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DETERMINANTS OF GAY MEN'S IDENTITY AND OUTNESS: EXAMINING THE  
ROLES OF MINORITY STRESS, MASCULINITY, CHILDHOOD GENDER  
BEHAVIOR, SOCIAL SUPPORT AND SOCIOECONOMIC STATUS

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## Abstract

# Determinants of Gay Men's Identity and Outness: Examining the Roles of Minority Stress, Masculinity, Childhood Gender Behavior, Social Support, and Socioeconomic Status

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Most stage models of gay identity development posit that gay men follow a distinct hierarchical blueprint wherein internal identity processes (e.g. dismantling internalized homonegativity) co-occur with increasing disclosure of their sexual orientation to others (i.e. greater outness). However, some scholars contend that linear stage models lack flexibility and do not account for the diversity of gay men's experience (Fassinger & Miller, 1996). Specifically, gay men's internal and public identity processes may advance by way of distinct, unparallel pathways and for that reason should be evaluated in conjunction and independently of one another. Extending Meyer's (1995; 2003) minority stress model, this study examined the role of childhood gender behavior, adult masculinity, social support and socioeconomic status in explaining gay men's identity status and degree of outness. Five hundred eighteen gay men recruited from online sources (e.g. listservs, Usenet groups) completed measures assessing stigma, anti-gay attack, recalled childhood gender behavior, masculinity, social support, and socioeconomic status. Hierarchical and logistic regression analyses supported several hypotheses reflected in the findings that stigma, anti-gay attack, masculinity, and social support were significantly associated with gay men's identity status and outness. In

addition, socioeconomic status moderated the relationship between masculinity and outness, as well as between minority stress (anti-gay attack) and identity status. Altogether, each of the factors examined in this study appear to play a unique role in explaining gay men's identity development and outness, underscoring the complexity of the social context that may intensify or alleviate the stress of these processes. The theoretical implications, future research, limitations, and recommendations for counselors are discussed.

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## Chapter 1: Introduction

Most models of gay identity development subsume 'coming out' as a necessary process in the formation of a positive gay identity (Eliason & Schope, 2007). This derives from the notion that through the relinquishing of negative internalized messages regarding homosexuality (the dissolution of self-hatred and shame), one's identity is strengthened and greater openness about oneself ensues (coming out). Essentially, these models propose that identity formation and coming out necessarily coexist on a continuum where on one end individuals are closeted and hold negative feelings about being gay, and on the opposite end, individuals are out and develop a positive gay identity. This is the synopsis of many theories including Cass' (1979) gay identity development model, still one of the most widely cited theories of gay identity development in the extant literature. Given the dominant, hetero-centric culture and the stigma associated with homosexuality (Herek, 1998), these linear stage models make sound conceptual sense and have enjoyed considerable success (Eliason & Schope, 2007).

Nevertheless, some scholars have challenged the notion that 'outness' and gay identity development travel together by arguing that coming out is a distinct process that only occurs when individual and environmental circumstances allow for the process to unfold (Fassinger & Miller 1996; Harry, 1993), and therefore one's out-status may not always be a necessary part of gay men's positive identity development. Disclosure of a stigmatized sexual orientation (coming out) is increasingly being recognized as an ongoing cost/benefit decision-making process that occurs based upon many contextual

and individual factors (e.g., race/ethnicity, class, age, geographic location, religion, occupation, community support), and may only occur based upon a host of factors aside from one's ostensible safety (Fassinger & Miller, 1996; Herek, 1998; Meyer, 2003). More specifically, the potential for increased stigma or violence may cause some gay men to remain closeted; however, discrimination in the workplace, loss of community or family support as well as other risks may either support or hinder gay men's coming out process (Elizur & Ziv, 2001; Waldo, 1999).

Therefore, as a result of the critiques of traditional stage models of gay identity development, some scholars have posited models of gay identity development in which men can develop positive gay identities without necessarily coming out (Fassinger & Miller 1996; Harry, 1993; McCarn & Fassinger, 1996). Specifically, Fassinger and Miller (1996) developed a model of lesbian and gay identity formation in which increased public disclosure of sexual orientation does not necessarily occur as one progresses in development. This expands the theoretical terrain of gay identity development by suggesting that the pathway to an integrated, healthy self may vary for gay men, perhaps in part because of the diversity within the gay male population and the environment they inhabit. To extend this notion further, it is suggested here that some gay men may come out and consequently experience increased stigma, discrimination, or violence, thereby producing negative associations with their identity. This example expands traditional stage models further by suggesting that gay men may come out and develop a negative identity, a concept that doesn't fit within the framework of most (if not any) models of gay identity development. Altogether therefore, it is suggested that

gay men's identity status and out-status might advance by way of distinct, unparallel pathways and for that reason should be evaluated in conjunction and independently of one another.

Another theoretical model that has helped elucidate the experiences of gay men is Meyer's (1995; 2003) minority stress model. In the model, he underscores some of the contextual and psychosocial factors associated with gay men's psychological wellbeing and the coming out process. In short, the model posits that gay men are at an increased risk for psychological health problems as a result of the marginalization and stigmatization associated with their minority status as homosexuals. Aside from the burden of negotiating the disclosure of sexual orientation, he outlines three unique stressors that gay men contend with as sexual minorities including internalized homophobia, expectations of stigma, and experiences of anti-gay attack. Meyer (2003) hypothesized that high levels of minority stress may cause gay men to remain closeted, and in fact, a recent study found that gay men with high levels of internalized homophobia were less likely to be out (Moradi et al., 2010). Furthermore, Meyer (1995) found that greater minority stress was significantly associated with a number of mental health outcomes including greater suicidality, demoralization, guilt and psychological distress. Therefore, it is hypothesized that gay men with higher levels of minority stress will report a more negative identity and, as previous research indicates (Moradi et al., 2010), will be less out.

Gay men's identity and outness may also be influenced by their constructions of masculinity. Specifically, men's adherence to norms of traditional masculinity has

widespread consequences such as reduced relationship satisfaction (Burns & Ward, 2005), difficulty with help-seeking (Mahalik, Good, & Englar-Carlson, 2003), and a host of increased health risk behaviors (Mahalik, Burns, & Syzdek, 2007). Conformity to masculinity norms is also negatively associated with men's general wellbeing (Courtenay, 2000) and has a documented association with gay men's negative identity (Sanchez et al., 2010). One of the fundamental tenants of traditional masculinity is disdain for homosexuality (Mahalik, 2003), which creates a critical paradox for gay men. The intrinsic conflict between being a man and being gay must be contended with, and many gay men struggle to realize an integrated identity that is simultaneously traditionally masculine and openly gay (Connell, 1992). For instance, Sanchez et al. (2010) found that gay men who reported greater concern about violating traditional masculine ideals were more likely to have negative gay identities. The relationship between conformity to masculinity norms and outness is far less understood; no empirical findings can be found that directly investigate this relationship. Nevertheless, it is hypothesized that men who report greater conformity to masculine norms will be less out, given the strong association between constructions of masculinity and the presumption of heterosexuality. Furthermore, as previous research has shown (Sanchez, 2005; Sanchez et al., 2010) it is hypothesized that greater masculinity will relate to a more negative gay identity.

In addition to the above listed factors, the present study will also explore the association between childhood gender behavior and gay men's outness/identity status, a sparsely explored topic in this framework. Childhood gender behavior is an important

variable to consider given that gender atypicality in childhood often continues into adulthood (Bailey & Zucker, 1995) and has a documented relationship with adult sexuality (Rieger et al., 2008). Adult gay men who report gender nonconforming behavior in childhood may be more likely to be out since they fit the gay stereotype. One study found that childhood gender behavior was not related to the timing of gay men coming out (Bogaert & Hafer, 2009), otherwise, no empirical research has examined childhood gender behavior as a predictor of gay men's outness. It may be that stigma experienced throughout childhood (based upon non-conforming behavior) impels these gay men to come out, yet the negative impact of the intolerance becomes internalized and brings about a negative identity. Specifically, several studies have documented that gender nonconformity in childhood is associated with negative psychological outcomes including suicidality, peer rejection, and psychological distress (Beard & Bakeman, 2000; Landolt et al., 2004; Lippa, 2008; Ploderl & Fartacek, 2009; Skidmore, Linsenmeier, & Bailey, 2006; Strong, Singh, & Randall, 2000). Therefore, it is hypothesized that gay men who recall more gender nonconforming behavior in childhood will be more out due to pressure related to their atypical characteristics, and regarding identity, men who report greater nonconformity in childhood will have more negative identities.

Research has documented that social support is also a robust predictor of wellbeing in the general population (Uchino, 2004; Uchino, Cacioppo, & Kiecolt-Glaser, 1996), and in the gay community (Detrie & Lease, 2008; Elizur & Mintzer, 2001; Elizur & Ziv, 2001; Wright & Perry, 2006). Gay men's identity development and the degree to which they are out are also related to social support (Bowleg et al., 2008; Elizur &

Mintzer, 2001; Elizur & Ziv, 2001; Kurdek, 1988). However, the relationship between social support and outness may be bidirectional in nature depending upon the source of support. Specifically, outness and social support may influence one another in that gay men who have greater social support may have more opportunity to come out; and conversely, men who are more out often seek support through the gay community (LeBeau & Jellison, 2009). Elizur and Ziv (2001) found that in a population of gay Israeli men, family support was related to more positive identities and eventually greater disclosure. Vincke and Bolton (1994) found an association between low social support and low self-acceptance in a sample of gay Flemish men. Social support has also been linked to lesbians' concealment of sexual orientation (Jordan & Deluty, 2000); specifically, lesbians who perceived greater social support in their lives were more out. Therefore, it is hypothesized that greater social support will relate to a more positive gay identity and greater outness.

Finally, another contextual factor that may have some bearing on gay men's identity and outness is their socioeconomic standing (Barrett, Pollack, and Tilden, 2002; Harry, 1993, McKirnan & Peterson, 1986). Socioeconomic status (SES) is recognized as a powerful predictor of mortality and morbidity (Gallo & Matthews, 2003; Kaplan & Keil, 1993); however, the influence of SES in the lesbian, gay, and bisexual populations is far less understood (Appleby, 2001; Mallon, 2001). Some scholars have argued that 'gay-identification' is a product of a socio-political movement that was initiated by, and intended for, the middle class (Valocchi, 1999). Harry (1993) analyzed data collected in the 1970's and found that gay men from lower socioeconomic backgrounds were more

likely to be out. However, more recent findings suggest that the reverse is true. Barrett and Pollack (2005) found that gay men in lower social classes were less likely to identify as gay, socialize within the gay community (e.g. events, parties, gay social groups), or have a male primary partner. For the present study, it is hypothesized that the advantages of education and a higher social status may permit gay men in these echelons to develop more positive gay identities. However, results regarding outness are less certain, it might be that the power of a higher socioeconomic position might also permit gay men to be more out, or alternatively, perhaps a contextual advantage (or privilege) of a higher socioeconomic background is such that these men can develop positive gay identities without coming out.

### *Interactions*

Given the documented relationship between minority stress and gay men's identity and outness, by examining (1) social support, (2) socioeconomic status, and (3) childhood gender behavior as moderators, we can identify when and for whom the relationship between minority stress and identity status/outness is most robust. First, social support is hypothesized to moderate the relationship between minority stress and identity status. Specifically, the validation and encouragement of friends and family support may buffer the negative effect of minority stress and permit gay men to develop positive identities in spite of the societal stigma associated with being gay. Furthermore, increased social support may emanate from the gay community, and foster solidarity against homophobia and stigma; therefore, greater social support may also have an effect on gay men's outness.

A similar effect may be true regarding socioeconomic class. Specifically, socioeconomic status is hypothesized to moderate the relationship between minority stress and identity/outness. That is, the impact of minority stress on gay men's identity and outness might depend upon their socioeconomic standing. For instance, minority stress may have a much more significant impact on gay men in lower socioeconomic positions; therefore, gay men from lower socioeconomic positions who experience high degrees of minority stress will be significantly less out and report more negative gay identities.

Finally, childhood gender behavior may moderate the relationship between minority stress and gay men's identity/outness in that men with histories of gender variance in childhood may deal with societal stigma and attack differently than men who were gender conforming in childhood. In fact, men who experienced stigma and attack growing up (non-conforming boys) may be more likely to have found ways of coping with such experiences in adulthood, whereas men who were gender-conforming in childhood may be more novice in dealing with these problems, and therefore, it may have more negative consequences with regard to their identity and compel them to remain closeted.

The next set of interactions will explore moderators of the relationships between conformity to masculine norms and gay men's identity status and outness. Four moderators will be examined, (1) minority stress, (2) childhood gender behavior, (3) social support, and (4) socioeconomic status. For instance, minority stress may moderate the relationship between masculinity and identity/outness. That is, the degree to which

traditionally masculine men are out may depend upon their perceptions of stigma and experiences of attack. Greater levels of minority stress may exacerbate fears of not being seen as masculine thereby playing a role in men's feelings about themselves (negative identity) and result in less disclosure of sexual orientation.

Given that research has demonstrated a fairly reliable association between childhood gender role behavior and adult characteristics of masculinity/femininity (Bailey & Zucker, 1995; Rieger, Linsenmeier, Gygax, & Bailey, 2008; Savin-Williams, 2005), it is expected that gay men with histories of gender nonconformity in childhood will also report low conformity to traditional masculine characteristics in adulthood. Therefore the strength of the relationship between men's current conformity to masculine norms and their identity/outness may depend upon their history of gender conformity.

Social support is hypothesized to moderate the relationships between masculinity and identity status. Specifically, greater social support in gay men's lives will buffer the otherwise negative effect of conforming to masculine norms on gay identity. That is, it may be that the self-validation intrinsic to social support can bolster gay men's identity in spite of the conflict between a traditional masculine identity and a gay identity. Furthermore, greater amounts of social support may change the direction of the relationship between masculinity and identity. Strong social support for a gay man who adheres to masculine norms may substantiate a positive gay identity of the masculine sort.

Socioeconomic status is hypothesized to moderate the relationship between masculinity and outness. Specifically, gay men who show greater conformity to

masculine norms and who fall into a lower socioeconomic position will be significantly less out. The interaction between socioeconomic status and masculinity has two possible effects on identity. First, the interaction hypothesized above may also hold true for identity; that is, gay men who show greater conformity to masculine norms and who fall into a lower socioeconomic position will have a significantly more negative identity. Alternatively, it may be hypothesized that gay men with who are in higher socioeconomic strata may be able to develop positive gay identities regardless of their conformity to masculinity norms. That is, access to the resources associated with wealth and education may allow men who strongly conform to masculine norms to develop positive feelings about themselves as gay men as well as providing them with coping strategies regarding the latent conflict between being a man and being gay.

The third set of interactions will examine the moderating effects of social support and socioeconomic status on the relationship between childhood gender behavior and outness/identity status. For instance, although gay men's identity may be predicted by their childhood gender behavior; this relationship may vary depending upon one's socioeconomic status. That is, perhaps the influence of gender nonconformity in childhood on gay men's identity and outness is different for men from lower socioeconomic strata than for men from higher social classes. While both groups of men may have struggled up against mainstream norms, men from higher socioeconomic positions may have been able to access the resources necessary to support their lives and bolster their identities. One study found that expectations and cultural norms vary across social classes by way of parental communication styles to children (Shinn & O'Brien,

2008) and that traditional masculine ideals are thought to be promulgated more strongly in lower and working class families. Therefore, gay men with histories of gender nonconformity in childhood from lower socioeconomic classes may be more likely to have difficulty forming positive gay identities and coming out. The way in which gay men's current social support will interact with their histories of childhood gender behavior is far less understood. It could be speculated that high social support could change the direction of the relationship between childhood gender behavior and identity for men with gender-variant histories. Furthermore, greater social support might strengthen the relationship between childhood gender behavior and outness. Therefore, it is hypothesized that the relationship between men's childhood gender behavior and outness/identity will depend upon degree of social support.

Finally, since socioeconomic class seems to be related to gay men's access to (and acceptance into) the gay community (Barrett & Pollack, 2005), it is expected that gay men in lower socioeconomic statuses who also have low social support will be significantly less out and have more negative identities. Specifically, from a greater stress perspective, the dual effect of being socially isolated and having minimal social capital may be greater than cumulative.

From a minority stress perspective, the primary purposes of this study are to (1) determine whether the above identified psychosocial and contextual dimensions of gay experience (minority stress, masculinity, childhood gender behavior, social support, and socioeconomic status) can predict gay men's outness

and identity status, and (2) to explore how some of these factors may act as moderators in predicting gay men's outness and identity status.

## Chapter 2: Literature Review

### *Gay Men's Identity Development and Coming Out*

The identity formation process of lesbians, gays, and bisexuals is situated within a long history of oppression and discrimination that continues to exist in most of the world. Theoretical models of gay and lesbian identity development began to emerge in the 1960s and 1970s during the high point of civil rights activism in the United States (Haldeman, 2007). Given that homosexuality was labeled a mental illness until 1973 at which time it was removed from the Diagnostic and Statistical Manual (DSM; APA, 1973), most research related to minority sexuality necessarily investigated it as pathology (Haldeman, 2007). Gay-rights activism paved the way for social and political changes that spawned the inception of some influential work on the experiences of lesbians and gay men (Burns, 2005). One prominent theory rising out of this era is still one of the most frequently cited models of gay and lesbian identity development: Cass' (1979) Gay and Lesbian Identity Development Model. Cass (1979, 1996) outlines a six-stage model beginning with *Identity Confusion*, manifested by questions of same-sex attraction, internal conflict, and negative attitudes toward gay people, and finalizing with *Identity Synthesis*, marked by peace with oneself and unity between one's public and private self. Hence, increased public outness is inherent in this model; that is, moving through the stages requires an increased public gay identity. For instance, during stage four, *Identity Acceptance*, one has more contact with other members of the gay community, and through stage five, *Identity Pride*, disclosure is increasingly common (Cass, 1979).

In addition to examining gay men's identity development juxtaposed to the coming out process, some research has isolated the construct of coming out and specifically investigated its association with other developmental and health-related factors in lgb populations. Indeed, the issue of gay men 'coming out' has been discussed in the literature for several decades, and has been explored from various social, psychological, and biological perspectives (Cass, 1979; Cole et al., 1996; Cole, 2006; Fassinger & Miller, 1996; Herek, 1998; McCarn & Fassinger, 1996; Mohr & Fassinger, 2000; Reynolds & Hanjorgiris, 2000). For instance, coming out as it pertains to societal stigma (Herek, 1998), coming out in relation to psychological and physical health (Cole et al., 1996; Cole, 2006), and of course, coming out and identity development (Cass, 1979; Fassinger & Miller, 1996; McCarn & Fassinger, 1996; Mohr & Fassinger, 2000; Reynolds & Hanjorgiris, 2000).

Coming out has been defined as a process that typically involves first acknowledging within oneself same-sex attraction, and second, by communicating to others by publicly adopting a gay identity (Reynolds & Hanjorgiris, 2000). Some men may progress through these broad stages with the end result of openly identifying as gay in most realms of life (i.e. with friends, family, and at work). However, it is more common for gay men to navigate disclosure uniquely within each sphere of life or interpersonal situation (Rothberg & Weinstein, 1996). Alternatively, some men who have same-sex attraction, or are homosexually active, never adopt a public gay identity, or even come to terms with their sexual orientation within themselves. Hence, gay men's

outness can widely vary and may be influenced by a number of intrinsic and contextual factors.

*Gay Identity Development, Coming Out, and Health*

Empirical research suggests that gay male identity formation is associated with a number of positive mental health outcomes such as feelings of self-worth (Helminiak, 1989; Savin-Williams, 1990), well-being (Carlson & Steuer, 1985), psychological adjustment (Hammersmith & Weinberg, 1992), and adult attachment security (Elizur & Mintzer, 2001). Furthermore, many theoretical models of gay identity (Cass, 1979; D'Augelli, 1994; Fassinger & Miller, 1996), as well as theory on the effects of societal stigma (Herek, 1998) posit that increased outness can have far-reaching benefits such as greater self-esteem, social support and better mental health. According to Herek (2003), concealing an important part of oneself such as one's sexuality can reduce intimacy, impair social relationships, and increase negative feelings related to secrecy. Indeed, evidentiary support from research has shown that self-concealment of sexual orientation is associated with a number of negative mental health outcomes including increased symptoms of anxiety and depression (D'Augelli, 1991; Jordan & Deluty, 1998; Larson & Chastain, 1990), and lower self-esteem, which is thought to be related to the disownment of an important part of the self (Fassinger, 1991). Cole et al. (1996) found that men who concealed their gay identity had higher incidences of pneumonia, bronchitis, tuberculosis, sinusitis, and cancer, concluding that men who are homosexually active, but not out, are at greater risk for serious physical health problems.

Nevertheless, although coming out is related to less health problems, public disclosure of one's sexual minority status also possesses several risks (Herek, 1998; Meyer, 2003). Coming out is the impetus for discrimination and increased social isolation, moreover, forty percent of gay men have been victims of hate crimes in the United States (Herek, 2005). Furthermore, the undertaking of disclosing sexuality in every interpersonal situation, not to mention the numerous associations of non-straight life, is increasingly recognized as a significant burden on lesbian, gay, and bisexual people (Fassinger, 1991; Gonsiorek & Rudolph, 1991; Meyer, 2003; Potoczniak, Aldea, & DeBlaere, 2007). Nevertheless, consequences of outing oneself will vary and raises questions about its association to one's identity.

Since Cass' (1979; 1984; 1996) ground-breaking work, theory and research on lesbian and gay identity processes have grown and brought new models of identity development that posit more complex interactions between outness, identity, and health (Elizur & Ziv, 2001; Fassinger & Miller, 1996; McCarn and Fassinger, 1996). McCarn and Fassinger (1996) advanced a model of lesbian identity development-- later validated on a sample of gay men (Fassinger & Miller, 1996) proposing that identity develops on individual and group levels and that one's out-status may not precisely reflect their internal identity development as straightforwardly as previous models suggested. The authors posit that some subgroups of gay men benefit from increased outness while others may experience increased stigmatization and oppression. Specifically, given the wide range of individual difference within the lesbian and gay populations (socioeconomic status, ethnicity, race, age, etc.), the degree to which one is out may not

correspond with their sexual minority identity status. Fassinger and Miller (1996) suggest that associating

“public identity disclosure as a manifestation of integrated identity renders existing models largely insensitive to the varying contexts of diverse lesbians and gay men. For many, other forms of difference (e.g., race/ethnicity, class, age, geographic location, religion, occupation, community support) exert a profound impact on the identity formation process, and determine the extent to which disclosure and politicization are even possible (p. 55).

Fassinger and Miller (1996) describe four statuses that are suggested to allow more flexibility in the identity development process. According to the model, these phases of development occur on group and individual level, and therefore, each status carries group and individual features. The first phase, *Awareness*, is characterized on an individual level by confusion and fear about feeling different from the dominant majority, and on a group membership level, awareness of sexuality in others increases. In the second phase, *Exploration*, individuals are suggested to be increasingly fascinated by their same-sex sexual attraction wherein they feel “longing, excitement, and wonder” (p. 56). On a group level, Exploration is characterized by understanding one’s position with regard to the gay community. The individual level of the third phase, *Deepening/Commitment*, entails greater self awareness and comfort about one’s sexuality, and on a group level involves greater outness and involvement with the gay community. Finally, during *Internalization/Synthesis*, on an individual level one’s sexual identity is secure and internal conflict is reduced; on a group level, individuals are more actively committed to their membership in an oppressed minority group. According to Fassinger and Miller (1996), even in the final phase of group membership development, individuals may not be more out (aside from their involvement in the gay community).

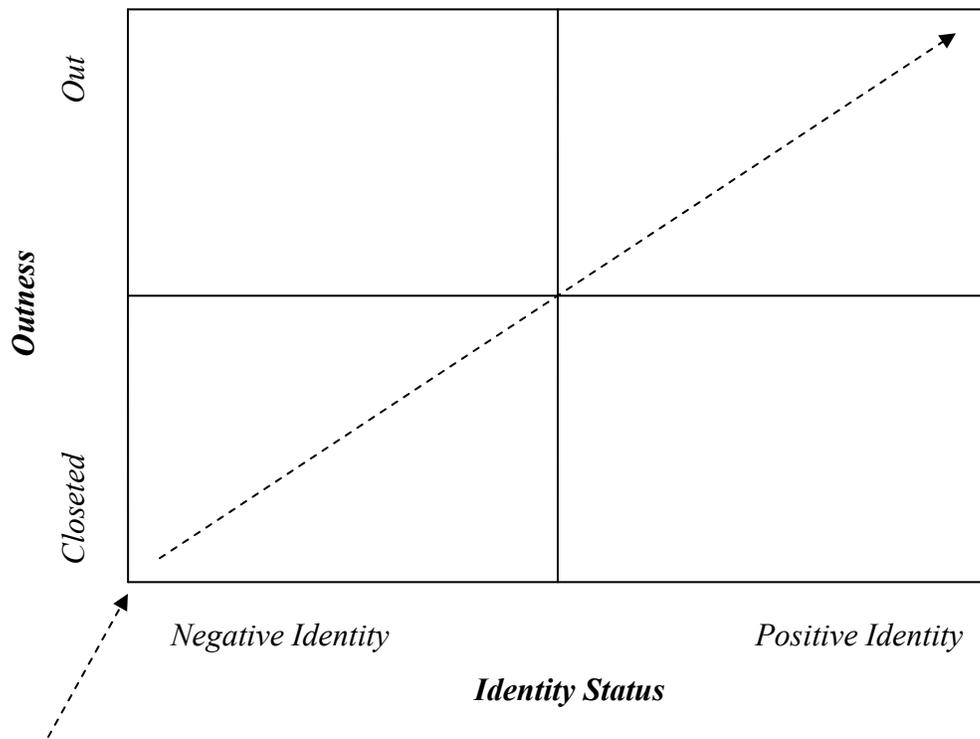
A central point of McCarn and Fassinger (1996) and Fassinger and Miller's (1996) work is their emphasis on how group and individual processes may run parallel or in contrast to one another, and that individuals may move back and forth between statuses more flexibly than in other models of gay identity development. Furthermore, they underscore that for each individual, these processes occur in a unique context with varying degrees of overt and latent oppression, and therefore progression through the phases are contextually bound. Therefore, it is important to understand the unique contextual circumstances that may explain gay men's identity statuses. Finally, perhaps one of the most emphasized assertions here is that the degree to which a gay man is out is believed to reflect their internal identity process. They reason that "disclosure is so profoundly influenced by contextual oppression that to use it as an index of identity development directly forces the victim to take responsibility for his or her own victimization" (p. 56). Concisely stated, "Disclosure decisions can be separate from internal identity processes" (Eliason & Schope, 2007, p. 21).

In light of the critiques of linear stage models, and Fassinger and Miller's (1996) recommendation to adopt more flexible approaches of assessing gay and lesbian identity development processes, Mohr and Fassinger (2000) sought to develop measures that might help researchers quantify the relevant experiences of gays and lesbians. Beginning with internalized homophobia as a fundamental starting point, they scrutinized the literature for other pivotal issues relevant to lesbians and gay men. On theoretical and empirical grounds, their research team uncovered five additional factors from the extant literature that were found to be most relevant to lesbians and gay men. The authors

describe the emerging constructs from factor analyses including, “confusion about one’s sexual orientation, belief in the superiority of LG people relative to heterosexual people, fear of judgment from others regarding one’s sexual orientation, desire to hide one’s sexual orientation, and perception of one’s sexual identity development process as having been difficult” (Mohr & Fassinger, 2000, p. 70). Furthermore, exploratory and confirmatory factor analyses revealed a ‘negative identity’ factor that comprised of four subscales, each of which emphasized negative feelings about being gay. Namely, these included (1) internalized homophobia, (2) need for privacy, (3) need for acceptance, and (4) difficult gay identity process.

Therefore, measuring specific interpersonal and contextual dimensions of gay experience can help us understand for whom coming out is associated with a positive gay identity, and for whom a positive gay identity might be formed without coming out (Mohr & Fassinger, 2000). Equally important is understanding the factors associated with the development of a negative identity and for whom a negative identity might be coupled with being in the closet or being out. In order to understand the conditions by which these statuses may occur, it is important to examine relevant socio-contextual and individual conditions that might predict gay men falling into one of these categories. Specifically, gay men’s identity status and outness necessarily converge into four broad categories, (1) positive identity and out, (2) positive identity and not out, (3) negative identity and out, and (4) negative identity and not out (see Figure 2).

Figure 2. Depiction of Cass' (1979) linear model relative to categories of outness/identity statuses



Cass' (1979) Gay Identity Development Model

Using McCarn and Fassinger's (1996) theory, and Mohr and Fassinger's (2000) expanded work on gay identity development as a backdrop, the following sections outline five contextual factors relevant to gay men that may help illuminate the associations of gay men falling into each of the above described four categories. In doing so it seems important to represent a range of individual differences and diversity within the gay male community, which is a goal of this study. A vital concept here is that, in spite of the challenges that gay men face in developing a positive gay identity, such an accomplishment is more possible today than ever before in the history of the United

States. Nevertheless, because gay identity development remains a ‘minority process,’ it subsumes further stressors that may impede advancement. Specifically, from a *greater risk perspective* (Keys, 2004), gay men must navigate multiple social and developmental obstacles that have the potential to discourage progress, and further, can result in increased distress and psychological maladjustment. Therefore, aside from the fact that relative to heterosexual adult development (commonly referred to as ‘normal’ adult development), it is important to examine a broad range of issues relevant to gay men’s identity in order to help us better understand the complexity of this process and how the risks for developing a negative identity might be lessened.

### *Minority Stress*

Since gay men inevitably experience social stigma, and identity theory indicates that internalized homophobia is an expected process (Mohr & Fassinger, 2000), perhaps one of the most pertinent theoretical extensions to gay men’s identity development is Meyer’s (1995, 2003) minority stress model. The model posits that “gay people, like members of other minority groups, are subjected to chronic stress related to this stigmatization” (p. 38, Meyer, 1995), and since its inception, has been used to better understand the experiences of the gay male population. He describes several distinct aspects of minority sexuality as sources of stress and documents that greater stress can have far-reaching effects on the lives of gay men. Specifically, he outlines three psychosocial dimensions of gay experience, occurring throughout the developmental process in which lgbt necessarily confront.

Deriving from social stress theory, Meyer's (1995) minority stress model outlines several aspects of minority sexuality that, in a dominant heterosexual context, elicit conflict and distress for gay men. Specifically, Meyer (1995) posits that minority stress is comprised of (1) internalized homophobia, (2) expectations of stigma, and (3) experiences of anti-gay violence. In his original study of 741 gay men, Meyer (1995) found that greater minority stress was significantly associated with a number of mental health outcomes. Specifically, each component of the model significantly predicted greater suicidality, AIDS status, demoralization, and guilt. In addition, internalized homophobia was positively associated with greater sex problems. Finally, the cumulative effect of the three minority stress components significantly predicted gay men's greater mental health distress.

The first construct, internalized homophobia, is a concept that has been researched extensively, and is a rigorous predictor of greater mental health problems in lesbian, gay, and bisexual populations (Herek, 1998; Malyon, 1982; McDonald, 1982; Sophie, 1987). Internalized homophobia is characterized by the conscious and unconscious adoption of the attitudes that sexual minorities are inferior (and even disordered) and therefore do not deserve equal treatment or rights from the larger society (Meyer, 1995). This process is thought to begin very early in development, and can have harmful consequences throughout the lifespan (Cochran, Sullivan, & Mays, 2003; Fergusson, Horwood, Ridder, & Beautrais, 2005). Specifically, in a hetero-centric context, negative messages about minority sexualities are persistent and plentiful (Fassinger, 1991; Williamson, 2000). Indeed, the profundity of internalized homophobia

has brought it to the forefront of gay, lesbian, and bisexual identity development theory and research (Mohr & Fassinger, 2000). Therefore, internalized homophobia (or, homonegativity) is considered by some scholars as a expected, normal component of lesbian, gay and bisexual people coming to terms with their sexual orientation (i.e. identity development) (Fassinger, 1991; Gonsiorek & Rudolph, 1991; Mohr & Fassinger, 2000).

