

PERCEIVED DISCRIMINATION EXPERIENCES AND MENTAL HEALTH OF ASIAN
AMERICAN WOMEN

By

CIRLEEN DEBLAERE

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To my Dad who is watching over me, my beautiful sisters and mother who have always supported me, and my partner Bryan who can always make me smile

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They say it takes a village to raise a child. It has most certainly taken a village to bring me to this point. I want to thank my Dad who is no longer with me in body, but is always with me in spirit. He was a source of never-ending love, support, and encouragement. I also want to thank my Mom who believed in me even when I doubted myself. She has always been my number one fan. I am thankful beyond words for my sisters. They have been there for me in more ways than I can name each and every time I needed them. I also want to thank Bryan. He has been integral to my sanity throughout my doctoral training. He is my partner in every sense of the word and I am thankful beyond measure that he is in my life. I want to thank my advisor Bonnie Moradi. In many ways, calling Bonnie my advisor falls short of describing her innumerable contributions to my professional development. Beyond her consistent support, encouragement, and guidance, Bonnie is a role model. She exemplifies so many of the qualities that I hope to bring to my own professional work. I am truly honored to call Bonnie my mentor and friend. I am thankful for the assistance given to me by my dissertation committee members: Michael Marsiske, Carolyn Tucker, and Wayne Griffin. Last, but certainly not least, I am thankful to my participants for their honest and open participation. I hope that this project and others will lead to a greater understanding of the experiences of racial/ethnic minority women.

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Abstract of Dissertation Presented to the Graduate School
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By

Cirleen DeBlaere

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Prior research links reported experiences of racist and sexist events with psychological symptomatology of racial/ethnic minority persons and women, respectively (e.g., Bowen-Reid & Harrell, 2002; Fischer & Holz, 2007; Moradi & Risco, 2006; Moradi & Subich, 2002). No published study to date, however, has examined the simultaneous links of perceived racist and sexist events with mental health for Asian American women. The present study examined a model that tested direct and indirect relations among perceived discrimination, sense of personal control, psychological distress, self-esteem, acculturation, and enculturation in a sample of Asian American women. Path analysis of the model indicated that (a) perceived racist events were related to greater psychological distress, indirectly through sense of personal control, (b) perceived sexist events were related directly to greater psychological distress, (c) acculturation to U.S. culture was related to less psychological distress and greater self-esteem, indirectly through sense of personal control and (d) enculturation to culture of origin was related to less psychological distress and greater self-esteem, indirectly through sense of personal control.

CHAPTER 1 INTRODUCTION

The Asian American population is the most rapidly growing racial/ethnic group in the United States and women comprise 51% of this population (Leong et al., 2007; Nomura, 2003). Nevertheless, there are no national data on Asian American women's mental health and limited research exists on mental health risk and protective factors for this population (Kawahara & Fu, 2007; Lee, 2003). Perceived racist and sexist events have been conceptualized as culturally-specific and gender-specific stressors, respectively, that analogous to generic stressful life events and hassles, can promote physical and psychological symptomatology (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978; Kanner, Coyne, Schaeffer, & Lazarus, 1981; Klonoff & Landrine, 1995; Landrine & Klonoff, 1996; Lazarus, DeLongis, Folkman, & Gruen, 1985). Indeed, prior research links reported experiences of racist and sexist events with psychological symptomatology of racial/ethnic minority persons and women, correspondingly (e.g., Bowen-Reid & Harrell, 2002; Fischer & Holz, 2007; Moradi & Risco, 2006; Moradi & Subich, 2002). Thus, the link of perceived discrimination experiences with mental health may be important to examine with Asian American women. To date, however, no published study has examined perceived racist and sexist events concomitantly in relation to Asian American women's mental health. Thus, the current study aims to address this gap in the literature by examining the links of perceived racist and sexist events with mental health indicators in a sample of Asian American women.

Perceived Racist Discrimination and Mental Health of Asian American Persons

Several authors have noted that the perception of Asian American individuals as a model minority group has led to the misguided assumption that Asian American persons experience less racist discrimination than do members of other racial/ethnic minority groups (e.g., Alvarez,

Juang, & Liang, 2006; Goto, Gee, & Takeuchi, 2002; Sue, Buccieri, Lin, Nadal, & Torino, 2007). Contrary to such assumptions, available data suggest that Asian American individuals perceive substantial levels of racist discrimination. For example, Alvarez et al. (2006) found that 98% of Asian American college students reported encountering a daily form of direct racist discrimination at least once or twice in the past year. Also, in one of the few studies that reported data specifically with Asian American women, Iyer and Halsam (2003) found that 86% of their sample of South Asian undergraduate women reported experiencing racial teasing (i.e., being teased based on one's race/ethnicity). In light of evidence that minority group members may deny experiencing personal discrimination (Crosby, 1984), the data reported here may underestimate Asian American persons' actual experiences with racism.

In addition to data suggesting that Asian American persons report considerable levels of racist discrimination, prior literature also indicates that Asian American individuals in general and Asian American women in particular, report notable levels of psychological distress. In fact, several studies have found that Asian American persons report more psychological distress (e.g., overall psychological symptomatology, negative affect, depression, social anxiety, fear of negative evaluation, obsessive-compulsiveness, interpersonal sensitivity, depression, phobic anxiety, paranoid ideation, psychoticism) than do White individuals (Chang, 2002; Cheng, Leong, & Geist, 1993; Lee, Okazaki, Yoo, 2006; Okazaki, 1997, 2000), that these trends hold longitudinally over time (Brown, Meadows, & Elder, 2007), and that Asian and Asian American women report greater levels of psychological distress than do Asian and Asian American men (e.g., Chung & Kagawa-Singer, 1993; Furnham & Shiekh, 1993; Pak, Dion, & Dion, 1991).

Psychological distress has been linked with perceived racist discrimination experiences for a number of racial/ethnic minority groups including African American, Arab American, and

Latina/o American persons (e.g., Bowen-Reid & Harrell, 2002; Klonoff, Landrine, & Ullman, 1999; Landrine & Klonoff, 1996; Moradi & Hasan, 2004; Moradi & Risco, 2006). Considering the data indicating that Asian American women and men perceive considerable amounts of discrimination and psychological distress, such a link may exist for Asian American populations as well. Indeed, the limited available data support such a link. Specifically, perceived racist discrimination has been found to be related positively to psychological distress, depression, negative affect, and stress-related symptoms (e.g., headaches) in samples of Asian immigrant, Asian American, Asian Indian American, Korean American, and Chinese American women and men (Furnham & Shiekh, 1993; Lee, 2003, 2005; Pak et al., 1991; Yoo & Lee, 2005, 2008). Particularly relevant to the current investigation are the few studies that examined Asian and Asian American women's perceived experiences of racism. These studies found that perceived racist discrimination is related positively to anxiety, body image concerns, eating disorder symptomatology, and perceived distress associated with racist events in samples of Asian American women and Asian adolescent women (Cassidy, O' Connor, Howe, & Warden, 2004; Iyer & Haslam, 2003; Liang, Alvarez, Juang, & Liang, 2007).

