ROLES OF SPIRITUALITY IN LESBIAN, GAY, AND BISEXUAL PERSONS’ EXPERIENCES OF MINORITY STRESS, PSYCHOLOGICAL DISTRESS, AND WELL-BEING

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2008
To the two men in my life: my cat Calvin and my partner Matt. Both have provided me with an immense amount of love and support during this time, one through purring and belly rubs, and the other one through long phone conversations and encouragement. The order listed here does not necessarily equate to order of importance.
ACKNOWLEDGMENTS

First of all I would like to thank my advisor and committee chair, Dr. Bonnie Moradi, for all of her guidance, support, and encouragement. I feel incredibly lucky to have worked with Dr. Moradi. She taught me how to be a dedicated psychologist. I am thankful for the assistance given to me by my committee members: Drs. Catherine Cottrell, Mary Fukuyama, and Kenneth Wald. In addition, I would like to thank my parents for all of their support. I could never have reached this point without their love, encouragement, and devotion. I am thankful to my partner Matt, and all my friends and family who could always make me laugh and kept me grounded and sane during this process. Furthermore, I want to especially thank Brian, Gizem, and Marisa who provided much help and support at my dissertation defense. Lastly, I want to acknowledge the participants in my survey for their honest and open participation. I hope that this project and others like it can lead to a greater understanding of the experiences of lesbian, gay, and bisexual persons.
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Grounded in the minority stress framework, the present study examined concomitantly the relations of (a) perceived experiences of prejudice, (b) expectations of stigma, (c) internalized homophobia, and (d) concealment of sexual orientation with LGB persons’ psychological distress and well-being. Within this framework, three posited roles of spirituality and religiosity were tested: that they are (a) mental health promoters, (b) buffers of minority stress and mental health relations, or (c) they are mental health stressors. Results showed that perceived experiences of prejudice, internalized homophobia, and concealment of sexual orientation each were related uniquely and positively to psychological distress and that perceived experiences of prejudice, expectations of stigma, internalized homophobia, and concealment of sexual orientation were related uniquely and negatively to psychological well-being. Additionally, beyond the role of the four minority stressors, spirituality was related uniquely and positively with psychological well-being while religiosity was shown to be related uniquely and negatively. Future directions for research and implications for practice are discussed.
CHAPTER 1
INTRODUCTION

Rates of some mental health concerns may be greater among lesbian, gay, and bisexual (LGB) persons than among heterosexual persons. For example, compared to heterosexual persons, LGB persons may be at higher risk for mood, anxiety, and substance use disorders (Cochran & Mays 2000a; Gilman et al., 2001; Sandfort, de Graaf, Bijl, & Schnabel, 2001) and may engage in more suicidal ideation and attempts (Fergusson, Horwood & Beautrais, 1999; Gilman et al., 2001; Herrell et al., 1999; Cochran & Mays, 2000b). Based on a meta-analysis of studies comparing LGB persons to heterosexual persons, Meyer (2003) concluded that at any point over their lifetime, LGB persons are about 2.5 times more likely to experience a mental disorder. Such data, suggesting greater symptomatology among LGB persons than among heterosexual persons, have been interpreted as evidence of the pathology of LGB orientations and identities. LGB affirming conceptualizations, however, point to minority stress, resultant from societal oppression against LGB persons, as an alternative explanation for observed symptom disparities (Brooks, 1981; DiPlacido, 1998; Mays & Chochran, 2001; Meyer, 1995; 2003) and also highlight the importance of exploring mental health promoting factors, given that many LGB persons do not suffer from psychological symptomatology (Basic Behavioral Science Task Force of the National Advisory Mental Health Council [BBSTF], 1996; DiPlacido, 1998; Meyer, 1995).

Religiosity and spirituality have been identified as potentially critical health promoting factors in the general population (Brady, Peterman, Fitchett, Mo, & Cella, 1999; Ellison, Gay, & Glass, 1989; Powell, Shahabi, & Thoresen, 2003), but conceptualizations of their link to the psychological distress and well-being of LGB persons have varied. Specifically, religiosity and spirituality have been conceptualized as health promoters, stress buffers, and stressors for LGB

Based on prior literature, the present study will explore these three different roles of religiosity and spirituality in the psychological distress and well-being of LGB persons while also considering the roles of previously identified minority stressors for LGB persons. More specifically, the minority stress framework (Meyer, 1995, 2003) posits that (a) perceived experiences of prejudice and discrimination, (b) expectations of stigma, (c) internalized homophobia\(^1\), and (d) concealment of sexual orientation are minority stressors that can contribute to greater psychological distress for LGB persons. Within this framework, spirituality and religiosity may have unique additional relations to lower distress and greater well-being (i.e., function as health promoters), moderate the relation of each minority stressor with distress and well-being (i.e., function as stress buffers), or have unique additional relations with greater distress and lower well-being (i.e., function as additional stressors). Importantly, the roles of religiosity and spirituality may differ from one another and may differ in relation to distress and well-being. These various possibilities will be examined in the present study.

**Minority Stress Framework**

Meyer (1995, 2003) outlined an integrative framework for understanding the deleterious implications of societal oppression for LGB persons’ mental health. Specifically, he outlined four sources of minority stress relevant to LGB individuals. The first source of minority stress is LGB persons’ experiences of anti-LGB discrimination and prejudice. Chronic exposure to such external, stressful events and conditions can promote the second source of minority stress,\(^1\)

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\(^1\) The author is choosing to use the term “internalized homophobia” for the purposes of continuity and consistency with prior, published work on this topic. However, the author recognizes the problems of this term because of the emphasis on the fear component of prejudice over other important processes including individual anti-LGB cognitions and institutional prejudice (Williamson, 2000).
vigilance and expectations of further prejudice and discrimination. The third source of minority stress is internalized homophobia. Internalized homophobia is defined as the “set of negative attitudes and affects toward homosexuality in other persons and toward homosexual features in oneself” (p. 178), including same gender sexual and affectional feelings, sexual behavior, intimate relationships, and self labeling as LGB (Shidlo, 1994). The final source of minority stress is the concealment of sexual orientation. Such concealment may reflect internalized shame about one’s own LGB orientation or serve as an attempt to prevent further prejudice. Together, this set of four minority stressors is posited to promote psychological distress and reduce psychological well-being of LGB persons.

Extant research has examined the links of each of these minority stressors with psychological distress. Indeed, empirical research has demonstrated that anti-LGB prejudice and discrimination, including verbal insults, threats of violence, physical attacks, and victimization due to sexual orientation are regrettably common (D’Augelli, 1989; Herek, 1993; Herek, Gillis, & Cogan 1999). Furthermore, data with samples of LGB persons support Meyer’s (1995; 2003) proposition that experiences of prejudice, expectations of stigma, and internalized homophobia are related to an array of negative mental and physical symptoms including suicidal ideation and behaviors, anxiety, depression, demoralization, guilt, insomnia, somatic symptoms, substance abuse, body image dissatisfaction, reduced relationship quality, and overall psychological distress (Balsam & Syzmanski, 2005; Diaz, Ayala, Bein, Henne, & Marin, 2001; DiPlacido, 1998; Herek, Cogan, Gillis, and Glunt, 1997; Kimmel & Mahalik, 2005; Lewis, Derlega, Clarke, & Kuang, 2006; Meyer, 1995; Szymanski & Chung, 2003).

On the other hand, support has been mixed for a link between sexual orientation concealment and psychological distress indicators; with some studies finding that concealment is
related to some symptomatology (Ayala & Coleman, 2000; Cole, Kemeny, Taylor, & Visscher, 1996; Cole, Kemeny, Taylor, Visscher, & Fahey, 1996; Diplacido, 1998; Lewis, Derlega, Derndt, Morris, & Rose, 2001; Nicholson & Long, 1990; Szymanski, Chung, & Balsam, 2001) and other studies finding that it is not (D’Augelli, Grossman, Hersherger, & O’Connell, 2001; Lewis, Derlega, Griffin & Krowinski, 2003; McGregor et al., 2001). One possible explanation for these mixed findings regarding sexual orientation concealment is the observed restriction in range of sexual orientation concealment in most prior studies, with sample averages typically near the high end of the outness continuum. Thus, additional research with samples that include a broader range of sexual orientation concealment/outness is needed.

In addition to studies that focus on the relation of each specific minority stressor with psychological distress, a few studies provide a more complete examination of the minority stress framework by examining two or more minority stressors together to identify their unique relations with psychological symptomatology. For instance, when examined together, reported experiences of prejudice events, expectation of stigma, and internalized homophobia each were related positively and uniquely to demoralization, guilt, and suicidal ideation and behaviors for gay and bisexual men (Meyer, 1995) and to body image dissatisfaction for gay men (Kimel and Mahalik, 2005). Additionally with a sample of LGB persons, Lewis et al. (2003) examined concomitantly the relations of depressive symptoms with expectations of stigma, internalized homophobia, concealment of sexual orientation, and perceived stressfulness of a range of sexual orientation-related issues (e.g., experiences of prejudice and discrimination, internalized homophobia, expectations of stigma, concealment and disclosure of sexual orientation, rejection from family, fear of HIV/AIDS). They found that the perceived stressfulness of sexual orientation-related issues, expectations of stigma, internalized homophobia, and concealment of
sexual orientation each had significant zero-order correlations with depressive symptoms. When all predictors were entered together into a multiple regression analysis, however, only perceived sexual orientation-related stress and expectations of stigma emerged as related uniquely to depressive symptoms. It is not clear, however, if internalized homophobia and concealment were not related uniquely to depression because there was a restriction in range for these constructs, with the sample scoring near the high end of both variables. Additionally, since experiences of prejudice and discrimination were not assessed separately, the potential unique relations of these experiences to depression remain unclear.

Overall the literature reviewed provides some support for aspects of minority stress theory. Specifically, extant data are consistent with the posited relations of perceived experiences of prejudice and discrimination, expectations of stigma, and internalized homophobia to psychological distress when these minority stressors are examined separately; but support for the posited role of concealment of sexual orientation is mixed. Compared to studies that focused on individual minority stressors in isolation, fewer studies have examined two or more minority stressors concomitantly. Nevertheless, in the studies that examined two or more minority stressors, some support exists for the unique roles of experiences of prejudice, internalized homophobia, and expectations of stigma in psychological symptomatology (Kimel & Mahalik, 2005; Meyer, 1995; Szymanski, 2005).

In contrast to accumulating data about the links of minority stressors with LGB persons’ psychological distress, limited data are available about the links of minority stressors with indicators of psychological well-being (e.g., self-esteem, positive affect, life satisfaction), and these limited data are mixed. For example, perceived experiences of prejudice have been found to be related negatively to self-esteem for 15-21 year old LGB youth (Hershberger & D’Augelli,
1995), but not to positive affect for LGB adults (Herek et al., 1999). Similarly, most studies with LGB persons link internalized homophobia with lower levels of self-esteem (Allen & Oleson, 1999; Herek et al., 1997; McGregor et al., 2001; Mohr & Fassinger, 2000; Peterson & Gerrity, 2006; Shildo, 1994; Syzmanski & Chung, 2001), psychological well-being, and satisfaction with life (Lease et al., 2005). In other studies, however, internalized homophobia was not related to self-esteem for lesbian women (Herek et al., 1997; Mohr & Fassinger, 2000), and for HIV positive gay men (Nicholson & Long, 1990). Mixed findings also have emerged with regard to concealment of sexual orientation. Mohr and Fassinger (2000) found that, for gay men, concealment of their sexual orientation to strangers, friends, and colleagues, but not to family members or members of their religious organization, was related negatively to self-esteem; for lesbian women, however, none of the concealment indicators were related to self-esteem. Finally, the relation between expectations of stigma and psychological well-being has not been examined with samples of LGB persons but it has been examined with other minority populations. For example, for women, expectations of stigma were related negatively to aspects of psychological well-being (Schmitt, Branscombe, Korbynnowicz, & Owen, 2002), but the link with well-being was not found for African American persons (Branscombe, Schmitt, & Harvey, 1999).

Thus, prior studies provide some support for the relations of the minority stressors with self-esteem, but this support is mixed. Also, none of the studies reviewed examined the links of self-esteem with the set of minority stress variables concomitantly. Thus, the unique relations of each of the minority stressors with self-esteem remain unclear. Furthermore, aspects of well-being other than self-esteem have been explored only minimally in minority stress research. Therefore there is a need for additional research to assess psychological well-being more broadly.
than the narrow focus on self-esteem in prior research, and to examine its relations with the set of minority stressors concomitantly.