The second construct in this model, perceived stigma, relates to actual stigma experienced and the minority person's consequential hyperawareness of their environment, wherein they expect prejudicial events to occur. For instance, for people with mental illness, the experience of stigmatization is associated with lower self-esteem, problems with employment, and social acceptance (Link, 1987; Link et al., 1987). As stigmatization is experienced, it becomes more broadly expected to continue occurring, perhaps as a way for the stigmatized person to psychologically prepare for potential (or imminent) negative encounters. Meyer (1995) explains that "a high level of perceived stigma would lead minority group member to maintain a high degree of vigilance—expectations of rejection, discrimination, and violence—with regard to the minority components of their identity in interactions with dominant group members" (p. 41). Therefore, it is clear how perceived stigma can increase psychological distress and can relate to one's sense of worth and even one's self-concept.

The third component of Meyer's model is experience of anti-gay prejudice, which he specifically defines as acts of verbal and physical violence toward gay people. Experiences of overt anti-gay rejection or violence has obvious negative consequences

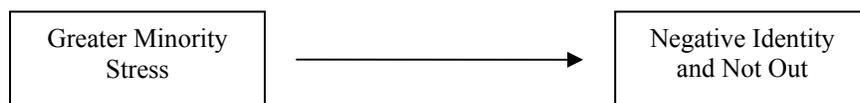
including feeling that the world is not a meaningful and amenable place, and can even cause more serious psychiatric problems such as post-traumatic stress disorder (Garnets, Herek, & Levy, 1990; Meyer, 1995).

Meyer's (1995; 2003) minority stress model has been empirically supported by explaining a number of health outcomes including suicidality, depression, anxiety, substance abuse, and body image problems (Cochran & Mays, 1994; D'Augelli & Hershberger, 1993; Diaz et al., 2001; Hamilton & Mahalik, 2009; Herek et al., 1999; Kimmel & Mahalik, 2005; Meyer, 1995; Waldo, 1999). More recently, the utility of the minority stress model has been expanded to understand issues such as the experiences of parenthood and child adjustment (Bos, Van Balen, & Van Den Boom, 2004), and the quality of same-sex relationships (Otis et al., 2006). Bos, Van Balen, & Van Den Boom (2004) found that minority stress in lesbian mothers was significantly related to their experiences of parenthood. Specifically, the authors documented that lesbian mothers with more experiences of anti-gay prejudice also experienced more parental stress. Furthermore, greater internalized homophobia and expectations of stigma was associated with more frequent defensiveness with regard to their roles as mothers. In another study by Otis et al. (2006), the minority stress model was found to significantly predict same-sex relationship quality. That is, higher levels of internalized homophobia and experiences of discrimination were found to be related to more negative perceptions of relationship quality.

With regard to gay men's identity development processes, based upon the previous research documenting how societal stigma, and actual experiences of violence

plays a role in greater mental health problems (Garnets, Herek, & Levy, 1990; Herek & Garnets, 2007), it is suggested that stigma and anti-gay attack might also relate to a more negative gay identity. Indeed, Troiden (1988) asserts that “nearly all models view homosexual identity development as taking place against a backdrop of stigma. The stigma surrounding homosexuality affects both the formation and expression of homosexual identities” (p. 48).

Minority stress is also associated with gay men’s disclosure or concealment of their sexual orientation. According to Meyer (2003), greater levels of minority stress may be related to gay men being more secretive about their sexual orientation. In support of this, Moradi et al., (2010) found that gay men with high levels of internalized homophobia were less likely to be out. Therefore, it is hypothesized that gay men with higher levels of minority stress (perceived stigma and experiences of anti-gay violence) will be less out and have a more negative gay identity



### *Gender and Masculinity*

Another powerful constraining force that affects gay men is their experience of socialization into masculine roles. Gender is a complex phenomenon generally described as having to do with the socio-cultural and psychological characteristics associated with one’s biological sex (Gilbert & Scher, 1999). Theories of gender socialization derive from psychoanalytic, cognitive-developmental, and social learning frameworks and posit

that the biological sex of an individual is associated with a multitude of expectations, assumptions, as well as implicit and explicit education in the direction of the individual regarding the dos and don'ts of gender behavior. From a social learning perspective, gender role socialization rewards males to adopt interests, attitudes and behaviors that are associated with traditional masculinity, and conversely punishes divergence (Mahalik, 2003). This includes a wide range of issues from menial factors such as preferring the color blue to pink to more critical issues such as adopting a heterosexual identity. These developmental expectations associated with one's biological sex are embedded in the fabric of society and exist on conscious and unconscious levels. They are culturally bound and can be found at all levels of a social order from macro or institutional levels down to individual/interpersonal levels. Indeed, many scholars posit that each underlying theory of gender socialization has merit and contribute in the process of individuals enacting and internalizing gender attributes. Gilbert and Scher (1999) integrate multiple points of view in their description of how the power of gender norms exist on several levels of language and interpersonal exchange, and carry with it assumptions of difference between men and women so much so that they provide an organizing structure to society.

As the process of gender socialization advances, the formation of a *gender identity* evolves. One's gender identity is generally characterized as the experience of feeling like a man or a woman; its close cousin, a corresponding *gender role*, is the degree to which one adopts behaviors and attitudes associated with one's gender (Gilbert & Scher, 1999). For instance, a biological male who adopts and prefers the dominant role

in a relationship would be regarded as gender identity / gender role congruent since his attitude and behavior are in agreement. Gender role conflict arises when these conditions are not in sync, and a considerable body of research demonstrates that gender role conflict is associated with a number of negative outcomes including reduced intimacy (Sharpe & Heppner, 1991), lower self-esteem (Cournoyer & Mahalik, 1995), and psychological distress including hostility and social discomfort (Hayes & Mahalik, 2000).

In addition to the evidence of risks associated with gender role conflict, a growing body of literature has documented the role of masculinity on men's health behaviors. Specifically, numerous findings suggest that the more men adopt masculine characteristics, they are more likely to engage in risky health practices (Mahalik, Burns, & Syzdek, 2007) consume more alcohol, tobacco, and illicit drugs (Blazina & Watkins, 1996; Liu & Iwamoto, 2007; Mahalik et al., 2003), and engage higher-risk sexual behavior (Mahalik et al., 2006; Pleck, Sonenstein, & Ku, 1994). Similar findings have been confirmed in the gay male population; for instance, in a sample of 315 gay men, Hamilton and Mahalik (2009) found a significant positive association between masculinity, alcohol use, and high-risk sexual behavior; furthermore, this study found that greater conformity to masculine norms predicted greater overall greater health-risk behavior (Hamilton & Mahalik, 2009).

### *Gay Men and Masculinity*

As previously discussed, gay men are equally subjected to the gender socialization process; yet, relative to heterosexual male counterparts, gay men are faced with the conflict between their minority sexual orientation and the notions of traditional

masculinity (Kimmel & Mahalik, 2005). Indeed, research has found that traditional masculinity is defined by its strong association to heterosexuality and a disapproving stance regarding homosexuality (Mahalik, 2003). Herek (1986) writes, “to be a man in contemporary American society is to be homophobic – that is, to be hostile toward homosexual persons in general and gay men in particular” (p. 563). Accordingly, research has found that gay men are at greater risk for gender role conflict (Sanchez et al., 2010).

In response to the intrinsic conflict between hegemonic masculinity and homosexuality, the gay male community has sought alternative ways to define themselves as men and hence alternative masculinities (Connell, 1992; Nardi, 2000). Yet, as Connell (1992) notes, “a specific masculinity is not constituted in isolation, but in relation to other masculinities and to femininities.” As such, the history of masculinity in the gay male community since as early as the 1970’s contains a rich array of contesting and redefining masculinity. In particular, the birth of subcultures created a space for which gay men could perform the most radical limits of masculinity and femininity. For instance, in the ‘leather’ subculture, men were depicted as extremely muscular and in hyper-masculine garb conveying stoic expressions. These ‘scenes’ with the gay community continue today along with a plethora of others (e.g. bears, g0ys, etc.), many of which share the foundational value of staunch masculinity. That is, in spite of the gay male community’s effort to redefine the notion of masculinity, against the backdrop of institutional and cultural hegemonic masculinity, anti-effeminacy attitudes persist among gay men (Taywaditep, 2001).

Masculinity is also associated with gay men's feelings about themselves. Sanchez, et al., (2010) found that gay men who reported to be more masculine, had more masculine ideals, and preferred a masculine partner had more negative sexual identities. Szymanski and Carr (2008) investigated the impact of internalized homophobia and gender role conflict on self-esteem and psychological distress in a sample of 210 gay and bisexual men. They found that greater gender role conflict was directly associated (and indirectly through greater internalized homophobia) with gay men adopting more negative feelings about themselves as sexual minorities. This in turn was found to relate to greater overall psychological distress.

Clearly, considerable evidence exists suggesting that gay men's constructions of themselves as men relates to their sexual identity. Therefore, a positive gay identity is, to a large extent, in opposition to a traditional masculine identity and for this reason, another purpose of this study is to examine whether gay men's conformity to masculine norms might predict the quality of their gay identity and degree to which they are out. Results here are expected to support previous findings that men who conform to traditional masculine norms are less out and harbor more negative feelings about themselves (Sanchez, 2005; Sanchez et al., 2010). Thus, greater conformity to masculine norms is hypothesized to predict a negative gay identity status and less disclosure of sexual orientation.



### *Childhood Gender Behavior*

Referring back to Meyer's (1995) theoretical frame in which minority stress processes can exist from multiple contexts-- aside from gay men's unique conflict with regard to adult masculinity, gay men are also more likely than heterosexual men to have histories of gender nonconformity in childhood (Dawood, et al., 2000; Zucker et al., 2006). That is, gender role behavior in childhood has specifically been linked to sexual orientation in adulthood, with children who have gender atypical characteristics more likely to be homosexual in adulthood. For instance, in a study by Rieger and his colleagues (2008), childhood home videos of heterosexuals and homosexuals were compared and rated on gender conformity. Results found that the homosexual group demonstrated significantly more opposite-sex play and behavior than the heterosexual group, furthermore, these findings were consistent with the groups' self-report of their behavior were significantly more likely to be homosexuals as adults. This study also examined the association between gender nonconformity and peer rejection and found that nonconformity was positively related to rejection (Rieger et al., 2008).

Therefore, gender nonconformity in childhood may be considered a unique developmental path and this section of chapter 2 will present the research on this subject, particularly as it relates to issues around adult sexual identity development. Specifically, gay men with histories of gender nonconformity in childhood may proceed through the gay identity development process differently than gay men who possessed more traditional boy characteristics. However, the specific association between childhood

gender nonconformity and gay men's identity development and outness is largely unknown, which is a primary reason for assessing its role in this study.

Examining childhood gender behavior necessitates a developmental perspective, and the basis of the 'biological sex-versus-gender' debate frequently ignites arguments of nature versus nurture (Bailey & Zucker, 1995; Lippa, 2005). Thus far in this chapter we have examined the notion of adult masculinity from a gender socialization perspective, and this line of reasoning also helps us understand children's sense of themselves as gendered beings. Specifically, once the sex of a child is known, a multitude of expectations, assumptions, as well as implicit and explicit teaching are immediately carried out by caregivers and others (Eagly & Steffen, 1984). As previously discussed, gender norms are replete in society, and arguably, institutionalized (Bem, 1993). Given the gender hierarchy in society (Connell, 1992), with men possessing the most power, boys are at more risk for being socially coerced into the mold of conventional manliness (i.e. who wouldn't claim and assert power that is handed to them?).

Nevertheless, while research has shown that gender socialization is a powerful force in shaping one's gender, genetic factors also have considerable influence on one's gender-role behavior (Collaer & Hines, 1995; van Beijsterveldt, Hudziak, & Boomsma, 2006). Research dedicated to atypical gender development has found many neuropsychological correlates of gender-variance in childhood suggesting a biological basis for gender behavior (Kruijver et al., 2000; Zhou et al., 1995). Indeed, many scholars maintain that gender expression is more a product of genetics than socialization or choice (Coolidge, et al., 2002; Reed, 2006).

Regardless of the degree to which gender behavior is a product of genetics or environmental factors, research shows that the gender traits and behavior found in early childhood are fairly reliable to persist into adulthood (Dawood, et al., 2000). That is, non-conforming children by and large maintain some degree of non-conforming traits and characteristics as adults. Considerable research has been dedicated to better understanding gender nonconformity in childhood as it pertains to the Diagnostic and Statistical Manual's Gender Identity Disorder (Zucker et al., 2006), even though this condition is considered "rare." Specifically, most boys adopt gender traits and behaviors associated with being male, and furthermore, most boys who later identify as gay have typical gender behavior for their sex (Taywaditep, 2001). Additionally, boys who assume traditionally feminine characteristics in childhood are more likely to maintain these traits into adulthood (Bailey & Zucker, 1995; Rieger, Linsenmeier, Gygax, & Bailey, 2008; Savin-Williams, 2005).

Gender nonconformity in childhood increases the risk for a host of psychological and social adjustment problems leading to developmental setbacks (Beard & Bakeman, 2000; Landolt et al., 2004; Strong, Singh, & Randall, 2000), distress (Skidmore et al., 2006) and increased suicidality (Ploderi & Fartacek, 2009) later in life. For instance, Beard and Bakeman (2000) found an association between childhood gender nonconformity, "imposterhood," and low self esteem in a sample of 109 gay and bisexual men, asserting negative parental reactions to place gay men are at greater risk for narcissistic damage in adulthood. They posit that parents "indirectly communicate to these boys that their behavior is somehow bad or even shameful. As a result, these boys

may learn to view themselves, at least in part, as shameful or unworthy of love. This may engender in them low self esteem, a sense of emotional inauthenticity, and a tendency to move through the world feeling like impostors who, if found out, would be rejected by those who profess to care about them” (p. 93).

Further evidence of the negative consequences of nonconformity in childhood comes from a study by Ploderi and Fartacek (2009) in which they compared adult heterosexual and homosexual samples with regard to current/past suicidality and gender nonconformity in childhood. Results revealed that gender nonconformity in childhood was significantly more associated with current suicidality in the homosexual group. The authors suggest that for gay, lesbian, and bisexual adults, gender nonconformity in childhood has an “enduring effect” on the mental health of LGB folks (Ploderi & Fartacek, 2009). Similar findings between childhood gender nonconformity and suicide risk have been documented with gay adolescents (Remafedi, 1999).

Still other researchers hypothesize that gender nonconformity in childhood (for most children) yields chronic stigmatization that is thereby internalized and associated with their identity. Friedman and Downey (1999), posit that this process is a probable explanation for greater internalized homophobia and “self-condemnation” later in life (p. 327). Skidmore et al. (2006) examined the association between gender nonconformity and found that greater child and adult gender nonconformity was associated with greater psychological distress, but only for gay; the same association was not found with lesbian women. The non-significant finding associating childhood gender nonconformity with adult psychological distress with lesbians concurs with other research demonstrating that

gender nonconformity in girls is not associated with the severity of consequence relative to boys (Bailey & Zucker, 1995; Harry, 1993). In fact, research has identified that in some ways, girls' adoption of masculine characteristics can be beneficial (Thornton & Leo, 1992; Wong, Kettlewell, & Sproule, 1985).

Clearly, the above described research demonstrates considerable evidence that gender nonconformity in childhood is a risk factor for gay men's wellbeing later in life. Yet, far less is known about how gender nonconformity in childhood may relate to gay men's identity development. One study by Bogaert and Hafer (2009) examined the role of gender nonconformity in childhood as it relates to the timing of gay men coming out. In their study they examined (amongst other variables), whether gender nonconformity in childhood might explain the timing of gay and bisexual men's coming out. They found that childhood gender behavior was unrelated to the timing of gay men coming out, and it should be noted that this study did not measure levels of outness, but rather, simply asked participants whether they were out or not. Further results of this study indicated that a novel interaction between gender nonconformity and belief in a just world. Specifically, they reported that for gay and bisexual men with greater gender nonconformity in childhood, a higher belief in a just world predicted earlier outness. The authors posit that "belief in a just world might buffer the threat of victimization for gay and bisexual men, particularly if the level of effeminate childhood behavior is high" (p. 2006). Aside from this study, no other empirical research has examined childhood gender behavior as a predictor of gay men's identity status or outness.

Given the previously described literature documenting the problems associated with gender nonconformity in childhood, it is suggested that high levels of gender nonconformity may also explain gay men’s general feelings about themselves (their identity status as a sexual minority) in addition to relating to the degree to which men are out. First, it is hypothesized that men with greater gender nonconformity in childhood will have significantly more negative gay identities. Regarding outness, there are a couple of possibilities about how greater gender nonconformity might relate to gay men’s outness in adulthood. On one hand, gay men with histories of gender nonconformity may be less inclined (or able) to conform to masculine norms in adulthood, and therefore are more likely to fit the stereotype for gay men. In turn, due their atypical characteristics, they may feel pressure to come out. Alternatively, as Bogaert and Hafer (2009) suggest, gay men with histories of gender nonconformity “might have a strong fear that feminine behavior—and being out as a gay or bisexual man generally—leads to negative social consequences, leading them to delay coming out (perhaps avoiding it altogether)” (p. 1997). Therefore, in summation, gay men with greater gender nonconformity in childhood are hypothesized to have more negative gay identities and an exploratory analysis will examine how gender nonconformity in childhood might relate to their outness.



### *Social Support*

Gay men's identity processes are also likely influenced by the degree to which they feel supported by others. Therefore, a fourth factor that may affect how positively gay men feel about themselves and disclose their sexual orientation to others is their level of social support. Research has shown that across diverse contexts and people, social support is strongly associated with physical and mental health (Uchino, 2004; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Indeed, lack of social support is related to numerous mental health problems including depression (Stice, Ragan, & Randall, 2004; Peirce, et al., 2000), substance use (Peirce, et al., 2000; Wills & Cleary, 1996), as well as several physiological problems (Cohen & Syme, 1985; House, Landis, & Umberson, 1988; King, Reis, Porter, & Norsen, 1993; Uchino, Cacioppo, & Kiecolt-Glaser, 1996).

One of the most prominent theories underlying the profound associations between social support and physical and mental health is the buffering hypothesis (Cohen & Wills, 1985). In their seminal review of social support research, Cohen and Wills (1985) concluded that social support can have benefits through two mechanisms, direct benefits exclusive of stress, and by acting as a buffer in the face of stress. The social support buffering hypothesis is essentially the notion that for individuals experiencing stress, social support acts as a protective device that counters the potential damage of the stress. Vincke and Bolton (1996) aptly summarize: "the main socio-psychological function of social support consists of providing individuals with regular positive experiences and a set of stable, socially rewarding roles in the community" (p. 108).

Therefore, from a minority stress perspective, social support may play an important role in gay men's positive identity formation. Specifically, as gay men embark on their sexual identity development process, having others' general support and acceptance may facilitate progression, or alternatively, gay men who have a deficient support network (or are otherwise rejected because of their sexual orientation) may be increasingly concealed and unchanging with regard to their identity. In an early study of correlates of lesbian and gay men's social support, Kurdek (1988) examined sources of support and how they related to various dimensions of relationship quality and psychological adjustment. They found that for both gay men and lesbians, greatest sources of social support were primarily from friends, second, from a significant other, and although family was the third most significant source, it only accounted for 13.5% of their total support (p. 507). Social support was also found to be positively associated with psychological adjustment.

Given the evidence of social support relating to positive mental health outcomes in both the general population and in lesbian, gay, and bisexual communities, it is not surprising that the association between social support and sexual identity formation has also been empirically documented in the literature. For instance, in a study of 156 adolescents, Wright and Perry (2006) found that greater quantities of social support reduced psychological and sexual identity distress. More specifically, the authors found a significant association between negative affect regarding sexual orientation and mental health problems, and that greater openness to members of participants' social support network decreased the likelihood of sexual identity distress (Wright & Perry, 2006).

In another study, Detrie and Lease (2007) examined the effects of social support on the psychological well-being of lesbian, gay, and bisexual youth. In a sample of 218 youth, the authors examined the role of family and friends social support on six dimensions of psychological well-being from the Ryff (1989) Psychological Well-Being Instrument. These included self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Results revealed that for all six dimensions of well-being, family and friends' support was significantly and positively related. Furthermore, it was discovered that for younger lgb participants (under age 18), support from family was more critical, and that for youth, support from friends explained greater variance in psychological well-being (Detrie & Lease, 2007).

Other research specifically examining the role of social support among sexual minority young adults has documented similar findings. Doty et al. (2010) found in a sample aged 18-21, support from family and friends was a significant buffer against distress not related to sexual orientation issues. However, support from other sexual minority friends was most significantly associated with helping participants with issues concerning their sexuality. Altogether, the greater levels of support concerning sexuality predicted lower levels of emotional distress and specifically buffered the effects of sexuality stress on emotional distress (Doty et al., 2010). Finally, Needham and Austin (2010) compared the role of parental support in heterosexual and lgb young adults finding that differences in parental support partially explained greater health risk behaviors including drug and alcohol use and increased psychiatric symptomology including depressive symptoms, and risk for suicide. Gay men's lower levels of parental

support (compared to heterosexual counterparts), was specifically found to explain their greater degree of suicidality.

Research supports this notion, linking gay men's identity development to social support, which includes family acceptance (Elizur & Ziv, 2001), and friends' support (Elizur & Mintzer, 2001). In one study by Elizur and Ziv (2001) the association between gay identity development and family support and acceptance was investigated in a sample of 114 gay Israeli men. The authors found support for path models that specifically determined that greater support influenced gay men's identity process and testing of the bidirectionality of these variables proved insignificant. In another study of Israeli gay men, Elizur and Mintzer (2001) examined the role of family and friends' support in relation to their self-acceptance as sexual minorities, attachment style, and overall outness. Results showed that support of both family and friends' was significantly associated with greater outness and specifically that friends' support predicted gay men's secure attachment style. The variation in results between identity and disclosure factors lends support for McCarn and Fassinger's (1996) multidimensional model of assessing gay identity development processes. Elizur and Mintzer (2001) note that such an approach is "a flexible alternative to stage models" specifically given their findings that determinants of outness and attachment style were simultaneously shared and distinct (p. 143).

The positive association between social support and outness has been empirically documented in a few other studies; however, rather than examining the effect of social support on outness, some researchers have examined how increased disclosure can

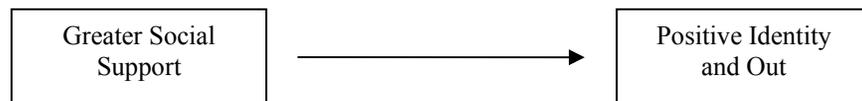
improve social support (Farberman, 2003; Jordan & Deluty, 2000). Specifically, it may be the case that greater social support facilitates more disclosure of sexual orientation, or, as men come out to others, the quality and quantity of social support may increase. For instance, in a sample of self-identified lesbians, Jordan and Deluty (2000) found that lesbians with less concealment reported greater satisfaction in personal relationships and social support. Additionally, Farberman (2003) described a far-reaching study by Ruth Fassinger and her colleagues who examined data from a nation-wide sample of 1770 lesbian and gay men. Results indicated that participants' outness was significantly associated with "their use of and satisfaction with social support" (Farberman, 2003, p. 43).

In summation, the above research suggests that although for younger men, support from family may play a crucial role in their identity formation processes (Detric & Lease, 2007), as gay men age, support from friends and a significant other also plays a critical role in their continued development as gay men (Kurdek, 1988).

Therefore, given the documented evidence, it is suggested that support from friends, family, and a significant other may likely operate as buffers from the social stigma of coming out and adopting a gay identity. Specifically, given that previous research has documented the relationship between social support and gay identity, it is hypothesized that greater social support will be related to a more positive gay identity. However, the relationship between gay men's outness and social support is more complicated in that outness and social support may influence one another. Gay men who have greater social support may have more opportunity to disclose their sexual

orientation; and conversely, men who embark on the coming out process often find support through the gay community (LeBeau & Jellison, 2009). Therefore, the relationship between social support and outness is likely bidirectional (Jordan & Deluty, 1998).

In an effort to examine broad dimensions of social support, the present study will examine the quality of gay men's social support from family, friends, and a significant other in contributing to their gay identity status and degree of disclosure. Specifically, in spite of research demonstrating the importance of social support emanating from the gay community, the aim of this study to recruit and represent closeted gay men precludes this evaluation.



### *Socioeconomic Status*

Meyer (2003) and other scholars' ongoing research on minority-related stress has grown this body of literature by identifying additional contextual dimensions that may play a role in the prevalence of mental health problems in lesbian, gay, and bisexual populations (Kertzner, 2007). Meyer (2003) explains that "minority stress is situated within general environmental circumstances, which may include advantages and disadvantages related to factors such as socioeconomic status" (p. 678). Therefore, a lower socioeconomic background may be considered an added disadvantage for gay men and may thereby be associated with their identity development and outness.

Research has documented that in the general population socioeconomic status is significantly related to well-being (Adler, Marmot, McEwen, & Steward, 1999), and mortality/morbidity (Gallo & Matthews, 2003; Kaplan & Keil, 1993); however, for lesbian, gay, and bisexual (lgb) people, this relationship is far less understood (Appleby, 2001; Mallon, 2001). Research comparing heterosexual to lgb populations with regard to education and income are inadequate; however, in 2008 Egan, Edelman, and Sherrill published a series of lesbian, gay, and bisexual statistics deriving from a nationwide survey of demographics. They enlisted a private company known for their capability of conducting “nationally representative” sampling via random digit dialing (via the internet) and were able to secure a relatively current and representative sample of the lgb population in the United States today (p. 3). This report revealed that although lgb people are, on average, more educated than the general population (33.7% versus 26.7% with Bachelor’s degrees or higher), gay men earn approximately 32% less than their heterosexual counterparts. These findings concur with other research documenting that gay men experience more discrimination in the workplace, with 68% of lgbt individuals reporting some form of employment discrimination (APA, 2011).

The few studies explicitly examining the experience of working-class and/or poor gay men have been qualitative. Appleby (2001) carried out an ethnographic study of gay and bisexual working-class men in the United States in which he interviewed 39 gay and bisexual men regarding a number of challenging social obstacles including discrimination and classism. A host of important themes emerged from the interviews including issues around employment and low wages, poor education and training before entering the

world of work, doubts about the judicial system being fair to gay men, distrust of the mental health system, bias from religious organizations which they found discriminatory and had a middle-class partiality, and lastly, issues with social role functioning including family roles, interpersonal roles, occupational roles, and other roles such as being a patient (to a doctor), or other scenarios in which they would be vulnerable and needing assistance. Appleby (2001) suggests that “in each of these domains, working-class people and gay men, if known, are likely to experience some discrimination because of social class bias, homophobia, heterosexism and heterocentrism” (p. 52).

In another study by Mallon (2001), the experiences of working-class gay men in Toronto Canada were explored. The author poignantly described his motivation for conducting his research:

As a working class gay man growing up in New York City, I have grappled with the recognition that there has been a strong component of social class in my own life which has been a distinctive feature in coming out as a gay male. The buffed men in New York’s Chelsea, the intellectual elite who attended gay soirées; the pretty boys dancing the night away in New York’s clubs, all seemed foreign to me (p. 104).

In this study, Mallon (2001) defined ‘class’ as a social construction “with no basis as a biological or genetic concept. It is a product of lived and material experience, ideology, prejudice, privilege, and power” (p. 104), and suggests that Canada is not dissimilar to the social structure of the United States in that those who have power, maintain it. In his research, he conducted open-ended interviews with the goal of better understanding the lived experience of gay men who are not middle or upper-middle class. Using grounded theory to understand his interview data, several themes emerged,

specifically, he summarized the central themes as, “the issue of appearance, the role of work, coming out to families, and attitudes and participation in the Toronto gay political/social scene” (p. 103). Specifically, the working class gay men in this study described unique challenges navigating their coming out process and formation of their gay identities due not feeling as though the ‘mainstream’ gay community embraced them as working-class men.

Chapple, Kippax, and Smith (1998) explored the notion of a “gay identity” with respect to socioeconomic class, positing that the “very essentialized notion of gayness in terms of core identity is the result of a political strategy... and it may well yet prove to emanate from a privileged class position” (p. 68). In their study, they interviewed homosexually active men aged 41 to 59 with the purpose of exploring the association between social class and interventions to affect behavioral change with regard to safe sex. They found that for the men interviewed, socioeconomic class was a significant factor mediating gay men’s pathway to the gay community. Therefore, rather than presuming that all homosexual men have equal opportunity to adopt a gay identity, it is hypothesized that power to embrace such a label is embedded in a larger political force-- primarily secured for the middle to upper classes. The authors conclude by asserting that “what can be explored is the interaction between the ‘contextual seduction of the gay movement’ and the self-construction by homosexually active persons themselves” (p. 68). This is an important argument, specifically, it is suggested that homosexually active men may not construct their identity as ‘gay,’ and if they do, it may offer significantly different meaning for them.

From a sociological perspective, other scholars have postulated that the vast majority of the gay community has been developed by, and primarily serves the middle class (Barrett & Pollack, 2005); therefore, poor and working class gay men may not have full access to the gay community. Barrett and Pollack (2005) found that gay men in lower social classes were less likely to identify as gay, socialize within the gay community (e.g. events, parties, gay social groups), or have a male primary partner.

Based upon the above described research, there is some evidence that the disadvantage associated with a lower socioeconomic status plays a role in gay men's identity development. However, the relationship between socioeconomic status and gay men's specific degree of outness has been examined even less, and therefore little has been documented on this topic. Interestingly, and contrary to theory and research on the consequences of socioeconomic disadvantage, one study by Harry (1993) found that gay men were more out at lower income levels. However, the data used in this study was collected in the late 1970's, and therefore may reflect the socio-political climate of gay-identification at that time (i.e. fringe and controversial). However, no other known studies have been conducted examining how socioeconomic status might affect gay men's disclosure or concealment of their sexual orientation. For the present study, given the advantages of education and wealth, it is hypothesized that gay men in higher socioeconomic echelons will have developed a more positive gay identity. However, results regarding outness are less certain, it might be hypothesized that the power of socioeconomic advantage might also allow for gay men to be more out, however,

previous research (albeit dated) shows otherwise. Therefore, the analysis examining the relationship between socioeconomic status and outness will be exploratory in nature.

### *Interactions*

In addition to the hypothesized main effects of the five predictor variables on gay men's outness and identity status, this study will examine two-way interaction effects to determine whether some of these factors may act as moderators in predicting gay men's outness and identity status. The following section will describe the hypothesized interaction effects and present hypotheses. The broad conceptualization of the interaction effects in this study is that the coupling of disadvantaged statuses may have a greater effect than the sum of their individual effects (Meyer, 2010). For instance, a gay man with a history of gender nonconformity in childhood who is from a low socioeconomic background faces compound challenges that may produce a synergistic effect on his identity status and/or outness. Another possible scenario concerning the interactions involves the buffering hypothesis (Cohen & Wills, 1985), particularly with regard to gay men's social support. For instance, the relationship between minority stress and negative identity might depend upon gay men's level of social support. Nevertheless the relationships between predictors are potentially more complex in that they may have reciprocal effects on one another. For example, gay men who adopt greater characteristics of masculinity might be more self-reliant and therefore may push potential sources of support away. Reduced social relations may in turn amplify gay men's adoption of more masculine characteristics as a way to feel more positively about themselves.

Although the above examples offer logical outcomes of how these variables may operate, it should also be noted that there are a number of interactions here in which the conceptualization is not as straightforward. Nevertheless, these will be strictly exploratory in nature in an effort to better understand the complexity of gay men's experience.

As previously noted, research has documented that minority stress can have a significant toll on the lives of gay men (Cochran & Mays, 1994; D'Augelli & Hershberger, 1993; Diaz et al., 2001; Hamilton & Mahalik, 2009; Herek et al., 1999; Kimmel & Mahalik, 2005; Meyer, 1995; Waldo, 1999); therefore, the first set of interaction effects will examine how (1) childhood gender behavior, (2) social support, and (3) socioeconomic status may moderate the relationship between minority stress and gay men's identity status and outness.