In addition to the relations of perceived racist events with psychological distress variables, the links of perceived racism to indicators of well-being also have been examined in prior literature with mixed results. For instance, with a sample of Asian American undergraduates, perceived racist events were found to be unrelated to self-esteem and social connectedness (Lee, 2003). Conversely, other studies have found that reports of racist discrimination are related negatively to self-esteem, social connectedness, positive affect, life satisfaction, and general happiness with Asian American and Korean American samples (Lee, 2003, 2005; Sasao & Chun, 1994; Yoo & Lee, 2005). There is also some evidence that the link

between perceived racist events and well-being may vary by gender. For example, Cassidy et al. (2004) found that both personal and ethnic self-esteem were related negatively to perceived racism for adolescent boys, but that neither well-being indicator was related significantly to perceived racism for adolescent girls. On the other hand, Pak et al. (1991) found that among Chinese participants who reported experiencing racist discrimination, women reported significantly lower levels of self-esteem than did men. No such gender difference in level of reported self-esteem was found among participants who did not report racist discrimination. Thus, reported racist discrimination was related to lower self-esteem for women than for men.

Mixed findings regarding the relation between perceived racist discrimination and psychological well-being in Asian American samples parallel prior mixed findings about this relationship in other minority groups as well (e.g., Barnes & Lightsey, 2005; Fischer & Shaw, 1999; Moradi & Hasan, 2004; Moradi & Risco, 2006). However, mixed findings regarding a direct link between perceived racist events and well-being do not preclude the possibility that an indirect relation, through other intervening variables, exists between perceived racist events and well-being (Moradi & Risco, 2006). Also, given that self-esteem is one of the most commonly examined indicators of well-being in the perceived discrimination-mental health literature (Moradi & Risco, 2006), and it has already been found to be related to perceived discrimination with a subsample of Asian American women (i.e., Pak et al., 1991), self-esteem may be an important psychological well-being indicator to consider in research that examines the perceived discrimination-mental health link with Asian American women. An additional direction for advancing the literature with Asian American women is to attend to perceived experiences of sexist events in addition to racist events (e.g., Gerrard, 1991).

Perceived Sexist Discrimination and Mental Health of Diverse Women

Just as there are limited empirical data on the perceived racist discrimination experiences of Asian American women, there are also limited data on the perceived sexist discrimination experiences of Asian American women. In a rare study that offered such data, Klonoff and Landrine (1995) found that Asian American women reported more sexist degradation (e.g., being called a sexist name) in the past year and more sexism in close relationships (e.g., treated unfairly by your family) in the past year and over their lifetime than did White women. Thus, as with perceived racist discrimination, the limited available data suggest that Asian American women perceive notable levels of sexist discrimination.

In addition to the literature on the perceived sexist discrimination experiences of women, prior studies also indicate that women generally report higher levels of psychological distress than do men (Klonoff, Landrine, & Campbell, 2000). This pattern is observed among Asian American women and men as well, with Asian and Asian American women reporting consistently more psychological distress than do Asian and Asian American men (e.g., Chung & Kagawa-Singer, 1993; Furnham & Shiekh, 1993; Pak et al., 1991). Additional evidence suggests that the elevated levels of some psychological symptoms among women relative to men are accounted for by women's reports of sexist events (Klonoff et al., 2000). Thus, it seems critical to examine the link between perceived sexist events and psychological distress with Asian American women. Indeed, a growing body of literature supports the link between perceived sexist events and psychological distress with samples of predominantly White women (e.g., Fischer & Holz, 2007; Moradi & Subich 2002, 2004) and sexual minority women (Szymanski, 2005; Szymanski & Owens, 2009). To date, however, no published studies have examined the link between perceived sexist events and psychological distress with Asian American women. Nevertheless, a few studies have examined this link with samples comprised of 30% or more

racial/ethnic minority women and found that sexist discrimination accounts for significant and unique variance in women's symptoms (e.g., depression; Landrine & Klonoff, 1997; Landrine, Klonoff, Gibbs, Manning, & Lund, 1995). In addition, in the only study that conducted analyses separately for racial/ethnic minority and White women, Landrine et al. (1995) found that perceived lifetime sexist events accounted for additional variance in overall symptomatology above and beyond generic life stresses for racial/ethnic minority women but not for White women. These findings point to the importance of examining perceived sexist discrimination experiences in the lives of racial/ethnic minority women.

As discussed previously, support for a direct link between perceived racism and well-being variables is mixed. Similarly, the scant findings on the link between perceived sexist events and psychological well-being are also inconsistent. For instance, Swim, Hyers, Cohen, and Ferguson (2001) found that a greater number of reported daily sexist events predicted lower social state self-esteem in their sample of women and men. However, reported daily sexist events were unrelated to appearance state self-esteem and performance state self-esteem. Similarly, self-esteem was found to be unrelated to perceived sexist events with two samples of predominately White women (Fischer & Holz, 2007; Moradi & Subich, 2004). As discussed with perceived racist events, these mixed findings do not preclude the potential for an indirect relation between perceived sexist events and well-being, through other intervening variables (Moradi & Risco, 2006). In addition, the fact that all of the studies reviewed in this section were conducted with samples of predominately White women underscores the need to study the sexism-mental health link with racial/ethnic minority women. Also, as in the body of literature on perceived racism and well-being, self-esteem has been commonly utilized in the sexist events literature to assess well-being. Thus, to advance understanding of the perceived discrimination-mental health link, it

is important to consider direct and indirect links of perceived sexist events with psychological distress and self-esteem of Asian American women.

Concomitant Examination of the links of Racism and Sexism with Mental Health Indicators

Scholars have called for attention to the multiple minority identities of racial/ethnic minority women (e.g., Porter, 2000; Reid & Comas-Diaz, 1990). Indeed, studies that focus on racism or sexism separately ignore the concomitant manifestation of these forms of discrimination in the lives of racial/ethnic minority women. To date, however, very few studies have considered both perceived racism and sexism in their conceptualizations and assessment of discrimination with samples of racial/ethnic minority women. Available data suggest substantial overlap in racial/ethnic minority women's reports of racism and sexism. For example, DeBlaere and Moradi (2008) found, with their sample of African American women, that perceived lifetime racist events, recent racist events, and appraisal of those events as stressful were highly correlated with lifetime, recent, and appraisal of sexist events, respectively ($r = .69-.72$). Similar magnitudes for the correlation between racism and sexism have been reported with other samples of African American women (e.g., King, 2003).