**Roles of Spirituality and Religiosity**

For counseling psychologists working with LGB persons it is important to understand the mechanisms that can lead to psychological distress and impede psychological well-being, but it is also important to understand factors that relate to positive functioning and promote well-being. Indeed there have been repeated calls for further empirical research on mechanisms that might alleviate distress and variables that might moderate or buffer the negative health consequences of minority stress (BBSTF, 1996; DiPlacido, 1998; Meyer, 1995). Therefore an additional aim of this study is to examine potential mental health promoting factors in the context of minority stressors’ links with psychological distress and well-being. This study focuses on spirituality and religiosity because they have been identified as important health promoting factors in the general population (Brady et al., 1989; Powell et al., 2003) and may be linked with psychological health for LGB persons as well (Lease et al., 2005; Miller, 2005; Woods et al., 1999). Theory and empirical research point to three possible roles of spirituality and religiosity in the mental health of LGB persons: spirituality and religiosity may serve as (a) mental health promoters, (b) buffers of the stress and mental health relation, or (c) mental health stressors. The current study will examine these three competing hypotheses within the context of the minority stress framework.

The first perspective suggests that spirituality and religiosity are two factors that may promote the mental health of LGB persons and so should be related to lower psychological distress and greater psychological well-being. Conceptually, spiritual and religious beliefs are hypothesized to add comfort, relieve pain and suffering, provide hope and meaning, and help people cope with their problems (C. E. Ross, 1990). Consistent with this perspective, using a variety of measures and across numerous samples of the general population, higher levels of
spirituality and religiosity have been linked to greater physical health and psychological well-being (Brady et al., 1999; Ellison et al., 1989; Powell et al., 2003). Similarly, spirituality and religiosity could be factors that promote mental health for LGB persons. Indeed theorists have proposed that, through spirituality and religiosity, LGB people may gain benefits such as a sense of wholeness, affirmation of the person’s basic goodness, and greater self-acceptance and psychological well-being (Davidson, 2000; Ritter & O’Neill, 1989; Wagner, Serafini, Rabkin, Remien, & Williams, 1994). Findings from some qualitative and quantitative research are consistent with the espoused benefits of spiritual and/or religious beliefs for LGB persons (Lease et al., 2005; Miller, 2005; Tan, 2005; Varner, 2004; Woods et al., 1999; Yakushko, 2005).

In addition to suggesting direct links of spirituality and religiosity with positive physical and mental health outcomes, theory and empirical research have also pointed to spirituality and religiosity as buffers of the relation between stress and negative health outcomes. For instance, spirituality and religiosity may buffer against stress by providing a framework for interpreting stressful events, enhancing coping resources, and facilitating access to social support (Siegel et al., 2001). Indeed, with various samples, there is empirical support for the notion that spirituality and religiosity are moderators of the relation between stress and negative health conditions (Fabricatore, Handal, & Fenzel, 2000; Forthus, Pidcock & Fischer, 2003; Mascaro & Rosen, 2006; Wills, Yaeger, & Sandy, 2003). Furthermore, spirituality specifically has been shown to buffer the relation of minority stress with symptomatology for African American persons. Specifically, Bowen-Reid and Harrell (2002) found that, for African American college students, spirituality moderated the relation between racist stressful events and psychological distress. The direction of moderation indicated that, for participants with high levels of spirituality, there was no significant relation between perceived racist stressful events and psychological distress,
whereas, for participants with low levels of spirituality, there was a significant and positive relation between perceived racist stressful events and psychological distress. As such, spirituality and religiosity may moderate or buffer the relations of minority stressors with mental health for LGB persons.

Despite the literature suggesting potential benefits of spirituality and religiosity for LGB persons (i.e., mental health promoter or stress buffers), there is also theory and research that points to potential spiritual wounding for LGB persons due to their participation in religions that describe same-gender sexuality as sinful. Indeed Ritter and O’Neill (1989) explained that for LGB persons’, traditional Judeo-Christian religions can be psychologically damaging because they “have heaped accusations of shame, contamination, and sinfulness, upon the heads of lesbian and gay people” (p.68). Additionally, Barret and Brazan (1996) described that there is a fundamental struggle for LGB persons to overcome the clash between homophobic religious institutions and personal spiritual experiences that connect them to a higher power. Empirical research also demonstrates the potential negative implications of religiosity for LGB persons. Indeed, research has shown that many LGB persons feel that they must choose between being LGB and being religious (Rodriguez & Ouellette, 2000), and that being religious in a non-gay affirming church and holding conservative religious views are related to internalized homophobia (Meyer & Dean, 1998; Wagner et al., 1994). Furthermore, religiously oriented programs aimed at changing the sexual orientation of LGB persons have been shown to be psychologically damaging (Beckstead & Morrow, 2004). Due to these negative experiences that many LGB persons face within their religions, greater spirituality and religious participation may be related to greater psychological symptomatology and lower well-being.
Thus, spirituality and religiosity have been conceptualized as potential mental health promoters, stress buffers, and stressors for LGB persons. In examining these three positions, it is important to be mindful of the potentially distinct roles that may be played by spirituality and religiosity. Specifically, spirituality and religiosity are related (Hill et al., 2000; Hill & Pargament, 2003), but theory and empirical research have highlighted that they are not identical constructs (Miller & Thoresen, 2003). Spirituality is considered an individual experience that includes a personal connection to a Scared or Higher Being, personal transcendence, and meaningfulness (Zinnbauer et al., 1997). Religiosity, on the other hand, is defined more narrowly to include participating in formally structured religious institutions, prescribed theology, and rituals (Zinnbauer et al., 1997). This distinction between spirituality and religiosity may be especially important for LGB persons because many religions condemn non-heterosexuality. Such condemnation may lead some LGB persons to have a strained relationship with their religious institutions, but not necessarily with their individual spirituality. Therefore, this study will examine if spirituality and religiosity have distinct, rather than parallel roles in the psychological distress and well-being of LGB persons.

**Study Overview**

Based on the literature reviewed here, and using the minority stress framework, the present study advances understanding of LGB persons’ psychological distress and well-being in a number of ways. First, this study examines concomitantly the relations of the four minority stress variables (i.e., perceived experiences of discrimination and prejudice, expectations of stigma, internalized homophobia, and concealment of sexual orientation) to psychological distress and psychological well-being of LGB persons. Second, this study examines the potential additional roles of spirituality and religiosity in the psychological distress and well-being of LGB persons. Specifically, based on theory and empirical research that suggest three possible roles of
spirituality and religiosity in the mental health of LGB persons, this study will test three rival hypotheses that spirituality and religiosity are (a) mental health promoters, (b) buffers of the stress and mental health relation, or (c) mental health stressors. Finally, the present study will explore the potential distinct rather than parallel roles of spirituality and religiosity in LGB persons’ mental health.
CHAPTER 2
REVIEW OF THE LITERATURE

As discussed in the previous chapter, the present study uses the minority stress framework to advance understanding of LGB persons’ psychological distress and well-being and examines the additional roles of spirituality and religiosity. As such, the present study fits well with the aims of counseling psychology to understand and alleviate sources of distress and also understand and promote sources of well-being within diverse populations. In order to provide the groundwork for the present study, this chapter reviews relevant literatures on (a) minority stress and psychological distress, (b) minority stressor and psychological well-being, (c) the relations of spirituality and religiosity to psychological distress and well-being, (d) the moderating role of spirituality and religiosity in the relations of stressors with psychological distress and well-being for LGB persons, and (e) the potentially distinct roles of spirituality and religiosity in LGB persons mental health.

The Minority Stress Framework

The minority stress framework is rooted in the work of pioneering scholars in the area of psychological stress who theorized that disproportionate stress due to minority status may be linked to higher rates of symptomatology among minority populations (Allport, 1954; Dohrenwend, 1973; Kardiner & Ovesey, 1951). For instance, Allport (1954) stated that, “A minority group member has to make many times as many adjustments to his status as does the majority group member…the awareness, the strain, the accommodation all fall more heavily and more frequently on the minority group members” (p. 145). More recently, the Basic Behavioral Science Task Force (BBSTF) of the National Advisory Mental Health Council (1996) explained that repeated experiences of discrimination and stigmatization are damaging to an individual’s sense of identity and that coping with this stigma, prejudice, and discrimination is stressful and
can result in increased levels of psychological distress. Many researchers and theorists who have examined this position with respect to LGB persons concur that stigma and discrimination against LGB persons may be a source of increased symptomatology for this population (Brooks, 1981; DiPlacido, 1998; Mays & Cochran, 2001; Meyer, 1995; 2003).

Based on an integration of prior theory and empirical research (Allison, 1998; Brooks, 1981, Crocker & Major, 1989; Lazarus & Folkman, 1984), Meyer (1995, 2003) argued that stigma and prejudice against LGB persons create a stressful and hostile environment that can promote mental health problems. He outlined four processes of minority stress relevant to LGB individuals. The first source of minority stress is LGB persons’ experiences of discrimination and prejudice. Chronic exposure to such external, stressful events and conditions can promote the second source of minority stress, vigilance and expectations of further prejudice and discrimination. The third source of minority stress is internalized homophobia. Internalized homophobia is defined as the “set of negative attitudes and affects toward homosexuality in other persons and toward homosexual features in oneself” (p. 178), including same gender sexual and affectional feelings, sexual behavior, intimate relationships, and self labeling as LGB (Shildo, 1994). The final source of minority stress is concealment of sexual orientation. Such concealment may reflect internalized shame about one’s own LGB orientation or serve as an attempt to prevent further prejudice. Together, this set of four minority stressors is posited to promote psychological distress and reduce psychological well-being of LGB persons. Extant research has examined the links of each of these minority stressors with psychological distress.

First, research focusing on experiences of anti-LGB prejudice events, including antigay violence and discrimination, suggests that such events are unfortunately common. For example, D’Augelli (1989) found that 50% of the gay and lesbian college students surveyed reported
sexual orientation based victimization including having overheard disparaging comments, 26% reported having experienced personal verbal insults, 26% reported having been threatened with physical violence, and 23% reported having been victims of assault. In another study, over three quarters of LGB college students reported that they had experienced verbal insults and 25% reported that they had experienced threats of violence, which they attributed to their sexual orientation (Herek, 1993). With a study of non-college student LGB persons, Herek, et al. (1999) found that one-fifth of the women and one-forth of the men experienced victimization that they attributed to their sexual orientation.

Data with samples of gay and bisexual men support Meyer’s (1995; 2003) proposition that experiences of anti-LGB prejudice, harassment, and victimization are related positively to an array of mental and physical symptoms including suicidal ideation and behaviors, anxiety, depression, demoralization, guilt, insomnia, somatic symptoms, and overall psychological distress (Diaz et al., 2001; Meyer, 1995; M. W. Ross, 1990). Additionally, with a sample of women and men recruited using a random digit-dial method (N = 73 LGB persons and 2,844 heterosexual persons), Mays and Cochran (2001) assessed discrimination experiences broadly (e.g., being fired from a job, being threatened or harassed, being treated with less respect or courtesy than other people) and found that, compared to heterosexual persons, LGB persons were more likely to report having experienced discrimination. Furthermore, participants who reported experiencing discrimination were more likely to meet diagnostic criteria for a psychiatric disorder than were those who did not report any discrimination experiences.

The culture of prejudice and discrimination described above can promote LGB persons’ expectations of anti-LGB prejudice and stigmatization. Such expectations of prejudice are the second source of minority stress identified by Meyer (1995, 2003). According to Meyer (2003),
in order to cope with prejudice and discrimination, LGB persons maintain a sense of vigilance, by remaining mindful of the possibility that others will be hostile towards them. Meyer (2003) suggested that this constant need for vigilance is stressful and can result in greater symptomatology for LGB persons. Available data support the link between perceptions of widespread stigma against one’s minority group and psychological distress. For example, perceiving negative events as prejudice was related negatively to self-esteem and positively to negative emotions for African American persons ($N = 139$; Branscombe et al., 1999) and positively to anxiety and depression and negatively to life satisfaction, self-esteem, and positive affect for women ($N = 220$; Schmitt et al., 2002). Research also has shown that expectations of stigma are related to negative health outcomes for LGB people. For instance, with a sample of gay and bisexual men ($N = 741$), Meyer (1995) found that expectations of stigma were related positively to demoralization, guilt, and suicidal ideation. Also, expectations of stigma were related positively to somatic symptoms and intrusive thoughts for lesbian women ($N = 105$; Lewis, et al., 2006) and to depression with a sample of LGB persons ($N = 204$; Lewis et al., 2003).