First, childhood gender behavior may moderate the relationship between minority stress and gay men's identity/outness in that men with histories of gender variance in childhood may deal with societal stigma and attack differently than men who were gender conforming in childhood. In fact, for men who experienced stigma and attack growing up (non-conforming boys) may be more likely to have found ways of coping with such experiences in adulthood, whereas men who were gender-conforming in childhood may be more novice in dealing with these problems, and therefore, it may have more negative consequences with regard to their identity and compel them to remain closeted. Another possibility is that nonconformity in childhood may have grown gay men's awareness of stigma and the potential for violence such that it instilled a sense of

the world as being unsafe and rejecting. Therefore, these men may possess a heightened sense of risk and their greater perceptions of stigma may stagnate their identity processes including their level of disclosure.

As previously described, research has shown that social support is a significant predictor of various aspects of psychological health and wellbeing (Uchino, 2004; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Therefore, social support may interact with minority stress in that it may buffer the negative influence associated with internalized homophobia, stigma, and experiences of attack and allow gay men to develop more positive identities. Furthermore, social support for some gay men may encourage greater connection with the gay community (or their social support may stem from the gay community), this in turn may significantly defend against the fear associated with minority stress and ultimately increase gay men's level of outness.

Finally, socioeconomic status is hypothesized to moderate the relationship between minority stress and identity/outness. Specifically, the impact of minority stress on gay men's identity and outness might depend upon their socioeconomic standing in that minority stress may have a much more significant impact on gay men in lower socioeconomic positions. Therefore, it may be the case that gay men from lower socioeconomic positions who experience high degrees of minority stress will be significantly less out and report more negative gay identities.

The next set of interactions will examine (1) minority stress, (2) social support, (3) socioeconomic status, and (4) childhood gender behavior as moderators of the relationship between gay men's conformity to masculine norms and their identity status

and outness. First, it is hypothesized that minority stress may moderate the relationship between masculinity and identity/outness. For instance, the degree to which traditionally masculine men are out may depend upon their perceptions of stigma and experiences of attack; high degrees of minority stress may exacerbate fears of not being seen as masculine, producing emotional strain and result in less disclosure of sexual orientation. Another possibility is that minority stress may have a greater effect on men who are not traditionally masculine. Specifically, perceptions of stigma and experiences of attack may have a greater impact on men who are more affect-oriented thereby playing a greater role in their identity development processes.

Few studies have been published that explicitly examine how social support and conformity to masculine norms interact with one another. Reevy and Maslach (2001) found that gender characteristics determined patterns of social support use and that participants (from both sexes) who held more masculine characteristics were less likely to seek and receive emotional support. This concurs with Mahalik's (2003) model of masculinity in which emotional control and self-reliance are principle factors. Although these notions have not been tested on a sample of gay men, it is nevertheless expected that men who report high conformity to masculine ideals will also have less social support and that together these will explain more negative feelings about being gay. In turn, it would be expected that these men would also be less out. On the other hand, should gay men with high conformity to masculine norms differ from straight men in their emotional control and self-reliance, and are able to seek and receive social support, it is possible that social support may have the power to sustain a positive gay identity.

That is, it may be that the self-validation intrinsic to social support can bolster gay men's identity in spite of the conflict between a traditional masculine identity and a gay identity. The degree to which outness would also increase in these circumstances will be exploratory. However, it may be that greater social support resides from the gay community and therefore, it could be that these men will be more out.

Regarding masculinity and socioeconomic status, one study found that in the gay male population, compared with their white-collar counterparts, men from blue-collar backgrounds were more likely to abandon traditional masculinity (Harry, 1985). In another study, the same author found that gay men in lower socioeconomic classes were more out than their middle and upper-class counterparts (Harry, 1993). It should be noted that these studies are dated (the latter study utilized data from 1978), and given the considerable sociopolitical changes that have occurred in the last 25 years, these results may no longer hold true. Specifically, more recent theory regarding social class posits that it is the middle and upper-middle classes that are responsible for the growth of the gay community (Chapple, Kippax, & Smith, 1998), and consequently, it possesses cultural norms consistent with middle-class values. Therefore, it may be that the direction of the relationship between socioeconomic status and outness has reversed. Specifically, it may be that the relationship between masculinity and outness will be much stronger for gay men from lower socioeconomic backgrounds.

Regarding the interaction between socioeconomic status and masculinity on identity, two possibilities exist. First, the interaction hypothesized above may also hold true for identity; that is, gay men who show greater conformity to masculine norms and

who fall into a lower socioeconomic position will have a significantly more negative identity. Alternatively, it may be that gay men with who are in higher socioeconomic strata may be able to develop positive gay identities regardless of their conformity to masculinity norms. That is, access to the resources associated with wealth and education may allow men who strongly conform to masculine norms to develop positive feelings about themselves as gay men as well as providing them with coping strategies regarding the latent conflict between being a man and being gay.

Finally, with regard to childhood gender behavior, as previously discussed, research has shown that gender behavior is fairly consistent from childhood to adulthood (Bailey & Zucker, 1995; Rieger, Linsenmeier, Gygax, & Bailey, 2008; Savin-Williams, 2005). For instance, Lippa (2008) found that gay men who reported gender nonconformity in childhood reported less adulthood masculinity and were much more likely to have less traditionally-masculine occupations. It seems to reason that adherence to masculine norms in adulthood will depend upon one's childhood gender behavior and that gay men with histories of gender nonconformity will be more likely to conform less to masculine norms in adulthood and be more likely to be out and have positive identities.

No empirical studies have explored the interacting effect of socioeconomic status and social support on gay men's identity and outness. Nevertheless, given the previous research in these areas, it is hypothesized that lower levels of each will have a synergistic effect on both identity status and outness. Gay men in lower socioeconomic statuses who also have low social support will be less out and have more negative identities.

The final two interactions involve childhood gender behavior which is a subject matter that has gained much attention in the literature (Lippa, 2008; Ploderl & Fartacek, 2009; Rieger et al., 2008; Zucker et al., 2006). More specifically, although most children show nonconforming behavior at some period during their childhood, when it becomes long-standing, parents often develop apprehension and in turn become involved with health care professionals (Zucker et al., 2006). Consequently, research has explored issues such as the relationship between gender-variant children and adult homosexuality (Bailey & Zucker, 1995), suicidality (Ploderl & Fartacek, 2009), as well as gender-variance in childhood as it relates to transgenderism and Gender Identity Disorder (Zucker et al., 2006). Therefore, it is possible that the experience of gender nonconformity in childhood is different for men from lower socioeconomic backgrounds than for men from higher social classes. While both groups of men may have experienced the consequences of violating gender norms, men from higher socioeconomic positions may have been able to access the resources necessary to support their lives and bolster their identities. In a study by Shinn and O'Brien (2008), expectations and cultural norms were found to vary across social classes by way of parental communication styles to children, and specifically, traditional masculine ideals were suggested to be promulgated more strongly in poor and working class families. The authors concluded that "parents convey implicit information about gender and social status to children through everyday interactions" (p. 61) and noted that the associated anxiety non-conforming gay men was significantly worse than for women. The expectations and cultural norms across social strata vary, and given that traditional

masculine ideals are thought to be promulgated more strongly in lower and working class families, therefore, men with histories of gender nonconformity in childhood and who are from lower socioeconomic statuses may be more likely to have more difficulty forming positive gay identities and coming out.

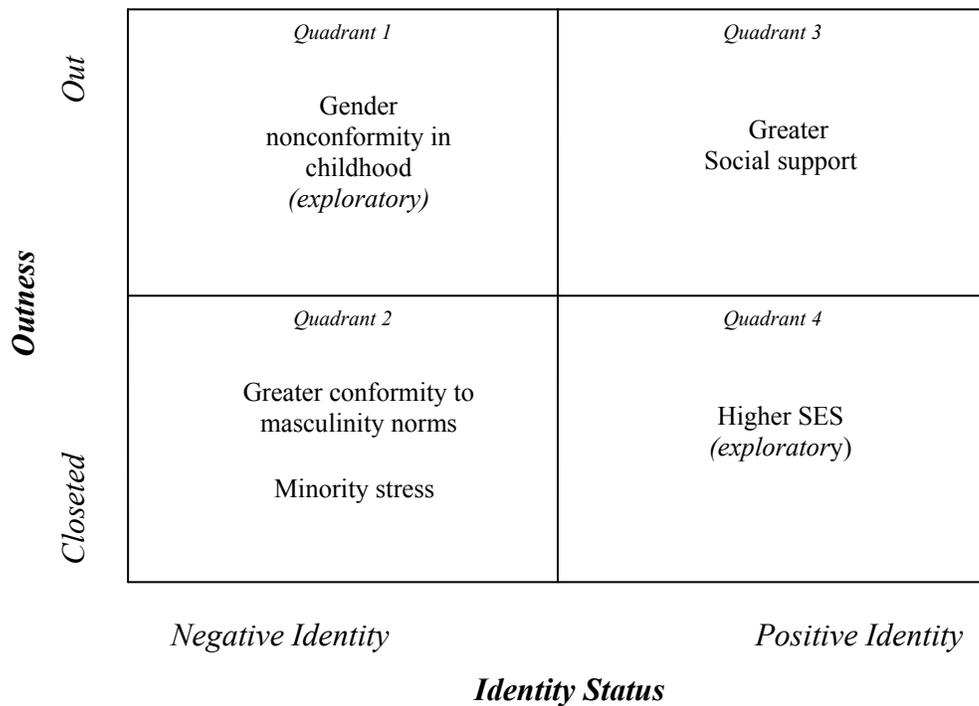
Finally, social support is hypothesized to moderate the relationship between and childhood gender behavior and gay men's identity status and outness by acting as a buffer against the negative consequence of violating gender norms. Specifically, greater social support for men with histories of gender nonconformity may result in a significantly more positive identity and/or outness. Therefore, it may be that the relationship between gender nonconformity and gay men's identity status/outness is dependent upon their degree of social support.

#### *Summary and purpose of this study*

One of the primary purposes of this study is to better understand the contextual overlay associated with gay men's identity formation and coming out process, and more specifically, if predictions of identity and outness can be made based upon various socio-contextual and individual conditions (Harry, 1993). Cass' (1979) and other leading developmental models of gay identity formation (Coleman, 1982; Troiden 1989) have focused on quadrants 2 and 3 (see Figure 1 below), and have in effect overlooked the experiences of gay men that fall into the remaining two quadrants. A fundamental critique of the stage models draws most attention to quadrant 4 by proposing that gay men can develop positive gay identities without necessarily being out. Consequently, newer theoretical models of gay identity development (Elizur & Mintzer, 2001; Fassinger

& Miller, 1996; Harry, 1993; McCarn & Fassinger, 1996; Mohr & Fassinger, 2003) suggest that coming out is not necessarily synonymous with identity formation, but rather, occurs based upon circumstances allowing for that process to unfold. This is an important theoretical shift and proposes that identity formation and coming out are potentially distinct processes for some gay men, yet, virtually no research to date has examined these hypotheses. Therefore, following the work of McCarn and Fassinger (1996) and Fassinger and Miller (1996), this study will expand upon Meyer's (1995; 2003) minority stress model by examining the influence of masculinity, childhood gender behavior, social support, and socioeconomic status to determine if these predictors can differentiate gay men on four designated outcomes of gay men's identity status and outness: (1) Out/Negative Identity, (2) Not Out/Negative Identity, (3) Out/Positive Identity, (4) Not Out/Positive Identity (see Figure 1). Specifically, from a *greater stress* perspective, this study will evaluate several unique (minority-related) and general sources of stress to determine their individual and cumulative effect on gay men's identity development and outness.

Figure 1. Hypothesized main effects of predictor variables on gay men's outness/identity



*Summary of hypotheses*

Hypothesis 1: Gay men with higher levels of minority stress (perceptions of stigma and experiences of anti-gay attack), and who report greater conformity to masculine norms, greater gender-variance in childhood, have less social support, and are in lower socioeconomic positions will predict more negative gay identities.

Hypothesis 2: Gay men with higher levels of minority stress (perceptions of stigma and experiences of anti-gay attack), conform more to masculine norms, had less gender-

variance in childhood, are in lower socioeconomic positions, and have less social support will each significantly predict less outness.

*Moderators of Minority Stress and Gay Men's Identity Status and Outness*

Hypothesis 3: Childhood gender behavior will moderate the relationships between minority stress and outness, and between minority stress and identity status. That is, the strength of the relationship between minority stress and identity/outness will be weaker for men with histories of greater gender-variance in childhood.

Hypothesis 4: Social support will moderate the relationships between minority stress and identity status, and between minority stress and outness. Greater social support is expected to buffer the negative impact of minority stress, with the effect of men being more out and having more positive identities.

Hypothesis 5: Socioeconomic status will moderate the relationships between minority stress and outness, and between minority stress and identity status. Gay men from lower socioeconomic echelons will be significantly more affected by minority stress and will be significantly less out and report more negative gay identities.

*Moderators of Masculinity and Gay Men's Identity Status and Outness*

Hypothesis 6: Minority stress will moderate the relationships between masculinity and outness, and between masculinity and identity status. Specifically, greater minority stress will strengthen the relationship between masculinity on outness (more closeted) and identity status (more negative).

Hypothesis 7: Social support will moderate the relationships between masculinity and outness, and between masculinity and identity status. Specifically, gay men with greater

social support will serve as a protective factor against the negative effect of conforming to masculine norms on gay identity and outness.

Hypothesis 8: SES will moderate the relationships between masculinity and outness, and between masculinity and identity status. Lower SES will significantly affect the impact of conforming to masculine norms on outness (more closeted) and identity (more negative).

Hypothesis 9: Childhood gender behavior will moderate the relationships between masculinity and outness, and between masculinity and identity status. Greater gender conformity in childhood will demonstrate a stronger affect between adult masculinity and outness (more closeted) as well as between adult masculinity and identity status (more negative).

*Moderators of Child Gender Behavior and Gay Men's Identity Status and Outness*

Hypothesis 10: Social support will moderate the relationships between childhood gender behavior and outness, and between childhood gender behavior and identity status. It is expected that greater social support will significantly increase outness and improve identity status in men with greater gender-variance in childhood.

Hypothesis 11: SES will moderate the relationships between childhood gender behavior and outness, as well as between childhood gender behavior and identity status.

Specifically, men in lower SES categories with greater gender-variant behavior in childhood will be significantly less out and have more negative identities.

*Moderator of Socioeconomic Status and Gay Men's Identity Status and Outness*

Hypothesis 12: Social support will moderate the relationships between SES and outness, and between SES and identity status. Specifically, greater social support will have a more significant impact on gay men from lower SES strata, and will predict them to be more out and have more positive identities.

*Main effect hypotheses examining predictors of gay men falling into one of four categories: (1) Out/Negative Identity, (2) Not Out/Negative Identity, (3) Out/Positive Identity, (4) Not Out/Positive Identity*

Hypothesis 13: Men with greater gender nonconformity in childhood will be significantly more likely to be out and have a negative gay identity (quadrant 1).

Hypothesis 14: Greater conformity to masculine norms will predict men to be significantly more likely to be closeted and have a negative gay identity (quadrant 2).

Hypothesis 15: Greater minority stress will predict men to be more likely to be closeted and have a negative gay identity (quadrant 2).

Hypothesis 16: Greater social support will predict men to be significantly more likely to be out and have a positive gay identity (quadrant 3).

Hypothesis 17: An exploratory analysis will examine if higher socioeconomic status will significantly predict men to be closeted and have a positive gay identity (quadrant 4).

## Chapter 3: Method

### *Participants*

Participants were 518 men whose mean age was 45.17 years old ( $SD = 14.97$ ). Nearly 20% identified as a racial or ethnic minority ( $n = 102$ ) with the following breakdown: Asian or Asian American ( $n = 41, 7.9\%$ ), Latino or Hispanic ( $n = 26, 5.0\%$ ), Black or African-American ( $n = 5, 1.0\%$ ), American Indian or Alaska Native ( $n = 5, 1.0\%$ ), Bi or Multi-racial ( $n = 14, 2.7\%$ ), Native Hawaiian or Other Pacific Islander ( $n = 2, 0.4\%$ ), and Other ( $n = 9, 1.7\%$ ). The remainder of the sample identified as White ( $n = 415, 80.1\%$ ). Half of the participants were single ( $n = 259, 50\%$ ); others reported to be partnered in an open relationship ( $n = 47, 9.1\%$ ), partnered in a monogamous relationship ( $n = 112, 21.6\%$ ), or married, domestic partnership, civil union, or ceremonially committed ( $n = 100, 19.3\%$ ). Participants reported their educational level as finishing 7<sup>th</sup> grade or less ( $n = 1, 0.2\%$ ), partial high school ( $n = 3, 0.6\%$ ), a high school diploma or GED ( $n = 85, 16.4\%$ ), some college or an Associate's degree ( $n = 82, 15.8\%$ ), a Bachelor's degree ( $n = 171, 33.0\%$ ), a Master's degree ( $n = 119, 22.9\%$ ), or a Doctoral degree ( $n = 56, 10.8\%$ ). Participants' median income was \$46,000. Finally, given that this was an online survey, it had the potential for reaching participants globally. Therefore, participants were asked to indicate where they were living. Most participants were from the United States ( $n = 436, 84.2\%$ ), as well as the Philippines ( $n = 30, 5.8\%$ ), Canada ( $n = 17, 3.3\%$ ), the United Kingdom ( $n = 12, 2.3\%$ ). The remaining 17 (3.3%) were from The Netherlands ( $n = 3$ ), Australia ( $n = 2$ ), France ( $n = 2$ ), Ireland ( $n = 2$ ), India ( $n = 1$ ), Singapore ( $n = 1$ ), Denmark ( $n = 1$ ), Germany ( $n = 1$ ), Nigeria ( $n = 1$ ), New

Zealand ( $n = 1$ ), Thailand ( $n = 1$ ), and the United Arab Emirates ( $n = 1$ ); six participants did not indicate their location.

### *Measures*

#### *Gay Identity*

Gay men's identity status was assessed using the Lesbian and Gay Identity Scale (LGIS; Mohr & Fassinger, 2000). The LGIS is a 27-item inventory that assesses attitudes and feeling about one's sexual orientation (see Appendix F). Items are answered on a 7-point Likert scale from 1-disagree strongly to 7-agree strongly. The LGIS contains 6 subscales, Internalized Homonegativity, Need for Privacy, Need for Acceptance, Identity Confusion, Difficult Process, and Superiority; additionally, a global subscale of Negative Identity can be calculated by taking the averages of the four subscales Internalized Homonegativity, Need for Privacy, Need for Acceptance, and Difficult Process. Mohr and Fassinger (2000) reported intercorrelations among these subscales ranging from .22 to .44. The present study utilized the four subscales that comprise the Negative Identity Index. The alpha coefficient for the Negative Identity Index was found to be .90 in a recent study (Sanchez, 2005). Cronbach's alpha for the Negative Identity Index in the present study was .90.

#### *Outness*

Participants' out-status was measured with the Outness Inventory (Mohr & Fassinger, 2000), an 11-item measure examining the degree to which one's sexual orientation is known by and openly discussed with people in different spheres of their lives (see Appendix E). A 7-point Likert-type scale is used (1 = "person definitely does

not know about your sexual orientation status," 7 = "person definitely knows about your sexual orientation status and it is openly talked about"). The inventory consists of three indices of outness: Out to Family ( $\alpha = .74$ ), Out to World ( $\alpha = .79$ ), and Out to Religion ( $\alpha = .97$ ). Mohr and Fassinger (2000) reported moderate intercorrelations between these subscales ranging from .36 - .46 and reported evidence of correlations with a measure of same, and 'other' group orientation that ranged from .20 to .37 for gay men. Cronbach's alpha in the present study was .94.

### *Sexual Orientation*

Sexual orientation was measured with the *Kinsey Scale* (Kinsey, 1948). This is an 8 item self-report measure of sexual orientation; it is one of the most widely utilized measures of sexual orientation (Bickford, 2004). Participants are asked to categorize themselves on a continuum from exclusively heterosexual to exclusively homosexual.

### *Minority Stress*

The *Stigma Scale* (Martin & Dean, 1987) is an 11-item survey that assesses expectations of prejudice and discrimination due to one's sexuality (e.g., "Once they know a person is gay, most people will take his opinion less seriously"). The measure is scored using a 6-point Likert scale (1 = *Strongly Disagree* to 6 = *Strongly Agree*). In a community sample of gay men, Martin and Dean (1987) reported alpha to be .86. Higher scores on the Stigma Scale correlate to four forms of psychological distress in gay men: demoralization, guilt, suicidal ideation and behavior, and AIDS related traumatic stress response (Meyer, 1995). Furthermore, the Stigma Scale has also been shown to be

significantly related to the degree of ‘outness’ in gay men (Meyer, 2003). Cronbach’s alpha in the present study was .90.

*Anti-gay Attack* was measured with four items that have been used in previous research examining anti-gay experiences (Kimmel & Mahalik, 2005; Meyer, 1995). The questions ask about physical and verbal attacks experienced the last year and during one’s lifetime. Research documents that experiencing physical and verbal attacks due to perceived sexual orientation is related to demoralization, guilt, suicidal ideation and behavior, and distress from failing to have a muscular body (Kimmel & Mahalik, 2005; Meyer, 1995). Cronbach’s alpha in the present study was .52.

In order to test the hypotheses regarding minority stress, a single *Minority Stress Index* was created from the two minority stress variables. To do this, the Stigma Scale and the Anti-gay Attack measures were standardized by transforming them to z-scores and the mean of these two scores was calculated to represent the total quantity of minority stress experienced. However, in the present study, Cronbach’s alpha for this index was rather low ( $\alpha = .14$ ) signifying that, although both of these variables represent aspects of minority stress, experiences of attack and perceptions of stigma are fundamentally dissimilar constructs. Therefore, it was decided to analyze these variables separately rather than as a single index representing minority stress.

### *Masculinity*

The *Conformity to Masculinity Norms Inventory* (CMNI; Mahalik et al., 2003) is a 94-item questionnaire that assesses conformity to an array of dominant cultural norms of masculinity in the United States (see Appendix I). For all CMNI test items, a four-

point Likert scale is employed with anchor points ranging from *Strongly Disagree* (0) to *Strongly Agree* (3). Higher scores on the CMNI reflect greater conformity to norms of masculinity (Mahalik et al., 2003). According to Mahalik et al. (2003), the CMNI yields eleven factor validated masculinity norms and a Total, composite score. Prior research suggests CMNI scores are associated with social dominance, desire to be more muscular, negative attitudes toward help-seeking, psychological distress, and aggression (Mahalik et al., 2003). Estimates of internal consistency for the CMNI range from .75 to .91 for the eleven masculinity norms with an alpha of .94 for the CMNI Total score.

In the present study the 22-item abbreviated version of the CMNI will be utilized. It uses the two highest loading items for each of the 11 factors from the original CMNI validation study (Mahalik et al., 2003), yielding a Total Masculinity score. The CMNI-22 correlates at .92 with the CMNI Total for the 94 item scale. Cronbach's alpha for the CMNI-22 was .70 in a sample of men with prostate cancer (Burns & Mahalik, 2008). Cronbach's alpha in the present study was .70.

#### *Childhood Gender Behavior*

The *Recalled Childhood Gender Identity / Gender Role Questionnaire* (RCGI; Zucker et al., 2006) consists of 23 items and has two Factors, (1) gender identity/role, and (2) parental identification and closeness (see Appendix K). For the present study, only the first factor was utilized, since the second subscale pertains less to gender behavior. The gender identity/role subscale contains 18 items and asks participants to rate their recalled behaviors before the age of 12 (e.g., "As a child, I had a reputation as a sissy," and "As a child, I would tell others I wanted to be a girl"). Questions are answered on a 5-point

response scale; high scores indicate greater gender nonconformity in childhood and early adolescent femininity, whereas low scores indicate more typical masculinity. Zucker et al. (2006) reported reliability of Factor 1 ( $r = .92$ ) and described support for discriminant validity; specifically, responses between men and women, gay and straight people, and women with congenital adrenal hyperplasia from controls could be differentiated (Zucker et al., 2006). Bogaert and Hafer (2009) reported an alpha coefficient of .89 for this 18-items subscale. Cronbach's alpha in the present study was .74.

### *Social Support*

The *Multidimensional Scale of Perceived Social Support* (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988) is a 12-item self-report measure of perceived social support (see Appendix J). The MSPSS contains three subscales that assess support from: (1) friends, (2) family, and (3) a significant other. Examples of items include "I have friends with whom I can share my joys and sorrows" and "My family really tries to help me." Items are answered on a seven point Likert-type scale ranging from "very strongly disagree" to "very strongly agree." Zimet et al., (1988) reported a Cronbach alpha coefficient of .88 for the entire scale and .91, .87, and .85 for the subscales Significant Other, Family, and Friends, respectively. Furthermore, a test-retest reliability analysis was reported to be .85 for the scale as a whole, and ranged from .72 - .85 for the three subscales. Construct validity was examined by analyzing the relationship between the MSPSS and symptoms of anxiety and depression. As expected, greater perceived social support was inversely related to depression and anxiety subscales of the Hopkins Symptom Checklist (HSCL; Zimet et al., 1988). Further, confirmatory factor analyses

showed strong support for a single factor (global social support) as well as the three factors: Family, Friends, and Significant Other (Clara et al, 2003). The MSPSS has been widely used in research across vastly different populations including cross culturally and internationally (Arkar, Sari, & Fidaner, 2004; Edwards, 2004; Heiman, 2004), with college students (Zimet et al., , 1988), victims of trauma (Yoshioka, Gilbert, & El-Bassel, 2003), and with clinically depressed patients (Clara et al., 2010). Cronbach's alpha in the present study was .92.

#### *Socioeconomic Status*

Socioeconomic status was measured with *The Hollingshead (1975) Index of Social Status* which is comprised of information about one's education and occupation. Specifically, participants are asked their occupational title and are assigned a score from one to nine, with higher scores representing more prestigious vocations (e.g. CEO's, MD's, etc.). Scores are assigned based upon the 1970 census code list of occupations which is included in Hollingshead's (1975) original manuscript. Educational level is also assigned a score from one to seven, with higher scores representing more formal education (seven indicating the obtainment of a graduate degree). Scores are then weighted and summed, yielding a total SES score ranging from 8 to 66. Higher scores indicate a higher social standing. Hollingshead (1975) assessed concurrent validity by examining coded occupational scores against the United States Census of 1970 which yielded correlations ranging from .67 to .78. Furthermore, a correlation with the National Opinion Research Center compared occupational prestige scores and yielded a strong relationship ( $r = .93$ ).

Hollinshead's (1975) measure has been critiqued on numerous grounds (Oakes & Rossi, 2003). First, it is an unpublished manuscript (therefore not peer reviewed), second, it contains an unexplained weighting process with occupational titles weighted more than educational level, and finally, critiques abound for being it being dated with regard to coding occupational titles based upon a list of occupational titles from 1970. Nevertheless, it continues to be one of the most widely utilized measures of socioeconomic status and is correlated with other measures of socioeconomic status (Nakao & Treas, 1992; Blishen, et al., 1987). Furthermore, Cirino et al. (2002) examined reliability of the Hollingshead measure both within (coding occupational titles) and across two other common measures of socioeconomic status and found interrater classification alphas ranging from .86 to .91. Furthermore, intermeasure correlations with Nakao Treas' (1992) *Socioeconomic Index of Occupations* and Blishen, Carrol, and Moore's (1981) *Socioeconomic Index for Occupations in Canada* ranging from .81 to .88 (Cirino et al., 2002). Cronbach's alpha in the present study was .53.

#### *Formula for the Four Criterion Variables*

Mohr and Fassinger (2000) reported mean scores for the following subscales of the Outness Inventory: Out to Religion = 4.78, Out to Family = 5.21, Out to World = 5.07 in their original sample of 414 gay men. Subsequent studies have reported mean scores on the Outness Inventory ranging between 4.22 in a sample of 130 racially diverse gay participants (Moradi et al., 2010) to 5.01 in a community sample of 186 gay men (Balsam & Mohr, 2007). Therefore, although the weighted mean of these outness scores (4.98) could serve as the cut-off reference point between 'out' and 'not out;' however, a score of

5 on the Outness Inventory indicates the “person definitely knows about your sexual orientation, but it is rarely talked about.” Conceptually, this statement suggests more outness than not, and for that reason, a cut-off score of 3 will be used to differentiate between out and not out. A mean rating of 3 indicates that the “person probably knows about your sexual orientation status, but it is never talked about.”

Regarding identity status, Mohr and Fassinger (2000) reported a mean of 2.94 on the Negative Identity Index (NGI) in the original LGIS sample. In another study conducted by Sanchez et al. (2010) revealed a mean NGI of 3.30 in a sample of 622 gay-identified men. The weighted mean of these previous results (3.04) could mark the separation between the categories of negative identity and positive identity; however, this score suggests a slightly more positive than negative identity (4 being neutral and higher scores indicating a more negative identity). Therefore, a mean rating of 4 will be used to differentiate negative from positive identity. Respondents’ scores for each measure will then be categorized in the four outcomes, quadrant 1 = Out/Negative Identity, quadrant 2 = Not Out/Negative Identity, quadrant 3 = Out/Positive Identity, quadrant 4 = Not Out/Positive Identity.

### *Procedure*

Seventy moderated listservs, Usenet groups, discussion forums, and websites intended for gay, lesbian, and bisexual populations were identified (e.g. queer event listings, sports, closeted men, regional groups, etc.) and moderators were asked for permission to contact members. Twenty-nine of these either did not respond or rejected the request to advertise, the remaining forty one approved and posted the message

requesting participation in the research. The message stated that participation was completely voluntary, the purpose of the study, and eligibility criteria (see Appendices A-B). Participants were informed that the purpose of this study is to better understand gay men's identity, and that they would be asked questions about experiences being a man, traditional masculinity, and their childhood. Members of the listservs who were interested in participating clicked on the link in the message which brought them to the informed consent page of the survey site (see Appendix C). Finally, although monetary compensation was not provided, participants were given the opportunity to contact the primary investigator for information regarding issues related to gay men's health, as well as a copy of the final draft of the study's findings.

Nine hundred and fifteen respondents consented to participate. Three hundred ninety seven were eliminated for the following reasons: three identified as a gender other than male, 233 identified as bisexual, and the remaining cases included a considerable amount of data missing. Participants who identified as gay, down low, and unsure/questioning were retained if they answered "exclusively homosexual" or "predominantly homosexual and only incidentally heterosexual" on the Kinsey scale. Duplicate respondents were examined via IP address; six pairs revealed duplicate IP address, however, answers between each pair significantly varied, including basic demographic information. The remaining 518 cases were used to compose the present study.

## Chapter 4: Results

### *Preliminary Analyses*

The means, standard deviations, and inter-correlations of the Outness Inventory (OI), the Lesbian, Gay, & Bisexual Identity Scale (LGBIS), the Conformity to Masculine Norms Inventory (CMNI), the Recalled Childhood Gender Identity/Gender Role Questionnaire (RCGIRQ), the Stigma Scale, the Anti-gay Attack Measure, the Multidimensional Scale of Perceived Social Support (MSPSS), and the Hollingshead Index of Social Status are presented in Table 1.

The following section compares the means and standard deviations of the eight above listed measures with samples from previous research. Regarding the Outness Inventory, in the original study of 414 gay men wherein Mohr and Fassinger (2000) developed this measure, their mean score was 5.14 ( $SD = 1.38$ ) for the Family and World Subscales combined. Their mean score for the Religion subscale was slightly lower at 4.78 ( $SD = 2.42$ ). Subsequent studies have reported mean scores of the Outness Inventory ranging between 4.22 in a sample of 130 racially diverse gay participants (Moradi et al., 2010) to 5.01 in a community sample of 186 gay men (Balsam & Mohr, 2007). The present study's mean Outness Inventory score is within one standard deviation away from each of these previous study's samples.

Next, scores from the Lesbian, Gay, and Bisexual Identity Scale (LGBIS) were compared with the original sample from which the measure was developed. Specifically, Mohr and Fassinger (2000) reported a mean of 2.94 ( $SD = 1.20$ ) on the Negative Identity Index (NII) in their original sample of 414 gay men. In another study conducted by

Sanchez et al. (2010) a mean NII score of 3.30 was reported for a sample of 622 gay-identified men. Again, the present study's mean score on the NII subscale of the LGBIS was within one standard deviation from these previous study's samples.