Additional studies have explored African American women's perceived experiences of the fusion of racism and sexism, termed ethgender discrimination (King, 2003) or gendered racism (Essed, 1991). For instance, Harrington, Crowther, Henrickson, and Mickelson (2006) found that discriminatory stress (i.e., combined appraisal of racist and sexist events) was related positively to reported daily hassles, perceived trauma, and binge eating for their subsample of African American women. Racism and ethgender prejudice also have been found to be related positively to psychological distress in samples of African American women (King, 2003, 2005; Thomas, Witherspoon, & Speight, 2008). Finally, Moradi & Subich (2003) reported, with their

sample of African American women, that when examined separately, perceived racist events and sexist events each were correlated positively with psychological distress. However, when sexism, racism, and their interaction were examined in a single path model, only sexism accounted for unique variance in psychological distress.

In addition to the studies that focused on psychological distress, one study examined the relations of perceived racism, sexism, and ethgender discrimination with indicators of well-being. King (2003) found that perceived racism, sexism, and ethgender discrimination were generally unrelated to several forms of self-esteem (i.e., state, performance state, appearance state, social state, and global), with the exception that ethgender discrimination was correlated negatively with social state self-esteem. Thus, as with the previously described studies on the links of racist and sexist discrimination with well-being variables, the findings of King's (2003) study were mixed. Again, however, potential indirect relations through intervening variables were not examined. In addition, these prior studies' focus on African American women's experiences highlights the need to examine the relations of perceived racist and sexist discrimination with mental health in other groups of racial/ethnic minority women.

The Potential Mediating Role of Sense of Personal Control

Moradi and Hasan (2004) asserted that an important next step in the burgeoning body of research on the link between discrimination and mental health is to attend to potential intervening variables through which perceived discrimination experiences are related to psychological distress and well-being indicators. Branscombe and Ellemers (1998) argued that lowered sense of personal control may be one key intervening variable through which perceived experiences of discrimination are linked with greater distress and lower well-being. Specifically, they proposed that targets of discrimination are likely to feel that they cannot control perpetrators' prejudicial and discriminatory attitudes and behaviors. Consequently, perceived

discrimination may undermine targets' sense of personal control in their life and across situations (Branscombe & Ellemers, 1998; Ruggiero & Taylor, 1995). Consistent with this conceptualization, perceived discrimination has been found to be related negatively to sense of personal control across diverse samples (e.g., Ruggiero & Taylor, 1997). Lowered sense of personal control, in turn, is theorized to be related to greater levels of distress and lower levels of self-esteem and available empirical evidence supports such links (e.g., Branscombe & Ellemers, 1998; Kanner & Feldman, 1991; Ryff, 1989).

In a series of studies particularly germane to the current investigation, Moradi and her colleagues (2004, 2006) examined the role of sense of personal control in the links of perceived discrimination with self-esteem and psychological distress across minority samples. Specifically, with a sample of Arab American women and men (53% women), Moradi and Hasan (2004) found that perceived discrimination was related, indirectly through personal control, to greater psychological distress and lower self-esteem. In a follow-up to this study, Moradi and Risco (2006) found a similar pattern of findings with a sample of Latina/o persons (63% women). These authors also examined level of acculturation as a potentially important variable and found that acculturation to United States (U.S.) culture and enculturation to Latina/o culture were related, indirectly through personal control, to greater self-esteem and lower psychological distress.

It is important to note that despite the seemingly individualist roots of sense of personal control, its intervening role in discrimination-mental health relations was supported in Arab American and Latina/o American samples which, similar to Asian American cultures, have been described as collectivistic (Abudabbeh, 1996; Smokowski & Bacallao, 2007; Sue, 1998). The fact that sense of personal control was found to be an important variable in the discrimination-

mental link with collectivistic racial/ethnic minority samples seems to suggest that collectivistic cultural values do not preclude the existence of sense of personal control within individuals. Indeed, Karasawa, Little, Miyashita, Mashima, and Azuma (1997) found that both control expectancy (i.e., belief that one can produce a specific outcome) and agency (i.e., belief that one can retrieve performance-related variables like effort and skill) variables, constructs that are akin to sense of personal control, emerged in Japanese students' beliefs about school performance. Furthermore, the level of sense of personal control in a sample or population may be independent of the relationship between personal control and other variables of interest in that sample or population. For instance, in a comparison of students from East and West Berlin, Oettingen, Little, Lindenberger, & Baltes (1994) found that children from East Berlin reported significantly lower levels of agency and control beliefs than children from West Berlin, but the associations of agency and control beliefs with school performance were consistently stronger in the East Berlin sample. Thus, the relation between sense of personal control and other variables may be meaningful in populations that report relatively lower average sense of personal control.

In light of this prior conceptual and empirical literature, sense of control could be a key variable through which perceived racist and sexist discrimination are related to greater psychological distress and lower self-esteem for Asian American women. Thus, the present study will expand upon the current personal control literature by examining its role in the links of racist and sexist events with psychological distress and self-esteem of Asian American women. In addition, as acculturation and enculturation were found to be significant variables in Moradi and Risco's (2006) study, these variables will be considered in the present study as well.

Role of Acculturation and Enculturation

The Asian American population reflects tremendous diversity with regard to ethnicity and generational status (e.g., Kim, B. S. K., 2007; Sue, 1998). Thus, sources of within-group

variability are important to consider in research with this population. Acculturation has been deemed to be one of the most important individual difference constructs in racial/ethnic minority research (Zane & Mak, 2003). Presently, scholars conceptualize acculturation as a bidimensional process that captures separate low to high continua for adherence to indigenous and host cultures (i.e., the bilinear perspective; Miller, 2007). In addition, within the Asian American psychology literature, these separate processes have been labeled acculturation (i.e., socialization to the dominant cultural group) and enculturation (i.e. socialization to the individual's indigenous culture; Kim, B. S. K. & Abreu, 2001). Indeed, empirical data with Asian American persons support the superiority of the bilinear model of acculturation and enculturation relative to a unilinear model that conceptualized acculturation to U.S. and Asian cultures on opposing poles of a single continuum (Miller, 2007).

Available research with Asian American individuals suggests that acculturation and enculturation are important variables to consider in investigations with this population. Specifically, acculturation and enculturation have been linked with perceptions of discrimination and mental health variables (e.g., Goto et al., 2002; Kim, B. S. K. & Omizo, 2006; Wilton & Constantine, 2003). For instance, level of U.S. acculturation was related positively to perceived discrimination and related negatively to psychological distress with samples Asian American and Latina/o college students and Asian Indian immigrant persons (Mehta, 1998; Wilton & Constantine, 2003). Similarly, enculturation to indigenous culture was related to greater psychological distress with a sample of Korean American undergraduates (Hovey, Kim, & Seligman, 2006). With regard to the link of acculturation and enculturation to indicators of well-being, U.S. acculturation was found to be positively related to cognitive flexibility and self-efficacy; enculturation to indigenous culture was found to be related positively to self-esteem

and related negatively to cognitive flexibility and self-esteem with samples of Asian American, Korean American, and Chinese American college students (Hovey et al., 2006; Kim, B. S. K., & Omizo, 2005, 2006; Tsai, Ying, & Lee, 2001).