In addition to promoting expectations of stigmatization, the culture of anti-LGB prejudice and stigma can also promote LGB persons’ internalization of that stigma. As such, internalized homophobia is the third source of minority stress outlined by Meyer (1995; 2003). Internalized homophobia has been an important focus within LGB studies and in gay-affirmative psychotherapy approaches (Williamson, 2000). Consistent with Meyer’s (1995; 2003) conceptualization, for gay and bisexual men, internalized homophobia has been linked positively to depression, anxiety, substance abuse, demoralization, guilt, body image dissatisfaction, shame, and suicidal ideation and behaviors (Allen & Oleson, 1999; Herek et al., 1997; Kimmel &
Mahalik, 2005; Meyer, 1995; Meyer & Dean, 1998; Rowen & Malcom, 2002; Shidlo, 1994; Williamson, 2000). For instance, in a longitudinal study with HIV positive gay and bisexual men \((N = 142)\), Wagner, Brondolo, and Rabkin (1996) found that baseline internalized homophobia predicted both self-reported and clinician-rated distress two years later, even after controlling for HIV-illness stage and psychological distress. Also, with samples of lesbian and bisexual women, internalized homophobia has been linked positively to alcohol consumption, negative affect, depression, low relationship quality, loneliness, and somatic symptoms (Balsam & Szymanski, 2005; DiPlacido, 1998; Lewis et al., 2006; Szymanski & Chung, 2003; Szymanski, et al., 2001). Additionally, Herek et al. (1997) found that lesbian and bisexual women \((N = 75)\) with high internalized homophobia reported significantly greater symptoms of depression and demoralization than did those with low internalized homophobia. Lastly, with a sample of LGB persons \((N = 204)\), Lewis et al. (2003) found that internalized homophobia was related positively to depressive symptoms.

The fourth posited source of minority stress for LGB persons is sexual orientation concealment. Unlike data relevant to the other minority stressors, however, support has been mixed for a link between sexual orientation concealment and negative health consequences. With respect to the physical health of gay and bisexual HIV-positive men, concealment of sexual orientation was related positively to a more rapid advancement of HIV infection and higher rates of other diseases including cancer, pneumonia, bronchitis, sinusitis, and tuberculosis, even after controlling for demographic characteristics, health practices, and other significant variables (Cole, Kemeny, Taylor, & Visscher, 1996; Cole, Kemeny, Taylor, Visscher, & Fahey, 1996). With samples of lesbian and bisexual women, concealment of sexual orientation was related positively to depression, alcohol consumption, and negative affect (Ayala & Coleman, 2000;
Diplacido, 1998; Szymanski et al., 2001), but not with somatic complaints (Szymanski et al. 2001). On the other hand, with samples of lesbian women ($N = 167$; Oetjen & Rothblum, 2000) and lesbian women treated for early stage breast cancer ($N = 57$; McGregor et al., 2001), concealment of sexual orientation was not related to depression and psychological distress. A number of studies that examined LGB persons together also yielded some mixed findings. With a sample of LGB persons ($N = 979$), concealment of sexual orientation was related positively to symptoms of depression (Lewis et al., 2001). Also with a sample of LGB older adults ($N = 416$; 60 years and older), concealment of sexual orientation was related positively to drug abuse, but not to alcohol abuse, current mental health, or suicidal ideation (D’Augelli et al., 2001). In contrast to these findings, Lewis et al. (2003) found that concealment of sexual orientation was not related to depression with a sample of LGB persons ($N = 204$). One possible explanation for these mixed findings regarding sexual orientation concealment is the observed restriction in range of sexual orientation concealment in most prior studies, with sample averages typically near the high end of the outness continua. Indeed both Lewis et al. (2003) and McGregor et al. (2001) claim that a majority of their samples were considerably open about their sexual orientation. Thus, additional research with samples that include a broader range of sexual orientation concealment/outness is needed.

Taken together, the studies reviewed thus far suggest that, when examined independently, perceived prejudice events, expectations of stigma, internalized homophobia, and in some studies, concealment of sexual orientation, are related to psychological distress. A few studies provide a more complete examination of the minority stress framework by examining two or more minority stressors together to identify their unique relations with psychological symptoms and other negative outcomes. For instance, with a sample of LGB couples ($N = 130$), Otis,
Rostosky, Riggle, and Hamrin (2006) found that perceived experiences of prejudice and internalized homophobia each were correlated significantly and negatively with relationship quality. When examined together, however, only internalized homophobia was related uniquely to relationship quality. Additionally, Balsam and Szymanski (2005) examined the relations of minority stressors with domestic violence perpetration and victimization with a sample of lesbian and bisexual women ($N = 272$). Reported experiences of prejudice and internalized homophobia each were related positively and uniquely to respondents’ reports of their own domestic violence perpetration, but only reported experiences of prejudice and not internalized homophobia were related uniquely to respondents’ reports of domestic violence victimization. Lastly, Szymanski (2005) found that both experiences of sexual orientation based victimization and internalized homophobia were related uniquely to psychological distress for a sample of lesbian and bisexual women ($N = 143$).

Further evidence for the minority stress framework has been found from studies that examined three of the minority stressors concomitantly. For example, Bos, van Balen, van den Boom, and Sandfort (2004) found that for Dutch lesbian mothers ($N = 100$), reported experiences of prejudice events, expectation of stigma, and internalized homophobia each were related positively and uniquely to a self-reported need to justify the quality of their parenthood to others. Additionally, in a study with gay men ($N = 357$), reported experiences of prejudice events, expectations of stigma, and internalized homophobia each were related positively and uniquely to body image dissatisfaction and distress about failing to meet the ideal muscular masculine body (Kimel & Mahalik, 2005). Meyer (1995) also examined multiple minority stressors with a sample of gay and bisexual men living in New York City ($N = 741$). He found that reports of prejudice events, expectation of stigma, and internalized homophobia each accounted for unique
variance in demoralization, guilt, and suicidal ideation and behaviors. Furthermore, he included concealment of sexual orientation as a covariate in separate regressions that examined links of each minority stressor with psychological symptoms, and found that concealment was correlated significantly and positively with psychological distress in these analyses. Unfortunately, he did not include concealment of sexual orientation when he examined the other three minority stressors concomitantly, leaving unclear the unique role of each minority stressor when the set of four stressors are considered together.

Building on Meyer’s (1995) work, Lewis et al. (2003) examined concomitantly the relations of expectations of stigma, internalized homophobia, and concealment of sexual orientation to depressive symptoms with a sample of LGB persons (N = 204). In addition to these three minority stressors, they also examined the perceived stressfulness of sexual orientation-related issues including prejudice and discrimination, internalized homophobia, expectations of stigma, concealment and disclosure of sexual orientation, rejection from family, and fear of HIV/AIDS. They found that the perceived stressfulness of sexual orientation-related issues, and levels of expectations of stigma, internalized homophobia, and concealment of sexual orientation each had significant zero-order correlations with depressive symptoms. However, when all of these variables were entered together into a multiple regression analysis, only perceived stressfulness of sexual orientation-related issues and level of expectations of stigma emerged as related uniquely to depressive symptoms. It is important to note, however, that in this sample there was a restriction in range for scores on internalized homophobia and concealment of sexual orientation, with the sample scoring near the low end of both variables. Such range restriction may have attenuated the observed relations of internalized homophobia and concealment of sexual orientation with depression. Furthermore, the frequency of experiences of prejudice and
discrimination was not examined in this study, leaving unclear the potential unique relation of such experiences with symptomatology.

Overall these studies provide some support for the minority stress theory. Specifically, there is support for the relations of perceived experiences of prejudice and discrimination, expectations of stigma, internalized homophobia, and concealment of sexual orientation to psychological distress when these minority stressors are examined separately. Additionally, the unique contributions of experiences of prejudice and discrimination, expectations of stigma, and internalized homophobia to psychological distress are supported in some of the studies reviewed. However, Lewis et al.’s study (2003) is the only study that examined concealment of sexual orientation along with the other minority stressors, and found that it was not related uniquely to symptomatology. Thus, additional research is needed to determine if concealment of sexual orientation should be retained in the minority stress framework as a stressor. To provide a more complete examination of the minority stress framework than that provided in much of the prior literature, the present study will examine concomitantly the relations of the four minority stressors with psychological distress. An important additional direction for research that is addressed by the present study is to evaluate the relations of minority stressors with psychological well-being. Literature relevant to this issue is discussed next.

**Need to Examine Psychological Well-Being**

The studies reviewed thus far attend mostly to the relations between minority stressors and psychological distress. Understanding the correlates of LGB persons’ psychological distress is important for informing appropriate therapies and interventions to reduce distress within this population. Based upon calls to attend to indicators of well-being as well as distress, however, (Goodman, Liang, Helms, Latta, Sparks, & Weintraub, 2004; Sandage, Hill, & Vang, 2003; Seligman, Steen, Park, & Peterson, 2005), it is also important to understand how experiences...
associated with living in a society that condemns non-heterosexuality (i.e., minority stressors) might relate to the psychological well-being of LGB persons

Unfortunately, there is limited research on the links of minority stressors with indicators of psychological well-being (e.g., self-esteem, positive affect, life satisfaction) for LGB persons. Also, the limited available research in this area has yielded mixed results. With regard to experiences of prejudice and discrimination, Diaz et al. (2001) found that self-esteem was linked negatively to experiences of social discrimination including homophobia, racism, and financial discrimination in a study with gay and bisexual Latino men ($N = 912$). However, because analyses were conducted only with an overall score of social discrimination, it is difficult to determine the specific link between self-esteem and experiences of sexual orientation-based prejudice. Additionally, perceived experiences of prejudice, as measured by sexual orientation based victimization experiences ranging from verbal insults to physical assault, have been found to be related negatively to self-esteem for 15-21 year old LGB youth ($N = 194$; Hershberger & D’Augelli, 1995), but not to positive affect for LGB adults ($N = 2259$; Herek et al, 1999).

The relation between expectations of stigma and psychological well-being has not been examined with samples of LGB persons, but it has been examined with other minority populations. For example, with a sample of women, expectations of stigma were related negatively to self-esteem, positive affect, and life satisfaction (Schmitt et al., 2002). However, Branscombe et al. (1999) found that for a sample of African American persons, tendency to perceive negative events as prejudice was not correlated with either self-esteem or the frequency of experiencing negative emotions. Thus additional research is needed to examine the relation between expectation of stigma and psychological well-being for LGB persons.
With respect to internalized homophobia, the majority of prior findings support its expected link with self-esteem. Indeed, Herek et al. (1997; \( N = 1089 \)), Mohr and Fassinger (2000; \( N = 414 \)), and Allen and Oleson (1999; \( N = 90 \)) found that internalized homophobia was related negatively to self-esteem for gay men. Additionally, Shildo (1994) reviewed four unpublished studies with gay men, and concluded that internalized homophobia was linked negatively to self-esteem across these studies. However, Nicholson and Long (1990) found that for HIV positive gay men (\( N = 89 \)), internalized homophobia and self-esteem were not correlated significantly. There are also some mixed results with samples of lesbian and bisexual women. For example, internalized homophobia was related negatively to self-esteem with a sample of lesbian college women (\( N = 35 \); Peterson & Gerrity, 2006), a sample of non-college lesbian and bisexual women (\( N = 303 \); Syzmanski & Chung, 2001), and a sample of lesbian women treated for breast cancer (\( N = 57 \); McGregor et al., 2001). On the other hand, both Herek et al. (1997) with a sample of lesbian and bisexual women recruited from an LGB street fair (\( N = 74 \)), and Mohr and Fassinger (2000) with a sample of lesbian women recruited from various community sources (\( N = 590 \)) found no significant relation between internalized homophobia and self-esteem. One potential reason for these non-significant findings is that there were skewed distributions and restricted ranges of scores for internalized homophobia, that may have attenuated observed correlations between scores on internalized homophobia and self-esteem. Indeed in both of these studies gay men had significantly higher levels of internalized homophobia than lesbian women, and for gay men, internalized homophobia was related significantly to self-esteem. Finally, with a sample of LGB persons (\( N = 583 \)), Lease et al. (2006) found that internalized homophobia was related negatively to overall psychological well-being and life satisfaction.
Regarding the relation of concealment of sexual orientation with psychological well-being, a study by Rosario, Rotheram-Borus, and Reid (1996) found that concealment of sexual orientation was not linked to self-esteem for gay and bisexual, predominantly Hispanic and Black youth \((N = 134)\). However, they assessed concealment of sexual orientation with a measure including frequency of disclosing one’s sexual identity, having one’s sexual identity discovered by others, and having one’s sexual identity ridiculed (Rosario et al, 1996). Thus, in this study, concealment of sexual orientation was confounded with experiences related to anti-LGB prejudice. In another study, Mohr and Fassinger (2000) found that for gay men \((N = 590)\), self-esteem was related negatively to concealing their sexual orientation to stranger, friends, and work colleagues, but not to concealing their sexual orientation from their family members or religious organization. Finally, for lesbian women \((N = 414)\), concealment of sexual orientation was not related to self-esteem (Mohr & Fassinger, 2000).