In a previous study by Kimmel and Mahalik (2005) the mean Stigma Scale score of their sample of 357 gay-identified men was 3.31 ( $SD = .94$ ). In the present study, the sample mean was only marginally less at 3.08 ( $SD = .96$ ). The remaining minority stress variable, the Anti-gay Attack measure has been used in several previous studies (Hamilton & Mahalik, 2009; Kimmel & Mahalik, 2005; Meyer, 1995; Meyer, 2003), however, rather than asking a single question about antigay experiences, this study employed the use of four and calculated the mean of these four questions; no previous studies were located to compare with the present sample.

The Multidimensional Scale of Perceived Social Support (MSPSS) was used in a study by Potoczniak, Aldea, and DeBlaere (2007) who sampled 347 gay and bisexually-identified men; the mean score of the MSPSS was 5.01 ( $SD = 1.15$ ) which was nearly identical with the present study which was 5.02 ( $SD = 1.24$ ). The 22-item version of the Conformity to Masculine Norms Inventory (CMNI) was previously used by Hamilton and Mahalik (2009) with a sample of 315 gay-identified men. The mean for this sample was 48.32 ( $SD = 6.43$ ), remarkably close to the present study's mean score of 48.22 ( $SD = 6.23$ ). Finally, the present study's sample mean of the Recalled Childhood Gender Role / Gender Identity Questionnaire (2.03) fell within one standard deviation away from in Bogaert and Hafer's (2009) sample of 367 gay and bisexual men ( $M = 2.47, SD = .60$ ).

To determine whether there were significant differences between participants from the U.S. and those from other countries, t-tests were performed comparing the scores of these two groups on the six predictor variables (social support, socioeconomic status, childhood gender behavior, masculinity, stigma, and experiences of anti-gay attack) and the two outcome measures, outness and identity. The two groups did not differ on any measures with the exception of the Recalled Childhood Gender Identity/Gender Role/Gender Questionnaire in which the men who identified their residence as outside the US reported significantly more gender variance in childhood. Therefore, given that there were no significant differences on seven of the eight measures, it was determined to retain both foreign and domestic participants.

To determine whether there were significant differences between the final data set and participants who were excluded due to incomplete surveys (most of these participants provided demographic information), t-tests were conducted comparing these two groups across age, educational level, income, and relationship status. Results revealed that the 41 participants who met all the inclusion criteria (i.e. were at least 18 years of age, identified as gay, or described themselves as exclusively homosexual or predominantly homosexual on the Kinsey scale) but discontinued the survey early and were excluded-- were significantly younger ( $M = 39.21$ ,  $SD = 15.46$ ) than participants who completed the survey ( $M = 45.17$ ,  $SD = 14.97$ ). However, comparisons of educational level, income, and relationship status revealed no differences between the groups.

### *Univariate Outliers*

Extreme scores can be indicative of several different issues and should be assessed for their influence on the data and their appropriateness for inclusion in each analysis. Hair et al., (1998) suggest that for sample sizes of 80 or less, standard scores of 2.5 or higher should be deemed outliers; however for large samples such as the present study, these authors recommend a cut-off standard score between 3-4 ( $p = .001$  at 3.67). Univariate outliers were assessed by transforming all of the total or mean scores of each measure in the present study to z scores. Only one score on one measure (the Conformity to Masculine Norms Inventory) exceeded 3.67; however it did not exceed 4.00. Therefore, this case was not removed based upon it being a univariate outlier. Multivariate outliers were assessed with each analysis and will be discussed later in the chapter.

### *Missing Data*

As previously mentioned, cases with more than 5% missing data were not included in this data set. This was the approximate cut-off between essentially completed surveys and cases in which entire inventories were not completed. Regardless of the small percentage of missing data, it was nevertheless examined to determine whether it was ‘missing completely at random’ (MCAR) or missing in a systematically biased fashion. According to Hair, Anderson, Tatham, and Black (1998), Little’s MCAR omnibus test compares “the actual pattern of missing data with what would be expected if the missing data were totally randomly distributed” (p. 60). In this case, Little’s test proved insignificant, thus determining that the missing data was randomly distributed.

Next, approaches to handling the missing data were compared. Participants' subscale means were substituted for the LGIS and the MSPSS. Pearson correlations of these two measures were compared to correlations using the expectation maximization (EM) approach as outlined by Schlomer, Bauman, and Card (2010). Results were identical (again, likely due to such a small percentage of missing data). Therefore, the EM approach was used as recommended by several scholars (Hair et al., 1998; Schlomer et al., 2010). However, missing data for Hollingshead's Index of Social Status was handled differently due to 98 participants not reporting their occupational title. In order to retain these participants in the SES analyses, the mean score of the coded occupational titles were entered.

#### *Introduction to the Main Analyses*

The next sections will be divided up in the following order. First, to test the hypotheses that minority stress, masculinity, childhood gender behavior, social support, and socioeconomic status would significantly relate to gay men's identity status and outness, the results of two main effect hierarchical linear regressions will be presented. Next, in order to examine the predictor variables association to the outness and identity inventory subscales, seven exploratory hierarchical linear regression analyses were conducted wherein the three subscales of the Outness Inventory (Family, Friends, Significant Other) and the four subscales of the Negative Identity Index (Internalized Homonegativity, Difficult Process, Need for Acceptance, Need for Privacy) were entered as the criterion variables. Following this, in order to test the hypotheses of the interaction effects between the six predictor variables predicting gay men's outness and identity

status, I will present findings from the 30 hierarchical regression analyses that tested interaction-effects. Finally, in order to test the hypotheses that minority stress, masculinity, childhood gender behavior, social support, and socioeconomic status would significantly predict gay men to be more likely to have positive out identities versus negative closeted identities, I will outline the results of two binary logistic regression analyses.

### *Selection of Covariates*

*Age.* Age is an important variable to take into account with regard to gay men's identity development and outness. Obviously, both identity development and coming out occur over time, which makes age an expected factor to control for; that is to say, a closeted man at age 20 might be out at age 25. Although this suggests that older men might be more out and have more evolved identities, another rationale for imputing age as a covariate is because of potential cohort effects. A number of previous studies have shown that men from older generations are less out than younger men (Floyd & Bakeman, 2006; Grov et al., 2006; Schope, 2002). Specifically, Schope (2002) found that men born prior to the Stonewall riot of 1969 are significantly less likely to be out. Additionally, Floyd and Bakeman (2006) found that younger gay men were more likely to self-identify as gay and more rapidly proceed through developmental stages of coming out such as disclosing their sexual orientation to parents. Therefore age was entered as a covariate in all linear and logistic regression analyses (with the exception of the interaction analyses).

*Race/Ethnicity.* Research has found some unique variation between gay men of color and white gay men with regard to outness. For instance, in one study by Moradi et al. (2010), white gay men were found to be significantly more out than men of color. However, in the present study a t-test comparing men of color with white men with regard to their outness revealed no significant difference. Nevertheless, there are obvious differences in the experiences of gay men of color and gay white men. Some research has identified specific risks such as greater stigma in communities of color (Lemelle & Battle, 2004), suggesting that gay men of color might have greater levels of internalized homonegativity and therefore more negative gay identities. Nevertheless, research examining these factors has reported mixed findings (Bonilla & Porter, 1990; Lewis, 2003; Schulte, 2002; Waldner, Sikka, & Baig, 1999), prompting several scholars to caution researchers in presupposing differences in gay identity formation between gay men of color and gay white men (Moradi et al., 2010; Parks, 2005). Therefore, as with age, race/ethnicity was added as a covariate in all analyses with the exception of the interaction analyses; men who identified as white were coded 0, and men of color were coded 1.

#### *Preliminary Analyses for Linear Regression*

In order to conduct a linear regression analysis, several underlying assumptions must be evaluated given that violation of these assumptions can cause erroneous and/or biased results. One of these assumptions was assessed prior to conducting analyses and the remaining assumptions will be examined following the analyses via the examination of residuals. The first data-check for conducting a hierarchical linear regression that I

employed was to examine the distributions of each variable which tests the assumption of normality for the general linear model. This was done by examining skewness and kurtosis. These analyses indicated that only one variable did not meet the assumption of a normal distribution: Hollingshead's Index. It was corrected by using procedures described by Tabachnick and Fidell (2001) with the best transformation being the computation of the square root of the score leading skewness to change from -.44 to -.66 and kurtosis from -1.173 to -.89. All of the remaining variables fell within the acceptable range between 1 and -1 indicating that their distributions were by and large normal.

The remaining assumptions for computing a linear regression were assessed following each analysis and for simplicity's sake, will only be discussed if assumptions appear to have been violated, or if outliers and/or influential observations were found and how they were handled. The other assumptions I am referring to include (1) independence of residuals ('errors' are assumed to be unrelated), (2) homoscedasticity, which means that the variance of the residuals are not significantly different across the range of the predictor variables, and (3) independence and normality of errors. Additionally, each analysis was assessed for multicollinearity following the recommendations of Tabachnick and Fidell (2001) by examining Variance Inflation Factors (VIF) and Tolerance values. VIF values that exceed 10 and Tolerance values below .50 are suggested to indicate problematic multicollinearity between the predictor variables. Finally, outliers and influential observations were assessed by examining standardized residuals and Cook's Distance values.

The final preliminary analysis was the calculation of Pearson correlations to examine the global relationships between all of the variables and to test the hypotheses that minority stress, conformity to masculine norms, childhood gender behavior, social support, and socioeconomic status are associated with gay men's outness and sexual identities. Results indicated that greater perceptions of stigma ( $r = .47, p < .001$  2-tail), fewer experiences of anti-gay attack ( $r = -.11, p < .01$  2-tail), greater conformity to masculine norms ( $r = .34, p < .001$  2-tail), and less social support ( $r = -.42, p < .001$  2-tail) were significantly associated with gay men reporting more negative identities. Childhood gender role behavior and socioeconomic status were not found to be significantly related to gay men's identity. Regarding outness, results indicated that less perception of stigma ( $r = -.32, p < .001$  2-tail), more experiences of anti-gay attack ( $r = .33, p < .001$  2-tail), less conformity to masculine norms ( $r = -.25, p < .001$  2-tail), less gender role conformity in childhood ( $r = .10, p < .05$  2-tail), and greater social support ( $r = .39, p < .001$  2-tail) were significantly associated with gay men being more out.

### *Main Analyses*

*Hypothesis 1: Minority stress (perceptions of stigma and experiences of anti-gay attack), conformity to masculine norms, childhood gender behavior, socioeconomic status, and social support will significantly relate to gay men's identity.*

In order to test the first hypothesis, a hierarchical linear regression analyses was conducted. In the first block of the model, age and race/ethnicity were entered as covariates. In the second block, the six predictor variables were entered [perceptions of stigma, experiences of attack, conformity to masculine norms (excluding the distain for

homosexuals subscale due to its high correlation with the internalized homonegativity subscale of the negative identity index), childhood gender behavior, social support, and socioeconomic status]. The Negative Identity Index from the Lesbian, Gay, and Bisexual Identity Scale was entered as the criterion variable; higher scores denote a more negative identity. Results indicated that the model was significant  $F(8, 512) = 30.19, p < .001, R^2 = .32, Adj R^2 = .31$ . Examining the individual beta coefficients revealed that the two covariates (age and race) were not significant in predicting identity status. However, four of the six main predictor variables were significant: variability in social support ( $\beta = -.27, p < .001$ ) and in perceptions of stigma ( $\beta = .36, p < .001$ ) contributed significantly to gay men's identity, in addition to men's conformity to masculine norms which was also significant ( $\beta = .10, p < .01$ ). Lastly, experiences of anti-gay attack was also significant ( $\beta = -.13, p < .001$ ), and it was found that more experiences of verbal and physical anti-gay attack predicted a more positive gay identity. See Table 2.

*Hypothesis 2: Minority stress (perceptions of stigma and experiences of anti-gay attack), conformity to masculine norms, childhood gender behavior, socioeconomic status, and social support will significantly relate to gay men's outness.*

In order to test the second hypothesis, a hierarchical linear regression analyses was conducted. In the first step of the model, age and race/ethnicity were entered as covariates. In the second step, the six predictor variables were entered (perceptions of stigma, experiences of attack, conformity to masculine norms, childhood gender behavior, social support, and socioeconomic status). Outness (excluding the Outness to Religion subscale) was entered as the criterion variable. Results indicated that the overall

model was significant  $F(8, 512) = 29.50, p < .001, R^2 = .32, Adj R^2 = .31$ . However, examining the individual beta coefficients revealed that of the two covariates, age ( $\beta = -.14, p < .001$ ) was significant in predicting outness but race was not. Four of the six main predictor variables were also significant, specifically, variability in social support ( $\beta = .23, p < .001$ ), perceptions of stigma ( $\beta = -.22, p < .001$ ) and conformity to masculine norms ( $\beta = -.14, p < .001$ ) were all significant predictors of gay men's outness. Experiences of anti-gay attack was also significant ( $\beta = .30, p < .001$ ), more experiences of verbal and physical anti-gay attack predicted greater outness. See Table 2.

*Exploratory Correlation Analyses Examining Subscales of the Outness Inventory and Negative Identity Index of the Lesbian, Gay, Bisexual Identity Scale*

The means, standard deviations, and intercorrelations of the Outness Inventory subscales, the Lesbian, Gay, and Bisexual Identity subscales, and the six predictor variables are presented in Table 3. Examining this table reveals a number of statistically significant relationships between the subscales of the criterion variables (outness and identity) and the six predictor variables. Specifically, the Stigma Scale, the Conformity to Masculine Norms Inventory, and the Social Support measure behaved very similarly and consistently across all of the outness and identity subscales. For instance, stigma was significantly related to the Negative Identity Index ( $r = .47, p < .01$ ), and was similarly related to the four individual Negative Identity subscales with coefficients ranging from .34 to .40 (see Table 3). Nevertheless, the remaining three predictor variables (attack, child gender role behavior, and SES) revealed some interesting variation in their relationship to the three outness and four identity subscales. First, anti-gay attack was

significantly related to the global negative identity index ( $r = -.11, p < .01$ ). However, examining the four subscales of this index reveals only two significant findings. Specifically, anti-gay attack was found to be associated with Internalized Homonegativity ( $r = -.12, p < .01$ ), and Need for Privacy ( $r = -.20, p < .001$ ), but not significantly related with the Need for Acceptance or Difficult Process subscales. Next, whereas childhood gender role behavior was found to be significantly related to global outness ( $r = .13, p < .01$ ), subscale findings only showed significant results with the Out to World subscale ( $r = .17, p < .001$ ) and Out to Religion subscale ( $r = .11, p < .05$ ); childhood gender behavior was not related to Outness to Family. This demonstrates that although greater gender-variance in childhood is related to greater outness to friends, co-workers, and new acquaintances, it has no bearing on outness to family. Another new finding regarding childhood gender behavior was its significant association with the Need for Privacy subscale of the LGBIS ( $r = -.10, p < .05$ ). Thus, greater gender variance in childhood is associated with less need for privacy; this corresponds with the finding that greater conformity to masculine norms in adulthood (CMNI) is also associated with greater need for privacy ( $r = .27, p < .001$ ). The final two Outness and Identity subscale intercorrelations that should be noted concern socioeconomic status (SES) which was not found to be significantly related to global Outness or the Negative Identity Index; however, subscale correlations revealed a significant association between SES and the Out to Religion subscale ( $r = .11, p < .01$ ); meaning, as SES increases, the degree to which gay men are out to other church members and religious leaders also increases. Additionally, although SES was unrelated to the Negative Identity Index, one subscale

revealed significance: Need for Acceptance ( $r = -.10, p < .05$ ); therefore, higher SES is associated with less need for acceptance.

#### *Exploratory Analyses of Outness Subscales Regressed on Predictor Variables*

The Outness Inventory (Mohr & Fassinger, 2000) contains three subscales: Out to World, Out to Family, and Out to Religion. Prior to calculating the three parallel regression analyses with these subscales entered as the criterion variables, their distributions were assessed for normality by examining skewness and kurtosis. The Out to Family ( $N = 512$ ) subscale revealed skewness and kurtosis values between -1 and 1 indicating a roughly normal distribution. However, the Out to World ( $N = 512$ ) subscale was found to have a skewness value of -.19 and a kurtosis value of -1.27, which required a transformation. The best transformation was by calculating the base-10 logarithm ( $\log_{10}$ ) which changed skewness to -.85 and kurtosis to -.50. Additionally, the Out to Religion ( $N = 281$ ) subscale revealed a skewness of .35 and a kurtosis of -1.49. Further investigation into this variable revealed a binomial distribution that could not be transformed successfully; therefore, no regression analysis was conducted with this subscale variable.

The results of these two regression analyses follow the same steps as the two previously described hierarchical regression analyses. That is, in the first step of the model, age and race were entered as covariates and in the second step, the six predictor variables were entered (perceptions of stigma, experiences of attack, conformity to masculine norms, childhood gender behavior, social support, and socioeconomic status). When Out to World was entered as the criterion variable, results indicated that the model

was significant  $F(8, 512) = 28.47, p < .001, R^2 = .31, Adj R^2 = .30$ . Examining the individual beta coefficients revealed that of the two covariates, age ( $\beta = -.22, p < .001$ ) was significant in predicting outness but race was not significant. Four of the six main predictor variables were also significant: greater social support ( $\beta = .17, p < .001$ ) and less perception of stigma ( $\beta = -.22, p < .001$ ) significantly predicted greater outness to the world, in addition to less conformity to masculine norms which was also significant ( $\beta = -.19, p < .001$ ). Experiences of anti-gay attack was also significant ( $\beta = .26, p < .001$ ), and revealed that more experiences of verbal and physical anti-gay attack predicted greater outness. See Table 4.

Next, Out to Family was entered as the criterion variable and again, results indicated that the overall model was significant  $F(8, 512) = 18.17, p < .001, R^2 = .22, Adj R^2 = .21$ . Examining the individual beta coefficients revealed four of the six predictor variables were significant, specifically, greater social support ( $\beta = .24, p < .001$ ), less perception of stigma ( $\beta = -.16, p < .001$ ), and less conformity to masculine norms ( $\beta = -.08, p < .05$ ) contributed significantly to gay men's increased outness to their family. In addition, experiences of anti-gay attack was significant ( $\beta = .28, p < .001$ ), and similar to its prediction of Outness to World, greater experiences of attack predicted greater outness to family. See Table 4.

#### *Exploratory Analyses of Negative Identity Index Subscales Regressed on Predictor Variables*

The Negative Identity Index of the Lesbian, Gay, Bisexual Identity Scale (LGBIS), (Mohr & Fassinger, 2000) contains four subscales: Internalized

Homonegativity, Difficult Process, Need for Privacy, and Need for Acceptance. Prior to calculating the four parallel regression analyses with these subscales entered as the criterion variables, their distributions were assessed for normality by examining skewness and kurtosis. All skewness and kurtosis figures were between 1 and -1 indicating generally normal distributions, therefore, no transformations were necessary.

The results of the following four regression analyses followed the same steps as previously described hierarchical regression analyses. That is, in the first step of the model, age and race/ethnicity were entered as covariates and in the second step, the six predictor variables were entered (perceptions of stigma, experiences of attack, conformity to masculine norms, childhood gender behavior, social support, and socioeconomic status). For the first analysis with the Internalized Homonegativity subscale entered as the criterion variable, the CMNI was recalculated excluding the distain for homosexuality subscale due to the high association between internalized homonegativity and the two questions making up this subscale. Results indicated that the overall model was significant  $F(8, 512) = 19.29, p < .001, R^2 = .23, Adj R^2 = .22$ . Again, four of the six individual beta coefficients were significant. Specifically, less social support ( $\beta = -.26, p < .001$ ) greater perceptions of stigma ( $\beta = .24, p < .001$ ), and greater conformity to masculine norms ( $\beta = .14, p < .001$ ) significantly contributed to gay men's internalized homonegativity. Additionally, experiences of anti-gay attack was significant ( $\beta = -.13, p < .001$ ), indicating that more experiences of verbal and physical anti-gay attack predicted less internalized homonegativity. See Table 5.

Next, the Difficult Process subscale was entered as the criterion variable. Results indicated that the model was significant  $F(6, 504) = 22.11, p < .001, R^2 = .22, Adj R^2 = .20$ . Examining the individual beta coefficients revealed that three main predictor variables were significant. These included social support ( $\beta = -.18, p < .001$ ), perceptions of stigma ( $\beta = .33, p < .001$ ), and conformity to masculine norms ( $\beta = .10, p < .05$ ), all of which contributed significantly to gay men's 'difficult process' identifying as gay.

Next, the Need for Privacy subscale was entered as the criterion variable. Results indicated that the model was significant  $F(6, 504) = 22.63, p < .001, R^2 = .24, Adj R^2 = .23$ . In this analysis both covariates were significant; variability in age ( $\beta = .10, p < .05$ ), and race/ethnicity ( $\beta = .10, p < .05$ ) significantly contributed to gay men's need for privacy. Specifically, an increase in age predicted a greater need for privacy. Regarding race/ethnicity, gay men of color showed a significantly greater need for privacy than gay white men. Additionally, four main predictor variables were significant: greater social support predicted a decreased need for privacy ( $\beta = -.14, p < .001$ ); as perceptions of stigma increased, gay men's need for privacy also increased ( $\beta = .26, p < .001$ ), and greater conformity to masculine norms predicted a greater need for privacy ( $\beta = .18, p < .001$ ). Finally, an increase in experiences of anti-gay attack significantly predicted gay men's less need for privacy ( $\beta = -.18, p < .001$ ).

Lastly, the Need for Acceptance subscale was entered as the criterion variable. Results indicated that the overall model was significant  $F(6, 504) = 29.05, p < .001, R^2 = .27, Adj R^2 = .25$ . Examining the individual beta coefficients revealed that four main predictor variables were significant: greater social support predicted a decreased need for

acceptance ( $\beta = -.23, p < .001$ ); as perceptions of stigma increased, gay men's need for acceptance also increased ( $\beta = .29, p < .001$ ), and greater conformity to masculine norms predicted a greater need for acceptance ( $\beta = .16, p < .001$ ). Finally, greater gender non-conformity in childhood significantly predicted greater need for acceptance ( $\beta = .11, p < .01$ ). See Table 5.

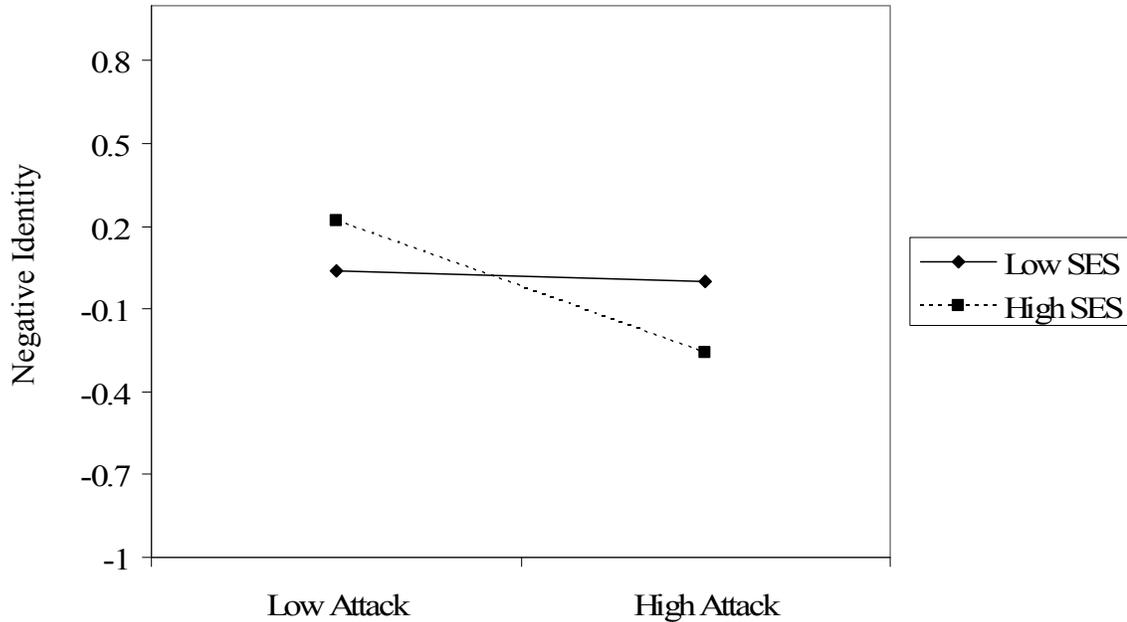
#### *Interaction Analyses Predicting Outness and Negative Identity*

To test the interaction effects of minority stress, masculinity, childhood gender behavior, social support, and socioeconomic status upon gay men's outness, 30 parallel hierarchical regression analyses were performed (15 with Outness as the criterion variable and 15 with Negative Identity as the criterion variable) following Frazier et al.'s (2004) recommendations for testing moderating effects. First, all variables were standardized by converting them to z-scores. Next, product terms were created for the two-way interactions (e.g., stigma X masculinity, attack X social support, masculinity X SES, etc.) and served as predictor variables (Frazier et al., 2004). For each hierarchical regression analysis, the two associated variables were entered in the first step of the model, and their product term was entered in the second step. Results from these thirty interaction models revealed two significant interactions that are presented below.

*Hypothesis 5: Socioeconomic status will moderate the relationship between minority stress (in this case, anti-gay attack) and identity status.* The first interaction effect that revealed significance was attack X SES predicting negative identity,  $F(3, 517) = 4.14, p < .01, R^2 = .03, Adj R^2 = .02$ . Examining the coefficients revealed that SES did not significantly contribute to the model ( $\beta = -.02, p > .05$ ); however, experiences of

attack ( $\beta = -.12, p < .01$ ) and the interaction term, attack X SES ( $\beta = -.10, p < .05$ ) were both significant. See Table 7. Again, as recommended by Frazier et al. (2004), interpretation of the significant two-way attack X SES interaction effect was accomplished by plotting the unstandardized predicted values for Negative Identity against attack for participants scoring one standard deviation above and one standard deviation below the SES sample mean. See Figure 1. In the interaction, the regression slopes show that the relationship between gay men's experiences of anti-gay attack and their identity was contingent upon their socioeconomic status. The slope for men in the high SES group was significantly steeper than the slope for men in the low SES group. Specifically, the relationship between attack and negative identity was significantly weaker for gay men in the lower SES category.

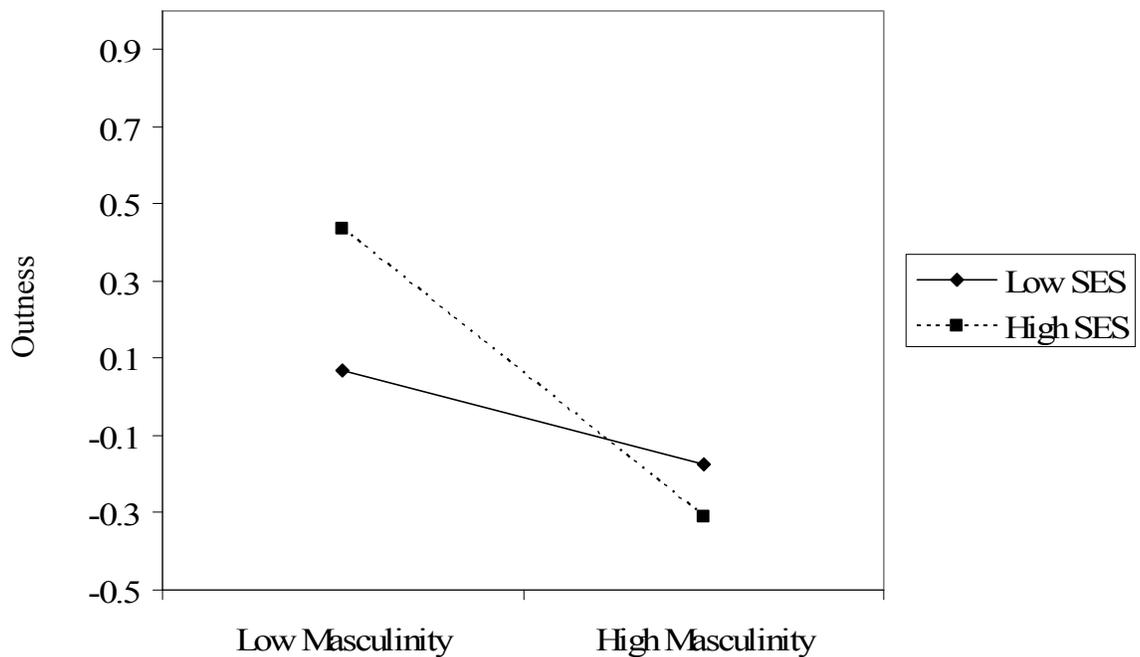
Figure 1. Interaction of experiences of anti-gay attack and SES predicting negative identity.



*Hypothesis 8: Socioeconomic status will moderate the relationship between masculinity and outness.* The second significant interaction was found between masculinity and socioeconomic status predicting outness in which the final step of the model (the interaction term) was significant ( $\Delta R^2 = .01, p < .05, \beta = -.12, p < .01$ , see Table 6). Next, as recommended by Frazier et al. (2004), interpretation of the significant two-way masculinity X socioeconomic status interaction effect was achieved by plotting the unstandardized predicted values for Outness against masculinity for participants scoring one standard deviation above and one standard deviation below the SES sample mean. In the interaction, the regression slope for gay men in the high SES group was

significantly steeper than the slope for men in the low SES group. Specifically, the relationship between masculinity and outness was stronger for gay men in the higher SES category. Stated differently, the relationship between gay men’s conformity to masculine norms and their outness was contingent upon their socioeconomic status. See Figure 2.

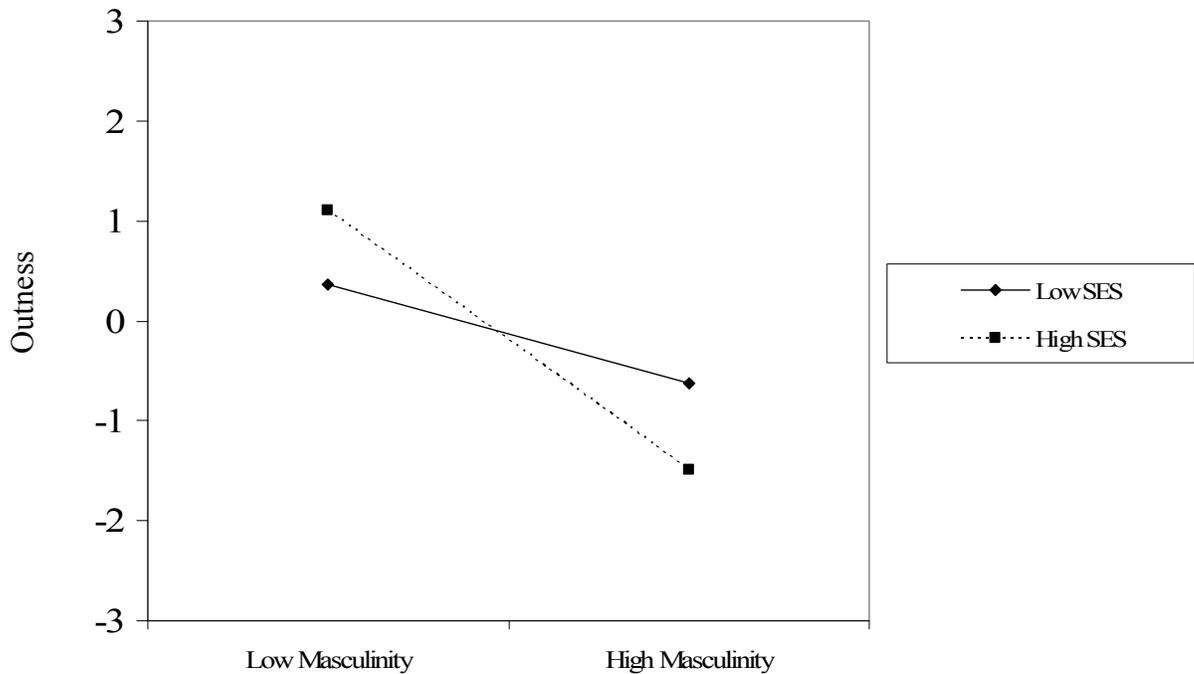
Figure 2. Interaction of masculinity and SES predicting outness.