Taken together, these studies suggest that acculturation and enculturation are important variables to consider in research on psychological distress and well-being of Asian American women. As such, considering the links of acculturation and enculturation, along with the links of perceived racism and sexism, with mental health indicators is important in the current investigation. This inclusion attends to within-group diversity in cultural orientation among Asian American individuals and responds to calls for research on the relations of acculturation and enculturation with psychological functioning of Asian American populations (e.g., Kim, B. S. K., 2007; Tsai et al., 2001). Accounting for possible covariations of Asian enculturation and U.S. acculturation with the variables of interest also allows for a more stringent test of relations among perceived discrimination, psychological distress, and well-being in the present study.

Overview of the Present Study

Based on the literature reviewed here, the present study aims to build on prior scholarship to advance research on Asian American women's perceived discrimination experiences and mental health in a number of ways. First, the present study examines the potential unique relations of perceived racist and sexist events with Asian American women's psychological distress and self-esteem when perceived racist events and sexist events are examined simultaneously. Second, in addition to the potential direct links of perceived racist and sexist discrimination experiences with psychological distress and self-esteem, this study also examines the potential indirect links of perceived discrimination with these mental health indicators through sense of personal control. Finally, the present study considers the roles of acculturation

and enculturation in the relations of perceived racism and sexism with psychological distress and self-esteem.

CHAPTER 2 REVIEW OF THE LITERATURE

As discussed in the previous chapter, the present study examines the links of perceived experiences of racist and sexist events to mental health with a sample of Asian American women. More specifically, this study advances current research with this population by examining racism and sexism simultaneously to evaluate their unique relations with mental health indicators. In addition, this study examines psychological distress and well-being separately to tease apart potentially distinct patterns of relations between perceived discrimination experiences and these two different aspects of mental health. Finally, personal control is examined as a potential intervening variable in the relations of racist and sexist events with psychological distress and well-being. As such, this study responds to calls for attention to the discrimination experiences of Asian American persons and consideration of the intersection of race and gender in the identities and experiences of Asian American women (Alvarez, Juang, Liang, 2006; Reid, 2002; Sue, Bucci, Lin, Nadal, & Torino, 2007; Yoo & Lee, 2008). In order to provide the groundwork for the present study, this chapter reviews relevant literature on (a) the link of perceived racist events with mental health (i.e., psychological distress and well-being indicators), (b) the link of perceived sexist events with mental health, (c) the unique links of racist and sexist events with racial/ethnic minority women's mental health, when racist and sexist events are examined concomitantly, (d) the intervening role of personal control in the perceived discrimination-mental health link, and (e) the importance of considering acculturation and enculturation as sources of within-group variability in studies of populations with a history of recent immigration.

Perceived Racist Discrimination and Mental Health of Asian American Persons

Perceived Racist Discrimination and Psychological Distress of Asian American Persons

Several authors have noted that the perception of Asian American individuals as a model minority group has led to the misguided assumption that Asian American persons experience less racist discrimination than do members of other racial/ethnic minority groups (e.g., Alvarez et al., 2006; Goto, Gee, & Takeuchi, 2002; Sue et al., 2007). Contrary to such assumptions, however, available data suggest that Asian American individuals perceive substantial levels of racist discrimination. For example, in a study with 254 Asian American college students (approximately 61% women), Alvarez et al. (2006) investigated the perceived frequency of vicarious (i.e., racism directed at other individuals), direct (i.e., racism directed at oneself), and collective (i.e., racism directed at one's racial group) racist events. The authors found that 98% of participants reported encountering a daily form of direct racist discrimination at least once or twice in the past year. Within the past five years, 99% of participants reported experiencing vicarious racism, 90% reported experiencing direct racism, and 85% reported experiencing collective racism. Hate crimes, which reflect severe manifestations of racist discrimination, also occur against Asian American individuals. The National Asian Pacific American Legal Consortium (NAPALC, 2003) indicated that 275 hate crime offenses directed at Asian American individuals were reported in 2002. Of those incidents, the most commonly reported hate crime was assault and battery, comprising 29% of all reported hate crime cases. It is important to note that these data only include statistics from 36 states. The other 14 states either do not routinely collect hate crime statistics or did not have data available at the time of NAPALC's publication. In one of the few studies that reported data with Asian American women in particular, Iyer and Halsam (2003) found that 86% of their sample of South Asian undergraduate women reported experiencing racial teasing (i.e., being teased based on one's race/ethnicity). In light of evidence

that minority group members may deny experiencing personal discrimination (Crosby, 1984), the data reported here may underestimate Asian American persons' actual experiences with racism.

In addition to data that suggest that Asian American persons report considerable levels of racist discrimination, extant literature also indicates that Asian American individuals in general, and Asian American women in particular, report substantial levels of psychological distress as well. Several studies have found that Asian American persons report more psychological distress (e.g., overall psychological symptomatology, negative affect, depression, social anxiety, fear of negative evaluation, obsessive-compulsiveness, interpersonal sensitivity, depression, phobic anxiety, paranoid ideation, psychoticism) than do White individuals (Chang, 2002; Cheng, Leong, & Geist, 1993; Lee, Okazaki, Yoo, 2006; Okazaki, 1997, 2000), that these trends hold longitudinally over time (Brown, Meadows, & Elder, 2007), and that Asian and Asian American women report greater levels of psychological distress than do Asian and Asian American men (e.g., Chung & Kagawa-Singer, 1993; Furnham & Shiekh, 1993; Pak, Dion, & Dion, 1991).

Perceived racist events have been conceptualized as culturally-specific stressors that, analogous to generic stressful life events and hassles, can promote physical and psychological symptomatology (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978; Kanner, Coyne, Schaeffer, & Lazarus, 1981; Klonoff & Landrine, 1995; Lazarus, DeLongis, Folkman, & Gruen, 1985). Indeed, psychological distress has been linked with perceived racist discrimination experiences for a number of racial/ethnic minority groups including African American, Arab American, and Latina/o American persons (e.g., Bowen-Reid & Harrell, 2002; Klonoff, Landrine, & Ullman, 1999; Landrine & Klonoff, 1996; Moradi & Hasan, 2004; Moradi & Risco, 2006). Considering the data indicating that Asian American women and men perceive considerable amounts of discrimination and psychological distress, such a link may exist for

Asian American populations as well. The limited available data does support such a link. For example, with a sample of Asian immigrant individuals of predominately Indian and Pakistani descent (53% women), Furnham and Shiekh (1993) found that reports of racist discrimination were related positively to psychological distress. Furthermore, a multiple regression analysis indicated that being a woman and experiencing racist discrimination were both positively and uniquely related to psychological distress after controlling for acculturation-related variables (e.g., English proficiency). Similarly, Lee (2003) found that levels of perceived racist discrimination were related positively to levels of depression with a sample of Asian Indian American persons (60% women). This positive correlation between perceived racism and depression was also replicated with a sample of Korean American college students (approximately 46% women; Lee, 2005).

