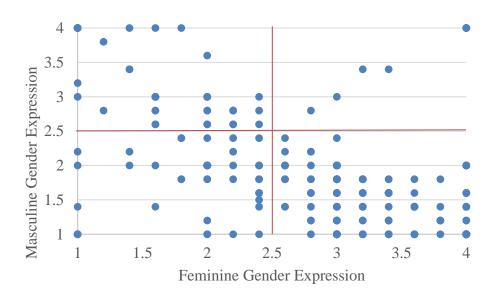


Figure X2. Feminine and masculine gender expression for cisgender assigned females (n = 479) in the full study.

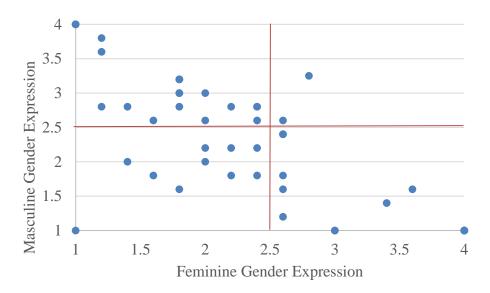


Figure X3. Feminine and masculine gender expression for transgender assigned males (n = 47) in the full study.

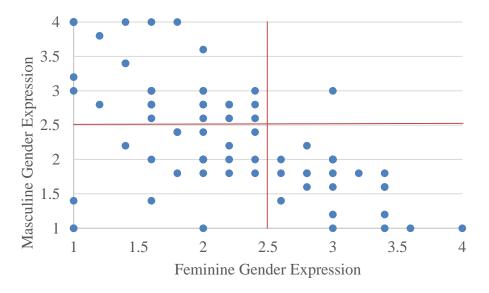


Figure X4. Feminine and masculine gender expression for transgender assigned females (n = 85) in the full study.

Table X6

Validation of Sexual Orientation Identity Responses from Full Study for Assigned Males and Identified Men

			Hetero	sexual	LGBA	ΛQ				
Scale	Min	Max	M	SD	M	SD	t	df	p	Cohen's d
Assigned Ma	ales									
fEROS	1	7	5.41	1.30	3.12	2.02	10.01	122.14	< .001	1.35
mEROS	1	7	1.27	0.65	4.69	1.75	-18.08	100.59	< .001	2.59
Identified M	en									
fEROS	1	7	5.41	1.28	2.94	1.95	10.58	105.83	< .001	1.50
mEROS	1	7	1.25	0.60	4.83	1.58	-19.85	88.39	< .001	3.00

Notes. LGBAQ = lesbian, gay, bisexual, asexual, and queer; fEROS = attraction to women; mEROS = attraction to men. Degrees of freedom for significance tests were adjusted due to unequal variances for heterosexual and LGBAQ groups. *N* heterosexual assigned males = 220, *n* LGBAQ assigned males = 91, *n* heterosexual identified men = 223, *n* LGBAQ identified men = 81.

Table X7

Validation of Sexual Orientation Identity Responses from Full Study for Assigned Females and Identified Women

			Hetero	sexual	LGB	AQ				
Scale	Min	Max	M	SD	M	SD	t	df	p	Cohen's d
Assigned Fe	males									
fEROS	1	7	1.66	1.09	4.50	1.53	-20.71	290.42	< .001	2.14
mEROS	1	7	4.93	1.48	3.76	1.86	6.80	315.49	< .001	0.70
Identified W	omen									
fEROS	1	7	1.59	1.01	4.52	1.51	-20.05	206.66	< .001	2.28
mEROS	1	7	5.02	1.37	3.92	1.87	5.92	220.50	< .001	0.67

Notes. LGBAQ = lesbian, gay, bisexual, asexual, and queer. fEROS = attraction to women. mEROS = attraction to men. Degrees of freedom for significance tests were adjusted due to unequal variances for heterosexual and LGBAQ groups. *N* heterosexual assigned females = 234, *n* LGBAQ assigned females = 171, *n* heterosexual identified women = 228, *n* LGBAQ identified women = 135.

APPENDIX Y. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON ANXIETY FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table Y1

Effects of Perceived Stigma (PS) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.65)	.16 (2.67)	.16 (2.66)
PS		.20 (3.21)	.21 (3.36)
Outness		09 (-1.40)	01 (-0.12)
PS*Outness			10 (-1.07)
\mathbb{R}^2	.026	.081	.085
$\chi^2(df)$	(3)15.565	(1)1.143	$(0) \ 0.000$
p	.0014	.2851	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table Y2

Effects of Internalized Prejudice (IP) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.65)	.15 (2.43)	.15 (2.45)
IP		.23 (3.61)	.24 (3.55)
Outness		04 (-0.59)	06 (-0.63)
IP*Outness			.02 (0.25)
\mathbb{R}^2	.026	.089	.090
$\chi^2(df)$	(3)16.886	(1)0.064	(0)0.000
p	.0007	.8000	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table Y3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.65)	.17 (2.73)	.17 (2.71)
EDV		.01 (0.14)	10 (-0.75)
Outness		13 (-2.19)	10 (-1.24)
EDV*Outness			.13 (0.93)
\mathbb{R}^2	.026	.044	.048
$\chi^2(df)$	(3)5.549	(1)0.857	(0)0.000
p	.1357	.3545	< .0001

APPENDIX Z. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON DEPRESSION FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table Z1

Effects of Perceived Stigma (PS) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.66)	.22 (3.66)	.22 (3.66)
PS		.17 (2.71)	.17 (2.71)
Outness		06 (-1.03)	05 (-0.55)
PS*Outness			02 (-0.18)
\mathbb{R}^2	.048	.085	.085
$\chi^2(df)$	(3)9.981	(1)0.032	(0)0.000
p	.0187	.8588	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table Z2

Effects of Internalized Prejudice (IP) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.66)	.21 (3.51)	.21 (3.51)
IP		.16 (2.44)	.16 (2.39)
Outness		04 (-0.59)	05 (-0.55)
IP*Outness			.01 (0.13)
\mathbb{R}^2	.048	.080	.081
$\chi^2(df)$	(3)8.648	(1)0.017	(0)0.000
p	.0343	.8971	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table Z3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.66)	.23 (3.77)	.23 (3.76)
EDV		.04 (0.68)	07 (-0.52)
Outness		11 (-1.73)	06 (-0.85)
EDV*Outness			.13 (0.96)
\mathbb{R}^2	.048	.061	.064
$\chi^2(df)$	(3)4.254	(1)0.908	(0)0.000
p	.2353	.3403	< .0001

APPENDIX AA. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON SUICIDE BEHAVIORS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AA1

Effects of Perceived Stigma (PS) and Outness on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.24 (4.02)	.24 (4.06)	.24 (4.08)
PS		05 (-0.75)	06 (-0.89)
Outness		04 (-0.60)	11 (-1.11)
PS*Outness			.09 (0.95)
\mathbb{R}^2	.057	.060	.063
$\chi^2(df)$	(3)1.645	(1)0.894	(0)0.000
p	.6492	.3444	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AA2

Effects of Internalized Prejudice (IP) and Outness on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.24 (4.02)	.24 (4.07)	.24 (4.07)
IP		03 (-0.51)	03 (-0.46)
Outness		04 (-0.60)	05 (-0.57)
IP*Outness			.01 (0.15)
\mathbb{R}^2	.057	.059	.059
$\chi^2(df)$	(3)0.465	(1)0.021	(0)0.000
p	.9265	.8840	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AA3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Suicide
Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.24 (4.02)	.24 (4.02)	.24 (4.01)
EDV		.00 (0.02)	06 (-0.45)
Outness		03 (-0.43)	00 (-0.05)
EDV*Outness			.07 (0.52)
\mathbb{R}^2	.057	.058	.059
$\chi^2(df)$	(3)0.452	(1)0.267	(0)0.000
p	.9294	.6055	< .0001

APPENDIX AB. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON EMOTIONAL ROLE LIMITATIONS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AB1

Effects of Perceived Stigma (PS) and Outness on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.46)	.26 (4.44)	.26 (4.45)
PS		.07 (1.04)	.06 (1.00)
Outness		02 (-0.35)	03 (-0.36)
PS*Outness			.02 (0.18)
\mathbb{R}^2	.068	.074	.074
$\chi^2(df)$	(3)1.489	(1)0.031	(0)0.000
_ <i>p</i>	.6847	.8604	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AB2

Effects of Internalized Prejudice (IP) and Outness on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.28)	.26 (4.24)	.26 (4.24)
IP		.05 (0.78)	.05 (0.65)
Outness		09 (-1.42)	09 (-1.42)
IP*Outness			01 (-0.10)
\mathbb{R}^2	.066	.076	.076
$\chi^2(df)$	(3)2.589	(1)0.011	(0)0.000
p	.4593	.9172	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AB3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Emotional Role
Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.28)	.26 (4.24)	.26 (4.24)
EDV		04 (-0.59)	09 (-0.78)
Outness		09 (-1.42)	09 (-1.39)
EDV*Outness			.06 (0.55)
\mathbb{R}^2	.066	.075	.077
$\chi^2(df)$	(3)2.612	(1)0.302	(0)0.000
p	.4554	.5827	< .0001

APPENDIX AC. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON GENERAL PHYSICAL HEALTH FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AC1
Effects of Perceived Stigma (PS) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	16 (-2.53)	16 (-2.61)	16 (-2.60)
PS		00 (-0.03)	00 (-0.04)
Outness		.14 (2.20)	.13 (1.39)
PS*Outness			.01 (0.08)
\mathbb{R}^2	.024	.044	.044
$\chi^2(df)$	(3)5.051	(1)0.007	(0)0.000
p	.1681	.9329	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AC2
Effects of Internalized Prejudice (IP) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	16 (-2.53)	15 (-2.44)	15 (-2.48)
IP		12 (-1.74)	13 (-1.83)
Outness		.09 (1.37)	.12 (1.44)
IP*Outness			05 (-0.56)
\mathbb{R}^2	.024	.055	.056
$\chi^2(df)$	(3)8.335	(1)0.317	(0)0.000
p	.0396	.5736	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AC3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	16 (-2.53)	17 (-2.75)	17 (-2.78)
EDV		09 (-1.44)	24 (-1.84)
Outness		.14 (2.32)	.20 (2.67)
EDV*Outness			.18 (1.31)
\mathbb{R}^2	.024	.051	.058
$\chi^2(df)$	(3)8.783	(1)1.699	(0)0.000
p	.0323	.1924	< .0001

APPENDIX AD. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON PHYSICAL ROLE LIMITATIONS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AD1

Effects of Perceived Stigma (PS) and Outness on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.14 (2.27)	.14 (2.27)	.14 (2.29)
PS		.01 (0.21)	.00 (0.07)
Outness		04 (-0.60)	11 (-1.11)
PS*Outness			.09 (0.95)
\mathbb{R}^2	.020	.021	.025
$\chi^2(df)$	(3)1.397	(1)0.906	(0)0.000
_ <i>p</i>	.7063	.3412	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AD2

Effects of Internalized Prejudice (IP) and Outness on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.14 (2.27)	.15 (2.38)	.15 (2.48)
IP		07 (-1.06)	05 (-0.65)
Outness		07 (-1.05)	15 (-1.73)
IP*Outness			.13 (1.48)
\mathbb{R}^2	.020	.026	.034
$\chi^2(df)$	(3)3.728	(1)2.158	(0)0.000
p	.2924	.1418	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AD3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Physical Role
Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.14 (2.27)	.15 (2.50)	.15 (2.50)
EDV		.13 (2.16)	.10 (0.76)
Outness		05 (-0.73)	03 (-0.42)
EDV*Outness			.04 (0.29)
\mathbb{R}^2	.020	.039	.039
$\chi^2(df)$	(3)5.093	(1)0.085	(0)0.000
p	.1651	.7712	< .0001

APPENDIX AE. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON ANXIETY FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AE1

Effects of Perceived Stigma (PS) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.52)	.28 (3.81)	.29 (3.86)
PS		.18 (2.32)	.17 (2.19)
Outness		17 (-2.21)	17 (-2.22)
PS*Outness			06 (-0.73)
\mathbb{R}^2	.073	.152	.155
$\chi^2(df)$	(3)13.509	(1)0.524	(0)0.000
p	.0037	.4693	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AE2