Given that the Hollinshead measure was found have 98 missing occupational titles, and that for participants who provided their occupational title, a considerable number were ambiguous (e.g. “Associate,” “Management,” etc.), I had cause for concern regarding the validity of this measure and thus the two significant interaction findings involving SES. Therefore, I sought to take a closer examination of these findings and

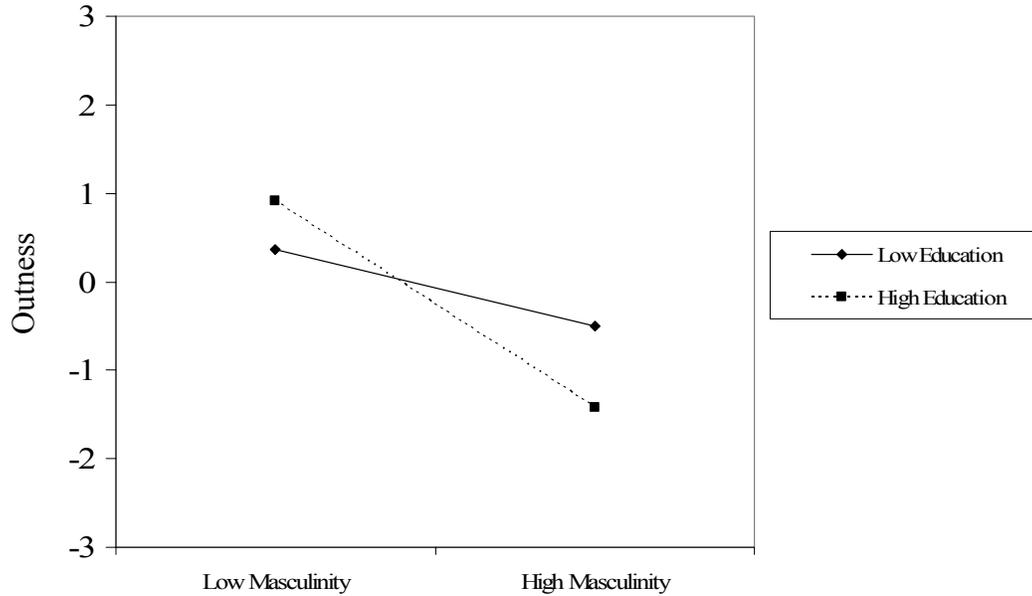
conducted a few additional analyses to examine the validity of these results. First, the analyses were re-run without the cases in which occupational titles were missing ( $N = 419$ ). In the first analysis, masculinity X SES predicting outness, the final model was significant:  $F(3, 419) = 13.91, p < .001, R^2 = .09, Adj R^2 = .09$  with the interaction term exceeding the .01 probability level ( $\beta = -.12, p < .01$ ), see Figure 3.

Figure 3. Exploratory interaction of masculinity and SES predicting outness.



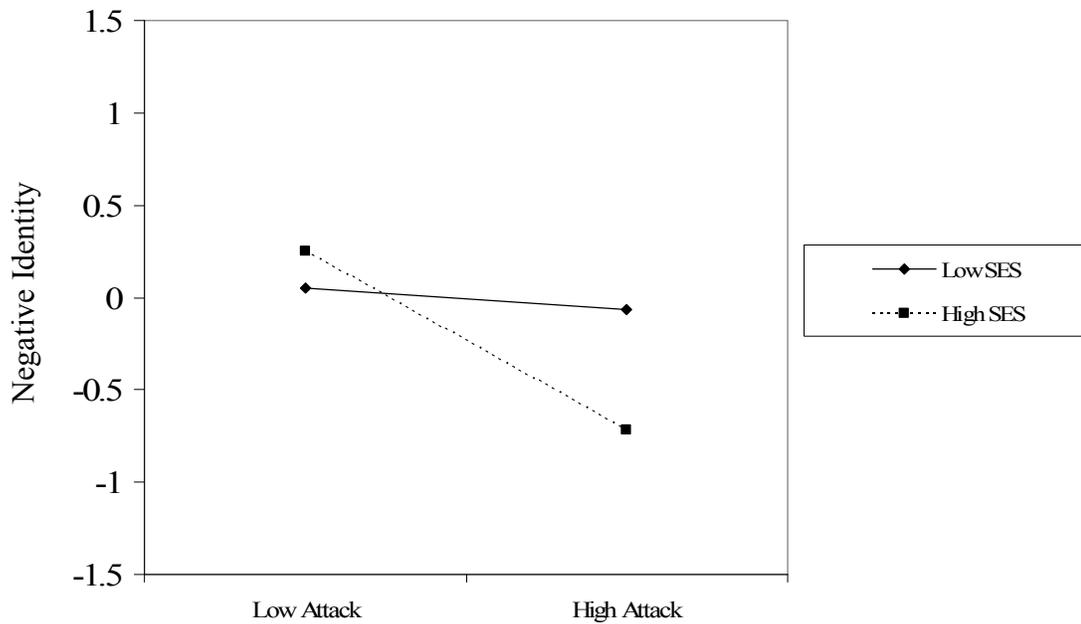
A second analysis was conducted in which educational status (which was answered by nearly all participants) was utilized as an alternative proxy for SES. Again, the findings were similar and the final model,  $F(3, 516) = 13.94, p < .001, R^2 = .08, Adj R^2 = .07$  with the interaction term ( $\beta = -.10, p < .05$ ) was significant. See Figure 4.

Figure 4. Exploratory interaction of masculinity and education predicting outness.



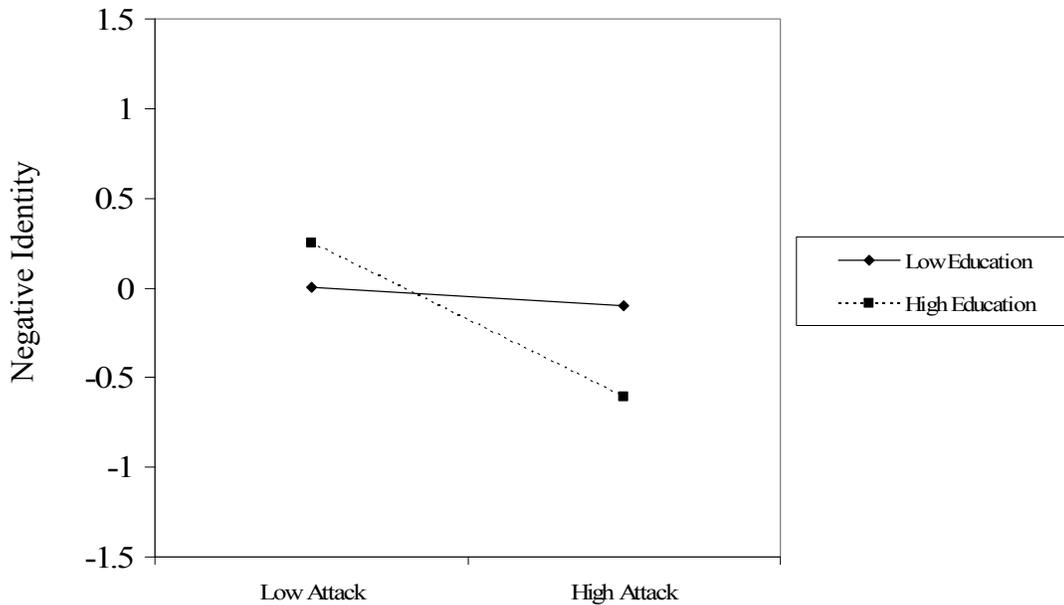
In a similar way, the significant finding of attack X SES predicting negative identity was more closely examined by conducting two additional analyses. As described above, first, analyses were re-run without the cases in which occupational titles were missing ( $N = 419$ ). Results indicated that the model  $F(3, 419) = 3.84, p < .01, R^2 = .03, Adj R^2 = .02$  and the interaction term ( $\beta = -.10, p < .05$ ) were significant (see Figure 5).

Figure 5. Exploratory interaction of experiences of anti-gay attack and SES predicting negative identity.



Finally, an additional analysis was conducted in which educational status completed stood as a substitute for SES. Again, the findings were similar and the final model,  $F(3, 516) = 3.81, p < .01, R^2 = .02, Adj R^2 = .02$  with the interaction term ( $\beta = -.09, p < .05$ ) was significant (See Figure 6).

Figure 6. Exploratory interaction of experiences of anti-gay attack and education predicting negative identity.



### *Logistic Regression Analyses*

First, allow me to say a few words about logistic regression. A logistic regression analysis (whether binomial or multinomial) allows the researcher to enter blocks of variables similarly to hierarchical regression. For example, one might first enter a block of demographic variables followed by predictor variables and finally interaction terms. A Wald statistical test is then used to examine the significance of each predictor. Odds ratios are also calculated which facilitate interpretation of each relationship with the outcome categories, and offer additional ways of describing the meaning of the beta coefficients for each predictor variable. Specifically, odds ratios can reveal how likely

membership in an outcome group is for each unit increase of a predictor variable, and can be converted to a probability of membership in a group (Menard, 2002).

Before I review the remaining hypotheses that were tested with a binary logistic regression, an explanation of my process in formulating the group membership of the outcome variables will be presented. Essentially, the final hypotheses suggested that variation in the six predictor variables (stigma, anti-gay attack, masculinity, childhood gender behavior, social support, and socioeconomic status) would separately predict gay men to be more likely to fall into one of the following four categories: (1) Out/Negative Identity, (2) Not Out/Negative Identity, (3) Out/Positive Identity, and (4) Not Out/Positive Identity. This hypothesis was to be tested utilizing a multinomial logistic regression analysis. However, this could not be accomplished, and the process by which this was determined, as well as the alternative resolution for conducting these analyses is detailed below.

First, four outcome categories were calculated using one standard deviation away from the mean of the LGBIS Negative Identity Index and the Outness Inventory (total of Out to World and Out to Family subscales only). However, this calculation revealed only two quadrants of cases, out/positive and closeted/negative which respectively contained 50 and 47 participants. No cases fell into the out/negative or closeted/positive categories. The ratio of predictor variables to cases was 12 to 1 (96 valid cases and 8 predictor variables); however, the preferred ratio of cases to predictors is 20 to 1 (Menard, 2001). Therefore, as an alternative, a half standard deviation was examined which produced only 11 cases in the closeted/positive group and only 9 cases in the out/negative group, both

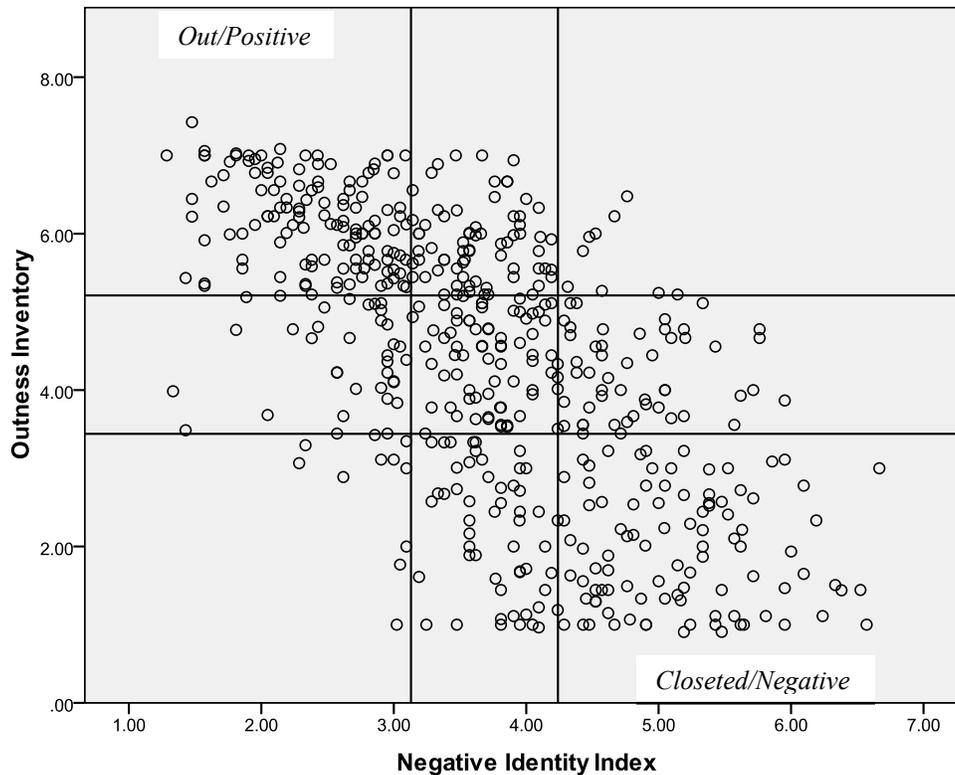
far below the acceptable standard for each quadrant. However, 125 cases fell in the out/positive group and 95 in the closeted/negative group, a ratio of 27 to 1 (see Figure 7). Therefore, the model using a half standard deviation was used in the final binary logistic regression analysis which compared the out/positive group to the closeted/negative group. Specifically, rather than testing membership in four groups, these analyses tested membership in two groups. The group defined as being out and having a positive identity was coded as 1 and the group defined as having a negative identity and being closeted was coded 0.

It should be noted that the cut-off scores for creating the Out/Positive and Closeted/Negative groups were also examined from a practical standpoint in order to explore the face validity of their construction. Specifically, regarding the out/positive identity group, a half standard deviation above the mean score of the Outness Inventory (5.21), indicates that these participants have reported, *at minimum*, that family, friends and work peers (on average) “definitely” know about their sexual orientation to the extent that it is talked about between “rarely” and “sometimes.” Further, the mean Outness score of this group, 6.19 ( $SD = 0.56$ ), reveals that, on average, their sexual orientation is talked about between “sometimes” and “openly” (Mohr & Fassinger, 2000). This is important because it indicates that this group has not only disclosed their sexual orientation, but is able to discuss it somewhat unreservedly as opposed to being obligated to keep it private. Simultaneously, regarding the assigned “positive identity,” a half standard deviation below the mean (since higher scores indicate a more negative identity) fell at 3.14, indicating that on the scale from 1 to 7, *at minimum*, participants were closer

to “strongly disagreeing” with the negative statements about being a gay man, and in fact, the mean identity score of this group was approximately a half a point lower at 2.41 ( $SD = 0.47$ ). Regarding the closeted/negative identity group, the mean outness score was 1.92 ( $SD = .73$ ), indicating that on average, friends, family and work peers either definitely do not know about participants’ sexual orientation or, at most, *might* know, but it is *never* discussed. This group’s mean Negative Identity score was 5.17 ( $SD = .60$ ) which leaned much closer to strongly agreeing with inventory’s negative statements about being gay. Altogether, from a practical standpoint, the decision to generate the two groups appears to hold face validity.

Next, influential observations and outliers were determined by examining Cook’s Distance and standardized residuals, respectively. No cases revealed Cook’s Distance values over one indicating that no cases were demonstrating extreme influence warranting further examination. However, seven cases revealed extreme standardized residuals (greater than 3.0), and according to Menard (2002), residuals greater than 3 or less than -3 should be scrutinized for model fit. In the present analysis, removing these seven cases improved the classification accuracy by 3.4% from 85.6% to 89%. Therefore, these cases were not included in the final analysis.

Figure 7. Logistic regression cells one half a standard deviation (in each direction) from the outness mean score and the negative identity mean score.



Logistic regression allowed hypotheses 13 – 17 to be tested simultaneously in one main effect analysis.

*Hypothesis 13: Men with greater gender-variance in childhood will be significantly more likely to be out and have a negative gay identity (quadrant 1).*

*Hypothesis 14: Greater conformity to masculine norms will predict men to be significantly more likely to be closeted and have a negative gay identity (quadrant 2).*

*Hypothesis 15: Greater minority stress will predict men to be more likely to be closeted and have a negative gay identity (quadrant 2). Hypothesis 16: Greater social support will*

*predict men to be significantly more likely to be out and have a positive gay identity (quadrant 3). Hypothesis 17: An exploratory analysis will examine if higher socioeconomic status will significantly predict men to be closeted and have a positive gay identity (quadrant 4).*

In the first block of the model, age and race/ethnicity were entered; in the second block, the six predictor variables were entered (perceptions of stigma, experiences of attack, conformity to masculine norms, childhood gender behavior, social support, and socioeconomic status). Results from this binary logistic regression revealed that the final model (block 2) was significant;  $\chi^2 = 175.90, p < .001$  (see Table 8). Examination of the individual coefficients revealed that five main predictors significantly contributed to the likelihood of men being out with positive identities. Odds ratios ( $e^\beta$ ) greater than 1 indicate that the odds of being in the out/positive identity group increase when the predictor increases; conversely, odds ratios less than 1 signify that the odds of being in the out/positive identity group decrease when the predictor variable increases (Menard, 2002). *Stigma*: the odds ratio ( $e^\beta$ ) of .11 indicates that a one unit increase in stigma decreases the odds of respondents falling into the out/positive identity group by 89%. *Anti-gay attack*: the odds ratio ( $e^\beta$ ) of 2.32 indicates that the model predicts that the odds of being out and having a positive identity are 2.32 times higher with each unit increase in experiences of anti-gay attack. *Child gender-role behavior*: results here indicate that with one unit increase in gender nonconformity in childhood the odds are 2.82 times higher of falling into the out/positive identity group. *Masculinity*: the odds ratio ( $e^\beta$ ) of .86 implies that a one unit increase in conformity to masculine norms decreases the odds

that respondents are out and have positive identities by 14%. Lastly, regarding *Social Support*: the odds ratio ( $e^{\beta}$ ) of 4.31 indicates that the odds of being in the out/positive identity group are 4.31 times higher with each unit increase in social support. Altogether therefore, gay men were more likely to be in the out/positive identity group if they perceived less stigma, experienced more anti-gay attack, had histories of more gender nonconformity in childhood, were less masculine, and had more social support.

#### *Logistic Regression Diagnostics*

Results revealed that the overall model fit well with the data as indicated by the Hosmer-Lemeshow (H-L) goodness-of-fit statistic. The H-L test examines the fit of the logistic model against observed outcomes; it revealed a  $\chi^2$  of 8.79 which was insignificant ( $p > .05$ ), suggesting that the model was adequately fit to the data.

Collinearity in the logistic regression was determined by examining the standard errors of the beta coefficients. A standard error larger than 2.0 indicates problematic multicollinearity among the predictor variables. Furthermore, tolerance and variance inflation factors (VIF) were examined. According to Menard (2001), tolerances should exceed .70, which they did in this analysis. Variance inflation factors above 2.5 are suggested to be cause for concern; in the present analysis the highest VIF was 1.26.

Finally, a split-sample analysis was conducted in order to test the validity of the model. The sample was randomly divided into two categories: 80% in the training sample and 20% in the holdout sample. A classification accuracy rate in the holdout sample should be no less than 10% lower than the accuracy rate of the training sample. In the present study, the percentage correct in the training sample was 89%, therefore the

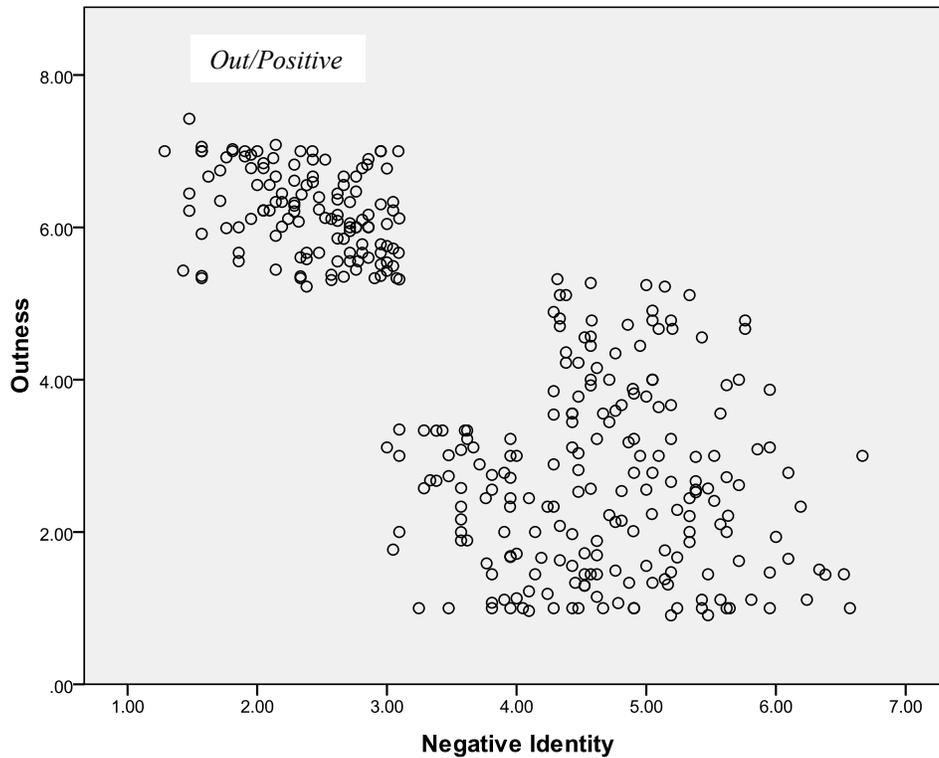
holdout sample should be a minimum of 80.1% correct. Since the holdout sample was 82.2% correct, the utility of the model is supported (see Table 9). That is, the 80-20 split-sample analysis validated the interpretation of the classification accuracy, individual relationships, and overall model.

### *Second Exploratory Logistic Regression*

The previously presented binary logistic regression sought to predict being out and having a positive identity simultaneously (group coded 1)-- versus not (group coded 0). The group coded zero was well-defined as an opposite “closeted/negative identity” group based upon statistical calculations of one standard deviation difference (for both outness and identity), which was also identified as having face validity. However, these two variables, outness and identity, are nevertheless on a continuum and given that binary logistic regression predicts “1” based upon a reference group “0,” it is important to recognize that with continuous variables, the defining characteristics of the reference category could be altered (i.e. binary logistic regression commonly uses unalterable, absolute categories such as comparing a yes versus no outcome). More specifically, this was a restricted comparison of groups confined to the outer limits of outness and positive/negative identity, and only comprised approximately forty percent of the study’s sample. In other words, if the present study’s sample is more or less representative of the gay male population, this analysis did not represent a majority of them. Therefore, an exploratory logistic regression was conducted predicting the same “out/positive identity” (coded 1) group with the parameters of the “closeted/negative identity” group slightly extended. In this analysis, the outness and identity status of the group coded 0 was

extended to a half standard deviation beyond the mean (the point at which the ‘out/positive group begins). See Figure 8. The additional cases included in this analysis approached greater outness or a more positive identity separately, but not simultaneously. For the group coded 1,  $N = 123$ , for the group coded 0,  $N = 205$ .

*Figure 8.* Illustration of data used for exploratory logistic regression with parameters of ‘closeted/negative identity’ group expanded.



Results from this analysis confirm several of the findings from the prior binary logistic regression analysis. Four main predictors were found to significantly predict the out/positive identity group; these included lower perceptions of stigma, greater social

support, more experiences of anti-gay attack, and less conformity to masculine norms. Specifically, each unit increase in perceived stigma decreased the odds of being in the out/positive identity group by 63%. Furthermore, the odds of being in the out/positive identity category were almost twice as likely (1.98) with each unit increase in social support. Regarding men's conformity to masculine norms, men were 6% less likely to be out and have positive gay identities with each unit increase in masculinity. Finally, with each unit increase in experiences of anti-gay attack, men were almost twice as likely (1.90) to be out and have positive gay identities. Child gender behavior and socioeconomic status did not significantly contribute to the overall model. However, it was found that men of color were 2.57 times more likely to be in the out/positive identity group than white men (see Table 10).

#### *Diagnostics*

Influential observations and outliers were determined by examining Cook's Distance and standardized residuals, respectively. No cases revealed Cook's Distance values over one indicating that no cases were demonstrating extreme influence warranting further examination. Two cases revealed standardized residuals slightly over 3; once removed the classification accuracy improvement was merely 0.8%, therefore, these cases were retained in the final analysis (Menard, 2001).

The Hosmer-Lemeshow (H-L) goodness-of-fit statistic revealed that the overall model fit well with the data:  $\chi^2 = 8.79$ ,  $p > .05$ . Lastly, a split-sample analysis was conducted in order to test the validity of the model. The procedure I followed was identical to the previous logistic regression analysis: the sample was randomly divided

into two categories: 80% in the training sample and 20% in the holdout sample. A classification accuracy rate in the holdout sample should be no less than 10% lower than the accuracy rate of the training sample. In this analysis the percentage correct in the training sample was 79.6%, therefore the holdout sample should be a minimum of accuracy rate of 71.6%. Since the holdout sample was 72.7% accurate, the utility of the model is supported (see Table 11). That is, the 80-20 split-sample analysis validated the interpretation of the classification accuracy, individual relationships, and overall model.

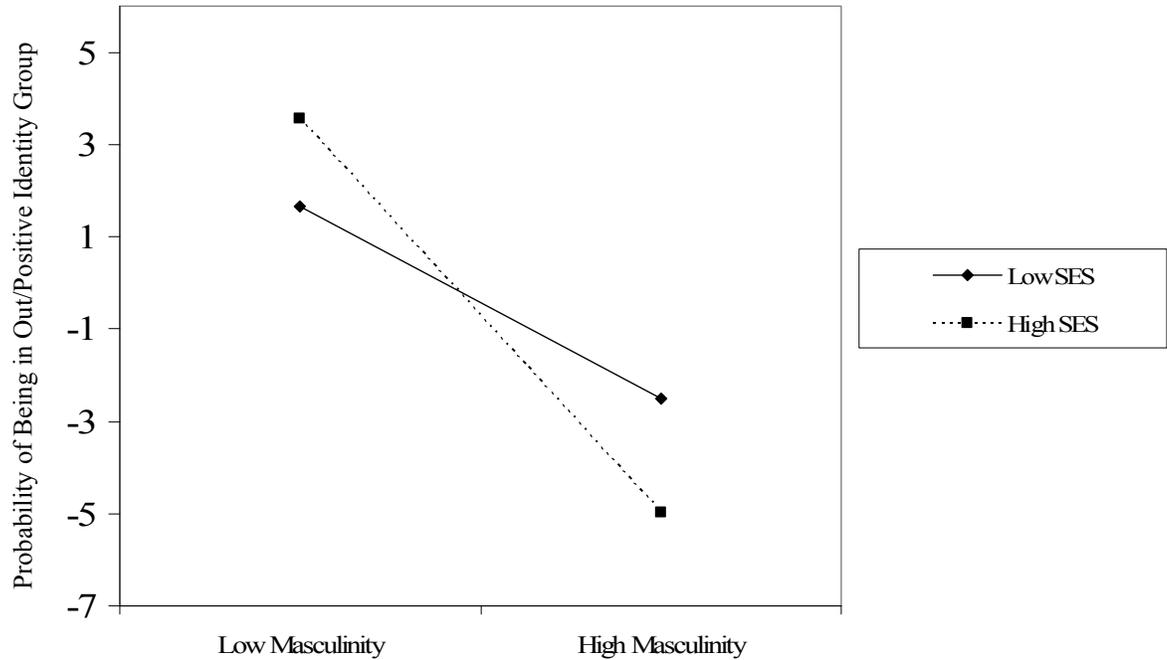
#### *Binary Logistic Regression Interactions*

In order to test the hypotheses that the predictor variables would significantly interact predicting the two groups ‘out/positive’ and ‘closeted/negative’ fifteen binary logistic regression analyses were conducted. Similar procedures were followed as in the previously described linear regression analyses. That is, for each analysis the two standardized predictor variables were entered followed by the interaction term; however, in these analyses the criterion variable was always the binary code: 1 = out/positive, 0 = closeted/negative. The dataset used here was the originally described 210 cases in which 125 cases fell in the out/positive group and 95 in the closeted/negative group (see Figure 3). This was the model in which one standard deviation separated the out/positive group from the closeted/negative group.

Results from these analyses revealed one significant interaction: SES X masculinity (see Table 12). Specifically, SES was found to significantly moderate the relationship between conformity to masculine norms and the probability of having a positive gay identity and being out (Wald’s  $\chi^2 = 64.31, p < .001$ ). Examining the

individual coefficients revealed that conformity to masculine norms ( $\beta = -1.01, p < .001$ ), and the interaction term ( $\beta = -.37, p < .05$ ) both significantly contributed to the model. Therefore, the relationship between gay men's conformity to masculine norms and the odds that they would fall into the out/positive group was contingent upon their socioeconomic status. According to Hayes and Matthes (2009), interpretation of logistic regression interactions are similar to the process of interpreting linear regression interactions; that is, they can be plotted by contrasting the high and low points of the two interacting predictors against the probability of the outcome variable. In Figure 5 below the slope of the line for high SES participants is much steeper than the slope for the low SES participants. This finding is similar to the previous linear regression interaction-effect between masculinity and SES predicting outness. Yet, this finding extends the previous one in that this predicts the odds of being out and having a positive gay identity. Therefore, men in higher socioeconomic positions are much more susceptible to the effects of conformity to masculine norms on their identity and outness.

Figure 5. Regression slopes of interaction effect between socioeconomic status (SES) and conformity to masculine norms predicting odds of being in out/positive identity category.



#### *Diagnostics of Logistic Regression Interaction-effect*

Results revealed that the overall model fit well with the data as indicated by the Hosmer-Lemeshow (H-L) goodness-of-fit statistic which revealed a  $\chi^2$  of 3.03 which was insignificant ( $p > .05$ ), suggesting that the model was adequately fit to the data.

Collinearity in the logistic regression was determined by examining the standard errors of the beta coefficients. A standard error larger than 2.0 indicates problematic multicollinearity among the predictor variables. Furthermore, tolerance and variance inflation factors (VIF) were examined. According to Menard (2001), tolerances should

exceed .70, which they did in this analysis. Finally, variance inflation factors above 2.5 are suggested to be cause for concern; in the present analysis the highest VIF was 1.05. Regarding outliers, four cases held studentized residuals greater than 2.0 (2.11 being the highest), when removed no changes in significance occurred (although the significance of the interaction increased to  $p < .01$ ), therefore these cases were retained in the final analysis.

Finally, a split-sample analysis was conducted in order to test the validity of the interaction model (see Table 13). Again, the sample was randomly divided into two categories: 80% in the training sample and 20% in the holdout sample. The percentage correct in the training sample was 68.40%, therefore the holdout sample should be a minimum of 61.56% correct. Since the holdout sample was 74.40% correct, the utility of the interaction effect is supported.

## Chapter 5: Discussion

The following chapter reviews and discusses the findings of this study, and will be organized into four sections. First, I will present the two analyses examining the association between the predictor variables and gay men's identity status and outness. In the second section, I will review the findings from the exploratory analyses that examined the relationship between the predictor variables and the outness and identity inventory subscales. Third, I will discuss the results of the interaction analyses, and finally, the fourth section will address the role of the predictors on gay men's identity and outness together. Throughout these sections the literature from Chapter 2 will be considered in light of the present study's findings. Finally, the theoretical implications and future research will be presented followed by a section on counseling implications. Last, I will discuss the limitations of the present study and wrap up with conclusions and a final summary.

### *Review of Results*

*Hypothesis 1: Minority stress (perceptions of stigma and experiences of anti-gay attack), conformity to masculine norms, childhood gender behavior, socioeconomic status, and social support will significantly relate to gay men's identity.* Results showed partial support for the first hypothesis. Specifically, after parceling out the variance of age and race/ethnicity, men with less perceptions of stigma, more experiences of anti-gay attack, less conformity to masculine norms and more social support possessed more positive gay identities. However, childhood gender behavior and socioeconomic status did not significantly contribute to gay men's identity status.