In an innovative study utilizing case vignettes to operationalize racial discrimination, Yoo and Lee (2008) asked Asian American college students (45% women) to imagine themselves in a situation where they and a group of Asian American friends were rejected entrance into a nightclub due to their race/ethnicity one out of five times (single discrimination incident) or five out of five times (multiple discrimination incidents). Multiple regression analyses indicated that frequency of racist discrimination (i.e., single discrimination incident versus multiple discrimination incidents) was related positively to negative affect even after controlling for generational status, refugee status, and level of Asian identity clarity and esteem. A positive association between perceived personal racist discrimination and negative affect above and beyond generational status and level of Asian identity clarity and esteem also was obtained with another sample of Asian American college students (63% women; Yoo & Lee, 2005). Thus, the

link between perceived racist discrimination and psychological distress appears to persist after controlling for acculturation and ethnic identity indicators.

In addition to studies that have examined the link between perceived racist events and psychological distress, the relations of perceived racist events with other stress-related outcomes have been investigated as well. For example, Pak et al. (1991) found that, compared to Chinese American participants who did not report experiencing racist discrimination, participants who reported experiencing racist discrimination reported significantly higher levels of stress-related symptoms such as sleeplessness and headaches. This relation persisted after accounting for general perceptions of racist discrimination against Chinese American individuals and other stress variables (e.g., social readjustment). Similarly, Liang, Li, and B. S. K. Kim (2004) found that frequency of perceived racist events was related positively to the perceived distress associated with racist events with a sample of Asian American college students.

Particularly relevant to the current investigation are studies that examine the perceived racism experiences of Asian and Asian American women. Although such studies are rare, those that exist seem to support the positive relation between perceived racist events and psychological distress for Asian and Asian American women. For example, racial teasing was found to be related uniquely and positively with body image concerns and eating disorder symptomatology in a sample of Asian American undergraduate women after controlling for level of acculturation, level of Asian identification, self-esteem, depression, and socioeconomic status (Iyer & Haslam, 2003). In another study that examined the racism-distress link with a subsample of Asian adolescent women, Cassidy, O' Connor, Howe, and Warden (2004) found that perceived racist events were related positively to anxiety. Finally, Liang, Alvarez, Juang, and Liang (2007) found that, after controlling for ethnicity (i.e., Chinese, Filipino, other Asian) and socioeconomic

status, frequency of racist events were related positively to a measure of the perceived stressfulness associated with personal racism experiences, awareness of historical and institutional racism, and the perpetual foreigner status of Asian American persons with their subsample of Asian American women.

Taken together, the literature reviewed thus far supports a positive association between perceived racist events and psychological distress for Asian and Asian American populations, oftentimes above and beyond relevant covariates (e.g., acculturation-related variables, socioeconomic status). Moreover, a few studies support this link with Asian and Asian American women in particular. Given calls in the literature to attend to indicators of psychological well-being as well as psychological distress (e.g., Sandage, Hill, & Vang, 2003; Seligman, Steen, Park, & Peterson, 2005), it is also important to understand how discrimination experiences might relate to the psychological well-being of Asian American persons.

Perceived Racist Discrimination and Psychological Well-Being of Asian American Persons

Research on the links of perceived racist events with indicators of psychological well-being for Asian American women and men is more limited than the body of research focusing on psychological distress. Furthermore, in contrast to fairly consistent support for the link between perceived racist events and psychological distress of Asian and Asian American samples, the limited available research on perceived racist events and psychological well-being has yielded mixed findings.

In support of a relation between perceived racism and well-being variables, Lee (2003, 2005) found that reports of racist discrimination experiences were related negatively to self-esteem and social connectedness in two separate samples of Asian American persons. Similarly, Yoo and Lee (2005) found that racism was related negatively to positive affect and life satisfaction with their sample of Asian American college students. In addition, the negative

relation between perceived racism and life satisfaction remained significant when gender, generational status, and level of Asian identity clarity and esteem were included in a regression equation. Conversely, with a sample of Asian American college students (44% women), Lee (2003) examined perceptions of discrimination directed at racial/ethnic minority groups on a college campus and found that perceived discrimination was not associated with self-esteem or social connectedness.

Studies that examined Asian and Asian American women and men separately have also reported mixed findings. For instance, shortly after the 1992 Los Angeles riots, Sasao and Chun (1994) examined the association between reported experiences of racial tension (e.g., overt discrimination experiences) and subjective well-being by gender group with their sample of Korean American individuals (60% women). With their Korean American men and Korean American women subsamples, Sasao and Chun (1994) found that perceived racial tension was related negatively with general happiness after controlling for relevant demographic variables (e.g., age, income). In another study, Pak et al. (1991) found no gender difference in self-esteem among Chinese American participants who did not report racist discrimination. But, among participants who reported experiencing racist discrimination, women reported significantly lower self-esteem than did men. Thus, reported racist discrimination was related to lower self-esteem for women than for men. On the other hand, Cassidy et al. (2004) found no relation between perceived racist events and self-esteem with their subsample of Asian adolescent girls.

Mixed findings regarding the relation between perceived racist discrimination and psychological well-being in Asian American samples parallel prior mixed findings about this relationship with other minority groups as well (e.g., Barnes & Lightsey, 2005; Fischer & Shaw, 1999; Moradi & Hasan, 2004; Moradi & Risco, 2006). However, mixed findings regarding a

direct link between perceived racist events and well-being does not preclude the possibility that an indirect relation, through other intervening variables, exists between perceived racist events and well-being (Moradi & Risco, 2006). Given that self-esteem is one of the most commonly examined indicators of well-being in the perceived discrimination-mental health literature (Moradi & Risco, 2006), and it has already been found to be related to perceived discrimination with a subsample of Asian American women (i.e., Pak et al., 1991), self-esteem may be an important psychological well-being indicator to consider in research that examines the perceived discrimination-mental health link with Asian American women. An additional direction for advancing the literature with Asian American women is to attend to perceived experiences of sexist events in addition to racist events (Gerrard, 1991; Porter, 2000).