In general, the studies described above provide mixed support for the relations of the minority stressors with self-esteem. However, none of the studies reviewed examined relations of self-esteem with the set of minority stress variables concomitantly. Thus, the unique relations of each of the minority stressors with self-esteem remain unclear. Also, aspects of well-being other than self-esteem have been explored only minimally in the minority stress research. Although, self-esteem is a component of psychological well-being, recent literature has conceptualized psychological well-being as broader in scope (Ryff, 1989). Indeed Ryff (1989) defines psychological well-being to include sense of autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Self-esteem is conceptually similar to and correlated significantly with scores on Ryff’s (1989) measure of self-acceptance, but self-esteem alone does not encapsulate the larger construct of well-being. Lease et al. (2005)
conducted the only study that examined the relation of a minority stressor (i.e., internalized homophobia) with this broader measure of psychological well-being. Therefore, there is a need for additional research to examine the relations of the set of minority stressors to psychological well-being. As such, the present study will examine the relations of the set of minority stress variables to psychological well-being using a measure based on Ryff’s (1989) conceptualization of psychological well-being. In addition to considering distress and well-being correlates of minority stressors, the present study will examine the potential roles of spirituality and religiosity in distress and well-being. Literature about the potential roles of spirituality and religiosity in the distress and mental health of LGB persons is reviewed next.

**Spirituality and Religiosity as Potential Health Promoting Factors, Stress-Mental Health Buffers, or Mental Health Stressors**

For counseling psychologists working with LGB clients, it is important to understand the mechanisms that can lead to psychological distress and impede psychological well-being, and minority stressors may be important variables to examine in this regard. It is also important, however, to examine strengths and factors that could reduce distress, promote well-being and protect clients from minority stress. Therefore, in addition to considering minority stressors, it is necessary to examine factors that may play a role in positive functioning. Indeed, Meyer (1995) stated “further work on minority coping needs to specify mechanisms that alleviate minority stress” (p. 52). DiPlacido (1998) echoed this sentiment by highlighting that many LGB persons successfully manage their minority stress so that they do not have any negative health outcomes. Therefore she emphasized a need to investigate variables that might moderate or buffer the negative health consequences of minority stress. Lastly, the BBSTF (1996) has called for increased research on discovering how people successfully cope with disempowering situations. Thus, there is a need for additional empirical research that examines potential mental health
promoting factors in the context of minority stressors’ links with psychological distress and well-being. As a step in addressing this need, the present study builds on prior literature to explore the roles of spirituality and religiosity.

Davidson (2000) highlighted that counseling psychologists and therapists need to have a greater understanding of the role of spirituality in the lives of LGB persons and that “because of the oppression of heterosexist society, gay, bisexual, and lesbian persons are more in need of, and more open to, spiritual nourishment than others” (p. 409). Unfortunately, attention to the roles of spirituality and religiosity in the mental health of LGB persons has been limited. Perhaps, since many mainstream religions condemn homosexuality (Boswell, 1980; Ellison, 1993), it is assumed that most LGB persons would have little to do with religious practices. Anecdotal evidence, however, suggests that LGB persons are actively engaged in religious practices. Indeed, Barret and Barzan (1996), two clinicians who identify as gay and have expertise in working with LGB persons, stated “it has been our collective personal and professional experiences that, in fact, the spiritual experiences of gay men and lesbians frequently mirror those of nongay persons” (p. 5).

Beyond such testimonials, the limited empirical research on the religious participation of LGB persons has yielded mixed findings. For example, Ellis and Wagemann (1993) found that children who were not exclusively heterosexual were less religious and less likely to follow the religion of their mother, as compared to exclusively heterosexual children. However, they measured sexual orientation with a single item assessing percentage of time fantasizing about the same sex. Thus, it is difficult to determine how these results apply to people who identify as LGB. In contrast to these findings, Sherkat (2002) found that many LGB persons are active religious participants. In a comparison of LGB persons and heterosexual persons, Sherkat (2002)
found that gay men have higher rates of religious participation than do heterosexual men, but that
lesbian and bisexual women and bisexual men have rates of religious participation that are lower
than heterosexual woman and men, respectively. Additionally, Sherkat (2002) found that
although LGB persons are more likely to abandon their religion than heterosexual women, they
were no more likely to abandon their religion than heterosexual men. Taken together, these
findings suggest that spirituality and religiosity are a part of some LGB persons’ lives.

Additional theory and empirical research point to three possible roles of spirituality and
religiosity in the mental health of LGB persons: (a) spirituality and religiosity are mental health
promoting factors and so should be related negatively to psychological distress and positively to
psychological well-being, (b) spirituality and religiosity are moderators of the stress and mental
health relation, and (c) because many religions condemn non-heterosexuality, spirituality and
religiosity act as mental health stressors and will be related positively to psychological distress
and negatively to psychological well-being. The present study will examine these three
competing hypotheses within the context of the minority stress framework.

Potential Mental Health Promoters

The perspective that spirituality and religiosity are mental health promoting factors is
consistent with findings from studies using a variety of measures and with numerous samples of
the general population, that higher levels of spirituality and religiosity are linked to greater
physical and mental health (Brady et al., 1999; Ellison et al., 1989; Powell et al., 2003).
Conceptually, spiritual and religious beliefs are hypothesized to add comfort, relieve pain and
suffering, provide hope and meaning, and help people cope with their problems (C. E. Ross,
1990).

Numerous studies have examined the links of spirituality and religiosity with the physical
and psychological health of the general population. Indeed in a review of empirical research on
adults, older adults, and older patients, Powell et al. (2003) found some evidence that religious service attendance was associated with lower rates of death and that religiosity (often measured by frequency of service attendance) was associated with lower rates of cardiovascular disease. In another review of empirical research on a variety of samples including adolescents, adults, and older adults from the U.S. and abroad, Seeman, Dubin, and Seeman (2003) concluded that Judeo-Christian practices of spirituality and religion were associated with lower blood pressure and hypertension and better immune function. Additionally, they concluded that Zen, yoga, and meditation practices were associated with better health outcomes in clinical patient populations and with lower blood pressure, cholesterol, and stress hormone levels for a wide range of samples including both U.S. and international samples, as well as for samples with a variety of ages and health statuses. Lastly, C. E. Ross (1990) found that higher levels of religious beliefs were associated with lower levels of psychological distress for a probability sample of Illinois residents recruited through a random digit-dialing system ($N = 401$).

Based on such data, it may be that spirituality and religiosity could serve as mental health promoting factors for LGB persons as well. Indeed there is theory and research that espouses the benefits of spiritual and/or religious beliefs for LGB persons. For instance, Ritter and O’Neill (1989) proposed that for many LGB persons, spirituality and religion may provide benefits such as a sense of wholeness, a relationship to the Divine, and an affirmation of the person’s basic goodness. Additionally, Wagner et al. (1994) proposed that LGB persons who integrate their religious faith with their sexuality might have greater self-acceptance and psychological well-being. Miller (2005) described a case study of an African American gay man with AIDS who used his spiritual and religious beliefs to cope with his disease. Additionally, in a qualitative study of eight lesbian women suffering from cancer, Varner (2004) found that all of the women
found spirituality, and five of them found religion to be both supportive and health promoting. Four quantitative studies on the topic also highlighted the potential benefits of spirituality and religion. With a sample of HIV-infected gay men (N = 106), using religion as coping mechanism (e.g., placing trust in God, seeking comfort in religion) was linked with fewer depressive symptoms and religious behavior was linked with positive immunological status (Woods et al., 1999). Additionally, spirituality and involvement in the social aspects of religion have been found to be related significantly to greater self-esteem and acceptance of one’s sexual orientation, and to feeling less alienated (Tan, 2005; Yakushko, 2005). Lastly, Lease et al. (2005) found that spirituality was related to greater psychological well-being and lower depressive symptomatology for Caucasian LGB persons (N = 583). Overall, all of these studies are consistent with conceptualizations of spirituality and religiosity as health promoters, such that they are related negatively to psychological distress and positively to psychological well-being. This study will test this position by examining concomitantly the unique relations of spirituality and religiosity to the psychological distress and well-being of LGB persons, above and beyond the roles of minority stress variables.

**Potential Stress-Mental Health Buffers**

In addition to direct links of spirituality and religiosity with physical and mental health outcomes, theory and empirical research has also pointed to spirituality and religiosity as potential buffers of the relations between stress and negative health outcomes. For instance, spirituality and religiosity may buffer against stress by providing a framework for interpreting stressful events, enhancing coping resources, and facilitating access to social support (Siegel et al., 2001). Indeed, with various samples, there is empirical support for the notion that spirituality and religiosity are moderators of the relationship between stress and negative health conditions. For instance, Mascaro and Rosen (2006) found that spirituality moderated the relation between
daily stress and depression for college students ($N = 143$) such that the relation between stress and depression was positive for those with low levels of spirituality and non-significant for those with high levels of spirituality. Additionally with college students ($N = 120$), Fabricatore et al. (2000) found that spirituality moderated the relation of stress (e.g., daily hassles, significant life events) with life satisfaction. The results indicated that for participants low in spirituality, there was a significant and negative relation between stress and life satisfaction, whereas for those high in spirituality, there was no significant relation between stress and life satisfaction. Additionally, in a four-year longitudinal study of adolescents ($N = 1,182$), Wills et al. (2003) found that religiosity buffered the relation of stressful life events with substance use. Specifically, there was a significant reduction in the effect size of the relation between stressful life events and substance use for those with high religiosity compared to those with low religiosity. Also, religiosity moderated the relation of family dysfunction with disordered eating for college women ($N = 876$), such that when participants had high levels of religiosity there was no relationship between family risk and disordered eating, but when participants had low levels of religiosity, there was a significant positive relation between family risk and disordered eating (Forthus et al., 2003).

Finally, spirituality has been shown to serve as a buffer of minority stress. Specifically, Bowen-Reid and Harrell (2002) found that, for African American college students ($N = 155$), spirituality moderated the relation between racist stressful events and psychological distress. For participants with high levels of spirituality, there was no significant relation between perceived racist stressful events and psychological distress; but, for participants with low levels of spirituality, there was a significant and positive relation between perceived racist stressful events and psychological distress. Based upon this literature, this study will explore the possibility that
spirituality and religiosity moderate or buffer the relations of minority stressors with psychological distress and well-being for LGB persons.

**Potential Mental Health Stressors**

Despite the literature suggesting potential benefits of spirituality and religiosity for LGB persons, there is also theory and research that suggests possible spiritual wounding for LGB persons due to their participation in religions that describe same-gender sexual orientation as sinful. Indeed, James (1928) proposed that for a religion to be useful it must be philosophically reasonable, morally helpful, and spiritually illuminating. However, Ritter and O’Neill (1989) explained that for LGB persons’, traditional Judeo-Christian religions do not provide these necessary facets and instead “have heaped accusations of shame, contamination, and sinfulness, upon the heads of lesbian and gay people” (p.68). Additionally, Barret and Brazan (1996) described that there is a fundamental struggle for LGB persons to overcome the clash between homophobic religious institutions and personal spiritual experiences that connect them to a higher power.

Empirical research also demonstrates the potential negative implications of religiosity for LGB persons. Qualitative research has shown that many LGB persons feel that they must choose between being LGB and being religious (Rodriguez & Ouellette, 2000). Furthermore, quantitative research indicates that being religious in a non-gay affirming church and holding conservative religious views are correlated with internalized homophobia (Meyer & Dean, 1998; Wagner et al., 1994). Lastly, religiously oriented programs aimed at changing the sexual orientation of LGB persons have been shown to be psychologically damaging (Beckstead & Morrow, 2004). Due to these negative experiences that many LGB persons could face within their religions, spirituality and religious participation may be related to poor mental health for LGB persons. Therefore, the perspective that spirituality and religiosity are mental health
stressors that are related positively to psychological distress and negatively to psychological well-being will be examined in the present study.

**Attending to Distinctions Between Spirituality and Religiosity**

In addition to testing the three different perspectives about the roles of spirituality and religiosity in LGB persons’ mental health, the present study will attend to potentially distinct roles played by spirituality and religiosity. More specifically, spirituality and religiosity are related (Hill et al., 2000; Hill & Pargament, 2003), but theorists have highlighted that they are not identical constructs (Miller & Thoresen, 2003). Spirituality is considered an individual experience that includes a personal connection to a Sacred or Higher Being, personal transcendence, and meaningfulness (Zinnbauer et al. 1997). Religiosity on the other hand is defined more narrowly to include participating in formally structured religious institutions, prescribed theology, and rituals (Zinnbauer et al. 1997).