The significant findings supporting the first hypothesis correspond with previous research regarding gay men's identity development. An assortment of research dedicated to lesbian, gay, and bisexual identity formation has documented the negative consequences of social stigma including psychological distress (Herek; 1998; Meyer, 1995; 2003) and developmental stagnation (Cass, 1979; Troiden, 1989). Likewise in the present study, stigma accounted for most of the variance in explaining gay men's identity, providing further evidence of the important association between stigma and the quality of gay men's lives.

Social support also accounted for significant variance in explaining gay men's identity, and demonstrates the essential role that family, friends, and significant others play in sexual minority identity development. Decades of research have documented the essential nature of social support with regard to healthy living and psychological adjustment for people regardless of sexual orientation (Uchino, 2004; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). The results from the present study confirm that in the process of gay men coming to terms with their sexual orientation, the quality of their personal relationships plays a considerable role in determining how positively they view their gay identity. This concurs with the buffering hypothesis wherein social support protects individuals who are experiencing distress (Cohen & Willis, 1985). Specifically, in the face of negative messages emanating from the larger society, the strength of a personal community in which one can rely allows for the development of positive feelings about oneself (e.g. increased self-esteem, more integrated self-concept).

Along with stigma and social support, a third factor that was found to significantly contribute to gay men's identity development was their conformity to masculine norms. This finding concurs with previous research that has documented the positive association between masculine identity and negative feelings about being gay (Sanchez, 2005; Sanchez et al., 2010), and echoes research suggesting that anti-effeminacy attitudes abound within the gay male community (Taywaditep, 2001). As gay men are socialized to adopt characteristics of traditional masculinity, they must simultaneously endeavor to maintain self-esteem and develop an integrated self-concept with regard to their sexual orientation. Findings here reiterate the conflict between a traditional masculine identity and a gay identity. In other words, the more that gay men admire and consequently incorporate the notions of masculinity into their character, they do so at the expense of their gay identity. Even so, the gay male community has endeavored to reinvent the notions of masculinity for decades with the advent of various subcultures that characterize manhood with more flexible boundaries (Connell, 1992; Tattelman, 2005). Although gay men seek to simultaneously develop positive images of themselves as men and not heterosexual, outside of the gay community, the dominant cultural script for what it means to be a man makes the process continually difficult.

The remaining significant predictor of gay men's identity status was their experience of anti-gay attack. Contrary to the hypothesis that greater experiences of attack would predict a more negative identity, it was found that more attack was significantly associated with a more positive identity. One possible explanation for this unexpected finding is that as gay men develop positive identities they increasingly

confront societal prejudice and stigma, which in turn results in more experiences of anti-gay attack. In other words, it seems less likely that actual experiences of verbal and/or physical anti-gay attack facilitates the formation of a more positive identity. Additionally, experiences of attack may be an impetus for greater identity exploration, stimulating increased awareness and recognition of social prejudice and therefore associated with identity growth. Altogether, even though the directionality of this relationship is ambiguous, it demonstrates the significant association between anti-gay violence and gay men's identity development.

The final remarks in this section address the non-significant predictors of gay men's identity status. Based upon previous theory and research documenting the distress associated with gender nonconformity in childhood (Pleck, 1995, Yunger, Carver, & Perry, 2004), particularly for boys (Blakemore, 2003; Carver et al., 2003; Cohen-Kettenis et al., 2003; D'Augelli, Grossman, & Starks, 2006; McCreary, 1994; Zucker, Bradley, & Sanikhani, 1997), it was hypothesized that greater nonconformity would significantly predict a more negative identity. Nevertheless, childhood gender behavior was not found to be associated with gay men's identity. Despite previous research has documented the association between childhood gender nonconformity and psychological distress (Skidmore et al., 2006), low self-esteem (Beard & Bakeman, 2000), and suicidality (Ploderi & Fartacek, 2009), it was not related to gay men's identity status. More specifically, this finding stands in contrast to Friedman and Downey's (1999) notion that gender nonconformity in childhood might explain greater internalized homophobia in adulthood.

Socioeconomic status was another variable that made no significant contribution to gay men's identity status. Socioeconomic status is an extensively researched subject across several disciplines (e.g. sociology, public health, etc.), and has long been recognized as a reliable predictor of physical health and wellbeing in the general population. However, the relationship between socioeconomic status and lesbian/gay/bisexual health is far less understood, and even fewer studies exist regarding the association between socioeconomic status and gay men's identity development (Appleby, 2001; Mallon, 2001). From a greater stress perspective it was hypothesized that men from lower SES backgrounds would possess a more negative identity, yet, no such relationship was found. Barrett and Pollack (2005) found that homosexually active men from lower social classes were less likely to identify themselves as gay, therefore, it may be that because the present study primarily included men who identified as gay, men from lower social classes (who have sex with men) were excluded. In fact, the present study's sample was fairly well educated with over 66% reporting to have a Bachelor's degree or higher. Therefore, it may be that for these reasons the association between socioeconomic status and identity was not significant.

*Hypothesis 2: Minority stress (perceptions of stigma and experiences of anti-gay attack), conformity to masculine norms, childhood gender behavior, socioeconomic status, and social support will significantly relate to gay men's outness.* Results of this study partially support the second hypothesis. Specifically, although childhood gender behavior and socioeconomic status did not significantly contribute to gay men's disclosure behavior, the remaining variables significantly predicted men's overall level of

outness. Therefore, men with less perceptions of stigma, more experiences of anti-gay attack, less conformity to masculine norms and more social support were globally more out. Additionally, age was found to significantly contribute to gay men's outness, and although it wasn't clear whether or not older or younger men would be more out, the present study's results revealed that an increase in age predicted less outness. This finding supports previous research documenting that older cohorts of gay men are generally less out to others (Floyd & Bakeman, 2006; Grov et al., 2006; Schope, 2002). Explanations for this phenomenon have postulated that younger cohorts are able to come out because of the socio-political changes that have occurred over the last several decades. Indeed, Grov et al., (2006) point to present-day cultural factors that may influence the coming-out process and suggest that "a younger person admitting a GLB identity today does not carry the same stigma or taboo as one who did so two decades ago" (p. 119). This specific finding regarding age will be discussed more in the *Exploratory Analyses of Outness Subscales* section given that upon further investigation, age was more precisely found to be associated with gay men's outness to the world in general and was not associated with outness to their families.

The significant findings from the above listed second hypothesis support an assortment of previous research regarding gay men's sexual orientation disclosure and concealment behavior. To begin, although this is the first study to specifically examine the predictive power of gay men's conformity to masculine norms on outness, at least one previous study explored closely related concepts and documented similar results. Specifically, Sanchez (2005) found that both greater gender role conflict and self-

reported masculinity were inversely related to gay men's outness. This study supports and extends this previous work, and signifies that the more men adopt attitudes and behaviors consistent with traditional masculinity, the more they will conceal matters of their sexuality. Along these lines, this finding also corresponds with previous research that has associated greater masculinity with self-reliance (Mahalik et al., 2003), and emotional reservation (Sharpe & Heppner, 1991; Sharpe et al., 1995). In other words, given the intimate nature of sexuality and the social complexities of navigating same-sex attraction, men who value self-sufficiency and who are emotionally guarded, would be expected to conceal their minority sexual orientation to others. This finding therefore broadens our understanding of the specific ways in which men's constructions of masculinity can influence such an important issue as the disclosure or concealment of their sexual orientation.

Results from the second hypothesis also found that greater social support significantly predicted greater outness. This finding augments the extant literature on the issue of gay men's coming out process. A few previous studies have shown that social support is positively associated with gay men's outness (Gallor & Fassinger, 2010; Fassinger et al., 2003). While some studies have focused on family acceptance (Elizur & Ziv, 2001), and friends' support (Elizur & Mintzer, 2001), the present study also examined the support of a significant other. Furthermore, given the reciprocal nature of social support and outness, some research has documented similar findings with these variables reordered-- that is, how disclosure or concealment impacts social support. For example, Jordan and Deluty (2000) found that in a sample of lesbian women, greater

disclosure of sexual orientation was associated with greater romantic relationship satisfaction. Also, Morris, Waldo, and Rothblum (2001) found that more gay community involvement predicted greater outness in bisexual and lesbian women. The present study's findings correspond with these previous studies, albeit here, results suggest that the social support within each of the three domains (family, friends, and significant other) can play an important role in gay men's disclosure or concealment of their sexual orientation.

Gay men's perception of stigma is the third and final predictor of gay men's outness that was supported as hypothesized. Research has documented the deleterious effects of stigma on the lives of gay men (Herek et al., 1999; Meyer, 1995; 2003), yet, few studies have directly examined the link between stigma and outness aside from a recent study by Moradi et al., (2010) which revealed similar findings. These authors found that greater perceptions of stigma were associated with less outness, and this was equally true for LGB people of color and white LGB folks. The present study's finding corroborates this relationship, and echoes the profound effect that societal stigma carries. Just as Meyer (1995) theorized in his earliest model of minority stress, when stigma is witnessed it produces the anticipation of being rejected and discriminated against by society. Therefore, it is not surprising that this process directly affects men's disclosure behavior; that is, the less that men experience and anticipate stigma, the more they are inclined to live openly with regard to their sexual orientation.

Finally, experiences of anti-gay attack significantly predicted gay men's outness; however, contrary to the original hypothesis, more experience of attack predicted gay

men to be more out. Meyer (1995) theorized that experiences of anti-gay verbal and physical attack could cause men to retreat into the closet. Thus, although it is feasible that men who have experienced attacks related to their sexual orientation may be less out to particular individuals (e.g. new friends/acquaintances, or “strangers”), otherwise it seems that men probably experience anti-gay attacks because they are out. Therefore, the directionality of this relationship is uncertain, but nevertheless demonstrates a clear association between anti-gay attack and outness.

No known previous research has specifically examined the role of gender nonconformity in childhood on gay men’s level of outness. Although, Bogaert and Hafer (2009) found that gay and bisexual men’s gender behavior in childhood was unrelated to how many years they remained closeted about their sexual orientation. The goal of the present study was to explore this particular relationship, although the outcome was uncertain. As previously discussed, it was suggested that gay men with histories of gender nonconformity may be more likely to fit the stereotype for gay men and consequently feel pressure to come out. Alternatively, it was proposed that gay men with histories of gender nonconformity may have developed an aversion to femininity due to peer rejection and stigma which might cause them to remain closeted. Altogether, this finding demonstrates that gay men’s gender nonconformity in childhood has no bearing on the degree to which they disclose their sexual orientation to others.

Socioeconomic status was another variable that made no significant contribution to gay men’s outness. This result contrasts with one study that examined the association between SES and outness which found that gay men were more out at lower income

levels (Harry, 1993). However, the sample data utilized in this study was collected in the 1970's, and given the socio-political changes that have occurred over the past forty years, may no longer accurately represent the relationship between these two factors. Based upon previous theory contending that the gay community is a middle to upper-middle class institution that maintains some degree of classism, it was suggested that gay men from working class or poor backgrounds have less access to the gay community and may be less out (Chapple et al., 1998). Furthermore, from a greater stress perspective, gay men from lower socioeconomic echelons might contextually bear additional burden that discourages them from coming out. Conversely, the power and privilege associated with higher socioeconomic status might provide gay men with more access and resources to navigate the coming out process. For these reasons, it was hypothesized that gay men from in higher socioeconomic statuses would be more out, yet, no such relationship was found. As previous mentioned, the present study's sample was fairly well educated with over 66% reporting to have a Bachelor's degree or higher. Therefore, the sample here may not have accounted for working class and poor gay men.

Altogether, the findings from the second hypothesis grow the current body of literature demonstrating the social and contextual factors related to gay men's concealment and disclosure of their sexual orientation to others, which is important for several reasons. First, it is important to isolate outness theoretically and practically given the hypothesis that gay men's identity development and outness are separate constructs and therefore may have different determinants. As previously discussed, numerous scholars are expanding lines of research dedicated to identifying more specific factors to

better understand the experiences of sexual minorities. For instance, Elizur and Mintzer (2001) assert that the coming out process is one dimension of gay identity development that should be independently measured in an effort to “provide a flexible alternative to stage models’ assumption of a single linear developmental process” (p. 143). Secondly, research has examined men’s concealment and disclosure behavior in unique ways and results suggests that this process is more complexly intertwined with other matters of both physical (Cole et al., 1996; Cole, 2006; Kauth, Hartwig, & Kalichman, 2000) and psychological wellbeing (McDonald, 1982).

Altogether, the results of the analysis predicting gay men’s identity status was virtually identical to the analysis predicting outness, with one exception: age was negatively associated with outness but was unrelated to gay men’s identity status. The similar findings suggest that gay men’s identity formation and coming out processes are both associated with the factors examined in this study. The purpose of examining identity and outness processes separately was based upon several scholars’ theorizing that gay men’s internal identity construction may be separate from public disclosure of sexual orientation (Elizur & Mintzer, 2001; Fassinger & Miller, 1996; Harry, 1993; McCarn & Fassinger, 1996; Mohr & Fassinger, 2003). This was found to be the case with regard to gay men’s age, which had no bearing on their identity but was significantly associated with less outness in older cohorts. This demonstrates the value of examining these two constructs separately, nevertheless, the profound overlap of both significant and nonsignificant findings predicting gay men’s identity status and outness suggests that in some respects, the merger of these constructs might be legitimate.

### *Exploratory Analyses of Outness Subscales*

Findings from the two exploratory analyses regarding outness (Outness to Family and Outness to World subscales) revealed nearly identical results to the analysis examining them together (Global Outness). That is, men with less perceptions of stigma, more experiences of anti-gay attack, less conformity to masculine norms and more social support were significantly more out to both their families and to the world. Again, neither childhood gender behavior nor socioeconomic status significantly contributed to gay men's outness to their families or to people in general (out to world subscale). However, age was found to significantly predict gay men's outness to the world (friends, co-workers, etc.) but was not associated with their outness to family. Therefore, increase in age predicted men to disclose their sexual orientation less to individuals outside their family, but age had no significant bearing on men's outness to their family.

Although some research has suggested that older cohorts of gay men are generally less out to others (Floyd & Bakeman, 2006; Grov et al., 2006; Schope, 2002), this is the first study to specifically find that older gay men's greater nondisclosure is isolated to individuals outside their families. One possible explanation for this finding is that, relative to their younger counterparts, older gay men's parents (as well as siblings and other extended family) are more likely to be deceased, and given that the outness to family subscale only contained four questions (mother, father, siblings, extended family), many of these categories may not have been applicable for older gay men. Another explanation might be that— although older generations of gay men were raised in a more conservative social climate, for various reasons, including greater contact with family,

they may have been forced out of the closet by some family members, or felt safe enough to disclose to select family members while not feeling this safety in other realms of life and therefore remained closeted elsewhere.

#### *Exploratory Analyses of Negative Identity Subscales*

The findings from the analyses exploring the four subscales of the Negative Identity Index (Need for Privacy, Need for Acceptance, Internalized Homonegativity, and Difficult Process) uncovered some variation with regard to the predictor variables that revealed significance. This section will reiterate each of the significant findings and specifically highlight discrepancies relative to the global Negative Identity Index findings.

*Need for Privacy.* Results from the Need for Privacy analysis revealed several similar findings relative to the global Negative Identity Index. Specifically, stigma accounted for the most variance in predicting greater need for privacy. Greater experiences of anti-gay attack predicted less need for privacy, and likewise, greater conformity to masculine norms and less social support predicted more need for privacy. However, two new factors, the two covariates, age and race/ethnicity, were also found to significantly predict gay men's need for privacy. First, age was positively related to need for privacy. This finding most closely corresponds with the previous discussion regarding older cohorts of gay men concealing their sexual orientation (Groves et al., 2006; Schope, 2002). One possible interpretation of this is that greater privacy in older generations of gay men may reflect a difference in cultural norms and core values over time. That is, the 'sexual revolution' of the 1960's and 1970's not only paved the way

for equal rights for gays and lesbians but also, for the first time, brought sex into the spotlight and made such matters more culturally acceptable for public discourse. Perhaps the broad cultural norm for gay men born during or after this timeframe continues to embrace sexuality far greater than those men born prior to the sexual revolution.

Next, gay men of color were found to have a greater need for privacy than white gay men. This is a novel finding, and little has been written about this particular relationship (Groves et al., 2006; Moradi et al., 2010). Comparison studies of gay men of color and white gay men are in small number; nevertheless, some research posits that greater stigma regarding homosexuality may exist in some communities of color (Lippincott, Wlazelek, & Schumacher, 2000; Waldner, Sikka, & Baig, 1999). The importance of religion (which is frequently homophobic) in many communities of color has been cited as a possible reason for more negative attitudes about homosexuality (Battle & Lemelle, 2002; Fullilove & Fullilove, 1999). Furthermore, although ‘need for privacy’ is not equivalent to ‘outing,’ conceptually, there is some degree of overlap. A few studies have examined the relationship between race/ethnicity and sexual orientation disclosure and findings concur that relative to white gay men, gay men of color are less out to family (Groves et al., 2006), and in general (Moradi et al., 2010). Moradi et al. (2010) suggests that “LGB people of color are thought to experience their LGB identity to be in tension with their desires to respect cultural values, preserve family reputation, maintain family and community connections, and avoid being ostracized” (p. 400). The present study’s finding supports this notion and highlights the cultural group variation within the gay male population.

*Need for Acceptance.* The exploratory analysis examining the predictors of gay men's need for acceptance also revealed some unique differences relative to the global Negative Identity Index results. First, although more experience of anti-gay attack significantly related to a more positive identity, no association was found between anti-gay attack and men's need for acceptance. Most research on the subject of sexual orientation-related victimization has demonstrated its association to negative mental health outcomes (Herek & Berrill, 1992; Herek, Gillis, & Cogan, 1999; Waldo, Hesson-McInnis, & D'Augelli, 1998). For instance, Willoughby, Doty, and Malik, (2010) found that victimization was associated with young men's internalizing problems by way of a negative gay identity. In Meyer's (1995) original study of minority-related stress and gay men, he found that experience of anti-gay attack was related to three mental health problems including greater demoralization, guilt, and suicidality. Nevertheless, as far as gay men's identity development is concerned, findings of the present study suggest that victimization in the form of verbal and physical attack did not relate to gay men's need for acceptance regarding their sexual orientation. This is the first study to examine specific dimensions of gay men's identity status in relation to their experiences of anti-gay victimization and demonstrates the unique role of minority-related stressors on gay men's identity development process.

The second distinction between the significant predictors of the global Negative Identity Index and the Need for Acceptance findings revealed that greater non-conformity in childhood was significantly associated with more need for acceptance regarding their sexual orientation (whereas childhood gender behavior was not significantly associated

with gay men's global identity). This finding corresponds with the line of research documenting the consequences of violating gender norms in childhood including disapproval and alienation (Pollack, 1998). Specifically, children who are gender nonconforming are at greater risk for social isolation resulting in psychological distress (Skidmore, Linsenmeier, & Bailey, 2006), and suicidality (Ploderi & Fartacek, 2009). In Mohr and Fassinger's (2000) original study in which the Lesbian, Gay, and Bisexual Identity Scale was developed, greater need for acceptance was most strongly correlated with low self-esteem. The authors conclude that "a risk factor for low self-esteem among lesbian and gay individuals is preoccupation with the degree to which their sexual orientation is accepted by others" (p. 20). Therefore, the present study's finding suggest that early experiences of gender development might play a role in this component of gay men's identity development, and although the present study did not test the mechanism by which this may occur, we might speculate based upon previous research that internalizing early incidents of rejection places nonconforming boys at a greater risk for longing for acceptance in adulthood (Beard & Bakeman, 2000; Landolt et al., 2004).

*Internalized Homonegativity.* Findings regarding the Internalized Homonegativity subscale revealed little difference from the Negative Identity Index results. That is, stigma, social support, conformity to masculine norms, and experiences of anti-gay attack were all significant predictors of internalized homonegativity, while childhood gender behavior and socioeconomic status were not found to be associated with gay men's internalized homonegativity. Conceptualized as both a component of minority stress (Meyer, 1995; 2003), and gay identity (Mohr & Fassinger, 2000), internalized

homophobia (or homonegativity) is one of the most long-standing topics of research with regard to lesbian, gay and bisexual experience (Hudson & Ricketts, 1980). In fact, due to the profoundly stigmatizing association with being gay, internalized homonegativity is considered by some researchers as an expected (and even ‘normal’) part of gay identity development (Fassinger, 1991; Gonsiorek & Rudolph, 1991). The association found here between stigma and internalized homonegativity reaffirms the strong link between these minority stress variables, and extends the utility of the minority stress model by recognizing internalized homophobia as a component of gay men’s identity. Furthermore, even after removing the disdain for homosexual items from the Conformity to Masculine Norms Inventory, the significant association between masculinity and internalized homonegativity was upheld, demonstrating how the enactment of other aspects of traditional masculinity correspond with more negative feelings about being gay. Finally, social support can be conceptualized as a potential buffer against internalized homonegativity as a minority stressor; yet in this case social support can also be recognized as a protective factor with regard to this aspect of gay men’s identity formation process.

*Difficult Process.* The exploratory analysis examining predictors of gay men experiencing a difficult identity development process reveal one unique variation from the Negative Identity Index results. In this analysis, socioeconomic status significantly contributed to men’s level of difficulty; specifically, as men’s socioeconomic status increased, their process of identifying as gay became less difficult. This finding provides partial support for the first hypothesis of this study, namely, that men from higher

socioeconomic backgrounds would possess more positive identities. The Difficult Process subscale assessed the perceived struggle with, and length of time men have spent identifying as gay. Therefore, this finding suggests that the higher education and more affluent occupations comprising higher socioeconomic status is specifically associated with gay men's identity formation process being less painful and/or quicker (Mohr & Fassinger, 2000). Even though this result demonstrates that SES is a relevant variable with regard to gay men's process of developing positive feelings about themselves as sexual minorities, non-significant results (with regard to SES) across the other three components of the Negative Identity Index reveals that socioeconomic status is largely unrelated to gay men's identity status.

This finding also highlights the multifarious functions of socio-contextual variables on the lives of gay men, and substantiates many scholars' conception that, along with developmental stage models, measuring specific interpersonal and contextual dimensions of gay men's lives can help us understand for whom a positive gay identity is more easily achieved (Eliason & Schope, 2007; Fassinger & Miller, 1996; Mohr & Fassinger, 2000). Furthermore, this finding reiterates previous scholars' calls for more complex models of minority sexuality development to include such factors as socioeconomic status (Valocchi, 1999).

#### *Moderators of Gay Men's Identity Status and Outness*

Results from the thirty linear regression interaction analyses (fifteen predicting identity, and fifteen predicting outness) revealed two significant findings. Each of these findings are presented in this section followed by their numbered hypotheses.

*Hypothesis 5: Socioeconomic status will moderate the relationship between minority stress (in this case, anti-gay attack) and identity status.* A few concerns should be noted prior to discussing the significant findings from the fifth hypothesis. First, given that the relationship between anti-gay attack and identity was discovered to be in the opposite direction as hypothesized (greater attack predicted a more positive identity), this interaction analysis should be considered strictly exploratory. As a consequence, although this finding might contribute to our understanding of gay men's identity, it should be interpreted with caution. Essentially, the finding here suggests that the relationship between experiences of anti-gay attack and gay men's identity status is much more significant for men in higher socioeconomic strata. And furthermore, for men in lower SES categories, this same association appears to virtually disappear. In other words, the quality of men's identities from lower socioeconomic backgrounds is not impacted by the degree to which they have experienced anti-gay verbal and physical attacks.

These insights raise a few pivotal questions. One issue raised here is that gay men from lower socioeconomic backgrounds are seemingly unaffected (in terms of their identity) by experiences of anti-gay attack. From a greater disadvantage perspective, the experience of anti-gay assault for poor or working-class gay men may more closely approximate an already oppressive experience of the world. Alternatively, from a resilience perspective, it is noteworthy that gay men's identity status does not worsen with greater experiences of attack. It may be the case that lower SES men have unique coping strategies that prevent the internalization of such experiences into their identity.

Another question that this finding raises centers on the issue of gay men from higher SES backgrounds possessing more positive gay identities with greater experiences of attack. It is conceivable that gay men from higher SES backgrounds are able to generate more constructive meaning from experiences of anti-gay attack and then incorporate these optimistic perceptions of their experience into their self-concept. The ability to accomplish this might be a result of increased education, and the otherwise greater resources associated with higher socioeconomic status.

*Hypothesis 8: Socioeconomic status will moderate the relationship between masculinity and outness.* The finding that the relationship between masculinity and outness is stronger for gay men in higher socioeconomic echelons highlights a complex interaction of two important socio-contextual variables. From a greater risk perspective, it was hypothesized that the relationship of masculinity to men's outness would be greater for men in lower socioeconomic statuses; however, the findings here suggest the reverse. Specifically, it was found that the relationship between masculinity and outness was stronger for men in higher socioeconomic positions. In other words, compared with men from lower socioeconomic backgrounds, when gay men in higher social strata adopt more traditional masculine characteristics, they disclose their sexual orientation to others significantly less.

This finding evidences the unique socio-cultural variation within the gay male community, and extends the growing literature on gay men's enactment of masculinity. Only a few previous studies have examined the relationship between socioeconomic status and gay men's outness, and findings have been inconsistent (Barrett & Pollack,

2005; Harry, 1993). Therefore, one of the purposes of this study was to explore how socioeconomic position, in conjunction with other key variables, might affect men's outness and identity as sexual minorities. Harry (1993) found that gay men in higher income brackets were less out than men in lower income categories, and posited that gay men's outness is a product of what he termed "structural and individual conditions" referring to broad contextual factors (e.g. socioeconomic status, area of residence, conformity to social rules, etc.) as the foremost facilitators of being out (Harry, 1993, p. 25). The finding from the present study suggests that, along with such contextual factors as socioeconomic status, gay men's outness is also a function of their conformity to masculine norms. Despite non-significant main-effect results of socioeconomic position on outness, the significant interaction between masculinity and SES predicting outness underscores the complexity of psychological and socio-contextual factors in the lives of gay men. Furthermore, it specifically emphasizes the gay community's within-group diversity and the importance of understanding the dynamic nature of how gay men navigate the disclosure of their sexual orientation.

#### *Logistic Regression Analyses*

The original hypotheses that were to be tested with logistic regression analyses presupposed that four distinct outcome variables could be derived from the data. Moreover, it was posited that the predictor variables would explain why gay men might fall into one of the following categories: out/positive identity, out/negative identity, closeted/positive identity, closeted/negative identity. However, given that only two groups emerged from the data (out/positive identity and closeted/negative identity),

therefore, by design, two of the original hypotheses were not able to be evaluated. First, it was suggested that gay men with greater gender nonconformity in childhood would fall into the out/negative identity group. Although this was unsupported, greater gender nonconformity in childhood was nevertheless discovered to significantly predict greater likelihood that men would fall into the out/positive identity group and will therefore be discussed. Second, an exploratory analysis examined the hypothesis that gay men from higher socioeconomic backgrounds might be afforded the privilege to develop positive gay identities without coming out. Again, since the positive identity/closeted group did not emerge from the data, this hypothesis was not supported. The remaining hypotheses identified below were partially or fully supported and the results will be reviewed and discussed.

*Hypothesis 13: Men with greater gender nonconformity in childhood will be significantly more likely to be out and have a negative gay identity.* This hypothesis was not supported; conversely, greater gender nonconformity in childhood significantly predicted gay men to be more likely to be out and have a *positive* gay identity in adulthood rather than a negative identity. This finding is at odds with a number of previous studies that have documented that gender nonconformity in childhood is associated with negative and not positive psychological outcomes in adulthood (Beard & Bakeman, 2000; Landolt et al., 2004; Lippa, 2008; Ploderl & Fartacek, 2009; Skidmore, Linsenmeier, & Bailey, 2006; Strong, Singh, & Randall, 2000). Furthermore, this finding contradicts the notion that gender nonconformity in childhood might be an additional unique minority-related stressor that places gay men at greater risk for identity stagnation

and concealment of their sexual orientation. Specifically, as Meyer (2010) suggests, it is important to recognize the multiple unique stressors that sexual minorities confront, and examine their contribution to lesbian, gay, and bisexual people's health. This finding supports this line of research and extends it by documenting the unique role that childhood gender behavior plays in conjunction with gay men's identity formation and sexual orientation disclosure behavior.

Nevertheless, this result is situated in contrast to the previous non-significant linear regression findings regarding the relationship between child gender behavior and gay men's outness, and separately, child gender behavior and gay men's identity status. The conflict between this finding and the previous results demonstrating no relationship between childhood gender behavior and gay men's identity status and outness warrants a thorough discussion. Specifically, in spite of its appeal, the magnitude of this finding should be interpreted with caution. Although the results indicated that with each unit increase in childhood gender nonconformity the odds of falling into the out/positive identity group were almost three times higher, this was a comparison of groups confined to the outer limits of outness and positive/negative identity. Specifically, this analysis only comprised approximately forty percent of the study's sample, and therefore, if the present study's sample is more or less representative of the gay male population, this analysis does not represent a majority of them. This limitation was one of the reasons for conducting a second exploratory logistic regression, and in this analysis, gender nonconformity in childhood was not a significant predictor of men falling into the

out/positive identity group. A more in-depth discussion of this finding will be presented in the final section of this chapter.

*Hypothesis 14: Less conformity to masculine norms will predict men to be more likely to be out and have a positive gay identity.* Gay men's masculinity was found to significantly predict the likelihood that they would fall into the out/positive identity group. This finding concurs with the present study's previous results illustrating the association between gay men's constructions of masculinity and their outness and identity status. Specifically, this finding supports the body of literature that associates harmful consequences with adherence to norms of traditional masculinity (Mahalik et al., 2003), including for gay men (Hamilton & Mahalik, 2009; Kimmel & Mahalik, 2005; Sanchez, 2010) in that having a positive out identity is beneficial and therefore this finding extends that masculinity has harmful consequences.

*Hypothesis 15: Men with less minority stress will be significantly more likely to be out and have a positive gay identity.* Along with social support, men's perceptions of stigma made the greatest contribution in predicting gay men being out with a positive identity. This finding supports the minority stress model (Meyer, 1995; 2003) in that it provides additional evidence of how stigma interferes with gay men's process of identity formation. Indeed, results here found that men were almost 90% less likely to fall into the out/positive identity group with each unit increase in perceived stigma. This is a sobering testament to the profundity of stigma in society and underscores that aside from numerous other psychological and health consequences linked to stigma (Hamilton & Mahalik, 2009; Herek, 1998; Meyer, 1995; 2003). In many ways, the findings from this

study suggest that social stigma is an incredible detriment to men's process of identifying as gay.

*Hypothesis 16: Greater social support will predict men to be significantly more likely to be out and have a positive gay identity.* Consistent with theory on the protective characteristics of social support (Cohen & Willis, 1985), result here found that greater social support increased the odds of men being out and having a positive gay identity. Specifically, this finding corresponds with the sizeable body of literature that has shown the multifarious ways in which social support positively relates to physical and psychological wellbeing (Uchino, 2004; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). As previously shown in this study, social support was positively related to greater disclosure of sexual orientation and a positive gay identity. This additional finding demonstrating that with one unit increase of social support gay men are over four times more likely to be out with a positive gay identity versus closeted with a negative identity confirms the specific influence and magnitude of social support as it relates to gay men's identity formation.

Additionally, it should be noted that regarding gay men's identity development, Cass' (1979) six-stage model asserts that increasing contact with the gay community is a crucial component by stage four, Identity Acceptance. As previously discussed, although social support in this case was a predictor variable, gay men's identity/outness and social support may have reciprocal effects on one another. That is, greater social support might facilitate increased disclosure of sexual orientation, and likewise, being more open with

others by opening up about one's sexuality may improve the quality of one's personal relationships.

*Summary of Logistic Regression Findings.* Akin to the results from the first two hypotheses, gay men with positive out gay identities were much more likely to (1) have less perception of social stigma, (2) have greater social support, (3) possess less masculine characteristics, and (4), contrary to the original hypothesis, have more experiences of anti-gay attack.