Perceived Sexist Discrimination and Mental Health of Diverse Women

Perceived Sexist Discrimination and Psychological Distress of Diverse Women

Just as there are limited empirical data on the perceived racist discrimination experiences of Asian American women, there are also limited data on the perceived sexist discrimination experiences of Asian American women. In a rare study that offered such data, Klonoff and Landrine (1995) found that almost all of the women in their large racially/ethnically diverse sample ($N = 631$, 4% Asian American) reported experiencing sexist events at least once in their life (99%) and within the past year (97%). In addition, the authors found that racial/ethnic minority women reported more past year and lifetime sexist events than did White women. Comparisons of specific racial/ethnic groups indicated that Asian American women reported more sexist degradation (e.g., being called a sexist name) in the past year and more sexism in close relationships (e.g., treated unfairly by your family) in the past year and over their lifetime than did White women. Thus, as with perceived racist discrimination, the limited data suggest that Asian American women perceive notable levels of sexist discrimination.

In addition to the literature on the perceived sexist discrimination experiences of women, prior studies also indicate that women generally report higher levels of psychological distress than do men (Klonoff, Landrine, & Campbell, 2000). This pattern is observed among Asian American women and men as well, with Asian American women reporting consistently more psychological distress than Asian and Asian American men (e.g., Chung & Kagawa-Singer, 1993; Furnham & Shiekh, 1993; Pak et al., 1991). Additional evidence suggests that the elevated levels of some psychological symptoms among women relative to men are accounted for by women's reports of sexist events (Klonoff et al., 2000). Thus, it seems critical to examine the link between perceived sexist events and psychological distress with Asian American women.

Perceived sexist events have been conceptualized as gender-specific stressors that, analogous to generic stressful life events and hassles, can promote physical and psychological symptomatology (Dohrenwend, Krasnoff, Askenasy, & Dohrenwend, 1978; Kanner, Coyne, Schaeffer, & Lazarus, 1981; Klonoff & Landrine, 1995; Lazarus, DeLongis, Folkman, & Gruen, 1985). Indeed, a growing body of literature supports the link between perceived sexist events and psychological distress with samples of predominantly White women (e.g., Fischer & Holz, 2007; Moradi & Funderburk, 2006; Moradi & Subich 2002, 2004; Swim, Hyers, Cohen, & Ferguson, 2001) and sexual minority women (Szymanski, 2005; Szymanski & Owens, 2009). To date, however, no published studies have examined the link between perceived sexist events and psychological distress with Asian American women. Nevertheless, a few studies have examined this link with samples comprised of 30% or more racial/ethnic minority women. For example, with their racially/ethnically diverse sample of women (36% racial/ethnic minority), Landrine, Klonoff, Gibbs, Manning and Lund (1995) found that reports of sexist discrimination accounted for significant and unique variance in women's psychological symptoms (i.e., depressive,

obsessive-compulsive, somatic, overall symptomatology) above and beyond generic life stressors. In addition, consistent with Landrine et al.'s (1995) conceptualization of lifetime sexist events as distal predictors and recent sexist events as proximal predictors of psychological distress, with their diverse sample of women (38% racial/ethnic minority), Landrine and Klonoff (1997) found that reports of recent sexist events accounted for unique variance in a range of psychological symptoms beyond that accounted for by reports of lifetime and appraisal of sexist events.

In the only study that conducted analyses separately for racial/ethnic minority and White women, Landrine et al. (1995) found that perceived lifetime sexist events accounted for additional variance in overall symptomatology beyond that accounted for by generic life stresses for racial/ethnic minority women but not for White women. These findings point to the importance of examining perceived sexist discrimination experiences in the lives of racial/ethnic minority women. In addition, as with perceived racist discrimination, the link of perceived sexist discrimination with psychological well-being is also important to examine.

Perceived Sexist Discrimination and Psychological Well-Being of Diverse Women

Similar to mixed findings regarding the link between perceived racism and psychological well-being, the scant findings on the link between perceived sexist events and psychological well-being are also inconsistent. For instance, Ryff, Keyes, and Hughes (2003) examined the relation between a general measure of discrimination and several well-being variables with a racially/ethnically diverse sample of women and men (56% women, 15% racial/ethnic minority women) and found that perceived discrimination was related negatively to self-acceptance, sense of purpose in life, and affirmative relations with others. Furthermore, Ryff et al. (2003) found that gender moderated several discrimination-well-being links such that at high levels of discrimination, women reported lower self-acceptance, affirmative relations with others, and

personal growth than did men. However, no gender differences were found at low levels of discrimination. Thus, reported discrimination was related to lower well-being for women than for men. Similarly, Swim, et al. (2001) found that a greater number of reported daily sexist events predicted lower social state self-esteem in their sample of women and men (race/ethnicity not described).

In contrast to the empirical evidence that supports a sexist events-well-being link, some studies have found no relation between perceived sexist events and psychological well-being variables. For instance, sexist discrimination was found to be unrelated to personal self-esteem with a sample of predominately White women (Fischer & Holz, 2007). Likewise, Moradi and Subich (2004) found that perceived sexist events and personal self-esteem were unrelated with their sample of racially/ethnically diverse women (20% racial/ethnic minority).

As with the research on racist events and well-being, the literature on sexist events and well-being offers mixed findings. As discussed with perceived racist events, this does not preclude the potential for an indirect relation between perceived sexist events and well-being, through other intervening variables (Moradi & Risco, 2006). In addition, the fact that all of the studies reviewed in this section were conducted with samples of predominately White women underscores the need to study the link between perceived sexist events and well-being with racial/ethnic minority women. Also, as in the body of literature on perceived racism and well-being, self-esteem has been commonly utilized to assess well-being in the sexist events literature. Thus, to advance understanding of the link of perceived discrimination with mental health, it is important to consider direct and indirect links with both psychological distress and self-esteem with Asian American women.

Concomitant Examination of the Links of Racism and Sexism with Mental Health Indicators

Reid (2002) conducted a search of the PsycINFO database and found that among publications that addressed Asian populations between 1997 and 2000, fewer than 5% discussed women or girls. Consistent with such evidence, scholars have highlighted that racial/ethnic minority women are often understudied, overlooked, and misunderstood in psychology (e.g., Reid, 2002; Reid & Comas-Diaz, 1990), and have called for attention to the multiple minority identities of racial/ethnic minority women (e.g., Porter, 2000; Reid & Comas-Diaz, 1990). Indeed, studies that focus on racism or sexism separately ignore the concomitant manifestation of these forms of discrimination in racial/ethnic minority women's lives. In order to better acknowledge the intersecting minority identities of racial/ethnic minority women, racism and sexism variables as well as their psychological correlates need to be examined together. To date, however, very few studies have considered both racism and sexism in their conceptualizations and assessment of discrimination with samples of racial/ethnic minority women.