Effects of Internalized Prejudice (IP) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.52)	.23 (3.08)	.23 (3.09)
IP		.34 (4.60)	.33 (4.30)
Outness		12 (-1.60)	12 (-1.60)
IP*Outness			02 (-0.31)
\mathbb{R}^2	.073	.223	.224
$\chi^2(df)$	(3)25.891	(1)0.094	(0)0.000
p	< .0001	.7587	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AE3

<u>Effects of Experiences with Discrimination and Violence (EDV) and Outness on Anxiety</u>

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.50)	.27 (3.57)	.28 (3.59)
EDV		.10 (1.21)	.11 (1.27)
Outness		24 (-3.15)	25 (-3.16)
EDV*Outness			03 (-0.37)
\mathbb{R}^2	.073	.131	.132
$\chi^2(df)$	(3)9.561	(1)0.139	(0)0.000
p	.0227	.7094	< .0001

APPENDIX AF. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON DEPRESSION FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AF1

Effects of Perceived Stigma (PS) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.61)	.30 (4.23)	.31 (4.31)
PS		.12 (1.58)	.11 (1.41)
Outness		31 (-4.12)	31 (-4.14)
PS*Outness			08 (-1.00)
\mathbb{R}^2	.076	.202	.207
$\chi^2(df)$	(3)22.305	(1)0.996	(0)0.000
p	.0001	.3183	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AF2
Effects of Internalized Prejudice (IP) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.61)	.24 (3.44)	.23 (3.29)
IP		.36 (5.11)	.39 (5.42)
Outness		23 (-3.24)	23 (-3.24)
IP*Outness			.11 (1.55)
\mathbb{R}^2	.076	.301	.312
$\chi^2(df)$	(3)43.045	(1)2.355	(0)0.000
p	< .0001	.1249	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AF3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.59)	.29 (3.99)	.30 (4.04)
EDV		.09 (1.19)	.10 (1.29)
Outness		37 (-5.11)	38 (-5.13)
EDV*Outness			04 (-0.57)
\mathbb{R}^2	.048	.204	.205
$\chi^2(df)$	(3)21.909	(1)0.319	(0)0.000
p	.0001	.5724	< .0001

APPENDIX AG. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON SUICIDE BEHAVIORS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AG1

Effects of Perceived Stigma (PS) and Outness on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.21 (2.69)	.22 (2.81)	.22 (2.86)
PS		.21 (2.69)	.21 (2.57)
Outness		10 (-1.29)	10 (-1.29)
PS*Outness			05 (-0.60)
\mathbb{R}^2	.045	.113	.115
$\chi^2(df)$	(3)11.051	(1)0.355	(0)0.000
p	.0115	.5513	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AG2

Effects of Internalized Prejudice (IP) and Outness on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.21 (2.69)	.21 (2.67)	.21 (2.64)
IP		.08 (0.90)	.08 (0.93)
Outness		14 (-1.66)	14 (-1.65)
IP*Outness			.02 (0.23)
\mathbb{R}^2	.045	.076	.076
$\chi^2(df)$	(3)4.773	(1)0.053	(0)0.000
p	.1892	.8172	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AG3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Suicide
Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.21 (2.67)	.21 (2.62)	.22 (2.76)
EDV		.10 (1.25)	.13 (1.52)
Outness		19 (-2.40)	21 (-2.62)
EDV*Outness			10 (-1.18)
\mathbb{R}^2	.045	.084	.092
$\chi^2(df)$	(3)7.431	(1)1.384	(0)0.000
p	.0593	.2394	< .0001

APPENDIX AH. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON EMOTIONAL ROLE LIMITATIONS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AH1

Effects of Perceived Stigma (PS) and Outness on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.63)	.28 (3.75)	.28 (3.68)
PS		.17 (2.08)	.17 (2.18)
Outness		10 (-1.23)	10 (-1.23)
PS*Outness			.06 (0.77)
\mathbb{R}^2	.077	.122	.126
$\chi^2(df)$	(3)7.944	(1)0.587	(0)0.000
p	.0472	.4437	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AH2

Effects of Internalized Prejudice (IP) and Outness on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.63)	.24 (3.12)	.23 (2.98)
IP		.22 (2.55)	.25 (2.88)
Outness		.05 (0.58)	.04 (0.50)
IP*Outness			.12 (1.53)
\mathbb{R}^2	.077	.116	.130
$\chi^2(df)$	(3)8.620	(1)2.292	(0)0.000
p	.0348	.1300	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AH3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Emotional Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.61)	.26 (3.29)	.25 (3.20)
EDV		.09 (1.15)	.08 (0.96)
Outness		05 (-0.60)	04 (-0.55)
EDV*Outness			.06 (0.73)
\mathbb{R}^2	.077	.086	.089
$\chi^2(df)$	(3)2.023	(1)0.529	(0)0.000
p	.5677	.4671	< .0001

APPENDIX AI. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON GENERAL PHYSICAL HEALTH FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AI1

Effects of Perceived Stigma (PS) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.47)	21 (-2.67)	21 (-2.72)
PS		20 (-2.54)	20 (-2.42)
Outness		.15 (1.81)	.15 (1.82)
PS*Outness			.05 (0.62)
\mathbb{R}^2	.039	.116	.119
$\chi^2(df)$	(3)12.550	(1)0.387	(0)0.000
p	.0057	.5341	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AI2

Effects of Internalized Prejudice (IP) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.47)	18 (-2.32)	18 (-2.23)
IP		18 (-2.13)	20 (-2.30)
Outness		.15 (1.83)	.15 (1.82)
IP*Outness			07 (-0.87)
\mathbb{R}^2	.039	.105	.110
$\chi^2(df)$	(3)11.172	(1)0.758	(0)0.000
p	.0108	.3839	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AI3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.47)	22 (-2.69)	22 (-2.75)
EDV		01 (-0.16)	03 (-0.30)
Outness		.20 (2.48)	.21 (2.55)
EDV*Outness			.05 (0.59)
\mathbb{R}^2	.039	.078	.080
$\chi^2(df)$	(3)6.286	(1)0.341	(0)0.000
p	.0985	.5593	< .0001

APPENDIX AJ. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON PHYSICAL ROLE LIMITATIONS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AJ1

Effects of Perceived Stigma (PS) and Outness on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.32 (4.28)	.32 (4.33)	.32 (4.29)
PS		.10 (1.29)	.11 (1.32)
Outness		07 (-0.83)	07 (1.32)
PS*Outness			.02 (0.29)
\mathbb{R}^2	.101	.120	.120
$\chi^2(df)$	(3)3.140	(1)0.083	(0)0.000
<u>p</u>	.3706	.7737	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AJ2

Effects of Internalized Prejudice (IP) and Outness on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.32 (4.28)	.31 (4.10)	.32 (4.18)
IP		.08 (0.92)	.06 (0.67)
Outness		07 (-0.88)	07 (-0.89)
IP*Outness			06 (-0.78)
\mathbb{R}^2	.101	.115	.119
$\chi^2(df)$	(3)2.861	(1)0.603	(0)0.000
p	.4136	.4374	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AJ3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Physical Role
Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.32 (4.31)	.33 (4.36)	.33 (4.33)
EDV		01 (-0.12)	01 (-0.12)
Outness		08 (-1.03)	08 (-1.01)
EDV*Outness			.00 (0.01)
\mathbb{R}^2	.103	.110	.110
$\chi^2(df)$	(3)1.169	(1)0.000	(0)0.000
p	.7605	.9941	< .0001

APPENDIX AK. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON ANXIETY FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table AK1

Effects of Perceived Stigma (PS) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.21)	.35 (3.99)	.34 (3.81)
PS		.13 (1.44)	.16 (1.72)
Outness		01 (-0.07)	02 (-0.19)
PS*Outness			.16 (1.70)
\mathbb{R}^2	.136	.154	.178
$\chi^2(df)$	(3)4.803	(1)2.784	(0)0.000
_ <i>p</i>	.1868	.0952	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AK2

Effects of Internalized Prejudice (IP) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.20)	.37 (4.17)	.37 (4.15)
IP		01 (-0.07)	01 (-0.09)
Outness		02 (-0.17)	.01 (0.05)
IP*Outness			12 (-1.28)
\mathbb{R}^2	.137	.137	.152
$\chi^2(df)$	(3)1.637	(1)1.606	(0)0.000
<u>p</u>	.6510	.2050	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AK3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.21)	.36 (4.06)	.37 (4.10)
EDV		.04 (0.45)	.04 (0.41)
Outness		01 (-0.07)	01 (-0.07)
EDV*Outness			.05 (0.49)
\mathbb{R}^2	.136	.138	.140
$\chi^2(df)$	(3)0.450	(1)0.242	(0)0.000
p	.9297	.6225	< .0001

APPENDIX AL. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON DEPRESSION FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table AL1

Effects of Perceived Stigma (PS) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.97)	.33 (3.75)	.32 (3.66)
PS		.21 (2.28)	.22 (2.34)
Outness		13 (-1.41)	13 (-1.45)
PS*Outness			.05 (0.54)
\mathbb{R}^2	.125	.183	.185
$\chi^2(df)$	(3)6.976	(1)0.293	(0)0.000
p	.0727	.5881	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AL2

Effects of Internalized Prejudice (IP) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.96)	.34 (3.83)	.34 (3.83)
IP		.09 (0.96)	.09 (0.95)
Outness		12 (-1.26)	08 (-0.88)
IP*Outness			21 (-2.30)
\mathbb{R}^2	.125	.151	.194
$\chi^2(df)$	(3)7.907	(1)4.955	(0)0.000
p	.0480	.0260	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AL3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.97)	.34 (3.83)	.35 (3.97)
EDV		.07 (0.79)	.06 (0.68)
Outness		13 (-1.38)	13 (-1.40)
EDV*Outness			.11 (-1.18)
\mathbb{R}^2	.125	.146	.158
$\chi^2(df)$	(3)3.785	(1)1.362	(0)0.000
<u>p</u>	.2857	.2433	< .0001

APPENDIX AM. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON SUICIDE BEHAVIORS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table AM1

Effects of Perceived Stigma (PS) and Outness on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.73)	.31 (3.46)	.30 (3.35)
PS		.24 (2.67)	.26 (2.80)
Outness		09 (-0.99)	10 (-1.05)
PS*Outness			.08 (0.87)
\mathbb{R}^2	.113	.178	.185
$\chi^2(df)$	(3)8.163	(1)0.744	(0)0.000
p	.0428	.3883	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AM2

Effects of Internalized Prejudice (IP) and Outness on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.72)	.33 (3.66)	.34 (3.72)
IP		.03 (0.27)	.03 (0.29)
Outness		10 (-0.93)	11 (-1.11)
IP*Outness			.10 (1.09)
\mathbb{R}^2	.113	.123	.133
$\chi^2(df)$	(3)2.197	(1)1.162	(0)0.000
p	.5324	.2810	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AM3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Suicide
Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.73)	.32 (3.54)	.31 (3.41)
EDV		.10 (1.01)	.11 (1.12)
Outness		09 (-0.96)	09 (-0.96)
EDV*Outness			11 (-1.19)
\mathbb{R}^2	.113	.130	.142
$\chi^2(df)$	(3)3.256	(1)1.388	(0)0.000
p	.3538	.2388	< .0001

APPENDIX AN. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON EMOTIONAL ROLE LIMITATIONS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table AN1

Effects of Perceived Stigma (PS) and Outness on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.90)	.32 (3.67)	.32 (3.70)
PS		.27 (3.12)	.28 (3.01)
Outness		18 (-1.99)	17 (-1.95)
PS*Outness			04 (-0.39)
\mathbb{R}^2	.121	.225	.226
$\chi^2(df)$	(3)12.283	(1)0.148	(0)0.000
_ <i>p</i>	.0065	.7000	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AN2