#### *Review and Discussion of Exploratory Logistic Regression Analysis*

As previously discussed in Chapter 4, the goal of the first presented binary logistic regression was to predict gay men being out and having a positive identity versus being closeted and having a negative identity. However, given that the creation these two discrete categories reduced the sample by over 50% by the restricted defining of the reference group from which the prediction of an out/positive identity group could be made, this second exploratory analysis was conducted with the intention of providing supplemental validity to the initial logistic regression. In this analysis, the parameters of the reference group (the "closeted/negative identity" group) were extended to a half standard deviation beyond the mean (the numerical point at which the 'out/positive group begins). However, the additional cases included in this analysis approached greater outness or a more positive identity separately, but not simultaneously. Figure 7 in chapter 4 depicts the division of groups for the first logistic regression and figure 8 shows the added cases that redefined the closeted/negative identity group in the second analysis.

Results of the exploratory logistic regression mirrored the original analysis with the exception of two important differences that will be discussed here. First, in this analysis, compared to white gay men, gay men of color were significantly more likely to fall into the out/positive identity group, and although the present study did not delineate specific hypotheses concerning race/ethnicity, this finding supports the literature regarding resiliency in lesbian, gay, and bisexual communities of color (Bowleg et al., 2003; Moradi et al., 2010; Wilson & Miller, 2002). Specifically, this finding suggests that among the other significant predictors, being a gay man of color increases the odds of falling into the out/positive identity group by two and a half times. Furthermore, although race/ethnicity was non-significant in the previous logistic regression analysis that strictly compared the out/positive identity group to the closeted/negative identity group, this analysis shows that race and ethnicity are relevant factors when a wider range of outness and identity statuses are observed. Therefore, in this sample of gay men, it reasons that more white gay men approach greater outness or approach a more positive identity. Given that this is the first study to cluster gay men's outness and identity into discrete categories, the full meaning of this finding might precede the theoretical footing of the current literature on these subjects. Yet, recent research is suggesting that in spite of the double minority status for lgbt people of color, there is little empirical evidence of greater mental health problems as a consequence (Meyer, Dietrich, & Schwartz, 2008), and as a result, research and theory on the topic of resilience in gay communities of color is advancing. In summary, the finding that gay men of color are significantly more likely to be out with positive gay identities supports the notion that, in spite of potentially

greater stress by way of racism (both within and outside the gay community), and potentially greater stigma within communities of color, gay men of color are nevertheless more resilient (Meyer, 2010).

The second variation in this analysis showed that childhood gender behavior was non-significant. Therefore, when a broader range of outness and identity statuses are observed (e.g. men who are in the middle ranges of outness and/or have a neutral identity status), childhood gender behavior has no bearing on gay men reaching what might be considered the most evolved statuses of gay identity development. This concurs with the previous results in that, when the full linear range of outness and identity statuses were examined against men's child gender behavior, no significant association was found. Taken altogether, although childhood gender behavior appears to have some bearing on gay men's outness and identity, it is not evidencing to be a strong or stable predictor.

#### *Logistic Regression Interaction*

*Hypothesis 9: Socioeconomic status will moderate the relationship between masculinity and outness/identity.* Results from this analysis echo the previous finding that socioeconomic status significantly moderated the relationship between masculinity and gay men's outness. Although not an exact replica of the previous result, this finding supports its validity and suggests that the interaction between socioeconomic status and masculinity is associated with gay men's total identity formation process (as opposed to strictly predicting outness). In this case, when comparing the polarities of outness and identity, the relationship between masculinity and outness/identity was stronger for men in higher socioeconomic positions. In other words, compared with men from lower

socioeconomic backgrounds, when gay men in higher social strata adopt more traditional masculine characteristics, they disclose their sexual orientation significantly less. The fact that this interaction relates to both identity and outness is not surprising given the strong correlation between gay men's identity and outness. Perhaps what is more intriguing is the issue that this same interaction was not found to be significant with regard to identity alone, which conceivably suggests that the interaction between masculinity and socioeconomic status has greater bearing on gay men's disclosure behavior than on other aspects of identity formation.

As previously mentioned, this is a novel finding with regard to the influence of socio-cultural variables within the gay male community, and extends the body of literature regarding gay men's identity development. Specifically, this finding suggests that, along with such contextual factors as conformity to masculine norms, gay men's identity development is also a result of their socioeconomic status.

#### *Global Summary of Findings*

The findings from this study that have been reviewed thus far are a somewhat complex and lengthy collection of results, interpretations, and review of previous literature. This section is intended to be a more comprehensible overview of the main findings.

To begin, I would like to emphasize the important finding regarding the two outcome variables, outness and identity status. These variables were strongly correlated--as men's identities became increasingly positive they were also more out and vice versa. The influence of this correlation on the present study's overall findings was demonstrated

in several ways. First, in spite of the theoretical grounds for gay men to develop positive gay identities without being out (Fassinger & Miller, 1996; Harry, 1993; Mohr & Fassinger, 2000), as well as the notion that gay men can conceivably be out and have a negative identity, results here found a strong linear trend whereby men ranged from being closeted with a negative identity to being out with a positive identity. In other words, in this relatively large sample of gay-identified men, only a handful could be described as being out with a negative identity or closeted with a positive identity. Therefore, it was not surprising that the factors significantly contributing to gay men's outness were, in many instances, virtually identical to those that contributed to their identity status.

Throughout the many analyses conducted in this study, three factors materialized as fairly robust and consistent predictors of gay men's outness and identity status. These included social support, perceived stigma, and conformity to masculine norms-- and although experiences of anti-gay attack also significantly predicted gay men's outness and identity, this finding was contrary to the original hypothesis and may signify that gay men who are more "out and proud" are more likely to have experienced verbal and physical anti-gay attacks. Although, childhood gender behavior and socioeconomic status did not significantly contribute to gay men's identity development and outness as main-effect predictors, subscale and interaction results revealed their relevance toward men's process of identifying as gay, including their disclosure behaviors.

#### *Theoretical Implications and Future Research*

One of the primary purposes of this study was to empirically test recently evolving theories regarding the nature of gay identity development (Fassinger & Miller,

1996; Harry, 1993; Mohr & Fassinger, 2000). Of particular interest here was the notion that gay men's identity may not develop parallel to their degree of outness as previously suggested by a number of early stage models of gay identity development (e.g. Cass, 1979; Troiden, 1988). Rather, several scholars (Fassinger & Miller, 1996; Harry, 1993; Mohr & Fassinger, 2000) have posited that gay men's internal identity processes may be separate from their disclosure behaviors. Furthermore, there has been a growing push in the literature to better understand the individual and contextual differences among the gay male population as way to better conceptualize which gay men might be more at risk for developmental failure and maladjustment (Mohr & Fassinger, 2000).

Therefore, this study explored the contribution of several socio-contextual variables in relation to gay men's outness and identity development. Several findings here support and extend previous research regarding the issues that gay men face with regard to coming out and developing positive feelings about themselves. Furthermore, this study specifically identified the strong association between identity and outness and demonstrated that in spite of the theoretical justification that gay men may develop positive identities without coming out, aside from a very small percentage of the sample, this situation was essentially not found. For that reason, results of this study indirectly provide support for linear theories of gay identity formation in that the latter stages of development are characterized by increasing disclosure of one's sexual orientation, decreased internalized homonegativity, and the integration of more positive feelings about one's sexual orientation (Cass, 1979; Troiden, 1988). Nevertheless, this study did not examine stages and therefore cannot attest to the specifics of sequential

developmental processes. However, in a study by Johns and Probst (2004), Cass' (1979) model was empirically tested with a sample of 143 mostly gay and lesbian adult participants, and results did not support the middle stages of development, instead, two broad categories emerged from the data, namely, 'unintegrated and integrated' (p. 86). Findings in the present study more closely support Johns and Probst (2004) study, although the data in the present study also demonstrated evidence of gay men possessing identities (and disclosure levels) in between negative or positive categories, suggesting that other statuses of identity exist within these processes. Moreover, the findings of this study do not support Fassinger and Miller's (1996) model of gay men undergoing separate internal and public identity processes.

Nevertheless, it should be noted that Gallor and Fassinger (2010) discovered a similar relationship between identity and outness in an ethnically diverse sample of lesbians and gay men recruited from online sources. They described the finding as unsurprising and explained that "it is difficult, if not impossible, to conduct this type of research with participants who are less comfortable with their same-sex identity or attraction or who are not involved with community organizations or groups of other gay and lesbian individuals" (p. 305). Furthermore, it should be emphasized that this study did not measure the detailed aspects of multiple stages of identity development; rather, it focused on global statuses of gay men possessing positive or negative feelings about themselves as sexual minorities. Specifically, most models of gay identity development describe a hierarchical process of increased self-esteem and reduced internalized homophobia toward a more fully-integrated self (Cass, 1979; Troiden, 1988). Even so,

the findings also highlight the intricate nature of social contexts and provide support for theory on the social-psychological effect of sexuality and gender construction in the contexts of stress and support (Meyer, Schwartz, & Frost, 2008).

In spite of the outcome that only a handful of men in this sample fit the description of being closeted with a positive gay identity, the idea that this is a possibility for sexual-minority people, should nevertheless be considered for future research. Specifically, heterosexuals are not obligated to come out to others about their sexuality, and at some point in time this burden may be lifted from lgbt people without sacrificing a positive gay identity. Since homosexuality was removed from the DSM nearly 40 years ago, society has made great strides to improve the lives of lesbian, gay, and bisexual people. For example, within the last decade we have made advances in the areas of marriage equality in a handful of states, service in the military (with the repeal of don't ask, don't tell), amongst other social evolutions demonstrating lgbt progress. Although many scholars agree that prejudice and stigma toward the gay community continue to abound (Herek, 2008; Herek, Chopp, & Strohl, 2007; Huebner & Davis, 2007), the socio-political landscape regarding these matters is nevertheless changing at an unparalleled momentum. Fassinger and Arseneau (2007) note that "research regarding identity formation is temporally bound and must be updated continually in order to be useful in practice" (p. 27). Therefore, as the cultural climate continues to change, research should persist in its inquiry of how the lives of gay men will accordingly adapt.

Another purpose of this study was to expand the use of Meyer's (1995; 2003) minority stress model by examining its utility in association with gay men's identity

formation. Furthermore, this study expanded the model through the investigation of additional unique factors that might be considered stressful with regard to possessing a minority sexual orientation. For example, gender nonconformity in childhood is a specific stressor in which gay men are more likely to have experienced. Furthermore, given the conceptual overlap between gender and sexuality, gay men have a unique struggle negotiating their gender and sexual identities. Therefore, gay men's experience of gender socialization and their resulting observance of masculine characteristics is, in many ways, a unique stress reserved for sexual minority men. The remaining variables in this study, social support, and socioeconomic status are more broad contextual factors, each of which has the potential for contributing to gay men's overall stress. Therefore from a *greater stress* perspective, this study evaluated several unique (minority-related) and general sources of stress to determine their individual and cumulative effect on gay men's identity development and outness.

Results of the present study support the utility of Meyer's (1995; 2003) minority stress model with regard to gay men's identity and outness with the exception of how the anti-gay attack variable performed. Additionally, results here support the notion of growing the conceptualization of what constitutes a minority-related stressor, and how these factors might interact with gay men's wellbeing and identity processes. Future research might also explore other predictors and moderators of gay men's identity development and outness, as well as other factors related to self-concept, self-esteem, and identity formation in order to better understand the complex interactive effects of the numerous socio-contextual factors on the lives of gay men.

### *Implications for Counseling*

Numerous implications for counseling with men are noted. The following section will proceed as follows-- first, I will briefly discuss issues related to countertransference; following this, I will discuss the implications of the strong relationship between gay men's outness and identity. Next, counseling implications concerning the three strongest predictors of gay men's outness and identity (conformity to masculine norms, social support, and stigma) will be addressed. Further, I will comment on the findings regarding childhood gender behavior, as well as the unexpected negative association between age and outness, and lastly, the interaction findings regarding socioeconomic status.

To begin, it has been recognized for some time that for many psychotherapists, approaching the subject of sex and sexuality can be a difficult undertaking (Jones, 2009; Langdrige, 2007). As the topic of sexuality emerges for men, as a baseline, it is imperative that counselors are fully receptive and comfortable with these themes. As much research notes, conscious and/or unconscious discomfort with any topic of therapy is apt to derail treatment. Just as men are faced with confronting such things as their internalized homonegativity and notions of being a man, psychotherapists are challenged to recognize their own potential homophobia and constructions of masculinity. Indeed, the American Psychological Association's (APA) guidelines for working with lesbian, gay, and bisexual people call for increasing attention to clinicians' self-awareness with regard to heterosexism and stigma in order to avoid bias in the course of therapy (APA, 2011).

One of the central research questions of this study concerned the notion that gay men may develop positive gay identities without being out, and explored several factors that might help us identify the gay men that might fit into this category. The finding that virtually none of the over 500 men in this sample fit this description underscores the importance of the coming out process as men embark on their journey of gay identity development. Nevertheless, it goes without saying that on an individual level the journey to greater self-awareness with regard to one's sexuality is wholly distinct and counselors should be especially sensitive to how their clients are choosing to navigate their coming out process. As many scholars have noted, coming out carries a host of risks (violence, rejection, financial loss, etc.), and therefore, gay men may have legitimate reasons for not coming out in many realms of life (Corrigan & Matthews, 2003). At the same time, counselors should be attune to the ways in which being closeted might be associated with aspects of their identity formation and explicitly explore how long and painful the process has been, levels of internalized homonegativity, attitudes about privacy, and need for acceptance. Findings here suggest that for most gay men, these dimensions of identity will correspond with their degree of outness. Thus, as these factors lessen, men might be encouraged to be more open to others about their sexuality. Alternatively, as men come out, they may find that these identity issues slowly resolve themselves.

Findings from this study highlight that minority stress, social support, and constructions of masculinity each play a significant role in gay men's identity development including how out they are to others with regard to their sexual orientation. Counselors should carefully consider each of these factors in their clients' lives, assessing

their contribution to men remaining closeted and maintaining negative feelings about themselves. Bolstering social support can combat a potentially difficult coming out process and serve to validate and encourage a positive gay identity. Additionally, minority stress should be thoroughly evaluated, particularly with regard to perceptions of, and experiences of stigma. Therapeutic goals can include exploring the history of, and current experiences of homophobia and stigma, and how these may be stagnating identity growth and the coming out process. Also, men's ideas about masculinity should be considered in relation to their levels of social support and minority stress. Given that more masculine men have been shown to be less emotional (Sharpe et al., 1995) and are less likely to seek help for psychological reasons (Mahalik et al., 2003), counselors should be particularly sensitive to the difficulty men may have 'opening up.' Several resources for counselors are available that discuss pertinent clinical issues related to men's masculinity and provide useful guidance to counselors working with men whose masculinity may be an obstacle in the therapeutic process (see Mahalik et al., 2005)

The finding that gay men's childhood gender behavior was significantly associated with greater need for acceptance can also inform the counseling process, particularly since the need for acceptance subscale closely relates to self-esteem (Mohr & Fassinger, 2000). From a developmental perspective, greater nonconformity in childhood may be associated with a host of other therapeutic concerns, and may be indicative of more deeply rooted conflicts. In light of the present study's finding, gay men with greater gender nonconformity may be much more sensitive with regard to their sexual orientation and therefore need supplementary encouragement and validation to bolster

their more fragile self-esteem. Counselors might consider ways to indicate the normalcy of both gay men's gender and sexual identities, and encourage rather than dissuade growth that feels most instinctive for their clients.

Another finding from this study that can inform the counseling profession is that the greater levels of outness found in younger men was specific to their outness to people in general and not to their family. In other words, although younger gay men may be more out to friends, and co-workers, etc., they were no more out to family than older counterparts. Therefore, counselors working with younger gay men might find that coming out to their family is a constructive therapeutic topic. Alternatively, counselors may find that older gay men may have more difficulty coming out in contexts such as at work or to new acquaintances. In either case, counselors should be especially alert to how cohort effects interact with gay men's disclosure behavior to their unique spheres of life.

Lastly, counselors should pay special attention to the ways in which gay men's socioeconomic standing interacts with their identity as a sexual minority. As suggested by previous research and the findings of the present study, the relevance of socioeconomic status as it pertains to gay men's lives may be unremarkable, yet, can have an important influence in gay men's identity processes. Therefore, as counselors better understand the distinct cultural environment of gay men's lives, they may observe the unique ways in which socioeconomic status shapes their perceptions of themselves as both sexual minorities and as men.

### *Limitations*

The first limitation I'll discuss regards the sampling procedure which is tremendously important as it pertains to validity and generalizability. Ideal sampling procedures entail pure random sampling in which each person in the researcher's chosen population has an equal probability of being selected for participation. For obvious reasons this is nearly impossible to accomplish and therefore less desirable methods must be employed in order to accomplish the work. Given that this study examined the gay male population and sought men who ranged in their sexual identity development and outness, the privacy and anonymity of online sampling made it an ideal sampling method. Furthermore, Gosling, Vazire, Srivastava, and John (2004) assert that "the data provided by internet methods are of at least as good quality as those provided through traditional paper and pencil measures" (p.102), and in fact, internet sampling for lgbt research is one of the most widely utilized and accepted methods (Riggle, Rostosky, & Reedy (2005). Other studies have tested the validity of internet sampling and found that when paper and pencil and online data samples were compared, the results were nearly identical (Buchanan & Smith, 1999; Krantz, Ballard, & Scher, 1997). Nevertheless, restricting the sampling to internet websites, Usenet groups, and listservs decreases the potential for all gay men to participate in the study, and may have resulted in a biased sample (e.g. some gay men may not have the resources to allow them access to the internet). Additionally, although I sought to advertise across a wide range of internet sites, one cannot be certain as to equally reaching gay men in various stages of identity development, outness, race, ethnicity, socioeconomic statuses, and other pertinent variables.

Another limitation to consider is the potential bias with regard to who elected to participate versus who did not. Specifically, out of the gay men whom the advertisement requesting participation reached, there exists the possibility that there is something fundamentally different about the men who decided to participate. Furthermore, it is uncertain how many men were afforded the opportunity to participate but declined. For instance, we could speculate that the men who took the fifteen to twenty minutes required to complete the survey (considering that no financial incentives were offered) might be more enthusiastic to better understand gay men's issues, additionally, these men may be fundamentally more altruistic. Therefore, considering the potential differences between non-respondents and respondents, the degree of bias within the study's sample is unknown.

This study relied on participants' self-report of their subjective experience and history, which limits the validity of the findings. Participants may have had reasons for providing socially desirable or otherwise inaccurate information, which would bias the results. Specifically, this study did not control for social desirability which is the notion that participants may answer questions in what they believe is a socially acceptable way as opposed to answering truthfully. In the present study there were certainly questions that potentially posed a challenge to participants with regard to truthfulness. Despite participants' control to complete the survey in the most private way of their choosing, and regardless of the complete anonymity of their responses, participants were being called on to be truthful with themselves about their sexuality, their values about being a man, their relationships with family and significant others, as well as other possibly

difficult topics such as internalized homophobia and the coming out process. Some research has shown that men with greater conformity to masculine norms have more immature psychological defense mechanisms (Mahalik et al., 1998). Therefore, more masculine men may deny aspects of their lives that are difficult, or use other immature psychological defenses to ward off the anxiety of troubling issues in life. Likewise, coming to terms with being gay can be a lengthy and difficult process (Mohr & Fassinger, 2000), and many men report being 'in denial' before admitting to themselves that they are homosexual.

Yet another limitation involves the correlational research design which limits the researcher's assertion of causality between the predictor variables and gay men's outness and identity. Specifically, in order to make ascertain the trajectories and causal determinants of gay men's identity development, longitudinal and experimental designs would be required. For example, as previously discussed, experiences of anti-gay attack (a minority stress variable), was used to predict gay men's identity status. It was hypothesized that gay men with greater experiences of anti-gay attack would have more negative identities; however, the reverse was true. Yet, it is unlikely that experiences of anti-gay verbal and physical attack are responsible for producing a positive gay identity. In fact, the development of a positive gay identity more likely predated experiences of anti-gay attack. Therefore, caution must be exercised with the interpretation of these significant relationships.

In addition to the limitations associated with the research design, there were two specific measures used in this study that revealed poor reliability coefficients and

therefore offered less confident findings. Specifically, the anti-gay attack measure consisted of four questions and was found to lack sufficient variability, a likely cause of its reduced Cronbach alpha. The socioeconomic status measure also revealed low internal consistency which may reflect inaccurate or biased coding on the part of the researcher or alternatively, may reflect the variability in the two aspects (education and occupation) of the socioeconomic status construct. Furthermore, the Recalled Childhood Gender Identity/Gender Role Questionnaire (Zucker et al., 2006) required participants to remember various aspects of their usual play behaviors and relations with peers and parents from before the age of thirteen. This introduces further potential for unreliable response patterns and therefore biased results. Another limitation with regard to the measures used in this study pertains to the Outness Inventory (Mohr & Fassinger, 2000) which asks participants about how out they are in various contexts, yet, does not take into account whether their level of outness was under their control. Specifically, for lgbt people, 'being outed' can be a very serious problem with a number of negative consequences. Therefore, participants' degree of outness may carry with it considerable distress not accounted for by the measure. This limitation may explain why only a handful of cases in this study could be described as having an *out negative identity*. That is, perhaps most of the participants in this study were voluntarily out rather than being 'outed' in which case there may have been more *out negative identity* subjects.

*Limitations of the sample recruited.* The final set of limitations to consider involves the difficulty of defining the community being examined. For example, it is important to note that bisexually-identified participants were excluded from this study.

Some evidence exists that many gay-identified men identified as bisexual prior to identifying as gay (Lever, 1994). According to Stokes, Miller, and Mundhenk (1998) men's self-identification change from heterosexual-to-bisexual-to-gay is an expected transition for many men, likely in response to the profound social stigma related to homosexuality. In light of this, the present study therefore may have excluded men in the early stages of gay identity development that were presently identifying as bisexual. Nevertheless, it is difficult (if not impossible) to know whether these men are transitioning to an eventual gay identity or are in fact bisexual and will remain bisexually-identified. Therefore, in an effort not to diminish the legitimacy of bisexuality, this study sought to categorize bisexually-identified men as unique to gay-identified men reasoning that bisexuality should be recognized as a distinct sexual orientation and encompasses a unique set of experiences, stressors, and identity/outness correlates.

Another limitation of the sample involved other demographics such as age, race/ethnicity, and education. First, an analysis comparing the demographics of participants who completed the survey versus participants who dropped out early revealed a significant difference in age with younger men more likely to have withdrawn from the study. Therefore, the results may be more representative of older gay men, and moreover, it may be that younger gay men experience different patterns of associations to their identity and outness. Additionally, the sample was primarily white and therefore the findings here may not be as applicable to gay men of color. Furthermore the sample was fairly well educated with over 66% reporting to have a Bachelor's degree or higher (in

fact, more participants held Master's or Doctoral degrees than Bachelor degrees). Therefore, although this study uncovered some significant results with regard to socioeconomic status, the sample may better represent upper-middle class rather than poor or working class gay men.

Additionally, this study did not include adolescent participants and therefore the results do not represent the unique developmental experiences of boys and men younger than age eighteen. The process of youth developing a minority sexuality and their coming out process carries unique developmental, contextual, and intrapsychic characteristics that were not accounted for in this study and should be examined separately due to the more sensitive nature of these issues for young people.

Furthermore, different patterns between contextual factors, outness and identity may exist for several reasons. For example, today more than ever before, youth may be more likely to develop positive gay identities without coming out. Alternatively, the experience of youth being 'outed' by peers (i.e. being involuntarily out) may generate a unique set of outcomes such as developing a negative gay identity.

### *Summary and Conclusions*

This study sought to extend the utility of Meyer's (1995, 2003) minority stress model by being the first to examine its contribution to gay men's identity development. Stress deriving from a minority status has been linked to an array of negative health consequences, yet, the variety of stressors specific to gay men, and the effect of their simultaneous presence are not fully understood, and is a growing point of interest in empirical research today. Since the conception of Meyer's (1995) initial model, research

has continued to grow around the notion of additive stress (or ‘disadvantage’) that sexual minorities confront (Kertzner, 2007; Meyer, 2010), and the petition for more complex models of sexual minority stress and resilience persist in the literature (Hamilton & Mahalik, 2009; McCarn & Fassinger, 1996; Mohr & Fassinger, 2000). Additionally, ever since Cass’ (1979) historic model of gay men’s identity development, theory and research on this subject has undergone considerable modifications (Eliason & Schope, 2007). Specifically, more recent models of gay men’s identity development (Harry, 1993; McCarn & Fassinger, 1996; Mohr & Fassinger, 2000) have posited that internal identity formation is not necessarily synonymous with coming out, but rather, occurs based upon contextual circumstances allowing for that process to unfold. Therefore, the aim of this study was extend the minority stress model by exploring additional variables (experiences of stress related to being a sexual minority, socioeconomic position, degree and quality of social support, gender behavior in childhood, and adherence to masculinity norms in adulthood) that have the potential to heighten the difficulty of gay men’s identity development and coming out process.

In conclusion, the findings from this study call attention to the complexity of the social context that is capable of intensifying or alleviating the stress of gay men’s identity development. Gay men’s history of gender behavior, socioeconomic status, social support, and enactment of traditional masculinity, can contribute to the stress of being a sexual minority, and appear to play a unique role in explaining gay men’s identity development and outness. Continued efforts need to be made to better understand factors that impact gay men’s identity development (including the coming out process) with the

intention of making these processes less burdensome, and with ultimate goal of eradicating minority-related stress altogether.

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Table 1. Means, Standard Deviations, and Intercorrelations of Variables.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Age	45.17	14.97	-							
2. Outness	4.33	1.77	-.17***	-						
3. LGBIS	3.69	1.11	.04	-.64***	-					
4. Stigma	3.08	0.96	.06	-.32***	.47***	-				
5. Attack	1.09	0.95	-.13**	.33***	-.11**	.07	-			
6. SS	5.02	1.24	-.11**	.39***	-.42***	-.37***	.06	-		
7. CMNI	48.22	6.23	-.12**	-.25***	.34***	.17***	-.09*	-.25***	-	
8. Child Gen	2.27	0.57	-.15***	.10*	.01	.03	.16***	.07	-.15***	-
9. SES	44.27	16.29	.19***	.07	-.02	-.04	.02	.11**	-.01	.02

*Note.* *N* = 518. Outness = Outness Inventory (Mohr & Fassinger, 2000); LGBIS = Lesbian, Gay, and Bisexual Identity Scale, negative identity index (Mohr & Fassinger, 2000); Stigma = Stigma Scale (Martin & Dean, 1987); Attack = Sum of history of a antigay verbal and physical attack; SS = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); CMNI = total score of the Conformity to Masculine Norms Inventory (Mahalik et al., 2003); Child Gen = Recalled Childhood Gender Identity/Gender Role Questionnaire (Zucker et al. 2006); SES = The Hollingshead Index of Social Status (Hollingshead, 1975).

\* *p* < .05 (two-tailed). \*\* *p* < .01 (two-tailed). \*\*\* *p* < .001 (two-tailed).

Table 2. *Summary of Regression Analyses for Variables Predicting Outness and Identity Status in Gay Men*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
<b>Main Effects Model</b>					
<b>Predicting Outness</b>					
Step 1				.04	.04***
Age	-.02	.01	-.14***		
Race	-.20	.18	-.05		
Step 2				.32	.29***
Child Gender	.02	.12	.01		
CMNI	-.04	.01	-.14***		
SS	.33	.06	.22***		
SES	.07	.05	.05		
Stigma	-.40	.07	-.22***		
Attack	.56	.07	.30***		
<b>Main Effects Model</b>					
<b>Predicting Negative Identity</b>					
Step 1				.01	.01
Age	.00	.00	.02		
Race	.20	.11	.07		
Step 2				.32	.32***
Child Gender	.09	.07	.05		
CMNI	.02	.01	.10**		
SS	-.24	.04	-.27***		
SES	.02	.03	.02		
Stigma	.42	.05	.36***		
Attack	-.15	.04	-.13***		

Note. *N* = 512. The values in step one reflect the full model. Child Gender = Recalled Childhood Gender Role/Identity Questionnaire (Zucker et al. 2006); CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SS = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); SES = The Hollingshead Index of Social Status (Hollingshead, 1975); Stigma = Stigma Scale (Martin & Dean, 1987); Attack = Measure of physical and verbal attack.

\* *p* < .05 (two-tailed). \*\* *p* < .01 (two-tailed). \*\*\* *p* < .001 (two-tailed).

Table 3. Means, Standard Deviations, and Intercorrelations of Outness Inventory Subscales, Identity Subscales, and Predictor Variables

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. Age	45.17	14.97	-																
2. Education	5.93	1.26	.19**	-															
3. Income	57K	53K	.10*	.16**	-														
4. Out to World	4.11	1.96	-.22**	-.01	-.05	-													
5. Out to Family	4.60	1.91	-.08	-.02	-.05	.66**	-												
6. Out to Religion	3.50	2.39	.02	.08	-.04	.74**	.64**	-											
7. LGBIS- IH	2.55	1.37	.02	-.01	-.01	-.50**	-.39**	-.53**	-										
8. LGBIS- PRI	4.82	1.43	.16**	.03	.06	-.75**	-.57**	-.63**	.52**	-									
9. LGBIS- ACC	3.21	1.27	-.08	-.07	-.04	-.42**	-.34**	-.33**	.55**	.54**	-								
10. LGBIS- DP	3.98	1.52	-.00	.08	.00	-.34**	-.34**	-.27**	.48**	.43**	.51**	-							
11. Stigma	3.08	0.96	.06	-.06	-.06	-.33**	-.33**	-.24**	.35**	.34**	.40**	.40**	-						
12. Attack	1.09	0.95	-.13**	-.02	-.03	.30**	.30**	.30**	-.12**	-.20**	.04	-.04	.07	-					
13. CMNI	48.22	6.23	-.12**	.05	.12**	-.27**	-.18**	-.31**	.34**	.27**	.26**	.21**	.17**	-.09*	-				
14. Child Gender	2.27	0.57	-.15**	.07	-.08	.14**	.04	.13*	.00	-.08	.09*	.03	.03	.16**	-.15**	-			
15. SS – Family	4.56	1.55	-.15**	.08	.02	.18**	.32**	.13**	-.24**	-.18**	-.29**	-.23**	-.30**	-.01	-.14**	.03	-		
16. SS – Friends	5.40	1.28	-.16**	.06	-.01	.43**	.25**	.33**	-.38**	-.33**	-.30**	-.28**	-.36**	.06	-.27**	.11*	.44**	-	
17. SS – S.O.	5.10	1.81	.00	.08	-.06	.29**	.25**	.22**	-.31**	-.25**	-.29**	-.24**	-.25**	.09*	-.21**	.03	.44**	.52**	-
18. SES	44.27	16.29	.19**	.59**	.24**	.05	.07	.11**	-.03	-.00	-.10*	.05	-.04	.02	.03	-.01	.08	.06	.12**

Note.  $N = 518$ . Education = Likert Scale (1=7<sup>th</sup> grade or less, 8=doctoral degree), Out to World, Out to Family, Out to Religion = Subscales from the Outness Inventory (Mohr & Fassinger, 2000), higher scores indicate greater outness; LGBIS- IH = Lesbian, Gay, and Bisexual Identity Internalized Homonegativity Subscale, LGBIS- PRI = Lesbian, Gay, and Bisexual Identity Need for Privacy Subscale, LGBIS- ACC = Lesbian, Gay, and Bisexual Identity Need for Acceptance Subscale, LGBIS- DP = Lesbian, Gay, and Bisexual Identity Difficult Process Subscale (Mohr & Fassinger, 2000), higher scores indicate greater internalized homophobia, more difficult process, etc.; Stigma = Stigma Scale (Martin & Dean, 1987), higher scores indicate greater stigma; Attack = Sum of history of a antigay verbal and physical attack, higher scores indicate more attack; SS = Social Support Subscales (Family, Friends, Significant Other) = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988), higher scores indicate more social support; CMNI = total score of the Conformity to Masculine Norms Inventory (Mahalik et al., 2003), higher scores indicate greater conformity; Child Gender = Recalled Childhood Gender Identity/Gender Role Questionnaire (Zucker et al. 2006), higher scores indicate greater non-conformity; SES = The Hollingshead Index of Social Status (Hollingshead, 1975), higher scores indicate higher social status.