Available data suggest substantial overlap in racial/ethnic minority women's reports of racism and sexism. For example, DeBlare and Moradi (2008) found, with their sample of African American women, that perceived lifetime racist events, recent racist events, and appraisal of those events as stressful were highly correlated with lifetime, recent, and appraisal of sexist events, respectively ($r = .69-.72$). Similarly high magnitudes of the correlation between perceived racism and sexism have been found with other samples of African American women (e.g., King, 2003). Despite high correspondence in levels of reported racism and sexism, factor analyses of African American women's responses to measures of racism and sexism suggest some differences in structure; with reports of racism emerging as unidimensional, and reports of sexism emerging as multidimensional. This difference in the factor structures suggest that racism

may be a more global construct for African American women than is sexism. DeBlaere and Moradi (2008) concluded that these findings are consistent with the perspective that issues of racial oppression may be more omnipresent and pervasive in the lives of racial/ethnic minority women than are issues of gender oppression (Reid & Comas-Diaz, 1990; St. Jean & Feagin, 1997).

Additional studies have assessed African American women's perceived experiences of the fusion of racism and sexism, termed ethgender discrimination (King, 2003) or gendered racism (Essed, 1991). For instance, Harrington, Crowther, Henrickson, and Mickelson (2006) asked their sample of African American and White women (52% African American) to report their appraisal of the stressfulness of racist and sexist events and then factor analyzed their responses to create a discriminatory stress composite. The authors found that discriminatory stress was related positively to reported daily hassles and perceived trauma (i.e., number of traumatic events such as physical abuse or a car accident and trauma-related distress) for both African American and White women. The link between discriminatory stress and binge eating, however, emerged only for African American/Black women. Thus, Harrington et al.'s (2006) findings suggest that the relations between perceived discrimination experiences and mental health indicators may differ for racial/ethnic minority women perhaps because of their experiences with multiple and concomitant forms of discrimination (i.e., racism and sexism).

In another study that considered multiple forms of discrimination, King (2003) investigated the links of perceived racism, sexism, and ethgender prejudice with psychological distress (i.e., a composite variable of general stress and negative affect) in a sample of African American undergraduate women. Specifically, King (2003) asked women to imagine themselves in an audiotaped scenario in which they overheard two White male classmates make negative

evaluations of them. Participants were then asked to report the extent to which they attributed the negative evaluations to racism, sexism, or ethgender prejudice. A series of separate multiple regression analyses with type of discrimination as the predictor and psychological distress as the criterion found that perceived racism and ethgender prejudice, but not sexism, were related positively to psychological distress. King (2005) also found that attributions of negative evaluations to racism and to ethgender discrimination, but not to sexist discrimination, were related positively with psychological distress. Similarly, gendered racism was found to be related positively to psychological distress with a community sample of African American women (Thomas, Witherspoon, & Speight, 2008).

Contrary to the studies just discussed, unique relations between perceived sexist events and psychological distress emerged in another study with African American women. Moradi and Subich (2003) examined the relations of perceived racist and sexist events separately and simultaneously with psychological distress. The authors found that, when examined separately, reports of racist and sexist events each were positively correlated with psychological distress. When sexism, racism, and their interaction were examined in a single path model, however, only sexism accounted for unique variance in psychological distress. The authors suggested that the significant correlation between racism and sexism ($r = .69$), combined with their largely overlapping relations with psychological distress, may indicate that the underlying constructs of racism and sexism are overlapping or fused for African American women.

In addition to the studies that focused on psychological distress, one study also examined the relations of perceived racism, sexism, and ethgender discrimination with indicators of well-being. King (2003) found that perceived racism, sexism, and ethgender discrimination were unrelated to overall state self-esteem, performance or ability-related state self-esteem,

appearance-related state self-esteem, and global self-esteem with her sample of African American women. The relations of perceived racism and sexism with social or interpersonally-related state self-esteem also were not significant. However, ethgender discrimination was found to be significantly and negatively correlated with social state self-esteem. Thus, as with the previously described studies on the links of racist and sexist discrimination with well-being variables, the findings of King's (2003) study were mixed; but again, potential indirect relations through intervening variables were not examined.

The Potential Mediating Role of Sense of Personal Control

An important next step in the burgeoning body of research on the link between discrimination and mental health is to attend to potential intervening variables through which perceived discrimination experiences are related to psychological distress and well-being indicators (Fischer & Shaw, 1999; Moradi & Hasan, 2004). Branscombe and Ellemers (1998) argued that lowered sense of personal control may be one key intervening variable through which perceived experiences of discrimination are linked with greater distress and lower well-being. Specifically, they proposed that targets of discrimination are likely to feel that they cannot control perpetrators' prejudicial and discriminatory attitudes and behaviors. Consequently, perceived discrimination may undermine targets' sense of personal control in their life and across situations (Branscombe & Ellemers, 1998; Ruggiero & Taylor, 1995).

Consistent with this conceptualization, Ruggiero and Taylor (1997) found that perceived discrimination was related to lowered sense of personal control with their sample of East Asian and West Indian Black participants (49% women). More specifically, the authors manipulated the likelihood of perceived discrimination by informing each participant that, 100%, 75%, 50%, 25%, or 0% of the eight White judges grading their papers discriminated against the participant's racial/ethnic group. They then assessed participants' subjective sense of control over their

performance. The authors found that participants in the 75%, 50%, and 25% chance of discrimination conditions reported greater perceived control over personal performance than did participants in the 100% condition. Thus, certainty about discrimination was associated with lower perceived control. This negative association between perceived discrimination experiences and sense of personal control has been replicated with samples of Arab American and Latina/o participants as well (Moradi & Hasan, 2004; Moradi & Risco, 2006). Furthermore, Ryff et al. (2003) found that the relation between perceived discrimination and sense of personal control was moderated by gender such that at high levels of discrimination, women reported lower levels of perceived personal control than did men. No such gender differences were found at low levels of discrimination. Thus, perceived discrimination seems to be related to lower levels of perceived control and there is preliminary evidence to suggest that this relation is even more pronounced for women. Lowered sense of personal control, in turn, is theorized to be related to greater levels of distress and lower levels of self-esteem and available empirical evidence supports such links (e.g., Branscombe & Ellemers, 1998; Kanner & Feldman, 1991; Moradi & Hasan, 2004; Moradi & Risco, 2006; Ryff, 1989). For example, with their diverse samples, Kanner and Feldman (1991) and Ryff (1989) found that sense of personal control was related negatively with depression and related positively with self-esteem.

In a series of studies particularly germane to the current investigation, Moradi and her colleagues (2004, 2006) examined the role of sense of personal control in the links of perceived discrimination with self-esteem and psychological distress. Specifically, with a sample of Arab American women and men (53% women), Moradi and Hasan (2004) found that perceived discrimination was related, indirectly through personal control, to greater psychological distress and lower self-esteem. In a follow-up to this study, Moradi and Risco (2006) found a similar

pattern of findings with a sample of Latina/o persons (63% women). Specifically, the authors once again found that perceived discrimination was related, indirectly through sense of personal control, with greater psychological distress and lower self-esteem. In addition to these indirect relations of perceived discrimination with self-esteem and psychological distress through personal control, Moradi and Risco (2006) also examined level of acculturation as a potentially important variable and found that acculturation to United States (U.S.) culture and enculturation to Latina/o culture were related, indirectly through personal control, to greater self-esteem and lower psychological distress.