Empirical data are consistent with the notion that spirituality and religiosity are related but distinct constructs. For instance, Zinnbauer et al. (1997) asked participants (N = 346) from a wide range of religious backgrounds to define the terms *religiousness* and *spirituality* in addition to reporting the degree to which they considered themselves religious and spiritual. A content analysis of these responses revealed that the definitions of spirituality and religiousness differed. The definitions of spirituality most frequently included feelings of connectedness with and personal beliefs about God or a Higher Power, feelings of transcendence, attaining a state of inner peace, and obtaining actualization. On the other hand, the most frequent definitions of religiousness included belief or faith in God or a Higher Power, organizational practices or activities such as attendance at religious services, performance of rituals, and belief in institutionally based dogma. Thus, although the definitions included some common features, such as a belief in God, there are significant differences in that spirituality mainly focused on a
personal relationship or connection with a Higher Power and religiousness focused on institutional beliefs and practices. Zinnbauer et al. (1997) also found that although the majority of participants considered themselves to be spiritual and religious (74%), a number of participants considered themselves to be spiritual but not religious (19%) or religious but not spiritual (3%). Lastly, in this study, spirituality and religiosity had some different correlates. For example, spirituality, but not religiosity, was related positively to education, income, mystical experiences, and being hurt by clergy in the past, while religiosity, but not spirituality, was related positively to parent’s church attendance during childhood, interdependence with others, and a positive view of religion.

Despite the distinctiveness of spirituality and religiosity, however, a limitation in much of the prior research is that these constructs are not assessed separately. The distinction between spirituality and religiosity may be especially important for LGB persons because many religions condemn non-heterosexuality. Such condemnation may lead some LGB persons to have a strained relationship with their religious institutions, but not necessarily with their individual spirituality. Indeed, Schuck and Liddle (2001) found that for LGB persons (N = 66) nearly two-thirds reported having conflicts between their religion and their sexual orientation and that fifty-three percent of the respondents tried to resolve this conflict by considering themselves spiritual rather than religious. Additionally, Lease and Shulman (2003) found that family members of LGB persons made a distinction between their spiritual beliefs (e.g., personal connection to a loving Higher Power) and organized religion. Lease and Shulman (2003) also found that spiritual beliefs were more important in helping the participants understand and accept their family member’s sexual orientation than was participation in a particular religion. Indeed, family members of LGB persons often have to struggle with integrating their religious beliefs, which
may condemn non-heterosexuality, and their love for their LGB family member. This struggle that family members of LGB persons experience, may parallel the struggle that LGB persons themselves grapple with. Additionally, Ritter and O’Neill (1989) explained that some LGB persons cope with the homonegativity that they receive in their traditional religions by turning to their spirituality, and enriching it, with ancient or non-Judeo-Christian expressions such as Shamanism and Native American Spirituality. Thus, the distinction between spirituality and religiosity may be particularly important to attend to in research with LGB persons and this study will examine if spirituality and religiosity have distinct, rather than parallel roles in the psychological distress and well-being of LGB persons.

**Purpose of Study**

Based on the literature reviewed here, and using the minority stress framework, the present study advances understanding of LGB persons’ psychological distress and well-being in a number of ways. First, this study examines concomitantly the relations of the four minority stress variables (i.e., perceived experiences of prejudice and discrimination, expectations of stigma, internalized homophobia, and concealment of sexual orientation) to psychological distress and psychological well-being of LGB persons. Second, this study examines the potential additional roles of spirituality and religiosity in the psychological distress and well-being of LGB persons. Specifically, based on prior theory and empirical research about the roles of spirituality and religiosity in the mental health of LGB persons, this study will test three rival hypotheses that spirituality and religiosity are (a) mental health promoters, (b) buffers of the stress and mental health relation, or (c) mental health stressors. Finally, the present study will explore the potentially distinct roles of spirituality and religiosity in LGB persons’ psychological distress and well-being. To address these aims, the present study tests the following hypotheses:
1. Based on the minority stress framework it is expected that perceived experiences of prejudice and discrimination, expectations of stigma, and internalized homophobia will be linked uniquely and positively with psychological distress and uniquely and negatively with psychological well-being. Given the mixed prior findings about the role of concealment of sexual orientation, its unique relation will be examined, but no specific hypothesis is made.

2. Three competing hypotheses will be explored separately for spirituality and religiosity:
   a. Spirituality and religiosity are mental health promoters and will be related negatively to psychological distress and positively to psychological well-being.
   b. Spirituality and religiosity are buffers in the stress-mental health relation and moderate the relations of perceived prejudice events, expectations of stigma, internalized homophobia, and concealment of sexual orientation to psychological distress and well-being.
   c. Spirituality and religiosity are mental health stressors and will be related positively to psychological distress and negatively to psychological well-being.

To allow for the examination of distinct roles played by spirituality and religiosity, these variables will be assessed and examined as separate variables in the tests of the hypotheses.
CHAPTER 3
METHODS

Participants

Analyses were based on data from 398 participants. With regard to gender, 48% \((n = 190)\) of participants identified as female, 49% \((n = 195)\) as male, 1% \((n = 3)\) as transgender male-to-female, and 1% \((n = 4)\) as transgender female-to-male. Participants ranged in age from 18 to 70 years \((M = 38.3, \text{SD} = 12.9, Mdn = 38)\). In terms of sexual orientation, 62% \((n = 246)\) of participants self identified as exclusively lesbian/gay, 21% \((n = 83)\) as mostly lesbian/gay, and 15% \((n = 61)\) as bisexual. With regard to race/ethnicity, 68% \((n = 271)\) identified as Caucasian, followed by 8% \((n = 31)\) African-American/Black, 4% \((n = 17)\) Native American, 4% \((n = 16)\) Hispanic, 4% \((n = 16)\) Asian American, 5% \((n = 18)\) multiracial, and 6% \((n = 23)\) other. In terms of social class, 7% \((n = 28)\) of the sample identified as lower class, 24% \((n = 95)\) as working class, 46% \((n = 184)\) as middle class, 18% \((n = 72)\) as upper middle class, and 2% \((n = 9)\) as upper class.

Approximately 25% \((n = 100)\) of the sample reported that they had no current religious affiliation and 12% \((n = 49)\) reported that they were agnostic. Other participants identified as current adherents of Catholicism \((7%, \text{n} = 29)\), Buddhism \((6%, \text{n} = 24)\), Judaism \((5%, \text{n} = 21)\), the Baptist denomination \((5%, \text{n} = 20)\), Universal Unitarianism \((4%, \text{n} = 15)\), Native American Spiritualities \((3%, \text{n} = 13)\), Paganism \((3%, \text{n} = 11)\), the Methodist denomination \((3%, \text{n} = 10)\), the Universal Fellowship of Metropolitan Community Churches \((3%, \text{n} = 10)\), Presbyterianism \((2%, \text{n} = 8)\), Episcopalianism \((2%, \text{n} = 8)\), Hinduism \((2%, \text{n} = 6)\), and Quakerism \((1%, \text{n} = 5)\). An additional 8% \((n = 31)\) identified as other Christian denominations. With respect to current attendance to religious services, 5% \((n = 21)\) reported attending more than once a week, 11% \((n = 42)\) attending once a week, 6% \((n = 23)\) attending twice a month, 5% \((n = 20)\) attending once a
month, 22% \((n = 86)\) attending less than once a month, and 49% \((n = 194)\) never attending. Approximately 91% of participants \((n = 360)\) reported currently living in the United States, whereas 8% \((n = 31)\) were living in other countries. With regard to the 31 participants who reported living in countries other than the United States, 23% reported residing in Canada \((n = 7)\), 16% in the United Kingdom \((n = 5)\), 13% in Mexico \((n = 4)\), 10% in Turkey \((n = 3)\), 6% in Australia \((n = 2)\), and 32% \((n = 10)\) living in a variety of other countries (e.g., Argentina, Portugal, South Africa) with 1 participant residing in each of these countries. These international participants correctly responded to the validity check items (described next), indicating that they were able to read and understand the instructions and survey questions.

**Procedures**

Participants were recruited through advertising in LGB Internet listserves and groups and through networking with personal contacts. Advertisements were sent to a variety of listserves specifically including those that focused on LGB, spiritual, and religious issues and those that had a combined focus on LGB issues and spirituality or religiosity. The study was also advertised through various Yahoo, Google, Facebook, and My Space groups. In addition, listserves, Internet groups, and organizations serving racial/ethnic and religious minority LGB persons were targeted in an attempt to obtain a racially, ethnically, and religiously diverse sample.

Data were collected using an online survey. Research has shown some potential benefits of online data collection. Specifically, Internet samples have been shown to be relatively diverse with respect to age, gender, geographic regions, and socioeconomic status (Gosling, Vazire, Srivastava, & John, 2004). Also, findings from online data collection have been found to be consistent with findings from traditional data collection methods (Gosling et al., 2004). Furthermore, large numbers of LGB participants may be easily recruited via the Internet (Epstein
& Klinkenberg, 2002). Online data collection also may result in better representation of individuals who are less “out” about their sexual orientation than do data collection strategies that require lesbian and gay persons to “come out” to researchers in person (Epstein & Klinkenberg, 2002). Lastly, with online surveys, LGB participants may feel that they have a greater sense of privacy and anonymity, which may encourage them to be more open and honest with their responses (Riggle, Rostosky, & Reedy, 2005).

The study advertisements directed participants to an online survey. Upon connecting to the survey website, the informed consent was displayed which described the purpose of the study, confidentiality of responses, and contact information of the researcher. Participants then clicked a link that served as an indication that they were voluntarily agreeing to participate, and they were then taken to the survey. The survey instruments were counterbalanced to reduce order effects. Embedded into each of the measures in the survey was a validity item. These items directed participants to respond in a particular manner. For example, an item asked participants to select the option for “strongly agree.” The purpose of these items was to identify random responding, and to ensure that participants were reading and understanding the questions. Following the completion of the survey, all participants received a thank you note, debriefing message, and the researcher’s contact information so that any additional questions or concerns could be addressed. A total of 803 surveys were submitted and screened to eliminate (a) 7 participants who were ineligible because they identified as either exclusively or mostly heterosexual, (b) 25 instances of potential random responding (i.e., more than one inaccurate validity item response), and (c) 373 surveys missing substantial amounts of data. Of the 373 surveys with substantial missing data, 113 only had the informed consent completed and
completed no survey items. The resulting final sample size used for the present analyses is 398 LGB persons.

**Instruments**

**Criterion Variables**

**Psychological distress** was measured with the *Hopkins Symptom Checklist-21 (HSCL-21)*. The HSCL-21 (Green, Walkey, McCormick, & Taylor, 1988) is a 21-item version of the longer 58-item Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth & Covi, 1974). It assesses psychological distress along the dimensions of general distress, somatic distress, and performance difficulty. The HSCL-21 items are rated on a 4-point continuum (1 = not at all to 4 = extremely). Sample items include, “Feeling inferior to others,” and “Blaming yourself for things.” Item ratings were averaged to yield an overall score, with higher scores indicating higher levels of psychological distress. HSCL-21 items had a Cronbach’s alpha of .90 in prior research (Green et al., 1988). Validity of HSCL-21 scores was supported by significant correlations with maladaptive perfectionism, perceived stress, and hopelessness (Kawamura & Frost, 2004; Moller, Fouladi, McCarthy, & Hatch, 2003). Additionally, the HSCL-21 has been used with diverse samples including substance abuse users (Downey, Rosengren, & Donovan, 2003), East Asian immigrants in the United States (Declan & Mizrahi, 2005), and international students (Komiya & Eells, 2001). With the current sample, HSCL-21 items yielded a Cronbach’s alpha of .92.

**Psychological well-being** was assessed with the *Psychological Well-Being Scale (PWB)*. The PWB (Ryff, 1989) is a theoretically based measure, assessing psychological well-being conceptualized to reflect autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The PWB is an 84-item, 6-point Likert-type scale (1 = strongly disagree to 6 = strongly agree). Sample questions include, “I feel like I get a
lot out of my friendships,” and “In general, I feel confident and positive about myself.” Item ratings were averaged to yield an overall score, with higher scores indicating higher levels of psychological well-being. With a sample of LGB persons, PWB items had a Cronbach’s alpha of .96 (Lease et al., 2005). Validity of PWB scores was demonstrated with significant correlations with theoretically related constructs such as self-esteem and life satisfaction (Ryff, 1989).