Effects of Internalized Prejudice (IP) and Outness on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.91)	.35 (3.75)	.35 (3.71)
IP		.06 (0.59)	.06 (0.58)
Outness		04 (-0.37)	03 (-0.32)
IP*Outness			02 (-0.21)
\mathbb{R}^2	.123	.127	.128
$\chi^2(df)$	(3)0.555	(1)0.045	(0)0.000
p	.9066	.8325	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AN3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Emotional Role
Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.90)	.36 (3.87)	.35 (3.82)
EDV		.15 (1.46)	.15 (1.47)
Outness		12 (-1.14)	12 (-1.12)
EDV*Outness			02 (-0.20)
\mathbb{R}^2	.066	.143	.144
$\chi^2(df)$	(3)2.514	(1)0.039	(0)0.000
p	.4727	.8438	< .0001

APPENDIX AO. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON GENERAL PHYSICAL HEALTH FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table AO1

Effects of Perceived Stigma (PS) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.68)	15 (-1.52)	13 (-1.36)
PS		13 (-1.33)	16 (-1.62)
Outness		.07 (0.69)	.08 (0.83)
PS*Outness			17 (-1.71)
\mathbb{R}^2	.027	.049	.076
$\chi^2(df)$	(3)5.005	(1)2.815	(0)0.000
p	.1714	.0934	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AO2

Effects of Internalized Prejudice (IP) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.67)	15 (-1.53)	15 (-1.52)
IP		11 (-1.06)	11 (-1.05)
Outness		.05 (0.46)	.04 (0.42)
IP*Outness			.02 (0.23)
\mathbb{R}^2	.028	.043	.043
$\chi^2(df)$	(3)1.577	(1)0.054	(0)0.000
p	.6647	.8163	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AO3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.68)	12 (-1.24)	12 (-1.23)
EDV		30 (-3.27)	30 (-3.25)
Outness		.07 (0.78)	.07 (0.78)
EDV*Outness			.00 (0.01)
\mathbb{R}^2	.027	.051	.120
$\chi^2(df)$	(3)9.748	(1)0.000	(0)0.000
p	.0208	.9917	< .0001

APPENDIX AP. EFFECTS OF MINORITY STRESSORS AND OUTNESS ON PHYSICAL ROLE LIMITATIONS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table AP1

Effects of Perceived Stigma (PS) and Outness on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.18 (1.88)	.16 (1.62)	.16 (1.59)
PS		.22 (2.25)	.22 (2.25)
Outness		.01 (0.13)	.01 (0.11)
PS*Outness			.02 (0.17)
\mathbb{R}^2	.034	.080	.080
$\chi^2(df)$	(3)4.762	(1)0.028	(0)0.000
p	.1901	.8679	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AP2

Effects of Internalized Prejudice (IP) and Outness on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.19 (1.89)	.17 (1.71)	.17 (1.72)
IP		.12 (1.22)	.12 (1.22)
Outness		.05 (0.46)	.04 (0.40)
IP*Outness			.03 (0.31)
\mathbb{R}^2	.035	.050	.051
$\chi^2(df)$	(3)1.602	(1)0.093	(0)0.000
<u>p</u>	.6589	.7602	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AP3

Effects of Experiences with Discrimination and Violence (EDV) and Outness on Physical Role
Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.18 (1.88)	.14 (1.49)	.13 (1.39)
EDV		.26 (2.71)	.27 (2.81)
Outness		.01 (0.09)	.01 (0.10)
EDV*Outness			10 (-1.03)
\mathbb{R}^2	.034	.098	.108
$\chi^2(df)$	(3)7.706	(1)1.045	(0)0.000
p	.0525	.3068	< .0001

APPENDIX AQ. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON ANXIETY FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AQ1
Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.65)	.16 (2.65)	.16 (2.70)
PS		.16 (2.67)	.12 (1.92)
SPS		20 (-3.21)	18 (-3.04)
PS*SPS			17 (-2.78)
\mathbb{R}^2	.026	.109	.135
$\chi^2(df)$	(3)29.671	(1)7.438	(0)0.000
p	< .0001	.0064	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AQ2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.65)	.15 (2.47)	.14 (2.45)
IP		.20 (3.24)	.22 (3.15)
SPS		19 (-3.05)	19 (-3.09)
IP*SPS			.05 (0.71)
\mathbb{R}^2	.121	.119	.121
$\chi^2(df)$	(3)25.820	(1)0.508	(0)0.000
p	< .0001	.4760	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AQ3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.65)	.16 (2.67)	.16 (2.68)
EDV		.00 (0.04)	01 (018)
SPS		24 (-4.10)	26 (-3.86)
EDV*SPS			05 (062)
\mathbb{R}^2	.026	.084	.085
$\chi^2(df)$	(3)15.767	(1)0.387	(0)0.000
p	.0013	.5338	< .0001

APPENDIX AR. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON DEPRESSION FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AR1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.66)	.21 (3.80)	.21 (3.85)
PS		.09 (1.53)	.06 (0.91)
SPS		33 (-5.85)	32 (-5.70)
PS*SPS			14 (-2.33)
\mathbb{R}^2	.048	.182	.199
$\chi^2(df)$	(3)43.401	(1)5.303	(0)0.000
p	< .0001	.0213	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AR2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.66)	.21 (3.72)	.21 (3.72)
IP		.08 (1.38)	.09 (1.23)
SPS		33 (-5.87)	33 (-5.86)
IP*SPS			.01 (0.10)
\mathbb{R}^2	.048	.181	.181
$\chi^2(df)$	(3)37.683	(1)0.009	(0)0.000
p	< .0001	.9244	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AR3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.66)	.22 (3.87)	.22 (3.89)
EDV		.04 (0.61)	.02 (0.34)
SPS		36 (-6.60)	38 (-6.00)
EDV*SPS			05 (-0.64)
\mathbb{R}^2	.048	.176	.177
$\chi^2(df)$	(3)36.558	(1)0.407	(0)0.000
p	< .0001	.5237	< .0001

APPENDIX AS. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON SUICIDE BEHAVIORS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AS1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.24 (4.02)	.24 (4.11)	.24 (4.12)
PS		10 (-1.57)	07 (-1.08)
SPS		21 (-3.52)	22 (-3.66)
PS*SPS			.11 (1.84)
\mathbb{R}^2	.057	.101	.113
$\chi^2(df)$	(3)15.314	(1)3.319	(0)0.000
p	.0016	.0685	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AS2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.24 (4.02)	.24 (4.15)	.24 (4.14)
IP		08 (-1.23)	06 (-0.82)
SPS		21 (-3.41)	21 (-3.44)
IP*SPS			.03 (0.45)
\mathbb{R}^2	.057	.098	.098
$\chi^2(df)$	(3)11.249	(1)0.200	(0)0.000
p	.0105	.6548	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AS3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.24 (4.02)	.24 (4.03)	.24 (4.02)
EDV		00 (-0.03)	.01 (0.09)
SPS		19 (-3.17)	18 (-2.56)
EDV*SPS			.03 (0.34)
\mathbb{R}^2	.057	.092	.093
$\chi^2(df)$	(3)9.663	(1)0.114	(0)0.000
p	.0217	.7351	< .0001

APPENDIX AT. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON EMOTIONAL ROLE LIMITATIONS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AT1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.46)	.26 (4.44)	.26 (4.45)
PS		.05 (0.73)	.03 (0.50)
SPS		09 (-1.41)	09 (-1.35)
PS*SPS			05 (-0.86)
\mathbb{R}^2	.068	.080	.083
$\chi^2(df)$	(3)4.032	(1)0.735	(0)0.000
p	.2580	.3912	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AT2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.46)	.26 (4.43)	.26 (4.44)
IP		.01 (0.19)	00 (-0.05)
SPS		10 (-1.55)	10 (-1.52)
IP*SPS			03 (-0.40)
\mathbb{R}^2	.068	.079	.079
$\chi^2(df)$	(3)2.958	(1)0.159	(0)0.000
p	.3981	.6900	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AT3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.46)	.26 (4.38)	.26 (4.39)
EDV		04 (-0.57)	04 (-0.67)
SPS		10 (-1.68)	12 (-1.65)
EDV*SPS			03 (-0.39)
\mathbb{R}^2	.068	.080	.080
$\chi^2(df)$	(3)3.240	(1)0.151	(0)0.000
p	.3561	.6972	< .0001

APPENDIX AU. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON GENERAL PHYSICAL HEALTH FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AU1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	16 (-2.53)	15 (-2.66)	15 (-2.66)
PS		.07 (1.13)	.06 (0.93)
SPS		.37 (6.61)	.38 (6.65)
PS*SPS			04 (-0.64)
\mathbb{R}^2	.024	.154	.155
$\chi^2(df)$	(3)36.349	(1)0.411	(0)0.000
p	< .0001	.5214	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AU2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	16 (-2.53)	15 (-2.55)	15 (-2.56)
IP		06 (-0.97)	05 (-0.70)
SPS		.34 (5.90)	.34 (5.86)
IP*SPS			.02 (0.25)
\mathbb{R}^2	.024	.153	.153
$\chi^2(df)$	(3)35.666	(1)0.064	(0)0.000
_ <i>p</i>	< .0001	.8006	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AU3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	16 (-2.53)	16 (-2.76)	16 (-2.79)
EDV		08 (-1.39)	06 (-0.88)
SPS		.35 (6.51)	.39 (6.26)
EDV*SPS			.08 (1.20)
\mathbb{R}^2	.024	.156	.161
$\chi^2(df)$	(3)38.023	(1)1.434	(0)0.000
p	< .0001	.2312	< .0001

APPENDIX AV. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON PHYSICAL ROLE LIMITATIONS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table AV1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.14 (2.27)	.14 (2.26)	.14 (2.26)
PS		01 (-0.08)	.01 (0.10)
SPS		10 (-1.58)	11 (-1.63)
PS*SPS			.05 (0.72)
\mathbb{R}^2	.020	.030	.032
$\chi^2(df)$	(3)3.128	(1)0.520	(0)0.000
p	.3723	.4706	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AV2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.14 (2.27)	.14 (2.35)	.14 (2.34)
IP		08 (-1.21)	07 (-0.90)
SPS		12 (-1.91)	12 (-1.92)
IP*SPS			.02 (0.26)
\mathbb{R}^2	.020	.035	.035
$\chi^2(df)$	(3)4.120	(1)0.069	(0)0.000
_ <i>p</i>	.2488	.7930	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AV3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.14 (2.27)	.15 (2.47)	.15 (2.50)
EDV		.13 (2.14)	.11 (1.60)
SPS		10 (-1.61)	14 (-1.98)
EDV*SPS			09 (-1.14)
\mathbb{R}^2	.020	.047	.052
$\chi^2(df)$	(3)8.343	(1)1.294	(0)0.000
p	.0394	.2552	< .0001

APPENDIX AW. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON ANXIETY FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AW1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.56)	.25 (3.28)	.25 (3.28)
PS		.21 (2.80)	.21 (2.79)
SPS		15 (-1.97)	15 (-1.96)
PS*SPS			.01 (0.10)
\mathbb{R}^2	.074	.147	.147
$\chi^2(df)$	(3)12.140	(1)0.011	(0)0.000
p	.0069	.9173	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AW2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.56)	.21 (2.84)	.21 (2.81)
IP		.35 (4.71)	.34 (4.22)
SPS		05 (-0.68)	05 (-0.66)
IP*SPS			04 (-0.56)
\mathbb{R}^2	.074	.210	.212
$\chi^2(df)$	3(23.787)	(1)0.312	(0)0.000
p	< .0001	.5762	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AW3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.54)	.24 (2.98)	.23 (2.85)
EDV		.07 (0.84)	.07 (0.90)
SPS		18 (-2.32)	18 (-2.31)
EDV*SPS			04 (-0.56)
\mathbb{R}^2	.074	.108	.110
$\chi^2(df)$	(3)5.776	(1)0.313	(0)0.000
p	.1230	.5756	< .0001