\*  $p < .05$  (two-tailed). \*\*  $p < .01$  (two-tailed). \*\*\*  $p < .001$  (two-tailed).

Table 4. *Summary of Regression Analyses for Variables Predicting Subscales of Outness*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
<b>Out to World Subscale</b>					
Step 1				.06	.06***
Age	-.01	.00	-.22***		
Race	-.02	.03	-.03		
Step 2				.31	.25***
Child Gender	.02	.33	-.03		
CMNI	-.01	.00	-.19***		
SS	.04	.01	.17***		
SES	.01	.01	.03		
Stigma	-.06	.01	-.22***		
Attack	.08	.01	.26***		
<b>Out to Family Subscale</b>					
Step 1				.01	.01
Age	-.01	.01	-.04		
Race	-.18	.20	-.04		
Step 2				.22	.22***
Child Gender	-.01	.01	-.04		
CMNI	-.03	.01	-.08*		
SS	.03	.01	.24***		
SES	.06	.06	.04		
Stigma	-.03	.01	-.16***		
Attack	.57	.08	.28***		

Note. *N* = 512. The values in step one reflect the full model. Child Gender = Recalled Childhood Gender Role/Identity Questionnaire (Zucker et al. 2006); CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SS = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); SES = The Hollingshead Index of Social Status (Hollingshead, 1975); Stigma = Stigma Scale (Martin & Dean, 1987); Attack = Measure of physical and verbal attack.

\* *p* < .05 (two-tailed). \*\* *p* < .01 (two-tailed). \*\*\* *p* < .001 (two-tailed).

Table 5. Summary of Regression Analyses for Variables Predicting Subscales of Lesbian, Gay, Bisexual Identity Scale (LGBIS)

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
<b>Need For Privacy Subscale</b>					
Step 1				.04	.04***
Age	.02	.00	.16**		
Race	.36	.15	.10*		
Step 2				.23	.20***
Child Gender	-.01	.10	-.01		
CMNI	.04	.01	.18**		
SS	-.16	.05	-.14**		
SES	-.01	.04	-.01		
Stigma	.38	.06	.26**		
Attack	-.27	.06	-.18**		
<b>Need For Acceptance Subscale</b>					
Step 1				.01	.01
Age	-.01	.00	-.06		
Race	.19	.13	.06		
Step 2				.27	.25***
Child Gender	.23	.09	.11**		
CMNI	.03	.01	.16**		
SS	-.23	.04	-.23**		
SES	-.05	.04	-.06		
Stigma	.37	.06	.29**		
Attack	.02	.05	.01		

Note. *N* = 512. The values in step one reflect the full model. Child Gender = Recalled Childhood Gender Role/Identity Questionnaire (Zucker et al. 2006); CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SS = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); SES = The Hollingshead Index of Social Status (Hollingshead, 1975); Stigma = Stigma Scale (Martin & Dean, 1987); Attack = Measure of physical and verbal attack.

\* *p* < .05 (two-tailed). \*\* *p* < .01 (two-tailed). \*\*\* *p* < .001 (two-tailed).

Table 5 (Cont.) Summary of Regression Analyses for Variables Predicting Subscales of Lesbian, Gay, Bisexual Identity Scale (LGBIS)

Variable	<i>B</i>	<i>SE B</i>	$\beta$	<i>R</i> <sup>2</sup>	$\Delta R^2$
<b>Internalized Homonegativity Subscale</b>					
Step 1				.00	.00
Age	.00	.00	.01		
Race	.23	.14	.07		
Step 2				.23	.23**
Child Gender	.12	.10	.05		
CMNI	.04	.01	.14***		
SS	-.29	.05	-.26***		
SES	.01	.04	.01		
Stigma	.35	.06	.24***		
Attack	-.17	.06	-.11**		
<b>Difficult Process Subscale</b>					
Step 1				.00	.00
Age	-.01	.01	-.05		
Race	-.01	.16	-.00		
Step 2				.21	.21**
Child Gender	.15	.11	.06		
CMNI	.03	.01	.10*		
SS	-.21	.05	-.17***		
SES	.09	.05	.08*		
Stigma	.52	.07	.33***		
Attack	-.11	.07	-.07		

Note. *N* = 512. The values in step one reflect the full model. Child Gender = Recalled Childhood Gender Role/Identity Questionnaire (Zucker et al. 2006); CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SS = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); SES = The Hollingshead Index of Social Status (Hollingshead, 1975); Stigma = Stigma Scale (Martin & Dean, 1987); Attack = Measure of physical and verbal attack.

\* *p* < .05 (two-tailed). \*\* *p* < .01 (two-tailed). \*\*\* *p* < .001 (two-tailed).

Table 6. *Regression Results Examining the Hypothesis that SES Moderates the Relationship Between Masculinity and Outness*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Criterion: Outness					
Step 1				.07	.07***
CMNI	-.44	.08	-.25***		
SES	.13	.08	.07		
Step 2				.08	.01**
CMNI x SES	-.22	.08	-.12**		

Note.  $N = 517$ . CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SES = The Hollingshead Index of Social Status (Hollingshead, 1975).

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

Table 7. *Regression Results Examining the Hypothesis that SES Moderates the Relationship Between Experiences of Anti-gay Attack and Negative Identity*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	$\Delta R^2$
Criterion: Negative Identity					
Step 1				.01	.01*
Attack	-.13	.05	-.12**		
SES	-.02	.05	-.02		
Step 2				.02	.01*
Attack x SES	-.11	.05	-.10*		

Note.  $N = 517$ . Negative Identity = Negative Identity Index from the Lesbian, Gay, and Bisexual Identity Scale, (Mohr & Fassinger, 2000); Attack = Sum Experiences of Anti-gay Attack; SES = The Hollingshead Index of Social Status (Hollingshead, 1975).

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

Table 8. *Binary Logistic Regression Analysis Predicting Gay Men Having a Positive Identity and Being Out Versus Having a Negative Identity and Being Closeted*

Predictor	<i>B</i>	<i>SE B</i>	Wald's $\chi^2$	<i>df</i>	$e^\beta$ (odds ratio)
Overall Model			175.90***	8	
Constant	3.88	3.37	1.33	1	48.61
Block 1					
Race/Ethnicity	.42	.72	.34	1	1.53
Age	-.01	.02	.06	1	1.00
Block 2					
Stigma	-2.21	.44	25.66***	1	.11
Attack	.84	.28	9.00**	1	2.32
SES	.01	.02	.59	1	1.01
Child Gender	1.04	.53	3.85*	1	2.82
CMNI	-.15	.05	9.55**	1	.86
SS	1.46	.29	25.15***	1	4.31

Note: N=209. Race/Ethnicity = White = 0, Men of Color = 1; Child Gender = Recalled Childhood Gender Role/Identity Questionnaire (Zucker et al. 2006); CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SS = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); SES = The Hollingshead Index of Social Status (Hollingshead, 1975); Stigma = Stigma Scale (Martin & Dean, 1987); Attack = Measure of physical and verbal anti-gay attack.

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

Table 9. *Classification Table of Split-Sample Validation Analysis*

		Predicted						
		Selected Cases				Unselected Cases*		
		Observed		LogCode		% Correct	LogCode	
.00	1.00	.00	1.00	.00	1.00			
Step 1	LogCode	.00	64	7	90.1	12	3	80.0
		1.00	11	82	88.2	5	25	83.3
	Overall Percentage				89.0			82.2

Note. The cut value is .50. \* Some of the unselected cases are not classified due to either missing values in the independent variables or categorical variables with values out of the range of the selected cases.

Table 10. *Exploratory Binary Logistic Regression Analysis Predicting Gay Men Having a Positive Identity and Being Out With the Reference Group “Negative Identity/Closeted” Redefined*

Predictor	<i>B</i>	<i>SE B</i>	Wald's $\chi^2$	<i>df</i>	$e^{\beta}$ (odds ratio)
Overall Model			145.82***	8	
Constant	.96	2.14	.20	1	2.62
Block 1					
Race/Ethnicity	.89	.34	5.34*	1	2.57
Age	-.01	.01	.67	1	.99
Block 2					
Stigma	-1.01	.18	31.06***	1	.37
Attack	.64	.17	13.65**	1	1.90
SES	.01	.01	.79	1	1.01
Child Gender	-.16	.27	.35	1	.85
CMNI	-.06	.03	5.50*	1	.94
SS	.69	.15	20.14***	1	1.98

Note: N=325. Race/Ethnicity = White = 0, Men of Color = 1; Child Gender = Recalled Childhood Gender Role/Identity Questionnaire (Zucker et al. 2006); CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SS = Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988); SES = The Hollingshead Index of Social Status (Hollingshead, 1975); Stigma = Stigma Scale (Martin & Dean, 1987); Attack = Measure of physical and verbal anti-gay attack.

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

Table 11. *Split-Sample Validation Classification Table of Second, Exploratory Binary Logistic Regression*

		Predicted						
		Selected Cases				Unselected Cases*		
		LogCode		% Correct		LogCode		% Correct
Observed		.00	1.00			.00	1.00	
Step 1	LogCode	.00	144	23	86.2	25	9	73.5
		1.00	32	71	68.9	6	15	71.4
	Overall Percentage				79.6			72.7

Note. The cut value is .50. \* Some of the unselected cases are not classified due to either missing values in the independent variables or categorical variables with values out of the range of the selected cases.

Table 12. *Logistic Regression Results Examining the Hypothesis that SES Moderates the Relationship Between Masculinity and the Odds of Being Out with a Positive Gay Identity*

Variable	<i>B</i>	<i>SE B</i>	Wald's $\chi^2$	<i>df</i>	$e^{\beta}$ (odds ratio)
Overall Model			64.31***	3	
Constant	.39	.15	6.29**	1	1.47
Criterion: Out/Positive					
Step 1					
CMNI	-1.01	.18	31.37***	1	.37
SES	.19	.15	1.45	1	1.21
Step 2					
CMNI x SES	-.37	.18	4.10*	1	.69

Note. *N* = 220. CMNI = Conformity to Masculine Norms Inventory (Mahalik et al., 2003); SES = The Hollingshead Index of Social Status (Hollingshead, 1975).

\* = *p* < .05. \*\* = *p* < .01. \*\*\* = *p* < .001.

Table 13. *Split-Sample Validation Table of SES X Masculinity Interaction Predicting Odds of Being Out and Having a Positive Gay Identity*

			Predicted					
			Selected Cases			Unselected Cases*		
			LogCode			LogCode		
Observed			.00	1.00	% Correct	.00	1.00	% Correct
Step 1	LogCode	.00	40	38	51.3	9	8	52.9
		1.00	18	81	81.8	3	23	88.5
		Overall Percentage	68.4			74.4		

Note. The cut value is .50. \* Some of the unselected cases are not classified due to either missing values in the independent variables or categorical variables with values out of the range of the selected cases.

## Appendix A: Letter to Moderators of Internet Groups

My name is Chris Hamilton and I am a doctoral candidate completing my dissertation in Counseling Psychology at Boston College. I am researching issues that affect men's identity; specifically, I am investigating the reasons that some men with same-sex attraction 'come out' and identify as 'gay' and some remain closeted.

I am contacting you in your role as moderator of the X listserv to ask for your help. Specifically, I would like to get your permission to contact the members of your listserv and request their participation in a study of gay, bisexual, and 'questioning' men's identity.

I am contacting you because I do not want to spam your members or break your netiquette. Also, I want to reassure you that I will not try to sell anything to your members.

What I am requesting is your permission to send the attached message to your members. In the message, I talk about issues of concern for gay and questioning men regarding their identities as men and how they address issues related to sexual orientation. I also describe the survey and ask the reader to consider participating in this anonymous internet survey, which takes about 15-20 minutes to complete. The url is <http://www.psychdata.com/> if you are interested in taking a look at the survey.

Could you please take a look at the attached letter and decide if I can have your permission to send it to your listserv. If so, could you also tell me if you would prefer to post the letter yourself (i.e., to let your members know it is not spam) or whether you would prefer that I send the letter myself to the list.

Please feel free to contact me at this e-mail address if I can answer any questions for you. Thank you for your time.

Sincerely,

Chris Hamilton, M.A.  
Boston College, Campion Hall 309  
Chestnut Hill, MA 02467  
E-mail: [hamiltcd@bc.edu](mailto:hamiltcd@bc.edu)

## Appendix B: Request for Participation Advertisement Posted to Listservs/Websites

My name is Chris Hamilton and I am an LGBT community member. I am writing the listserve to ask for gay and 'questioning' men to participate in my online research study. I am currently conducting doctoral dissertation research at Boston College regarding issues that affect men with same-sex attraction.

Did you know that recent research suggests that some men with same-sex attraction adopt a positive gay identity more easily than other? Scholars have yet to fully understand this phenomenon, but some have hypothesized that it may be related to heterosexism in our society.

This research is an attempt to expand our understanding of how men with same-sex attraction negotiate their identity development; and specifically why some men 'come out' and develop positive 'gay' identities more easily than others.

**We are asking all men who are sexually attracted to men to participate in this study.**

In the study, you will not be asked to give any identifying information; your participation is entirely **anonymous**. You will be asked some questions about your childhood, masculinity, heterosexism and identity. The 15-20 minute survey can be completed online at:

[www.psychdata.net/surveys](http://www.psychdata.net/surveys)

You will not be contacted in any way following your participation in the survey. You will not be asked to buy anything or to sign up for any membership. You are only being asked to complete the on-line survey and nothing else.

Although I am unable to offer you any compensation for your time, my hope is that your participation in the study will help improve the quality of men's lives in the future through increasing community understanding of identity issues regarding men's same-sex attraction and how identity is negotiated. Please feel free to contact me by snail-mail, or e-mail if you have any questions about the study. The primary investigator, Chris Hamilton, can be contacted via email at [hamiltcd@bc.edu](mailto:hamiltcd@bc.edu) to answer any questions about the survey. If you have questions about your rights as a research participant, you may contact the Office for Research Protections, Boston College, at 617-552-4778 or [irb@bc.edu](mailto:irb@bc.edu).

Thank you for your willingness to consider participating in this research. Please feel free to share the web-site address of the survey with other men you think would be willing to help us better understand identity and coming out issues for men with same-sex attraction.

Chris Hamilton, M.A.  
Boston College, Campion Hall 309  
Chestnut Hill, MA 02467  
E-mail: [hamiltcd@bc.edu](mailto:hamiltcd@bc.edu)

## Appendix C: Letter of Informed Consent

You are invited to participate in a research study conducted by Chris Hamilton, M.A. a doctoral student researcher at Boston College. You are being asked to participate in this study because you are an adult male 18 years of age or older and are sexually attracted to other men. If this does not describe you, thank you for your interest, but please do not complete the survey.

**Purpose:** This study explores issues regarding sexual prejudice, gender behavior, and how men with same-sex attraction potentially ‘come out’ as gay. The earliest models of sexual identity development suggest that men must ‘come out’ in order to develop positive identities, yet, as the sociopolitical climate continues to change, some scholars suggest that men can develop positive feelings about being gay without coming out. The purpose of this study is to better understand the reasons that some men with same-sex attraction ‘come out’ and identify as ‘gay’ and some remain closeted.

**Procedures:** This study is being conducted through this online survey and will take approximately 15-20 minutes for you to complete. You will be asked some questions regarding your childhood and background, perceptions of stigma, feelings about traditional masculinity, and the quality of your social support. You may choose not to respond to any question on this survey. Should you choose to skip a question, you may continue with the remainder of the survey. Although there are no direct benefits offered by completing this survey, you should understand that the work here will help psychologists better understand the lives of sexual minorities and will advance our knowledge of how homophobia and stigma continue to have a negative impact on the lives of lgbt people.

**Risks:** Participating in this study should involve no more risk than that encountered in everyday life. However, if you experience any discomfort while answering the questions, you are free to discontinue without penalty. Although it is not possible to identify all potential risks, every reasonable effort has been taken to minimize potential risks.

**Anonymity:** In this study, your responses will be held confidential and are completely anonymous. You will not be contacted by the researcher or anyone else because you are not being asked to provide any identifying information such as your name, email or address. Your responses are assigned a random number to identify them and are stored behind a secure network firewall at Psychdata.com. This research may be published; however, no individual identity can be recognized through the reporting of such things as group averages, or variables such as age, race, or income.

**Withdrawal from the study:** Your participation is entirely voluntary. You may choose not to respond to any question on this survey and are free to discontinue participation at any time without penalty.

**Questions:** If you have questions or concerns concerning this research you may contact the Principal Investigator at 617-851-1359 or [hamiltcd@bc.edu](mailto:hamiltcd@bc.edu). If you have questions about your rights as a research participant, you may contact the Office for Research Protections, Boston College, at 617-552-4778 or [irb@bc.edu](mailto:irb@bc.edu). You may also request a summary of the findings by requesting this from Chris Hamilton by address or regular mail to Boston College, Lynch School of Education, Campion 309, Chestnut Hill, MA 02467 or email at [hamiltcd@bc.edu](mailto:hamiltcd@bc.edu). (This information is also provided at the end of the survey.)

**Certification of Consent:** Please read the statements below and click on the “I have read these statements, understand them and consent to participate” hyperlink to indicate that you consent to participate in the study. If you have questions or do not understand the statements below, please contact Chris Hamilton at [hamiltcd@bc.edu](mailto:hamiltcd@bc.edu). The Boston College IRB has approved this protocol from October 22, 2010 – October 21, 2011.

I have read these statements, understand them, and consent to participate

## Appendix D: Demographics

What is your age? \_\_\_\_\_

What is your gender?

Male

Female

Transgender Male to Female

Transgender Female to Male

Intersex

What is your relationship status?

Single

Partnered in an open relationship

Partnered in a monogamous relationship

Married, Domestic Partnership, Civil Union, or Ceremonially Committed

Which of the following best describes you?

Exclusively homosexual

Predominantly homosexual, only incidentally heterosexual

Predominantly homosexual, but more than incidentally heterosexual

Equally heterosexual and homosexual

Predominantly heterosexual, but more than incidentally homosexual

Predominantly heterosexual, only incidentally homosexual

Exclusively heterosexual

Asexual or non-sexual

Which of the following sexual orientations best describes you?

Gay

Bisexual

Down Low

Questioning/Unsure

Heterosexual

Other (Please Specify)

Which best describes your race/ethnicity?

- American Indian or Alaska Native
- Asian or Asian American
- Black or African American
- Latino or Hispanic
- Native Hawaiian or Other Pacific Islander
- White / Caucasian
- Bi / Multi-racial
- Other (Please Specify)

What is your occupational title? \_\_\_\_\_

What is your annual income in US Dollars? \_\_\_\_\_

Partner's/Spouse's occupational title? \_\_\_\_\_

Partner's/Spouse's annual income in US Dollars? \_\_\_\_\_

Educational status completed:

- 7<sup>th</sup> grade or less
- Junior high school (8<sup>th</sup> or 9<sup>th</sup> grade)
- Partial high school (10<sup>th</sup> or 11<sup>th</sup> grade)
- High school diploma or GED
- Associate's degree
- Bachelor's degree
- Master's degree (e.g. MA, MS, Med, MBA)
- Doctoral degree (e.g. PhD, MD)

Envision a ladder that represents social standing in the United States. At the top of the ladder are the people who are the best off- those who have the most money, the most education and the most respected jobs. At the bottom are the people who are the worst off- who have the least money, least education and the least respected jobs or no job. On a scale of 1-10, 1 being the worst off, or the bottom of the ladder, and 10 being the best off or top, where would you place yourself on this ladder? \_\_\_\_\_

In what Country do you reside? \_\_\_\_\_

If from the United States, select which region you reside in:

- Northeast
- Southeast
- South
- Midwest
- Southwest
- Northwest

Please indicate where you heard about this study \_\_\_\_\_

## Appendix E: Outness Inventory

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

- 1 = person definitely does NOT know about your sexual orientation status  
 2 = person might know about your sexual orientation status, but it is NEVER talked about  
 3 = person probably knows about your sexual orientation status, but it is NEVER talked about  
 4 = person probably knows about your sexual orientation status, but it is RARELY talked about  
 5 = person definitely knows about your sexual orientation status, but it is RARELY talked about  
 6 = person definitely knows about your sexual orientation status, and it is SOMETIMES talked about  
 7 = person definitely knows about your sexual orientation status, and it is OPENLY talked about  
 0 = not applicable to your situation; there is no such person or group of people in your life

1. mother	1	2	3	4	5	6	7	0
2. father	1	2	3	4	5	6	7	0
3. siblings (sisters, brothers)	1	2	3	4	5	6	7	0
4. extended family/relatives	1	2	3	4	5	6	7	0
5. my <u>new</u> straight friends	1	2	3	4	5	6	7	0
6. my work peers	1	2	3	4	5	6	7	0
7. my work supervisor(s)	1	2	3	4	5	6	7	0
8. members of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
9. leaders of my religious community (e.g., church, temple)	1	2	3	4	5	6	7	0
10. strangers, new acquaintances	1	2	3	4	5	6	7	0
11. my <u>old</u> heterosexual friends	1	2	3	4	5	6	7	0

Appendix F: Lesbian, Gay, Bisexual Identity Scale

For each of the following statements, mark the response that best indicates your experience as a lesbian, gay, or bisexual (LGB) person. Please be as honest as possible in your responses.

- |          |        |        |        |        |        |          |
|----------|--------|--------|--------|--------|--------|----------|
| 1-----   | 2----- | 3----- | 4----- | 5----- | 6----- | 7        |
| Disagree |        |        |        |        |        | Agree    |
| Strongly |        |        |        |        |        | Strongly |
- 
1.  I prefer to keep my same-sex romantic relationships rather private.
  2.  I will never be able to accept my sexual orientation until all of the people in my life have accepted me.
  3.  I would rather be straight if I could.
  4.  Coming out to my friends and family has been a very lengthy process.
  5.  I'm not totally sure what my sexual orientation is.
  6.  I keep careful control over who knows about my same-sex romantic relationships.
  7.  I often wonder whether others judge me for my sexual orientation.
  8.  I am glad to be an LGB person.
  9.  I look down on heterosexuals.
  10.  I keep changing my mind about my sexual orientation.
  11.  My private sexual behavior is nobody's business.
  12.  I can't feel comfortable knowing that others judge me negatively for my sexual orientation.
  13.  Homosexual lifestyles are not as fulfilling as heterosexual lifestyles.
  14.  Admitting to myself that I'm an LGB person has been a very painful process.
  15.  If you are not careful about whom you come out to, you can get very hurt.
  16.  Being an LGB person makes me feel insecure around straight people.
  17.  I'm proud to be part of the LGB community.
  18.  Developing as an LGB person has been a fairly natural process for me.
  19.  I can't decide whether I am bisexual or homosexual.
  20.  I think very carefully before coming out to someone.
  21.  I think a lot about how my sexual orientation affects the way people see me.
  22.  Admitting to myself that I'm an LGB person has been a very slow process.
  23.  Straight people have boring lives compared with LGB people.
  24.  My sexual orientation is a very personal and private matter.
  25.  I wish I were heterosexual.
  26.  I get very confused when I try to figure out my sexual orientation.
  27.  I have felt comfortable with my sexual identity just about from the start.

## Appendix G: Anti-gay Attack Questions

The following 4 questions ask about anti-gay experiences. Please indicate yes or no for each question.

Have you ever been verbally attacked because of your sexual orientation?  
YES or NO

Have you ever been physically attacked because of your sexual orientation?  
YES or NO

Have you been verbally attacked because of your sexual orientation in the last year?  
YES or NO

Have you been physically attacked because of your sexual orientation in the last year?  
YES or NO

## Appendix H: Stigma Scale

Please select the answer that best describes your amount of agreement with each of the statements. Don't spend too much time thinking about your responses since your initial reaction to each statement is generally best.

1. Most people would willingly accept a gay man as a close friend.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

2. Most people believe that a gay man is just as intelligent as the average person.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

3. Most people believe that a gay man is just as trustworthy as the average citizen.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

4. Most people would accept a gay man as a teacher of young children in public school.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

5. Most people feel that homosexuality is a sign of personal failure.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

6. Most people would not hire a gay man to take care of their children.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

7. Most people think less of a person who is gay.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

8. Most employers will hire a gay man if he is qualified for the job.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

9. Most employers will pass over the application of a gay man in favor of another applicant.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

10. Most people in my community would treat a gay man just as they would treat anyone.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

11. Once they know a person is gay, most people will take his opinion less seriously.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
-------------------	---------------------	-------------------	----------------	------------------	----------------

## Appendix I: Sample Conformity to Masculine Norms Inventory

This is a sample of the 22-item version of the Conformity to Masculine Norms Inventory. It contains the directions given to persons completing the inventory, the format of the inventory, and some sample items. The 22-item version takes 5-10 minutes to complete.

-----

Instructions: The following pages contain a series of statements about how men might think, feel or behave. The statements are designed to measure attitudes, beliefs, and behaviors associated with both traditional and non-traditional masculine gender roles.

**Thinking about your own actions, feelings and beliefs**, please indicate how much **you personally agree or disagree with each statement** by circling SD for "Strongly Disagree", D for "Disagree", A for "Agree", or SA for "Strongly agree" to the left of the statement. There are no right or wrong responses to the statements. You should give the responses that most accurately describe your personal actions, feelings and beliefs. It is best if you respond with your first impression when answering.

- |     |  |    |   |   |    |
|-----|--|----|---|---|----|
| 1.  | It is best to keep your emotions hidden                    | SD | D | A | SA |
| 2.  | In general, I will do anything to win                      | SD | D | A | SA |
| 3.  | If I could, I would frequently change sexual partners      | SD | D | A | SA |
| 4.  | If there is going to be violence, I find a way to avoid it | SD | D | A | SA |
| 5.  | I love it when men are in charge of women                  | SD | D | A | SA |
| 6.  | It feels good to be important                              | SD | D | A | SA |
| 7.  | I hate it when people ask me to talk about my feelings     | SD | D | A | SA |
| 8.  | I try to avoid being perceived as gay                      | SD | D | A | SA |
| 9.  | I hate any kind of risk                                    | SD | D | A | SA |
| 10. | I prefer to stay unemotional                               | SD | D | A | SA |
| 11. | I make sure people do as I say                             | SD | D | A | SA |

## Appendix J: Multidimensional Scale of Perceived Social Support

For the next set of questions, indicate how you feel about each statement.

1. There is a special person who is around when I am in need.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree
2. There is a special person with whom I can share my joys and sorrows.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree
3. My family really tries to help me.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree
4. I get the emotional help and support I need from my family.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree

5. I have a special person who is a real source of comfort to me.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree
6. My friends really try to help me.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree
7. I can count on my friends when things go wrong.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree
8. I can talk about my problems with my family.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree
9. I have friends with whom I can share my joys and sorrows.  
Very Strongly Disagree  
Strongly Disagree  
Mildly Disagree  
Neutral  
Mildly Agree  
Strongly Agree  
Very Strongly Agree

10. There is a special person in my life who cares about my feelings.

Very Strongly Disagree

Strongly Disagree

Mildly Disagree

Neutral

Mildly Agree

Strongly Agree

Very Strongly Agree

11. My family is willing to help me make decisions.

Very Strongly Disagree

Strongly Disagree

Mildly Disagree

Neutral

Mildly Agree

Strongly Agree

Very Strongly Agree

12. I can talk about my problems with my friends.

Very Strongly Disagree

Strongly Disagree

Mildly Disagree

Neutral

Mildly Agree

Strongly Agree

Very Strongly Agree

Appendix K: The Recalled Childhood Gender Identity/Gender Role Questionnaire (form for males)

Please answer the following questions about your behavior as a *child*, that is, the years “0 to 12.” For each question, circle the response that best describes your behavior as a child. Please note that there are no “right or wrong” answers.

1. As a child, my favorite playmates were

- Always boys
- Usually boys
- Boys and girls equally
- Usually girls
- Always girls
- I did not play with other children

2. As a child, my best or closest friend was

- Always a boy
- Usually a boy
- A boy or a girl
- Usually a girl
- Always a girl
- I did not have a best or close friend

3. As a child, my favorite toys and games were

- Always “masculine”
- Usually “masculine”
- Equally “masculine” and “feminine”
- Usually “feminine”
- Always “feminine”
- Neither “masculine” or “feminine”

4. Compared to other boys, my activity level was

- Very high
- Higher than average
- Average
- Lower than average
- Very low

5. As a child, I experimented with cosmetics (make-up) and jewelry

As a favorite activity

Frequently

Once-in-a-while

Very rarely

Never

6. As a child, the characters on TV or in the movies that I imitated or admired were

Always girls or women

Usually girls or women

Girls/women and boys/men equally

Usually boys or men

Always boys or men

I did not imitate or admire characters on TV or in the movies

7. As a child, I enjoyed playing sports such as baseball, hockey, basketball, and soccer

Only with boys

Usually with boys

With boys and girls equally

Usually with girls

Only with girls

I did not play these types of sports

8. In fantasy or pretend play, I took the role

Only of boys or men

Usually of boys or men

Boys/men and girls/women equally

Usually of girls or women

Only of girls or women

I did not do this type of pretend play

9. In dress-up play, I would

Wear boys' or men's clothing all the time

Usually wear boys' or men's clothing

Half the time wear boys' or men's clothing and half the time wear girls' or women's clothing

Usually wear girls' or women's clothing

Wear girls' or women's clothing all the time

I did not do this type of play

10. As a child, I felt

Very masculine  
Somewhat masculine  
Masculine and feminine equally  
Somewhat feminine  
Very feminine  
I did not feel masculine or feminine

11. As a child, compared to other boys my age, I felt

Much more masculine  
Somewhat more masculine  
Equally masculine  
Somewhat less masculine  
Much less masculine

12. As a child, compared to my brother, I felt

Much more masculine  
Somewhat more masculine  
Equally masculine  
Somewhat less masculine  
Much less masculine  
I did not have a brother [Note: If you had more than one brother, make your comparison with the brother closest in age to you.]

13. As a child, I

Always resented or disliked my sister  
Usually resented or disliked my sister  
Sometimes resented or disliked my sister  
Rarely resented or disliked my sister  
Never resented or disliked my sister  
I did not have a sister [Note: If you had more than one sister, make your comparison with the sister closest in age to you.]

14. As a child, my appearance (hair style, clothing, etc.) was

- Very masculine
- Somewhat masculine
- Equally masculine and feminine
- Somewhat feminine
- Very feminine
- Neither masculine or feminine

15. As a child, I

- Always enjoyed wearing dresses and other “feminine” clothes
- Usually enjoyed wearing dresses and other “feminine” clothes
- Sometimes enjoyed wearing dresses and other “feminine” clothes
- Rarely enjoyed wearing dresses and other “feminine” clothes
- Never enjoyed wearing dresses and other “feminine” clothes

16. As a child, I was

- Emotionally closer to my mother than to my father
- Somewhat emotionally closer to my mother than to my father
- Equally close emotionally to my mother and to my father
- Somewhat emotionally closer to my father than to my mother
- Emotionally closer to my father than to my mother
- Not emotionally close to either my mother or to my father

17. As a child, I

- Admired my mother and my father equally
- Admired my father more than my mother
- Admired my mother more than my father
- Admired neither my mother nor my father

18. As a child, I had the reputation of a “sissy”

- All of the time
- Most of the time
- Some of the time
- On rare occasions
- Never

19. As a child, I

Always felt good about being a boy  
Usually felt good about being a boy  
Sometimes felt good about being a boy  
Rarely felt good about being a boy  
Never felt good about being a boy  
Never really thought about how I felt being a boy

20. As a child, I had the desire to be a girl but did not tell anyone

Almost always  
Frequently  
Sometimes  
Rarely  
Never

21. As a child, I would tell others I wanted to be a girl

Almost always  
Frequently  
Sometimes  
Rarely  
Never

22. As a child, I

Always felt that my mother cared about me  
Usually felt that my mother cared about me  
Sometimes felt that my mother cared about me  
Rarely felt that my mother cared about me  
Never felt that my mother cared about me  
Cannot answer because I did not live with my mother (or know her)

23. As a child, I

Always felt that my father cared about me  
Usually felt that my father cared about me  
Sometimes felt that my father cared about me  
Rarely felt that my father cared about me  
Never felt that my father cared about me  
Cannot answer because I did not live with my father (or know him)