Similar to Lease et al. (2005), in the present study, the Purpose in Life subscale items were not assessed because of high conceptual overlap with the measure of spirituality, and an overall PWB average score was computed without the Purpose of Life subscale items. Cronbach’s alpha for PWB items with the current sample was .97.

**Predictor Variables**

**Perceived Experiences of prejudice** were assessed with the Schedule of Heterosexist Events (SHE). Selvidge (2000) developed the 18-item SHE to measure the frequency of perceived prejudice events that lesbian and bisexual women encountered. Selvidge (2000) developed this measure by adapting the Schedule of Sexist Events (Klonoff & Landrine, 1995), and parallel versions of this measure have been used to assess perceived racist events with African American and Arab American persons as well (Landrine & Klonoff, 1996; Moradi & Hasan, 2004). In the current study, items were modified to be inclusive of gay and bisexual men in addition to lesbian and bisexual women. Sample items include, “How many times have you been treated unfairly by your family because you are lesbian, gay, or bisexual?” and “How many times have you been really angry about something heterosexist or homophobic that was done to you?” Items were rated on a 6-point continuum (1 = never to 6 = almost all of the time); item ratings are averaged, and higher scores indicate more frequent experiences of prejudice. In two samples of lesbian and bisexual women, Selvidge (2000) found Cronbach’s alphas of .91 and .92 for SHE items. Supporting validity of SHE scores, Selvidge found a positive correlation between
SHE scores and self-concealment and a negligible correlation between SHE scores and self-monitoring. In the current sample, Cronbach’s alpha for SHE items was .93.

**Expectations of stigma** were assessed with the *Stigma Consciousness Questionnaire for Gay Men and Lesbians (SCQ)*. The LG version of the SCQ (Pinel, 1999) was designed to measure the extent to which LG persons expect to be stigmatized by others. The version of the measure used by Pinel was modified slightly to apply to bisexual persons as well. The SCQ is a 10-item, 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). Sample items include, “Most heterosexuals have a lot more homophobic thoughts than they actually express,” and “Stereotypes about gay, lesbian, or bisexual persons have not affected me personally (reverse scored).” Item ratings were average with higher scores indicating greater expectations of stigma. SCQ items had adequate internal consistency with Cronbach’s alpha of .81 and items load on a single factor (Pinel, 1999). Pinel reported that, as expected, SCQ scores were significantly and positively correlated with scores on measures of perceived discrimination and past experiences of discrimination. Additionally, discriminant validity was demonstrated in that SCQ scores were not related to social anxiety (Pinel, 1999). In the current sample, Cronbach’s alpha for SCQ items was .79.

**Internalized Homophobia** was assessed with the *Internalized Homophobia (IHP)* scale. Martin and Dean (1987; as cited in Herek et al., 1997) originally created the IHP as interview questions with gay men. The current study used the self-report version used by Herek et al. (1997) that is applicable to LGB persons. The IHP is a 9-item, 5-point Likert-type scale (1 = disagree strongly to 7 = agree strongly). Sample items include “I feel that being gay, lesbian, or bisexual is a personal shortcoming for me,” and “I wish I weren’t gay, lesbian, or bisexual.” Items ratings were averaged, with higher scores indicating greater levels of internalized
homophobia. In terms of reliability, IHP items had Cronbach’s alphas of .71 and .83 for women and men, respectively. As expected, Herek et al. (1997) found that compared to those with low IHP scores, men and women with high IHP scores reported significantly higher levels of depression and demoralization and lower levels of self-esteem. With the current sample, Cronbach’s alpha for IHP items was .90.

**Disclosure versus Concealment of sexual orientation** was assessed with the *Outness Inventory (OI)*. The OI (Mohr & Fassinger, 2000) measures the degree to which respondents’ sexual orientation is disclosed versus concealed with people in different areas of their lives. The 10 OI items are rated on a 7-point continuum (1 = person definitely does not know about your sexual orientation status to 7 = person definitely knows about your sexual orientation status, and it is openly talked about). The OI has three subscales that assess concealment of sexual orientation with different sets of people including “Out to the World” (e.g., my new straight friends), “Out to Family” (e.g., mother, siblings), and “Out to Religion” (e.g., leaders of my religious community). For ease of interpretation, item ratings were reverse coded and averaged so that higher scores indicated greater concealment of sexual orientation and lower scores indicated greater disclosure of sexual orientation. Based on the results of a factor analysis of OI items, Mohr and Fassinger concluded that either the full scale or individual subscales could be used when analyzing OI data. Since the focus of this study is on overall level of concealment of sexual orientation, results will be analyzed using the overall score. Validity for OI scores has been demonstrated by positive correlations of outness with level of self-acceptance about same-sex desires and identification with LG communities. Lastly, OI items had a Cronbach’s alpha of .85 with a sample of LGB persons (Moradi et al., 2006) and Cronbach’s alpha for OI items with the current sample was .91.
Spirituality was assessed with the Spiritual Involvement and Beliefs Scale (SIBS). The SIBS (Hatch, Burg, Naberhaus, & Hellmich, 1998) was designed to assess spiritual beliefs, involvement, and activities including a relationship with a higher power, fulfillment from nonmaterial things, faith, and trust. The SIBS is a 26-item, 5-point Likert-type scale (1 = strongly agree to 5 = strongly disagree). Sample items include, “Some experiences can be understood only through one’s spiritual beliefs,” and “My spiritual life fulfills me in ways that material possessions do not.” Item ratings were averaged and higher scores indicate a greater level of spirituality. Validity for SIBS scores has been demonstrated by expected correlations between these scores and other indicators of spirituality including scores on the Spiritual Well-Being Scale, The Santa Clara Strength of Religious Faith Questionnaire, and the Intrinsic subscale of the Religious Orientation scale (Hatch et al., 1998; Lease et al., 2006). Reliability for SIBS scores has been indicated by strong test-retest reliability ($r = .92$), and high internal consistency with Cronbach’s alpha of .92 (Hatch et al., 1998). The SIBS also was used with a sample of LGB persons and yielded a Cronbach’s alpha of .75 (Lease et al., 2006). With the current sample, Cronbach’s alpha for SIBS items was .92.

Religiosity was assessed with the Religious Commitment Inventory—10 (RCI-10) scale. The RCI-10 (Worthington et al., 2003) was designed to assess the degree to which respondents adhere to their religious beliefs, practices, and values and use them in daily living. The RCI-10 was created to be a shorter and more psychometrically sound version of the previous 62, 20, and 17-item Religious Commitment Inventories. The 10 items of the RCI-10 are rated on a 5-point continuum (1 = not at all true of me to 5 = totally true of me). Sample items include, “I enjoy working in the activities of my religious organization,” and “My religious beliefs lie behind my whole approach to life.” Item ratings were averaged and higher scores indicate a greater level of
religiosity. Validity of RCI-10 scores has been demonstrated by their correlations with other related constructs such as frequency of religious service attendance and measures of religiosity (Worthington et al., 2003). Additionally, RCI-10 items have strong internal consistency (Cronbach’s alpha ranging from .88 - .96) and test-retest reliability with estimates of .87 for three weeks and .84 for five months (Worthington et al., 2003). RCI-10 items yielded a Cronbach’s alpha of .95 with the current sample.
Preliminary analyses were conducted to examine descriptive information, and to explore potential gender and order effects in the data. Tests of hypotheses were conducted following these preliminary analyses.

Descriptive Statistics

The present sample’s means and standard deviations on the variables of interest (see Table 1) were generally comparable to those obtained in previous samples of LGB persons. More specifically, relatively low levels of psychological distress were reported by the current sample \((M = 1.70, SD = .53)\). These low scores are comparable to HSCL-58 scores reported by Szymanski (2005) with a sample of lesbian women \((M = 1.44, SD = .32)\). Scores for psychological well-being \((M = 4.53, SD = .79)\) were similar to scores reported by Lease et al. (2005) with a sample of LGB persons \((M = 4.81, SD = .64)\). The present sample’s scores for experiences of prejudice \((M = 2.22, SD = .75)\) were similar to scores reported by Goodman et al. (2005) with a sample of LGB persons \((M = 2.23, SD = .76)\). The current sample’s scores for expectations of stigma \((M = 4.31, SD = 1.03)\) were similar to those reported by Lewis et al. (2003) with a sample of LGB persons \((M = 4.32, SD = .64)\). The current sample’s scores for internalized homophobia \((M = 1.54, SD = .78)\) were also similar to those reported by Lewis et al. (2003) with a sample of LGB persons \((M = 1.52, SD = .64)\). The sample’s scores for concealment of sexual orientation were \((M = 3.58, SD = 1.56)\). However, when sample’s score for the Outness Inventory were not reversed scores they were \((M = 4.42, SD = 1.56)\), which fell between those reported by Moradi et al. (2006) for a Caucasian sample \((M = 4.70, SD = 1.36)\) and racial/ethnic minority sample \((M = 3.78, SD = 1.35)\) of LGB persons. Likewise, scores for spirituality for the current sample \((M = 4.69, SD = 1.16)\) were similar to those reported by Lease
et al. (2005) with a sample of LGB persons \((M = 4.03, SD = .35)\). Lastly, with respect to religiosity, scores for the current sample were \((M = 2.16, SD = 1.14)\). No study was found that used the Religious Commitment Inventory-10 with a sample of LGB persons. However, the present sample’s scores were similar to scores reported by Worthington et al. (2003) with samples of university students \((M = 2.31, SD = 1.02)\) and clients in a secular counseling center \((M = 2.14, SD = 1.17)\). Skewness and kurtosis values for all variables of interest met recommended cut-offs for normality (Weston and Gore, 2006).

**Gender Comparisons**

To explore potential gender differences in the data, a MANOVA was conducted with gender as the independent variable and the variables of interest (i.e., psychological distress, psychological well-being, experiences of prejudice, expectations of stigma, internalized homophobia, concealment of sexual orientation, spirituality, and religiosity) as dependent variables. To be inclusive of transgender persons, male-to-female transgender persons were categorized as women and female-to-male transgender persons were categorized as men. Box’s test of equality of covariance matrices and Levene’s test of equality of error variances were not significant indicating that data met assumptions of homogeneity of covariance matrices and variance. The overall model was significant \((F[1, 378] = 3.35, p < .01, \eta_p^2 = .07)\), indicating a significant but small gender difference in the set of dependent variables. Follow-up univariate analyses, with alpha adjusted to .01 (given that there were 8 comparisons), indicated no significant gender differences on the individual dependent variables. With alpha of .05, there were small but significant gender differences on psychological well-being \((F[1, 378] = 4.77, p < .05, \eta_p^2 = .01)\), with women \((M = 4.63, SD = .73)\) reporting slightly greater well-being than men \((M = 4.46, SD = .82)\); and on religiosity \((F[1, 378] = 5.30, p < .05, \eta_p^2 = .01)\), with men
Gender accounted for approximately 1% of variability in these data. Parallel results were found when gender comparisons were made with transgender persons excluded from the analyses; again, the overall model was significant, but no gender effects were significant with alpha adjusted to .01, and only psychological well-being yielded a significant gender effect with alpha at .05, again with women scoring higher than men. Thus, overall, gender differences on the dependent variables were non-significant or negligible. As such, hypotheses were tested with the entire sample, and without gender as a covariate.

**Test for Order Effects**

To test for order effects across the two orders of the survey, a MANOVA was conducted with survey order as the independent variable and the variables of interest (i.e., psychological distress, psychological well-being, experiences of prejudice, expectations of stigma, internalized homophobia, concealment of sexual orientation, spirituality, and religiosity) as dependent variables. Box’s test of equality of covariance matrices and Levene’s test of equality of error variances were not significant indicating that the data met assumptions of homogeneity of covariance matrices and variance. The overall model was significant ($F[1, 384] = 2.25, p < .05, \eta^2_{p} = .05$) suggesting a significant but small order difference in the set of dependent variables. Again given the number of comparisons being conducted, a more conservative alpha of .01 was used for follow-up univariate analyses. These analyses indicated that there were no significant order effects at the $p = .01$ level. At the less conservative $p = .05$ level, only religiosity yielded a significant order effect ($F[1, 384] = 5.42, p < .05, \eta^2_{p} = .01$), with the order effect accounting for approximately 1% of variance in the data. Thus, overall, order effects on the dependent variables were non-significant or negligible.
Minority Stress Framework: Hypothesis 1

Hypothesis 1 was that experiences of prejudice and discrimination, expectations of stigma, and internalized homophobia are linked uniquely and positively with psychological distress and uniquely and negatively with psychological well-being. Given the mixed prior findings about the role of concealment of sexual orientation, no specific hypothesis was made about its relation to psychological distress and well-being.