APPENDIX AX. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON DEPRESSION FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AX1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.23 (3.21)	.23 (3.30)
PS		.16 (2.28)	.17 (2.45)
SPS		38 (-5.57)	39 (-5.75)
PS*SPS			.09 (1.22)
\mathbb{R}^2	.077	.256	.263
$\chi^2(df)$	(3)33.093	(1)1.467	(0)0.000
p	< .0001	.2258	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AX2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.19 (2.80)	.18 (2.71)
IP		.32 (4.56)	.28 (3.71)
SPS		28 (-4.01)	28 (-3.98)
IP*SPS			13 (-1.75)
\mathbb{R}^2	.077	.319	.333
$\chi^2(df)$	(3)47.751	(1)3.020	(0)0.000
p	< .0001	.0822	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AX3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.63)	.22 (2.92)	.22 (2.93)
EDV		.06 (0.83)	.06 (0.80)
SPS		40 (-5.96)	40 (-5.97)
EDV*SPS			.02 (0.26)
\mathbb{R}^2	.077	.236	.236
$\chi^2(df)$	(3)27.675	(1)0.065	(0)0.000
p	< .0001	.7982	< .0001

APPENDIX AY. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON SUICIDE BEHAVIORS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AY1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (2.73)	.17 (2.28)	.17 (2.26)
PS		.21 (2.86)	.21 (2.81)
SPS		32 (-4.48)	32 (-4.37)
PS*SPS			02 (-0.20)
\mathbb{R}^2	.046	.204	.204
$\chi^2(df)$	(3)26.555	(1)0.040	(0)0.000
p	< .0001	.8409	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AY2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (2.73)	.17 (2.29)	.18 (2.30)
IP		01 (-0.06)	.00 (0.03)
SPS		34 (-4.46)	34 (-4.47)
IP*SPS			.02 (0.25)
\mathbb{R}^2	.046	.161	.161
$\chi^2(df)$	(3)18.896	(1)0.062	(0)0.000
_ <i>p</i>	.0003	.8028	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AY3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.21 (2.71)	.15 (1.91)	.16 (2.08)
EDV		.11 (1.36)	.10 (1.23)
SPS		36 (-4.97)	36 (-5.01)
EDV*SPS			.09 (1.16)
\mathbb{R}^2	.046	.174	.181
$\chi^2(df)$	(3)22.321	(1)1.339	(0)0.000
p	.0001	.2472	< .0001

APPENDIX AZ. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON EMOTIONAL ROLE LIMITATIONS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table AZ1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.26 (3.42)	.27 (3.56)
PS		.18 (2.33)	.20 (2.56)
SPS		11 (-1.45)	14 (-1.73)
PS*SPS			.13 (1.70)
\mathbb{R}^2	.077	.126	.143
$\chi^2(df)$	(3)10.751	(1)2.811	(0)0.000
p	.0132	.0936	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AZ2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.24 (3.17)	.24 (3.11)
IP		.17 (2.03)	.15 (1.66)
SPS		08 (-0.91)	07 (-0.88)
IP*SPS			07 (-0.78)
\mathbb{R}^2	.077	.119	.123
$\chi^2(df)$	(3)7.358	(1)0.606	(0)0.000
p	.0613	.4365	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table AZ3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.64)	.24 (3.02)	.23 (2.90)
EDV		.10 (1.28)	.11 (1.33)
SPS		14 (-1.83)	14 (-1.82)
EDV*SPS			04 (-0.52)
\mathbb{R}^2	.077	.105	.106
$\chi^2(df)$	(3)4.667	(1)0.270	(0)0.000
p	.1979	.6033	< .0001

APPENDIX BA. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON GENERAL PHYSICAL HEALTH FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BA1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.50)	16 (-2.13)	04 (-2.09)
PS		22 (-2.88)	25 (-2.78)
SPS		.23 (3.07)	.44 (2.92)
PS*SPS			.03 (0.18)
\mathbb{R}^2	.040	.150	.150
$\chi^2(df)$	(3)17.865	(1)0.032	(0)0.000
p	< .0001	.8581	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BA2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.50)	15 (-1.93)	15 (-1.88)
IP		14 (-1.73)	12 (-1.38)
SPS		.21 (2.52)	.20 (2.49)
IP*SPS			.06 (0.77)
\mathbb{R}^2	.040	.121	.125
$\chi^2(df)$	(3)13.588	(1)0.589	(0)0.000
p	.0035	.4428	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BA3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.50)	17 (-2.09)	17 (-2.07)
EDV		.00 (0.00)	.00(0.00)
SPS		.25 (3.30)	.25 (3.30)
EDV*SPS			00 (-0.03)
\mathbb{R}^2	.040	.104	.104
$\chi^2(df)$	(3)9.963	(1)0.001	(0)0.000
p	.0189	.9802	< .0001

APPENDIX BB. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON PHYSICAL ROLE LIMITATIONS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BB1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.31 (4.18)	.31 (4.06)	.31 (4.07)
PS		.10 (1.32)	.11 (1.33)
SPS		03 (-0.34)	03 (-0.37)
PS*SPS			.02 (0.21)
\mathbb{R}^2	.097	.109	.109
$\chi^2(df)$	(3)1.978	(1)0.069	(0)0.000
p	.5770	.7930	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BB2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.31 (4.18)	.30 (3.89)	.30 (3.89)
IP		.10 (1.24)	.11 (1.23)
SPS		00 (-0.03)	00 (-0.03)
IP*SPS			01 (-0.15)
\mathbb{R}^2	.097	.108	.108
$\chi^2(df)$	(3)1.777	(1)0.023	(0)0.000
_ <i>p</i>	.6200	.8795	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BB3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.31 (4.21)	.32 (4.12)	.32 (4.14)
EDV		04 (-0.44)	04 (-0.48)
SPS		03 (-0.40)	03 (-0.40)
EDV*SPS			.03 (0.41)
\mathbb{R}^2	.099	.101	.102
$\chi^2(df)$	(3)0.564	(1)0.165	(0)0.000
p	.9047	.6842	< .0001

APPENDIX BC. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON ANXIETY FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BC1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.21)	.34 (3.91)	.34 (3.90)
PS		.12 (1.32)	.11 (1.22)
SPS		18 (-1.92)	19 (-2.05)
PS*SPS			.08 (0.83)
\mathbb{R}^2	.136	.184	.190
$\chi^2(df)$	(3)6.224	(1)0.689	(0)0.000
p	.1012	.4065	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BC2
Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.20)	.36 (4.11)	.36 (4.08)
IP		03 (-0.31)	03 (-0.36)
SPS		19 (-2.05)	19 (-2.08)
IP*SPS			04 (-0.43)
\mathbb{R}^2	.137	.172	.174
$\chi^2(df)$	(3)4.164	(1)0.182	(0)0.000
p	.2443	.6699	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BC3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.21)	.35 (3.95)	.35 (3.98)
EDV		.05 (0.52)	.05 (0.53)
SPS		19 (-2.03)	18 (-1.97)
EDV*SPS			.07 (0.71)
\mathbb{R}^2	.136	.172	.176
$\chi^2(df)$	(3)4.612	(1)0.500	(0)0.000
p	.2025	.4794	< .0001

APPENDIX BD. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON DEPRESSION FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BD1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.97)	.31 (3.66)	.31 (3.65)
PS		.18 (2.10)	.18 (2.05)
SPS		32 (-3.78)	32 (-3.78)
PS*SPS			.03 (0.33)
\mathbb{R}^2	.125	.266	.267
$\chi^2(df)$	(3)17.171	(1)0.111	(0)0.000
p	.0007	.7389	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BD2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.96)	.32 (3.75)	.32 (3.72)
IP		.07 (0.77)	.07 (0.71)
SPS		32 (-3.75)	33 (-3.78)
IP*SPS			04 (-0.46)
\mathbb{R}^2	.125	.239	.241
$\chi^2(df)$	(3)13.654	(1)0.208	(0)0.000
p	.0034	.6484	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BD3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.97)	.32 (3.69)	.32 (3.69)
EDV		.08 (0.92)	.08 (0.92)
SPS		33 (-3.94)	33 (-3.93)
EDV*SPS			00 (-0.05)
\mathbb{R}^2	.125	.240	.240
$\chi^2(df)$	(3)13.698	(1)0.002	(0)0.000
p	.0033	.9641	< .0001

APPENDIX BE. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON SUICIDE BEHAVIOR FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BE1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Suicide Behavior

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.73)	.30 (3.36)	.30 (3.35)
PS		.32 (2.55)	.22 (2.45)
SPS		15 (-1.63)	16 (-1.76)
PS*SPS			.07 (0.78)
\mathbb{R}^2	.113	.192	.197
$\chi^2(df)$	(3)9.653	(1)0.608	(0)0.000
p	.0218	.4355	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BE2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Suicide Behavior

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.72)	.32 (3.56)	.33 (3.62)
IP		.02 (0.20)	.03 (0.29)
SPS		16 (-1.73)	16 (-1.66)
IP*SPS			.08 (0.81)
\mathbb{R}^2	.113	.141	.147
$\chi^2(df)$	(3)3.712	(1)0.650	(0)0.000
p	.2943	.4203	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BE3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Suicide Behavior

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.73)	.31 (3.40)	.31 (3.42)
EDV		.10 (1.06)	.10 (1.06)
SPS		17 (-1.82)	17 (-1.79)
EDV*SPS			.04 (0.37)
\mathbb{R}^2	.113	.150	.151
$\chi^2(df)$	(3)4.265	(1)0.138	(0)0.000
p	.2342	.7105	< .0001

APPENDIX BF. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON EMOTIONAL ROLE LIMITATIONS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BF1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.90)	.30 (3.54)	.29 (3.54)
PS		.25 (2.93)	.23 (2.75)
SPS		29 (-3.47)	32 (-3.87)
PS*SPS			.17 (1.97)
\mathbb{R}^2	.121	.278	.305
$\chi^2(df)$	(3)22.764	(1)3.734	(0)0.000
p	< .0001	.0533	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BF2
Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.91)	.33 (3.77)	.33 (3.78)
IP		.02 (0.18)	.02 (0.20)
SPS		31 (-3.56)	31 (-3.53)
IP*SPS			.02 (0.21)
\mathbb{R}^2	.123	.221	.221
$\chi^2(df)$	(3)11.409	(1)0.043	(0)0.000
p	.0097	.8364	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BF3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.90)	.31 (3.56)	.31 (3.57)
EDV		.12 (1.28)	.12 (1.28)
SPS		31 (-3.66)	31 (-3.63)
EDV*SPS			.03 (0.32)
\mathbb{R}^2	.121	.230	.231
$\chi^2(df)$	(3)12.879	(1)0.102	(0)0.000
p	.0049	.7493	< .0001

APPENDIX BG. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON GENERAL PHYSICAL HEALTH FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BG1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.68)	13 (-1.39)	13 (-1.38)
PS		11 (-1.13)	10 (-1.08)
SPS		.34 (3.88)	.35 (3.89)
PS*SPS			04 (-0.41)
\mathbb{R}^2	.027	.160	.162
$\chi^2(df)$	(3)14.389	(1)0.167	(0)0.000
_ <i>p</i>	.0024	.6829	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BG2
Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.67)	13 (-1.42)	14 (-1.45)
IP		07 (-0.72)	08 (-0.82)
SPS		.34 (3.79)	.33 (3.70)
IP*SPS			08 (-0.88)
\mathbb{R}^2	.028	.154	.160
$\chi^2(df)$	(3)14.105	(1)0.767	(0)0.000
p	.0028	.3811	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BG3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (1.68)	09 (-1.03)	09 (-1.03)
EDV		31 (-3.61)	31 (-3.61)
SPS		.36 (4.30)	.36 (4.28)
EDV*SPS			00 (-0.05)
\mathbb{R}^2	.027	.243	.243
$\chi^2(df)$	(3)24.333	(1)0.002	(0)0.000
p	< .0001	.9603	< .0001

APPENDIX BH. EFFECTS OF MINORITY STRESSORS AND SOCIAL PROVISIONS ON PHYSICAL ROLE LIMITATIONS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BH1

Effects of Perceived Stigma (PS) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.18 (1.88)	.14 (1.52)	.14 (1.52)
PS		.20 (2.12)	.20 (2.09)
SPS		22 (-2.40)	23 (-2.38)
PS*SPS			.01 (0.14)
\mathbb{R}^2	.034	.129	.129
$\chi^2(df)$	(3)10.074	(1)0.018	(0)0.000
p	.0179	.8920	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BH2