Zero-order correlations were computed to test hypothesized relations among variables of interest (see Table 1). Psychological distress was correlated positively with reported experiences of prejudice ($r = .33, p < .001$), expectations of stigma ($r = .30, p < .001$), internalized homophobia ($r = .38, p < .001$), and concealment of sexual orientation ($r = .21, p < .001$). Additionally, psychological well-being was correlated negatively with reported experiences of prejudice ($r = -.17, p < .001$), expectations of stigma ($r = -.30, p < .001$), internalized homophobia ($r = -.51, p < .001$), and concealment of sexual orientation ($r = -.38, p < .001$).

To examine the unique relation of each minority stressor with each mental health indicator, simultaneous multiple regression analyses were conducted. In the first equation, experiences of prejudice, expectations of stigma, internalized homophobia, and concealment of sexual orientation were regressed on psychological distress. These predictors were associated significantly with psychological distress, $R = .49, F(4, 389) = 31.19, p < .001$, accounting for 24% of the variance in distress (see Table 2). Inspection of individual variables indicated that reported experiences of prejudice ($\beta = .30, t = 5.62, p < .001$), internalized homophobia ($\beta = .28, t = 5.38, p < .001$), and concealment of sexual orientation ($\beta = .12, t = 2.37, p < .05$), but not expectations of stigma, each accounted for unique variance in psychological distress. In the second equation, experiences of prejudice, expectations of stigma, internalized homophobia, and concealment of sexual orientation were regressed on psychological well-being. These predictors
were significantly associated with psychological well-being, $R = .57$, $F(4, 389) = 45.59$, $p < .001$, accounting for 32% of the variance (see Table 2). Inspection of individual variables indicated that reported experiences of prejudice ($\beta = -.11$, $t = -2.22$, $p < .05$), expectations of stigma ($\beta = -.12$, $t = -2.50$, $p < .05$), internalized homophobia ($\beta = -.37$, $t = -7.50$, $p < .001$), and concealment of sexual orientation ($\beta = -.21$, $t = -4.36$, $p < .001$) each accounted for unique variance in psychological well-being.

Thus, Hypothesis 1 was mostly supported. Participants who reported greater experiences of prejudice, internalized homophobia, and concealment of sexual orientation, but not expectation of stigma also reported more psychological distress. Additionally participants who reported greater experiences of prejudice, expectations of stigma, internalized homophobia, and concealment of sexual orientation also reported less psychological well-being.

The Roles of Spirituality and Religiosity: Hypothesis 2

Three competing hypotheses were presented for the potential roles of spirituality and religiosity in relation to psychological distress and well-being: (a) that they are mental health promoters (i.e., related to lower distress and greater well-being), (b) buffers (i.e., moderators) in the stress-mental health relation, (c) or mental health stressors (i.e., related to greater distress and lower well-being).

Spirituality and Religiosity as Mental Health Promoters (Hypothesis 2a) or Stressors (Hypothesis 2c)

Zero-order correlations revealed that spirituality and religiosity were not correlated significantly with psychological distress. Furthermore, spirituality ($r = .25$, $p < .001$), but not religiosity, was correlated positively with psychological well-being (see Table 1). Additional exploratory analyses indicated that neither current nor childhood attendance at religious services was related to psychological distress or well-being. Lastly, there was no mean difference in
psychological distress or well-being between participants who indicated that religion and spirituality are important parts of their lives and participants who indicated that religion and spirituality are not important parts of their lives.

Additionally, Hypothesis 2a and 2c were tested by conducting two hierarchical multiple regression analyses with the set of four minority stressors entered as step one and spirituality and religiosity entered as step 2 to determine their unique relations with psychological distress and well-being, above and beyond the set of minority stressors. In the first equation, with psychological distress as the criterion variable, spirituality and religiosity did not account for unique variance, beyond that accounted for by the set of minority stress variables (see Table 3). In the second equation, with psychological well-being as the criterion variable, spirituality and religiosity accounted for an additional 7% of variance beyond that accounted for by minority stressors (see Table 3). Specifically, both spirituality ($\beta = .37, t = 6.33, p < .001$) and religiosity ($\beta = -.18, t = -3.03, p < .01$) accounted for unique variance in psychological well-being, with spirituality related uniquely and positively and religiosity related uniquely and negatively with psychological well-being. Thus, Hypotheses 2a and 2c were partially supported in that the data were consistent with the view of spirituality as a well-being promoter and religiosity as a well-being stressor.

**Spirituality and Religiosity as Buffers in the Stress-Mental Health Relation (Hypothesis 2b)**

To test Hypothesis 2b, regarding the potential moderating roles of spirituality and religiosity in the relations of perceived experiences of prejudice and discrimination, expectations of stigma, internalized homophobia, and concealment of sexual orientation with psychological distress and well-being, the recommendations of Barron and Kenny (1989) to use moderator regression analyses were followed. Following recommendations by Aiken and West (1991), predictor and moderator variables were centered (i.e., mean deviation scores were computed) to
reduce multicollinearity between the interaction term and the main effects when testing for moderator effects. In order to test for moderation, a series of hierarchical multiple regression analyses were conducted; eight to test spirituality as a moderator of the relation of each of the four minority stressors with (a) psychological distress and (b) psychological well-being and another eight to test religiosity as a moderator in these relations. For each analysis, the centered minority stressor was entered in Step 1 predicting psychological distress or well-being. In Step 2 of each regression, centered scores for either spirituality or religiosity were entered. Lastly, in Step 3, scores reflecting the interaction between the respective centered minority stressor and centered spirituality or religiosity scores (e.g., experiences of prejudice scores multiplied by spirituality scores) were entered. Significant moderation is indicated if adding the interaction term results in a significant change in $R^2$, and the beta weight for the interaction term is significant. Given the difficulty in detecting interaction effects with correlational research, use of liberal alphas (e.g., .10) has been recommended (McClelland & Judd, 1993). But, due to the number of regression equations conducted to test for moderation in the present study, alpha was set at .05. None of the interaction terms emerged as significant in the regressions for psychological distress or well-being. Thus Hypothesis 2b that spirituality and religiosity were buffers in the stress-mental health relation was not supported.
Table 4-1. Summary statistics and correlations among the variables of interest

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<td>.25**</td>
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<td>.09</td>
<td>.14**</td>
<td>-.03</td>
<td>.72**</td>
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</table>

M 1.70 4.53 2.22 4.31 1.54 3.58 4.69 2.16
SD .53 .79 .75 1.03 .78 1.56 1.16 1.14
∝ .92 .97 .79 .79 .90 .91 .92 .95
Possible Range 1-4 1-6 1-6 1-7 1-5 1-7 1-7 1-5

Higher scores indicate higher levels of the construct assessed. *p < .05, **p < .01.

Table 4-2. Simultaneous regression equations of minority stressors regressed on psychological distress and well-being

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>R</th>
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*p < .05, **p < .01.
Table 4-3. Hierarchical regression equations examining unique links of spirituality and religiosity with psychological distress and well-being

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Note. *p < .05. **p < .01. B, β, and t reflect values from the final regression equation.
 CHAPTER 5
DISCUSSION

Spirituality and religiosity may be important in the lives of many LGB persons (Barret & Barza, 1996; Sherkat, 2002), but there is limited attention to these variables in the LGB literature (Phillips, Ingram, Smiths, & Mindes, 2003). The present study addresses this gap and contributes to the understanding of LGB persons’ experiences and mental health by examining the roles of spirituality and religiosity in the psychological distress and well-being of this population. Specifically, this study advances the literature in three important ways. First, this study provides a test of the minority stress model by examining concomitantly the relations of (a) perceived experiences of prejudice, (b) expectations of stigma, (c) internalized homophobia, and (d) concealment of sexual orientation with psychological distress. Second, this study advances the current literature on minority stress by examining the relations of the set of minority stressors with psychological well-being, in addition to psychological distress. Third, this study examines three conceptualizations regarding the roles of spirituality and religiosity in the mental health of LGB persons: (a) that they are mental health promoters (i.e., related to lower distress and greater well-being), (b) buffers (i.e., moderators) in stress-mental health relations, or (c) mental health stressors (i.e., related to greater distress and lower well-being). Finally, by assessing spirituality and religiosity separately, this study explores the possibility that spirituality and religiosity have distinct, rather than parallel roles in the psychological distress and well-being of LGB persons.

The results of this study provide further evidence for the minority stress framework that Meyer (1995, 2003) outlined. Indeed, when examined separately with zero-order correlations, perceived experiences of prejudice and discrimination, expectations of stigma, internalized homophobia, and concealment of sexual orientation each were correlated positively with psychological distress and negatively with psychological well-being. Additionally, when
examined concomitantly, perceived experiences of prejudice and discrimination, internalized homophobia, and concealment of sexual orientation each were related uniquely to greater psychological distress and all four minority stressors were related uniquely to lower psychological well-being. This study demonstrated that minority stressors are not only linked with greater psychological distress, but also are linked with lower psychological well-being. In fact the minority stressors accounted for 24% of the variance in psychological distress and 32% of variance in psychological well-being. Thus, the posited stressors of living as a sexual minority person seem relevant to consider in understanding psychological distress as well as psychological well-being of LGB persons. As such, researchers and clinicians should attend to the relations of minority stressors with psychological well-being in addition to their relations with psychological distress of LGB persons.

Interestingly, when considered in the context of other minority stressors, expectations of stigma did not account for unique variance in psychological distress. This finding is inconsistent with the minority stress framework and prior studies that did find a unique relationship between expectations of stigma and some negative outcomes. For instance, prior studies found that when expectations of stigma were examined concomitantly with reported experiences of prejudice events and internalized homophobia, expectations of stigma were related uniquely to (a) self-reported need to justify the quality of one’s parenthood to others for Dutch lesbian mothers (Bos et al., 2004), (b) body image dissatisfaction and distress about failing to meet the ideal muscular masculine body for gay men (Kimel & Mahalik, 2005), and (c) demoralization, guilt, and suicidal ideation and behaviors for gay and bisexual men (Meyer, 1995). There are two major differences between these studies and the current study that could account for the different findings. First, the current study examined the relationship of minority stressors to overall
psychological distress while the previous studies examined more specific negative outcomes. Second, the current study examined concealment of sexual orientation concomitantly with perceived experiences of prejudice, expectations of stigma, and internalized homophobia, whereas the prior studies did not examine concealment of sexual orientation.

In one prior study, Lewis et al. (2003) examined concomitantly the relations of expectations of stigma, internalized homophobia, and concealment of sexual orientation to depressive symptoms with a sample of LGB persons. Although Lewis et al. (2003) did not examine perceived experiences of prejudice directly, they did examine perceived stressfulness of a range of sexual orientation-related issues including prejudice and discrimination, internalized homophobia, expectations of stigma, concealment and disclosure of sexual orientation, rejection from family, and fear of HIV/AIDS. In contrast to the findings of the current study, Lewis et al. (2003) found that expectations of stigma and perceived stressfulness of sexual orientation-related issues were related uniquely to depressive symptoms, but that internalized homophobia and concealment of sexual orientation were not related uniquely to depressive symptoms. Perhaps these mixed findings are due to the fact that Lewis et al.’s (2003) sample reflected restricted ranges of internalized homophobia and concealment of sexual orientation, with the sample scoring near the low end of both variables. This restriction in range many also have restricted the observed covariation of internalized homophobia and concealment of sexual orientation with depressive symptoms, allowing greater variance to be accounted for by expectations of stigma. Furthermore, perceived frequency of experiences of prejudice and discrimination was not examined in Lewis et al.’s (2003) study, and this difference also may have accounted for the different results found in that study and the present study. Although the current study does not support the unique role of expectations of stigma to psychological distress, researchers and
clinicians should continue to pay attention to expectations of stigma in LGB persons given its unique relationship to psychological well-being.

It is important to note that prior research has yielded mixed findings regarding the link between sexual orientation concealment and psychological distress, with some studies finding a positive relationship (Ayala & Coleman, 2000; Cole, Kemeny, Taylor, & Visscher, 1996; Cole, Kemeny, Taylor, Visscher, & Fahey, 1996; Diplacido, 1998; Lewis et al., 2001; Szymanski et al., 2001) and other studies finding no significant link (D’Augelli et al., 2001; Lewis et al., 2003; McGregor et al., 2001). The current study supports the hypothesis that sexual orientation concealment is related uniquely to greater psychological distress and lower psychological well-being. One possible explanation for mixed findings across studies regarding sexual orientation concealment is the observed restriction in range of sexual orientation concealment in many prior studies, with sample averages typically near the high end of the outness continuum (Lewis et al., 2003; McGregor et al., 2001). Another consideration is that some researchers assess sexual orientation concealment with a single item (D’Augelli et al., 2001), which may not adequately capture participants’ levels of outness across contexts. In the current study, disclosure - concealment of sexual orientation scores were near the mid-point of possible scores, demonstrating a greater range of reported concealment versus outness than has been typically represented in prior studies. Thus, attention to sample characteristics and range restriction in level of outness is important in interpreting prior and future findings regarding the link of sexual orientation concealment with mental health indicators. Findings of the current study support the posited role of concealment of sexual orientation as a minority stressor.

In addition to testing and generally providing support for the tenets of the minority stress model, the present study also examined several competing hypotheses regarding the roles of
spirituality and religiosity in the mental health of LGB persons. First, the hypothesis that spirituality and religiosity would be buffers of the stress and psychological distress and well-being relationship was not supported. Therefore minority stress is related to positively to psychological distress and negatively to psychological well-being regardless of level of spirituality and religiosity. By contrast, Bowen-Reid & Harrell (2002) found that for African American college students, spirituality moderated the relationship between racist stressful events and psychological distress. For participants with high levels of spirituality, there was no significant relation between perceived racist stressful events and psychological distress, whereas, for participants with low levels of spirituality, there was a significant and positive relation between perceived racist stressful events and psychological distress. Perhaps spirituality serves as a buffer of minority stress for African American persons because in the African American community, spirituality and religiosity are also connected with a sense of family, community, and history of strength. However, spirituality and religiosity may not have the same meaning in the LGB community as they do in the African American community because many religions are condemning of homosexuality. Additionally, many LGB persons struggle with their spirituality and religion and many LGB persons may have split from the spirituality or religion that they were raised in (Ritter & O’Neill, 1998). For instance, in the current sample, 69% of participants reported that their current religion is not the religion that they were raised in.

Despite lack of support for a buffering or moderating effect, results of this study were consistent with the view of spirituality as a mental health promoter. Specifically, spirituality was not related significantly to psychological distress, but it was correlated positively with psychological well-being. Additionally, spirituality accounted for unique variance in well-being above and beyond that accounted for by the minority stressors and religiosity. On the other hand,
results were consistent with the view of religiosity as a mental health stressor. Specifically, religiosity was not correlated significantly with either psychological distress or well-being, but religiosity accounted for unique negative variance in psychological well-being when entered into a regression analysis with the minority stressors and spirituality. This pattern of findings suggests that religiosity is not related to psychological distress, but that it is related to lower well-being for LGB persons when the positive effects of spirituality are accounted for. The different patterns of findings for spirituality and religiosity also support the perspective that spirituality and religiosity have distinct, rather than parallel roles in the psychological distress and well-being of LGB persons.

**Limitations**

The present findings must be interpreted in light of a number of limitations. For example, overall, the sample reported fairly low levels of distress and high levels of well-being. Also, this study did not assess whether participants are currently or have ever sought therapy. Therefore these results may not generalize to LGB persons who have greater levels of distress, diagnosable mental illnesses, or are seeking therapy. Future research should examine if minority stress is significantly related to mental illnesses such as depression, anxiety, and substance abuse with clinical populations of LGB persons.

An additional potential limitation is use of the Internet to collect data. Thus, persons who did not have access to a computer and the Internet were excluded from this study. This limitation should be considered in light of the fact that over two-thirds of Americans have access to the Internet at home, school, work, or in other venues, and that LGB persons spent more time on the Internet than their heterosexual counterparts (Riggle et al., 2005). Another concern about using an online study is the potential vulnerability to random responding. In the current study validity check items were utilized to ensure that participants were not randomly responding and that they
were reading and understanding the questions. Despite concerns about sample restriction and random responding, use of the Internet to collect data in the present study was deemed appropriate given some of the benefits of Internet data collection, specifically for LGB research. Specifically, online recruitment does not require that participants “come out” in person to researchers, and this may result in greater representation of participants who are less “out” about their sexual orientation (Epstein & Klinkenberg, 2002). Additionally, online recruitment has been shown to be geographically diverse (Gosling et al., 2004) which circumvents the challenge of oversampling LGB participants from a few large metropolitan areas. Instead with online data collection, researchers are able to recruit participants from a broader geographic area. For instance, the current study had participants that came from over 40 states and from 15 countries.

Despite these benefits of online recruitment, it is important to highlight that about half of the participants who attempted the study did not complete the study. Although it is impossible to know the reasons that participants did not completed the study, one potential explanation is the length of time it took to complete the study. The on-line survey took approximately 25 minutes to complete which may have created study fatigue and increased the drop out rate. Future on-line studies should aim to reduce the length of the research survey. But such decisions need to be balanced against the loss of potentially important information. It is also possible that some of the participants who did not complete the study initially, may have come back to complete it at a later time. For instance, some participants may have wanted to see what the study was about first, and then completed the survey at a time that was more convenient for them. Lastly, it is impossible to know if there are any important differences between the group of persons who completed the study and the group that did not.
Another limitation of this study is that while participants were diverse in terms of age, religion, and social class, the sample was largely White/Caucasian and most participants reported having at least a college degree. Additionally, this study recruited participants who identified as lesbian, gay, or bisexual. This study did not recruit participants who engage in same-gender sexual behaviors but do not identify as LGB. There may be different levels of minority stress for persons who identify as LGB and are open about their sexual orientation than for persons who identify as heterosexual but engage in same-gender sexual behaviors. The relations among minority stressors, psychological distress and well-being, spirituality, and religiosity may also be different for these different groups. For instance, for persons who identify as heterosexual, internalized homophobia may play a larger role in accounting for psychological distress and well-being, and experiences of prejudice, expectations of stigma, and concealment of sexual orientation may play smaller roles given that these individuals do not have public sexual minority identities. These issues limit the generalizeability of the present findings to individuals of the racial/ethnic backgrounds and sexual orientation identifications reflected in the present sample. Future studies are needed to assess the roles of spirituality, religiosity, minority stress, and psychology distress and well-being with racial/ethnic minority samples of LGB persons and with persons who do not identify as LGB but engage in same-gender sexual activity.

**Implications for Future Research and Practice**

The current study found that spirituality was related to lower psychological distress and greater psychological well-being. Future research should explore what specific aspects of spirituality (e.g. a belief in a higher power, a daily meditative practice, or a relationship with a spiritual leader) are protective features for LGB persons. This information would not only increase our scientific understanding of spirituality, but could also be used to inform development of interventions for the LGB community and society at large. Additionally, future
investigations could explore ways that LGB persons can increase their spirituality without being exposed to potentially harmful aspects of some religions that condemn homosexuality as a sin. Furthermore, a critical direction for future research is to continue to explore variables that may act as protective factors for LGB persons. Although research has suggested that LGB people are at increased risk for some mental health concerns (Cochran & Mays 2000a; Gilman et al., 2001; Meyer, 2003; Sandfort et al., 2001), the majority of LGB persons do not have a mental illness. In fact, the current sample reported relatively low levels of psychological distress and high levels of psychological well-being. Thus, many LGB persons appear to cope adaptively with minority stress. This study identified spirituality as one potential mental health promoter. Future research is needed to explore additional mental health promoters and buffers of minority stress for LGB persons. This line of research will be essential in creating prevention and mental health promotion programs for the LGB community.

By advancing scientific understanding of the roles of minority stressors, as well as spirituality and religiosity in the mental health of LGB persons, the present study can inform theoretically and empirically based therapies and interventions that aim to improve the mental health of LGB persons. More specifically, the present data suggest that the roles of minority stressors in the psychological distress and well-being of LGB persons are important to address in therapy. When working with LGB clients, therapists should assess clients’ perceived experiences of prejudice and discrimination, expectations of stigma, internalized homophobia, and concealment of sexual orientation. Therapists can inform clients of the relationship between these minority stressors and psychology distresses and work to reduce their clients’ exposure to such stress. To this end, social justice promotion efforts aiming to increase protection of LGB persons’ rights and reduce societal prejudice against LGB persons continue to be needed.
However, clinicians should be aware that expecting stigma from others and concealing sexual orientation might be an effective way for LGB persons to cope with societal stigma. Thus, reducing stigma vigilance and sexual orientation concealment may not necessarily be adaptive for clients in a cultural context of anti-LGB prejudice and stigmatization. But, helping clients to make informed decisions about when and how to disclose their sexual orientation and how to protect themselves from potential stigma might foster some sense of perceived control in the context of societal stigma. Indeed, perceived control has been found to mediate the link of perceived prejudice with psychological distress in racial/ethnic minority samples (Moradi & Hasan, 2004; Moradi & Risco, 2006).

In addition to social justice efforts to reduce societal stigma against LGB individuals, it is also important for therapists to work with their clients to develop tools for mitigating the potentially negative effects of current minority stressors in their clients’ lives. The present findings regarding the role of spirituality provide one potentially useful tool for therapists and clients to consider. Specifically, spirituality was found to be linked uniquely and positively with psychological well-being. Therefore aspects of spirituality may be used in therapy as a tool to help clients cope with minority stress or can be incorporated into prevention programs that might promote health for LGB persons. Specifically, with clients who are open to considering spirituality as a resource, clinicians can explore the role of spirituality in the clients’ lives and psychological well-being, encourage clients to set aside time for meditation or prayer, and help clients identify resources for spiritual guidance. Additionally, since religiosity was found to be related uniquely and negatively with psychological well-being, clinicians should assess for and work to reduce the impact of religious wounding for LGB persons. Specifically, clinicians may educate clients about the distinction between spirituality and religiosity. Additionally, they may
assess for maladaptive religious beliefs, such as inappropriate deferral to or feeling punished by God or a Higher Power (Pragament et al., 1998) and offer alternative messages. For instance, therapists can inform clients about religious organizations and recourses that take an affirming stance toward LGB individuals (e.g. Metropolitan Community Churches, The World Congress of Gay, Lesbian, Bisexual, and Transgendered Jews).

An important consideration is that research has shown that therapists are less religious than the general population (Begin & Jensen, 1990), although therapists do view religiosity and spirituality as important areas of functioning (Hathaway, Scott, & Garver, 2004). Despite the value that therapists may place on spirituality, most do not routinely assess the domain or address it in treatment planning (Hathaway, Scott, & Garver, 2004). Indeed, Lindgren and Coursey (1995) found that for a sample of adults with mental illness, two thirds wanted to discuss spiritual concerns with their therapists, but only half of the sample was doing so. The limited attention given to spirituality in therapy may be because therapists receive little training in spirituality or religiosity (Brawer, Hangal, Fabricatore, Roberts, & Wajda-Johnston, 2002). Thus it seems important for training programs to incorporate education about spirituality into their curricula and for current therapists to receive training on how to address spirituality with both LGB and heterosexual clients. To this end, Fukuyama (2007) made a number of training recommendations for the inclusion of spirituality into multicultural therapy that include clinicians (1) becoming self aware of their own issues or biases, (2) learning about diverse religious and spiritual traditions, (3) discussing spiritual topics with colleagues or supervisors, (4) having a personal spiritual practice, and (5) having spiritual/religious referrals or consultants. Lastly, clinicians should base their integrations of spiritually into therapy in the burgeoning body of theory and research on spirituality (Pargament, Murray-Swank, & Tarakeshwar, 2005). For
instance, clinicians could examine a client’s level of spiritual development based on the Experience Based Stages of Spiritual Development (Sandhu, 2007), a developmental stage model of spirituality that is comparable to other identity stage models used in counseling psychology (e.g. Model of Homosexual Identity Formation; Cass, 1979). Also, when appropriate clinicians could utilize a manualized spiritually integrated treatment (Avants, Beitel, & Margolin, 2005; Propst, Ostrom, Watkins, Dean, & Mashburn, 1992).

**Summary**

The findings of the current study are largely supportive of the minority stress theory and the posited relations of minority stressors with greater psychological distress and lower psychological well-being. The findings also suggest different roles for spirituality and religiosity, such that spirituality is linked with greater psychological well-being whereas religiosity is linked with lower psychological well-being of LGB individuals. Future studies should expand on the current findings by exploring what aspects of spirituality promote mental health and by identifying additional mental health promoters for LGB populations.


BIOGRAPHICAL SKETCH

Melinda B. Goodman was born and raised in Silver Spring, Maryland. She graduated magna cum laude with a Bachelor of Science in psychology from the University of Maryland in 2002. After graduating she spent a year working with autistic children and traveling overseas. In August 2003 she moved to Gainesville to enter into University of Florida’s Counseling Psychology program. She is currently completing her Predoctoral Internship at the Virginia Commonwealth University Counseling Services.