Effects of Internalized Prejudice (IP) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.19 (1.89)	.16 (1.65)	.16 (1.66)
IP		.08 (0.85)	.09 (0.86)
SPS		23 (-2.37)	23 (-2.35)
IP*SPS			.01 (0.12)
\mathbb{R}^2	.035	.098	.098
$\chi^2(df)$	(3)6.515	(1)0.014	(0)0.000
p	.0891	.9048	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BH3

Effects of Experiences with Discrimination and Violence (EDV) and Social Provisions (SPS) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.18 (1.88)	.13 (1.34)	.12 (1.31)
EDV		.26 (2.89)	.26 (2.89)
SPS		25 (-2.71)	25 (-2.77)
EDV*SPS			07 (-0.78)
\mathbb{R}^2	.034	.158	.163
$\chi^2(df)$	(3)13.954	(1)0.609	(0)0.000
p	.0030	.4353	< .0001

APPENDIX BI. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON ANXIETY FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table BI1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.56)	.16 (2.54)	.16 (2.57)
PS		.21 (3.51	.22 (3.57)
CC		04 (-0.72)	05 (-0.72)
PS*CC			06 (-0.96)
\mathbb{R}^2	.026	.074	.077
$\chi^2(df)$	(3)12.969	(1)0.919	(0)0.000
p	.0047	.3377	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BI2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.56)	.14 (2.33)	.15 (2.43)
IP		.26 (4.45)	.32 (5.22)
CC		05 (-0.83)	03 (-0.56)
IP*CC			17 (-2.76)
\mathbb{R}^2	.026	.098	.125
$\chi^2(df)$	(3)25.678	(1)7.317	(0)0.000
p	< .0001	.0068	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BI3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.56)	.16 (2.57)	.16 (2.57)
EDV		.01 (0.08)	.01 (0.11)
CC		05 (-0.74)	05 (-0.65)
EDV*CC			.01 (0.09)
\mathbb{R}^2	.026	.028	.028
$\chi^2(df)$	(3)0.563	(1)0.009	(0)0.000
p	.9047	.9258	< .0001

APPENDIX BJ. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON DEPRESSION FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table BJ1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	22 (3.63)	.22 (3.66)	.22 (3.67)
PS		.18 (2.91)	.18 (2.93)
CC		12 (-2.00)	12 (-2.01)
PS*CC			02 (-0.38)
\mathbb{R}^2	.050	.097	.097
$\chi^2(df)$	(3)12.235	(1)0.144	(0)0.000
p	.0066	.7043	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BJ2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.63)	.21 (3.51)	.22 (3.65)
IP		.18 (3.01)	.24 (3.89)
CC		13 (-2.10)	11 (-1.81)
IP*CC			19 (-3.04)
\mathbb{R}^2	.050	.099	.131
$\chi^2(df)$	(3)21.434	(1)8.803	(0)0.000
p	.0001	.0030	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BJ3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (3.63)	.23 (3.74)	.23 (3.74)
EDV		.04 (0.60)	.05 (0.67)
CC		13 (-2.01)	12 (-1.74)
EDV*CC			.02 (0.32)
\mathbb{R}^2	.050	.067	.067
$\chi^2(df)$	(3)4.440	(1)0.102	(0)0.000
p	.2177	.7491	< .0001

APPENDIX BK. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON SUICIDE BEHAVIORS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table BK1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.25 (4.08)	.25 (4.14)	.25 (4.15)
PS		05 (-0.84)	05 (-0.82)
CC		-10 (-1.53)	10 (-1.54)
PS*CC			02 (-0.38)
\mathbb{R}^2	.061	.073	.073
$\chi^2(df)$	(3)3.107	(1)0.141	(0)0.000
p	.3754	.7071	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BK2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.25 (4.08)	.25 (4.12)	.25 (4.15)
IP		02 (-0.23)	.00 (0.04)
CC		09 (-1.51)	09 (-1.42)
IP*CC			06 (-0.84)
\mathbb{R}^2	.061	.070	.073
$\chi^2(df)$	(3)3.028	(1)0.710	(0)0.000
_ <i>p</i>	.3873	.3993	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BK3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.25 (4.08)	.25 (4.09)	.25 (4.08)
EDV		.00 (0.00)	01 (-0.14)
CC		09 (-1.51)	10 (-1.54)
EDV*CC			03 (-0.36)
\mathbb{R}^2	.061	.070	.070
$\chi^2(df)$	(3)2.393	(1)0.130	(0)0.000
p	.4949	.7187	< .0001

APPENDIX BL. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON EMOTIONAL ROLE LIMITATIONS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table BL1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Emotional Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.28)	.26 (4.29)	.26 (4.32)
PS		.06 (0.98)	.06 (1.02)
CC		09 (-1.40)	09 (-1.42)
PS*CC			05 (-0.84)
\mathbb{R}^2	.066	.078	.080
$\chi^2(df)$	(3)3.625	(1)0.709	(0)0.000
p	.3049	.3999	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BL2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Emotional Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.28)	.26 (4.24)	.26 (4.30)
IP		.05 (0.78)	.08 (1.24)
CC		09 (-1.42)	08 (-1.26)
IP*CC			10 (-1.61)
\mathbb{R}^2	.066	.076	.086
$\chi^2(df)$	(3)5.121	(1)2.543	(0)0.000
p	.1631	.1108	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BL3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.26 (4.28)	.26 (4.24)	.26 (4.24)
EDV		04 (-0.58)	03 (-0.44)
CC		09 (-1.42)	08 (-1.20)
EDV*CC			.02 (0.32)
\mathbb{R}^2	.066	.075	.076
$\chi^2(df)$	(3)2.410	(1)0.100	(0)0.000
p	.4917	.7513	< .0001

APPENDIX BM. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON GENERAL PHYSICAL HEALTH FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table BM1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-2.72)	17 (-2.76)	17 (-2.77)
PS		04 (-0.57)	04 (-0.58)
CC		.13 (2.10)	.13 (2.11)
PS*CC			.02 (0.29)
\mathbb{R}^2	.029	.048	.048
$\chi^2(df)$	(3)4.743	(1)0.081	(0)0.000
_ <i>p</i>	.1916	.7761	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BM2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-2.72)	16 (-2.60)	16 (-2.63)
IP		17 (-2.68)	18 (-2.81)
CC		.13 (2.18)	.13 (2.08)
IP*CC			.05 (0.82)
\mathbb{R}^2	.029	.073	.076
$\chi^2(df)$	(3)11.886	(1)0.672	(0)0.000
p	.0078	.4123	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BM3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on General Physical Health

()			
Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-2.72)	18 (-2.91)	18 (-2.96)
EDV		09 (-1.36)	12 (-1.79)
CC		.13 (2.09)	.09 (1.40)
EDV*CC			10 (-1.47)
\mathbb{R}^2	.029	.054	.062
$\chi^2(df)$	(3)8.286	(1)2.123	(0)0.000
p	.0405	.1451	< .0001

APPENDIX BN. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON PHYSICAL ROLE LIMITATIONS FOR HETEROSEXUAL AND CISGENDER PARTICIPANTS IN THE FULL STUDY

Table BN1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Physical Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.49)	.16 (2.51)	.16 (2.58)
PS		.01 (0.15)	.02 (0.26)
CC		08 (-1.22)	08 (-1.26)
PS*CC			12 (-1.97)
\mathbb{R}^2	.025	.031	.046
$\chi^2(df)$	(3)5.304	(1)3.810	(0)0.000
p	.1508	.0509	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BN2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Physical Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.49)	.16 (2.55)	.16 (2.55)
IP		04 (-0.60)	04 (-0.58)
CC		08 (-1.21)	08 (-1.21)
IP*CC			.00 (0.05)
\mathbb{R}^2	.025	.032	.032
$\chi^2(df)$	(3)1.832	(1)0.002	(0)0.000
p	.6080	.9605	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BN3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.16 (2.49)	.17 (2.74)	.17 (2.77)
EDV		.14 (2.20)	.16 (2.45)
CC		08 (-1.19)	05 (-0.71)
EDV*CC			.08 (1.07)
\mathbb{R}^2	.025	.049	.054
$\chi^2(df)$	(3)7.312	(1)1.131	(0)0.000
p	.0626	.2875	< .0001

APPENDIX BO. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON ANXIETY FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BO1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.56)	.26 (3.54)	.26 (3.53)
PS		.22 (2.80)	.22 (2.82)
CC		05 (-0.67)	05 (-0.66)
PS*CC			05 (-0.67)
\mathbb{R}^2	.074	.128	.130
$\chi^2(df)$	(3)9.282	(1)0.452	(0)0.000
p	.0258	.5014	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BO2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.56)	.21 (2.82)	.20 (2.65)
IP		.39 (5.19)	.37 (4.55)
CC		.06 (0.71)	.07 (0.83)
IP*CC			08 (-0.95)
\mathbb{R}^2	.074	.211	.216
$\chi^2(df)$	(3)24.421	(1)0.902	(0)0.000
_ <i>p</i>	< .0001	.3422	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BO3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.27 (3.54)	.26 (3.32)	.26 (3.29)
EDV		.07 (0.80)	.05 (0.66)
CC		11 (-1.36)	12 (-1.55)
EDV*CC			.10 (1.21)
\mathbb{R}^2	.074	.087	.096
$\chi^2(df)$	(3)3.606	(1)1.46	(0)0.000
p	.3073	.2309	< .0001

APPENDIX BP. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON DEPRESSION FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BP1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.27 (3.67)	.27 (3.66)
PS		.18 (2.35)	.19 (2.39)
CC		09 (-1.17)	09 (-1.16)
PS*CC			08 (-1.03)
\mathbb{R}^2	.077	.126	.133
$\chi^2(df)$	(3)9.054	(1)1.050	(0)0.000
p	.0286	.3054	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BP2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.21 (2.89)	.23 (3.22)
IP		.44 (5.99)	.49 (6.55)
CC		.04 (0.52)	.02 (0.24)
IP*CC			.17 (2.13)
\mathbb{R}^2	.077	.251	.273
$\chi^2(df)$	(3)34.954	(1)4.393	(0)0.000
p	< .0001	.0361	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BP3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.63)	.27 (3.51)	.27 (3.47)
EDV		.04 (0.50)	.02 (0.28)
CC		14 (-1.80)	17 (-2.13)
EDV*CC			.16 (1.97)
\mathbb{R}^2	.077	.097	.120
$\chi^2(df)$	(3)6.924	(1)3.738	(0)0.000
p	.0743	.0532	< .0001

APPENDIX BQ. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON SUICIDE BEHAVIORS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BQ1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (2.73)	.21 (2.73)	.21 (2.72)
PS		.23 (2.91)	.23 (2.92)
CC		08 (-1.00)	08 (-0.99)
PS*CC			04 (-0.45)
\mathbb{R}^2	.046	.111	.112
$\chi^2(df)$	(3)10.517	(1)0.206	(0)0.000
p	.0146	.6499	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BQ2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.22 (2.73)	.21 (2.59)	.23 (2.93)
IP		.07 (0.84)	.14 (1.51)
CC		10 (-1.12)	12 (-1.42)
IP*CC			.19 (2.22)
\mathbb{R}^2	.046	.067	.096
$\chi^2(df)$	(3)7.879	(1)4.700	(0)0.000
p	.0486	.0302	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BQ3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.21 (2.71)	.20 (2.48)	.19 (2.44)
EDV		.09 (1.09)	.07 (0.89)
CC		15 (-1.83)	17 (-2.13)
EDV*CC			.14 (1.80)
\mathbb{R}^2	.061	.071	.091
$\chi^2(df)$	(3)7.017	(1)3.131	(0)0.000
p	.0714	.0768	< .0001

APPENDIX BR. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON EMOTIONAL ROLE LIMITATIONS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BR1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Emotional Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.27 (3.61)	.27 (3.59)
PS		.19 (2.45)	.20 (2.50)
CC		.01 (0.10)	.01 (0.12)
PS*CC			09 (-1.19)
\mathbb{R}^2	.077	.114	.122
$\chi^2(df)$	(3)7.270	(1)1.391	(0)0.000
p	.0638	.2382	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BR2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Emotional Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.66)	.24 (3.16)	.26 (3.45)
IP		.21 (2.55)	.27 (3.07)
CC		.05 (0.61)	.03 (0.37)
IP*CC			.16 (1.87)
\mathbb{R}^2	.077	.116	.136
$\chi^2(df)$	(3)9.714	(1)3.404	(0)0.000
p	.0212	.0650	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BR3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.28 (3.64)	.26 (3.31)	.26 (3.27)
EDV		.10 (1.16)	.08 (1.02)
CC		05 (-0.60)	70 (-0.80)
EDV*CC			.10 (1.27)
\mathbb{R}^2	.077	.087	.097
$\chi^2(df)$	(3)3.099	(1)1.582	(0)0.000
p	.3767	.2084	< .0001

APPENDIX BS. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON GENERAL PHYSICAL HEALTH FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BS1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.50)	19 (-2.50)	19 (-2.48)
PS		22 (-2.85)	23 (-2.93)
CC		.09 (1.14)	.09 (1.12)
PS*CC			.13 (1.75)
\mathbb{R}^2	.040	.106	.124
$\chi^2(df)$	(3)13.396	(1)2.971	(0)0.000
p	.0039	.0848	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BS2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.50)	17 (-2.15)	19 (-2.46)
IP		19 (-2.21)	25 (-2.79)
CC		.06 (0.73)	.09 (1.00)
IP*CC			18 (-2.04)
\mathbb{R}^2	.040	.088	.113
$\chi^2(df)$	(3)11.575	(1)4.028	(0)0.000
p	.0090	.0448	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BS3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on General Physical Health

()			
Predictors	Step 1	Step 2	Step 3
SRRS-R	20 (-2.50)	20 (-2.53)	20 (-2.49)
EDV		.01 (07)	.02 (0.23)
CC		.14 (1.67)	.15 (1.89)
EDV*CC			11 (-1.39)
\mathbb{R}^2	.040	.058	.071
$\chi^2(df)$	(3)4.712	(1)1.900	(0)0.000
p	.1942	.1681	< .0001

APPENDIX BT. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON PHYSICAL ROLE LIMITATIONS FOR SEXUAL ORIENTATION MINORITY PARTICIPANTS IN THE FULL STUDY

Table BT1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Physical Role
Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.31 (4.18)	.31 (4.12)	.30 (4.15)
PS		.11 (1.42)	.12 (1.56)
CC		.03 (0.42)	.04 (0.49)
PS*CC			23 (-3.16)
\mathbb{R}^2	.097	.109	.163
$\chi^2(df)$	(3)11.213	(1)9.213	000.000
p	.0106	.0024	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BT2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Physical Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.31 (4.18)	.30 (3.81)	.31 (4.01)
IP		.13 (1.52)	.17 (1.90)
CC		.06 (0.72)	.05 (0.53)
IP*CC			.12 (1.40)
\mathbb{R}^2	.097	.111	.123
$\chi^2(df)$	(3)4.202	(1)1.935	(0)0.000
_ <i>p</i>	.2405	.1642	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BT3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Physical Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.31 (4.21)	.32 (4.23)	.33 (4.31)
EDV		04 (-0.53)	03 (-0.38)
CC		.02 (0.28)	.04 (0.50)
EDV*CC			11 (-1.33)
\mathbb{R}^2	.099	.101	.111
$\chi^2(df)$	(3)2.047	(1)1.731	(0)0.000
p	.5627	.1883	< .0001

APPENDIX BU. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON ANXIETY FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BU1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.21)	.36 (4.00)	.36 (3.99)
PS		.14 (1.50)	.14 (1.45)
CC		05 (-0.46)	05 (-0.47)
PS*CC			01 (-0.12)
\mathbb{R}^2	.136	.156	.156
$\chi^2(df)$	(3)2.243	(1)0.015	(0)0.000
p	.5235	.9027	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BU2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.20)	.370 (3.99)	.38 (4.09)
IP		00 (-0.04)	04 (-0.35)
CC		.00 (0.01)	03 (-0.30)
IP*CC			11 (-1.10)
\mathbb{R}^2	.137	.137	.148
$\chi^2(df)$	(3)1.191	(1)1.189	(0)0.000
_ <i>p</i>	.7553	.2755	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BU3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Anxiety

Predictors	Step 1	Step 2	Step 3
SRRS-R	.37 (4.21)	.37 (4.06)	.36 (3.87)
EDV		.06 (0.56)	.07 (0.65)
CC		04 (-0.38)	05 (-0.44)
EDV*CC			04 (-0.33)
\mathbb{R}^2	.136	.139	.140
$\chi^2(df)$	(3)0.456	(1)0.110	(0)0.000
p	.9284	.7403	< .0001

APPENDIX BV. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON DEPRESSION FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BV1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.97)	.36 (3.97)	.36 (3.97)
PS		.23 (2.49)	.23 (2.46)
CC		13 (-1.33)	13 (-1.33)
PS*CC			.01 (0.13)
\mathbb{R}^2	.125	.181	.181
$\chi^2(df)$	(3)6.485	(1)0.017	(0)0.000
p	.0903	.8963	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BV2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.96)	.36 (3.82)	.36 (3.86)
IP		.11 (1.16)	.09 (0.93)
CC		06 (-0.66)	08 (-0.81)
IP*CC			06 (-0.61)
\mathbb{R}^2	.125	.142	.145
$\chi^2(df)$	(3)2.203	(1)0.367	(0)0.000
p	.5313	.5447	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BV3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Depression

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.97)	.37 (4.02)	.36 (3.85)
EDV		.12 (1.16)	.13 (1.17)
CC		13 (-1.24)	14 (-1.27)
EDV*CC			03 (-0.28)
\mathbb{R}^2	.050	.143	.144
$\chi^2(df)$	(3)2.130	(1)0.077	(0)0.000
p	.5460	.7812	< .0001

APPENDIX BW. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON SUICIDE BEHAVIORS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BW1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.73)	.27 (2.94)	.27 (2.94)
PS		.21 (2.30)	.21 (2.27)
CC		.16 (1.68)	.16 (1.69)
PS*CC			.01 (0.08)
\mathbb{R}^2	.113	.193	.193
$\chi^2(df)$	(3)9.204	(1)0.006	(0)0.000
p	.0267	.9397	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BW2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.72)	.27 (2.88)	.28 (2.95)
IP		.06 (0.59)	.03 (0.28)
CC		.22 (2.29)	.19 (1.91)
IP*CC			10 (-0.98)
\mathbb{R}^2	.113	.159	.167
$\chi^2(df)$	(3)6.047	(1)0.941	(0)0.000
p	.1093	.3321	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BW3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Suicide Behaviors

Predictors	Step 1	Step 2	Step 3
SRRS-R	.34 (3.73)	.28 (3.04)	.29 (3.02)
EDV		.02 (0.23)	.01 (0.12)
CC		.19 (1.87)	.20 (1.87)
EDV*CC			.02 (0.22)
\mathbb{R}^2	.113	.151	.152
$\chi^2(df)$	(3)4.340	(1)0.046	(0)0.000
p	.2270	.8299	< .0001

APPENDIX BX. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON EMOTIONAL ROLE LIMITATIONS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BX1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Emotional Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.90)	.34 (3.84)	.34 (3.85)
PS		.29 (3.28)	.27 (2.92)
CC		12 (-1.26)	12 (-1.30)
PS*CC			14 (-1.54)
\mathbb{R}^2	.121	.207	.225
$\chi^2(df)$	(3)12.212	(1)2.311	(0)0.000
p	.0067	.1284	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BX2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Emotional Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.91)	.35 (3.75)	.36 (3.88)
IP		.06 (0.59)	.02 (0.15)
CC		04 (-0.37)	08 (-0.77)
IP*CC			15 (-1.46)
\mathbb{R}^2	.123	.127	.146
$\chi^2(df)$	(3)2.596	(1)2.085	(0)0.000
p	.4582	.1487	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BX3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Emotional Role Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.35 (3.90)	.36 (3.87)	.34 (3.58)
EDV		.15 (1.46)	.19 (1.68)
CC		12 (-1.34)	14 (-1.30)
EDV*CC			09 (-0.81)
\mathbb{R}^2	.121	.143	.149
$\chi^2(df)$	(3)3.131	(1)0.656	(0)0.000
p	.3718	.4181	< .0001

APPENDIX BY. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON GENERAL PHYSICAL HEALTH FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BY1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.68)	13 (-1.25)	13 (-1.25)
PS		11 (-1.12)	12 (-1.12)
CC		10 (-0.95)	10 (-0.96)
PS*CC			01 (-0.11)
\mathbb{R}^2	.027	.053	.053
$\chi^2(df)$	(3)2.619	(1)0.011	(0)0.000
p	.4542	.9157	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BY2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on General Physical Health

Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.67)	12 (-1.13)	12 (-1.18)
IP		12 (-1.24)	10 (-0.96)
CC		13 (-1.24)	10 (-0.97)
IP*CC			.08 (0.76)
\mathbb{R}^2	.028	.056	.061
$\chi^2(df)$	(3)3.387	(1)0.576	(0)0.000
p	.3357	.4480	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BY3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on General Physical Health

()			
Predictors	Step 1	Step 2	Step 3
SRRS-R	17 (-1.68)	12 (-1.19)	10 (-1.03)
EDV		30 (-2.96)	33 (-2.95)
CC		01 (-0.07)	.01 (0.08)
EDV*CC			.07 (0.64)
\mathbb{R}^2	.027	.115	.119
$\chi^2(df)$	(3)9.551	(1)0.402	(0)0.000
p	.0228	.5262	< .0001

APPENDIX BZ. EFFECTS OF MINORITY STRESSORS AND COMMUNITY CONNECTEDNESS ON PHYSICAL ROLE LIMITATIONS FOR TRANSGENDER PARTICIPANTS IN THE FULL STUDY

Table BZ1

Effects of Perceived Stigma (PS) and Community Connectedness (CC) on Physical Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.18 (1.88)	.17 (1.72)	.17 (1.73)
PS		.23 (2.33)	.23 (2.34)
CC		06 (-0.58)	06 (58)
PS*CC			.03 (0.28)
\mathbb{R}^2	.034	.083	.084
$\chi^2(df)$	(3)5.136	(1)0.080	(0)0.000
p	.1621	.7774	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BZ2

Effects of Internalized Prejudice (IP) and Community Connectedness (CC) on Physical Role

Limitations

Predictors	Step 1	Step 2	Step 3
SRRS-R	.19 (1.89)	.18 (1.74)	.19 (1.82)
IP		.11 (1.13)	.08 (0.77)
CC		03 (-0.28)	06 (-0.58)
IP*CC			12 (-1.09)
\mathbb{R}^2	.035	.048	.060
$\chi^2(df)$	(3)2.537	(1)1.161	(0)0.000
_ <i>p</i>	.4686	.2813	< .0001

Note. SRRS-R = Revised Social Readjustment Rating Scale.

Table BZ3

Effects of Experiences with Discrimination and Violence (EDV) and Community Connectedness (CC) on Physical Role Limitations

()			
Predictors	Step 1	Step 2	Step 3
SRRS-R	.18 (1.88)	.17 (1.73)	.16 (1.57)
EDV		.31 (3.03)	.33 (2.99)
CC		13 (-1.24)	15 (-1.35)
EDV*CC			06 (-0.58)
\mathbb{R}^2	.034	.112	.115
$\chi^2(df)$	(3)8.501	(1)0.332	(0)0.000
p	.0367	.5643	< .0001

APPENDIX CA. MULTI-GROUP ANALYSIS MODELS PREDICTING PHYSICAL DISTRESS WITH LIMITED COVARIATES

Table CA1

Model 4 – Multi-Group Analysis of the Effects of Minority Stressors and Outness on Physical Distress (Physical Role Limitations)

		Step 1			Step 2			Step 3		
Variable	β	t	p	β	t	p	β	t	p	
Heterosexual a	nd Cisg	ender								
SRRS-R	.09	1.56	.120	.10	1.73	.083	.11	1.78	.075	
MTurk	31	-4.91	<.001	30	-4.65	<.001	30	-4.58	< .001	
Age	.37	6.13	<.001	.36	5.69	<.001	.35	5.46	< .001	
PS				00	-0.05	.964	.00	0.06	.952	
IP				02	-0.25	.800	00	-0.02	.988	
EDV				.08	1.40	.163	.11	0.92	.356	
Out				03	-0.39	.695	08	-0.82	.414	
PS*Out							.02	0.17	.863	
IP*Out							.06	0.65	.513	
EDV*Out							04	-0.28	.778	
\mathbb{R}^2		.16			.16			.17		
LGBAQ										
SRRS-R	.28	3.61	< .001	.26	2.97	.001	.27	3.29	.001	
MTurk	11	-1.43	.154	14	-1.38	.069	15	-1.83	.067	
Age	.11	1.41	.158	.16	2.78	.044	.17	2.01	.044	
PS				.11	1.05	.194	.12	1.34	.180	
IP				.11	1.79	.197	.10	1.14	.254	
EDV				04	-0.38	.674	05	-0.57	.571	
Out				08	-1.41	.385	08	-0.87	.386	
PS*Out							.07	0.77	.440	
IP*Out							07	-0.79	.431	
EDV*Out							02	-0.24	.812	
\mathbb{R}^2		.12			.26			.17		

Table CA1 continued

		Step 1			Step 2			Step 3	
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	.17	1.62	.106	.11	1.11	.267	.07	0.74	.461
MTurk	13	-1.30	.193	07	-0.74	.461	08	-0.75	.451
Age	.11	1.05	.293	.06	0.56	.577	.06	0.61	.541
PS				.14	1.40	.163	.16	1.58	.115
IP				.09	0.86	.392	.14	1.32	.188
EDV				.21	2.09	.037	.25	2.44	.015
Out				.04	0.40	.688	.07	0.68	.497
PS*Out							.05	0.46	.643
IP*Out							10	-0.93	.351
EDV*Out							19	-1.84	.065
\mathbb{R}^2		.07			.14			.17	
RMSEA		.06			.00			.00	
CFI		.88			1.00			1.00	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	65.56	42	.012	17.68	18	.477	0.00	0	< .001
$\Delta\chi^2$				47.88	24	.003	17.68	18	.477

Notes. Physical role limitations model ran in conjunction with model predicting general physical health. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; Out = outness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 487 ($n_{\text{het/cis}} = 249$; $n_{\text{LGBAQ}} = 143$; $n_{\text{trans}} = 95$).

Table CA2

Model 4 – Multi-Group Analysis of the Effects of Minority Stressors and Outness on Physical Distress (General Physical Health)

-		Step 1			Step 2			Step 3	
Variable	β	t	p	β	t	p	β	t	p
Heterosexual an	d Cisgen	ıder							
SRRS-R	13	-2.08	.037	13	-2.11	.035	13	-2.13	.033
MTurk	.16	2.36	.019	.15	2.15	.031	.15	2.22	.027
Age	21	-3.20	.001	22	-3.25	.001	24	-3.45	.001
PS				.00	0.03	.979	00	-0.04	.971
IP				14	-2.06	.040	15	-2.10	.036
EDV				07	-1.06	.289	27	-2.13	.033
Out				.07	1.02	.308	.14	1.28	.201
PS*Out							.01	0.10	.923
IP*Out							.00	0.01	.989
EDV*Out							.25	1.84	.066
\mathbb{R}^2		.07			.10			.11	
LGBAQ									
SRRS-R	20	-2.39	.017	17	-2.04	.041	16	-2.01	.044
MTurk	.07	0.79	.430	.12	1.45	.147	.11	1.35	.179
Age	04	-0.47	.639	13	-1.63	.103	15	-1.86	.064
PS				19	-2.26	.024	22	-2.53	.011
IP				16	-1.90	.057	19	-2.18	.029
EDV				.03	0.33	.745	.01	0.14	.888
Out				.16	1.84	.066	.18	1.99	.047
PS*Out							02	-0.19	.850
IP*Out							11	-1.38	.167
EDV*Out							.08	0.88	.375
\mathbb{R}^2		.05			.17			.19	

Table CA2 continued

		Step 1			Step 2		Step 3		
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	09	-0.90	.368	03	-0.31	.754	.01	0.10	.923
MTurk	.25	2.56	.011	.20	2.06	.040	.19	2.05	.040
Age	.11	1.13	.257	.19	1.99	.046	.19	2.03	.043
PS				03	-0.28	.777	08	-0.80	.423
IP				10	-1.03	.305	10	-1.04	.299
EDV				31	-3.29	.001	34	-3.53	<.001
Out				.09	0.96	.338	.07	0.77	.440
PS*Out							19	-2.00	.046
IP*Out							.16	1.57	.117
EDV*Out							.11	1.09	.276
\mathbb{R}^2		.09			.20			.24	
RMSEA		.06			.00			.00	
CFI		.88			1.00			1.00	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	65.56	42	.012	17.68	18	.477	0.00	0	< .001
$\Delta\chi^2$				47.88	24	.003	17.68	18	.477

Notes. General physical health model ran in conjunction with model predicting physical role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; Out = outness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 487 ($n_{het/cis} = 249$; $n_{LGBAQ} = 143$; $n_{trans} = 95$).

Table CA3

Model 5 – Multi-Group Analysis of the Effects of Minority Stressors and Social Provisions on Physical Distress (Physical Role Limitations)

	Step 1				Step 2		Step 3			
Variable	β	t	p	β	t	p	β	t	p	
Heterosexual a	nd Cisge	ender								
SRRS-R	.09	1.56	.120	.10	1.72	.086	.10	1.71	.087	
MTurk	31	-4.92	<.001	31	-4.85	< .001	31	-4.79	<.001	
Age	.37	6.13	<.001	.36	5.83	< .001	.36	5.63	<.001	
PS				03	-0.52	.605	03	-0.39	.700	
IP				04	-0.68	.495	03	-0.43	.669	
EDV				.08	1.33	.184	.07	1.11	.266	
SPS				13	-2.03	.042	14	-1.98	.047	
PS*SPS							.00	0.06	.956	
IP*SPS							.02	0.23	.817	
EDV*SPS							03	-0.40	.691	
\mathbb{R}^2		.16			.18			.18		
LGBAQ										
SRRS-R	.27	3.53	<.001	.25	2.98	.003	.25	3.10	.002	
MTurk	11	-1.40	.163	16	-1.77	.078	16	-1.85	.065	
Age	.12	1.51	.131	.16	1.97	.048	.16	2.06	.040	
PS				.12	1.46	.143	.12	1.47	.141	
IP				.13	1.42	.155	.13	1.39	.166	
EDV				07	-0.71	.477	07	-0.84	.403	
SPS				.04	-0.43	.668	04	-0.50	.619	
PS*SPS							.02	0.17	.866	
IP*SPS							.01	0.09	.928	
EDV*SPS							.07	0.85	.394	
\mathbb{R}^2		.12			.16			.16		

Table CA3 continued

		Step 1			Step 2			Step 3	
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	.17	1.62	.106	.10	1.03	.303	.09	0.92	.358
MTurk	13	-1.30	.193	06	-0.62	.534	07	-0.71	.479
Age	.11	1.05	.293	.04	0.38	.704	.02	0.23	.819
PS				.13	1.37	.172	.15	1.51	.132
IP				.05	0.55	.580	.05	0.54	.592
EDV				.22	2.27	.023	.22	2.26	.024
SPS				22	-2.39	.017	23	-2.44	.015
PS*SPS							.00	0.01	.993
IP*SPS							02	-0.19	.854
EDV*SPS							10	-1.07	.283
\mathbb{R}^2		.07			.19			.20	
RMSEA		.10			.00			.00	
CFI		.72			1.00			1.00	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	105.70	42	< .001	6.10	18	.996	0.00	0	< .001
$\Delta\chi^2$				99.60	24	< .001	6.10	18	.996

Notes. Physical role limitations model ran in conjunction with model predicting general physical health. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SPS = Social Provisions Scale; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 488 ($n_{\text{het/cis}} = 249$; $n_{\text{LGBAQ}} = 144$; $n_{\text{trans}} = 95$).

Table CA4

Model 5 – Multi-Group Analysis of the Effects of Minority Stressors and Social Provisions on Physical Distress (General Physical Health)

	Step 1				Step 2		Step 3			
Variable	β	t	p	β	t	p	β	t	p	
Heterosexual an	nd Cisger	nder								
SRRS-R	13	-2.08	.037	13	-2.16	.031	13	-2.15	.031	
MTurk	.16	2.36	.019	.18	2.77	.006	.18	2.84	.005	
Age	21	-3.20	.001	22	-3.55	<.001	21	-3.23	.001	
PS				.09	1.43	.154	.09	1.35	.176	
IP				07	-1.08	.281	05	-0.66	.507	
EDV				05	-0.90	.367	04	-0.57	.566	
SPS				.36	6.23	<.001	.39	5.92	<.001	
PS*SPS							06	-0.93	.354	
IP*SPS							.06	0.87	.386	
EDV*SPS							.05	0.79	.432	
\mathbb{R}^2		.07			.21			.21		
LGBAQ										
SRRS-R	20	-2.42	.016	11	-1.42	.156	11	-1.40	.161	
MTurk	.07	0.80	.424	.17	2.17	.030	.19	2.27	.023	
Age	04	-0.45	.656	09	-1.13	.257	08	-1.02	.306	
PS				23	-3.00	.003	23	-2.89	.004	
IP				10	-1.17	.241	08	-0.87	.383	
EDV				.05	0.66	.512	.06	0.71	.476	
SPS				.26	3.15	.002	.26	3.12	.002	
PS*SPS							.03	0.30	.765	
IP*SPS							.05	0.58	.560	
EDV*SPS							03	-0.38	.705	
\mathbb{R}^2		.05			.20			.21		

Table CA4 continued

	Step 1				Step 2		Step 3			
Variable	β	t	p	β	t	p	β	t	p	
Transgender	,									
SRRS-R	09	-0.90	.368	01	-0.15	.879	02	-0.17	.864	
MTurk	.25	2.56	.011	.17	1.92	.054	.17	1.86	.063	
Age	.11	1.13	.257	.20	2.24	.025	.21	2.31	.021	
PS				01	-0.13	.897	02	-0.21	.838	
IP				08	-0.86	.390	09	-0.93	.351	
EDV				33	-3.69	<.001	33	-3.67	<.001	
SPS				.35	4.20	<.001	.35	4.05	<.001	
PS*SPS							.01	0.14	.890	
IP*SPS							06	-0.66	.511	
EDV*SPS	S						.03	0.38	.703	
\mathbb{R}^2		.09			.31			.31		
RMSEA		.10			.00			.00		
CFI		.72			1.00			1.00		
	χ^2	df	p	χ^2	df	p	χ^2	df	p	
Model Fit	105.70	42	< .001	6.10	18	.996	0.00	0	< .001	
$\Delta\chi^2$				99.60	24	< .001	6.10	18	.996	

Notes. General physical health model ran in conjunction with model predicting physical role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SPS = Social Provisions Scale; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 488 ($n_{\text{het/cis}} = 249$; $n_{\text{LGBAQ}} = 144$; $n_{\text{trans}} = 95$).

Table CA5

Model 6 – Multi-Group Analysis of the Effects of Minority Stressors and Community Connectedness on Physical Distress (Physical Role Limitations)

		Step 1			Step 2	2		Step 3	}
Variable	β	t	p	β	t	p	β	t	p
Heterosexual a	and Cisg	gender							
SRRS-R	.11	1.83	.067	.12	2.01	.045	.13	2.14	.032
MTurk	33	-5.00	<.001	32	-4.72	< .001	31	-4.64	<.001
Age	.39	6.10	<.001	.37	5.75	< .001	.37	5.79	<.001
PS				01	-0.09	.932	01	0.11	.914
IP				00	-0.04	.968	01	0.23	.822
EDV				.08	1.38	.168	.10	1.59	.112
CC				06	-1.08	.279	05	-0.73	.468
PS*CC							13	-2.16	.031
IP*CC							03	-0.42	.677
EDV*CC							.05	0.78	.438
\mathbb{R}^2		.16			.17			.19	
LGBAQ									
SRRS-R	.27	3.53	<.001	.25	3.09	.002	.28	3.65	<.001
MTurk	11	-1.40	.163	13	-1.67	.095	13	-1.76	.079
Age	.12	1.51	.131	.15	1.89	.059	.17	2.14	.032
PS				.13	1.56	.119	.14	1.83	.067
IP				.15	1.73	.084	.17	1.96	.050
EDV				07	-0.83	.404	04	-0.43	.665
CC				.05	0.60	.547	.02	0.17	.862
PS*CC							23	-2.97	.003
IP*CC							.23	2.70	.007
EDV*CC							05	-0.67	.501
\mathbb{R}^2		.12			.16			.23	

Table CA5 continued

		Step 1			Step 2			Step 3	
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	.17	1.62	.106	.15	1.50	.135	.08	1.39	.164
MTurk	13	-1.30	.193	05	-0.54	.590	02	-0.54	.590
Age	.11	1.05	.293	.06	0.59	.553	.05	0.68	.496
PS				.18	1.74	.083	.13	1.76	.078
IP				.07	0.67	.502	.11	0.37	.713
EDV				.27	2.60	.009	.36	2.75	.006
CC				18	-1.70	.090	29	-2.06	.039
PS*CC							.02	0.40	.690
IP*CC							16	-1.16	.245
EDV*CC							06	-0.78	.438
\mathbb{R}^2		.07			.16			.18	
RMSEA		.08			.07			.00	
CFI		.79			.93			1.00	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	83.03	42	< .001	31.47	18	.025	0.00	0	< .001
$\Delta\chi^2$				51.56	24	< .001	31.47	18	.025

Notes. Physical role limitations model ran in conjunction with model predicting general physical health. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; CC = Community Connectedness; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 476 ($n_{\text{het/cis}} = 237$; $n_{\text{LGBAQ}} = 144$; $n_{\text{trans}} = 95$).

Table CA6

Model 6 – Multi-Group Analysis of the Effects of Minority Stressors and Community Connectedness on Physical Distress (General Physical Health)

		Step 1			Step 2		Step 3		
Variable	β	t	p	β	t	p	β	t	p
Heterosexual a	and Cisgo	ender							
SRRS-R	15	-2.28	.023	14	-2.31	.021	15	-2.39	.017
MTurk	.18	2.51	.012	.16	2.22	.027	.15	2.18	.029
Age	22	-3.22	.001	24	-3.43	.001	23	-3.33	.001
PS				02	-0.28	.782	02	-0.37	.709
IP				18	-2.92	.004	20	-3.07	.002
EDV				06	-1.01	.314	10	-1.45	.148
CC				.12	2.00	.046	.08	1.28	.200
PS*CC							.03	0.52	.600
IP*CC							.05	0.72	.474
EDV*CC							10	-1.38	.168
\mathbb{R}^2		.07			.12			.13	
LGBAQ									
SRRS-R	20	-2.42	.016	15	-1.89	.059	17	-2.19	.029
MTurk	.07	0.80	.424	.10	1.28	.201	.12	1.55	.121
Age	04	-0.45	.656	10	-1.23	.219	13	-1.72	.086
PS				23	-2.90	.004	24	-3.06	.002
IP				17	-1.96	.049	22	-2.45	.014
EDV				.06	0.72	.470	.04	0.52	.607
CC				.04	0.41	.682	.11	1.29	.196
PS*CC							.19	2.45	.014
IP*CC							24	-2.87	.004
EDV*CC							13	-1.61	.107
\mathbb{R}^2		.05			.15			.23	

Table CA6 continued

		Step 1			Step 2			Step 3	
Variable	β	t	p	β	t	p	β	t	p
Transgender									
SRRS-R	09	-0.90	.368	02	-0.22	.828	01	-0.14	.888
MTurk	.25	2.56	.011	.20	2.06	.040	.20	2.06	.040
Age	.11	1.13	.257	.18	1.88	.061	.18	1.81	.069
PS				02	-0.18	.861	02	-0.15	.882
IP				12	-1.24	.216	10	-0.94	.347
EDV				29	-2.91	.004	33	-2.98	.003
CC				04	-0.36	.718	.00	0.02	.981
PS*CC							.01	0.05	.963
IP*CC							.10	0.91	.366
EDV*CC							.06	0.58	.561
\mathbb{R}^2		.09			.19			.20	
RMSEA		.08			.07			.00	
CFI		.79			.93			1.00	
	χ^2	df	p	χ^2	df	p	χ^2	df	p
Model Fit	83.03	42	< .001	31.47	18	.025	0.00	0	< .001
$\Delta\chi^2$				51.56	24	< .001	31.47	18	.025

Notes. General physical health model run in conjunction with model predicting physical role limitations. SRRS-R = Revised Social Readjustment Rating Scale; MTurk = Amazon Mechanical Turk participants; PS = Perceived Stigma; IP = Internalized Prejudice; EDV = Experiences with Discrimination and Violence; SPS = Social Provisions Scale; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer. N = 476 ($n_{\text{het/cis}} = 237$; $n_{\text{LGBAQ}} = 144$; $n_{\text{trans}} = 95$).

APPENDIX DA. FACTOR LOADINGS FOR LATENT PSYCHOLOGICAL DISTRESS FACTORS IN MULTI-GROUP, MULTI-STRESSOR MODELS

Table DA1

Standardized Factor Loadings for the Latent Psychological Distress Factor in Model 1 with Outness as Moderator

		Step 1			Step	2	Step 3			
Indicator	β	t	p	β	t	p	β	t	p	
Heterosexua	al and	Cisgend	er							
DEP	.86	24.48	< .001	.90	24.81	< .001	.90	24.83	< .001	
ANX	.65	14.80	< .001	.69	15.33	< .001	.69	15.21	< .001	
SBQ-R	.60	15.37	< .001	.59	14.92	< .001	.58	14.82	< .001	
ERL	.70	19.04	< .001	.68	19.30	< .001	.68	19.15	< .001	
LGBAQ										
DEP	.92	21.03	< .001	.97	25.06	< .001	.97	25.22	< .001	
ANX	.73	13.61	< .001	.78	15.60	< .001	.77	15.41	< .001	
SBQ-R	.54	11.63	< .001	.53	11.89	< .001	.53	11.81	< .001	
ERL	.71	18.33	< .001	.70	18.99	< .001	.69	18.75	< .001	
Transgende	r									
DEP	.83	17.08	< .001	.83	17.94	< .001	.85	18.01	< .001	
ANX	.59	9.95	< .001	.60	10.57	< .001	.61	10.49	< .001	
SBQ-R	.49	8.42	< .001	.47	8.14	< .001	.47	8.16	< .001	
ERL	.76	15.56	< .001	.75	15.02	< .001	.74	15.07	< .001	

Note. DEP = depression; ANX = anxiety; SBQ-R = Revised Suicide Behaviors Questionnaire; ERL = emotional role limitations; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer.

Appendix DA continued

Table DA2

Standardized Factor Loadings for the Latent Psychological Distress Factor in Model 2
with Social Provisions as Moderator

		Step	1		Step 2	2	Step 3			
Indicator	β	t	p	β	t	p	β	t	p	
Heterosexua	al and	Cisgend	er							
DEP	.86	24.49	< .001	.91	26.23	< .001	.92	26.24	< .001	
ANX	.65	14.81	< .001	.69	15.44	< .001	.69	15.38	< .001	
SBQ-R	.60	15.40	< .001	.59	15.15	< .001	.58	15.05	< .001	
ERL	.70	19.05	< .001	.68	19.82	< .001	.68	19.92	< .001	
LGBAQ										
DEP	.92	21.16	< .001	.97	26.08	< .001	.98	26.73	< .001	
ANX	.73	13.68	< .001	.76	15.45	< .001	.76	15.61	< .001	
SBQ-R	.54	11.68	< .001	.53	11.82	< .001	.53	11.72	< .001	
ERL	.71	18.42	< .001	.69	18.66	< .001	.69	18.62	< .001	
Transgende	r									
DEP	.83	17.09	< .001	.83	18.73	< .001	.83	18.69	< .001	
ANX	.59	9.96	< .001	.60	10.62	< .001	.60	10.65	< .001	
SBQ-R	.49	8.44	< .001	.47	8.14	< .001	.46	8.05	< .001	
ERL	.76	15.56	< .001	.75	15.09	< .001	.74	14.89	< .001	

Note. DEP = depression; ANX = anxiety; SBQ-R = Revised Suicide Behaviors Questionnaire; ERL = emotional role limitations; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer.

Appendix DA continued

Table DA3

Standardized Factor Loadings for the Latent Psychological Distress Factor in Model 3 with Community Connectedness as Moderator

		Step 1	1		Step 2	2		Step 3		
Indicator	β	t	p	β	t	p	β	t	p	
Heterosexua	al and	Cisgend	er							
DEP	.86	23.93	< .001	.89	24.33	< .001	.91	24.82	< .001	
ANX	.64	14.48	< .001	.68	15.07	< .001	.69	15.03	< .001	
SBQ-R	.60	14.97	< .001	.58	15.54	< .001	.58	14.65	< .001	
ERL	.71	18.85	< .001	.69	19.10	< .001	.69	19.59	< .001	
LGBAQ										
DEP	.92	21.10	< .001	.96	23.79	< .001	.95	23.45	< .001	
ANX	.73	13.63	< .001	.78	15.36	< .001	.76	14.74	< .001	
SBQ-R	.53	11.58	< .001	.53	11.63	< .001	.52	11.42	< .001	
ERL	.71	18.40	< .001	.70	18.74	< .001	.70	18.37	< .001	
Transgende	r									
DEP	.83	17.08	< .001	.83	17.83	< .001	.83	17.67	< .001	
ANX	.59	9.93	< .001	.61	10.53	< .001	.60	10.51	< .001	
SBQ-R	.49	8.37	< .001	.47	8.11	< .001	.47	8.07	< .001	
ERL	.76	15.55	< .001	.75	15.10	< .001	.76	15.08	< .001	

Note. DEP = depression; ANX = anxiety; SBQ-R = Revised Suicide Behaviors Questionnaire; ERL = emotional role limitations; LGBAQ = lesbian, gay, bisexual/pansexual, asexual, and queer.



Institutional Review Board Office for Responsible Research Vice President for Research 1138 Pearson Hall Ames, Iowa 50011-2207 515 294-4366 FAX 515 294-4267

Date: 2/4/2016

To: Karen E Bittner

W113 Lagomarcino

1415 Snedecor Dr. Susan E Cross W112 Lagomarcino Hall

CC: Dr. Fred Lorenz

From: Office for Responsible Research

Title: Sex, Gender, Sexual Orientation, Stress, and Distress

IRB ID: 14-627

Approval Date: 2/4/2016 Date for Continuing Review: 3/23/2017

Submission Type: Modification Review Type: Full Committee

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.
- **Obtain IRB approval prior to implementing** <u>any</u> **changes** to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.
- Stop all research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research
 participants. Research activity can resume once IRB approval is reestablished.
- Complete a new continuing review form at least three to four weeks prior to the date for continuing review as noted
 above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy
 reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. Approval from other entities may also be needed. For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. IRB approval in no way implies or guarantees that permission from these other entities will be granted.

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 1138 Pearson Hall, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.

4 4 4		
Assigned	IRB ID	: 14-6Z7

INSTITUTIONAL REVIEW BOARD (IRB) Modification Form for Non-Exempt Research

Principal Investigator (PI): Karen	Bittner	Degrees: M	1.S.
Iniversity ID:	Phone: 515-451-8503	Email Address: kbittner@iastate.edu	
Department: Psychology			
OR STUDENT PROJECTS (Required	d when the principal investigat	or is a student)	D=-
Name of Major Professor/Supervis	sing Faculty: Dr. Fred Lorenz		RECEIVED
University ID:	Phone: 515-294-8314	Email Address: folorenz@iastate.edu	110
			NUV 2 0 2015
Alternate Contact Person: Susan Cross		Email Address: scross@iastate.edu	
Correspondence Address: W113 Lago, ISU, Ames, IA, 50011		Phone: 515-294-3224	By IRB
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