It is important to note that despite the seemingly individualist roots of sense of personal control, its intervening role in discrimination-mental health relations was supported in Arab American and Latina/o American samples which, similar to Asian American cultures, have been described as collectivistic (Abudabbeh, 1996; Smokowski & Bacallao, 2007; Sue, 1998). The fact that sense of personal control was found to be an important variable in the discrimination-mental link with collectivistic racial/ethnic minority samples seems to suggest that collectivistic cultural values do not preclude the existence of sense of personal control within individuals. Indeed, Karasawa, Little, Miyashita, Mashima, and Azuma (1997) conducted an analysis of the factor structure of the Control, Agency, Means-ends Interview (CAMI; Little, Oettingen, & Baltes, 1995) with a sample of 817 Japanese school children (52% girls) and determined that both control expectancy (i.e., belief that one can produce a specific outcome) and agency (i.e., belief that one can retrieve performance-related variables like effort and skill) variables, constructs that are akin to sense of personal control, emerged in Japanese students' beliefs about school performance. Furthermore, the level of sense personal control in a sample or population may be independent of the relationship between personal control and other variables of interest

in that sample or population. For instance, in a study that compared children from East Berlin and West Berlin on agency and control beliefs and their relation to school performance, the authors found that children from East Berlin reported significantly lower levels of agency and control beliefs than children from West Berlin, but the associations of agency and control beliefs with school performance were consistently stronger in the East Berlin sample (Oettingen, Little, Lindenberger, & Baltes, 1994). Thus, the relation between sense of personal control and other variables may be meaningful in populations that report relatively lower average sense of personal control.

In light of this prior conceptual and empirical literature, sense of control could be a key variable through which perceived racist and sexist discrimination are related to greater psychological distress and lower self-esteem for Asian American women. Thus, the present study will expand upon the current personal control literature by examining its role in the links of racism and sexism with psychological distress and self-esteem of Asian American women. In addition, as acculturation and enculturation were found to be significant variables in Moradi and Risco's (2006) study, these variables will be considered in the present study as well. In the next section, acculturation and enculturation are defined and their relevance to studies of mental health and discrimination-mental health links is discussed.

Role of Acculturation and Enculturation

The Asian American cultural group reflects tremendous diversity with regard to ethnicity and generational status (e.g., Sue, 1998; Kim, B. S. K., 2007). Thus, sources of within-group variability are important to consider in research with this population. Acculturation has been deemed to be one of the most important individual difference constructs in racial/ethnic minority research (Zane & Mak, 2003). Originally, acculturation was conceptualized as existing on a single continuum from adherence to culture of origin to adoption of the host culture (i.e.,

unilinear perspective; Miller, 2007). Presently, scholars conceptualize acculturation as a bidimensional process that captures separate low to high continua for adherence to indigenous and host cultures (i.e., the bilinear perspective; Miller, 2007). In addition, within the Asian American psychology literature, these separate processes have been labeled acculturation (i.e., socialization to the dominant cultural group) and enculturation (i.e. socialization to the individual's indigenous culture; Kim, B. S. K. & Abreu, 2001). Importantly, this bilinear perspective accounts for the possibility of simultaneous high or low adherence to both indigenous and host cultures (Kim, B. S. K. & Abreu, 2001). Empirical data with Asian American persons support the superiority of the bilinear model of acculturation and enculturation relative to a unilinear model (Miller, 2007).

Available research with Asian American individuals suggests that acculturation and enculturation are important variables to consider in investigations with this population. Specifically, acculturation and enculturation have been found to have significant relations with perceptions of discrimination and mental health variables (e.g., Goto et al., 2002; Kim, B. S. K. & Omizo, 2006; Wilton & Constantine, 2003). For instance, Goto et al. (2002) found that greater levels of acculturation were related to more perceived discrimination with their large sample of Chinese American participants ($N = 1,503$, 50% women). With regard to psychological distress, acculturation to U.S. culture has been found to be related to lower psychological distress with samples of Asian American and Latina/o college students (66% Asian, 53% women) and Asian Indian immigrant persons (40% women; Mehta, 1998; Wilton & Constantine, 2003) and enculturation to one's indigenous culture has been found to be related to greater psychological distress with a sample of Korean American undergraduates (66% women; Hovey, Kim, & Seligman, 2006).

In addition to observed links of acculturation and enculturation with psychological distress, a growing body of literature addresses the associations of acculturation and enculturation with psychological well-being. For instance, Hovey et al. (2006) found that adherence to Asian cultural values was related negatively to self-esteem with their sample of Korean American women and men. Additionally, in a series of studies with Asian American college students, B. S. K. Kim and Omizo (2005, 2006) examined the relations of cultural and behavioral dimensions of acculturation and enculturation with cognitive flexibility and self-efficacy. The authors found that U.S. cultural and behavioral acculturation were uniquely and positively related to cognitive flexibility and self-efficacy after controlling for multiple dimensions of collective self-esteem, acculturative stress, and cultural and behavioral enculturation. With respect to cultural and behavioral enculturation to indigenous culture, however, only the cultural aspect of enculturation was found to be related negatively to cognitive flexibility. However, this relation was no longer significant in a subsequent multiple regression where collective self-esteem, acculturative stress, and adherence to European American values also were considered. Finally, examinations of subsamples of Chinese American and Korean American women found that pride in Chinese culture was related positively to self-esteem, and that length of stay in the U.S. was related positively to general happiness and perceived physical health after controlling for several demographic variables (e.g., age, SES; Sasao & Chun, 1994; Tsai, Ying, & Lee, 2001).

Taken together, these studies suggest that acculturation and enculturation are important variables to consider in research on psychological distress and well-being with Asian American women. As such, considering the links of acculturation and enculturation along with the links of perceived racism and sexism with mental health indicators is important in the current

investigation. This inclusion attends to within-group variability in cultural orientation among Asian American individuals and responds to calls for research on the relations of acculturation and enculturation with psychological functioning of Asian American populations (e.g., Kim, B. S. K., 2007; Tsai et al., 2001). Accounting for possible relations of Asian enculturation and U.S. acculturation with the variables of interest also allows for a more stringent test of relations among perceived discrimination, psychological distress, and well-being in the present study.

Purpose of Study

Based on the literature reviewed here, the present study aims to build on prior scholarship to advance research on Asian American women's perceived discrimination experiences and mental health in a number of ways. First, the present study examines the potential unique relations of perceived racist and sexist events with Asian American women's psychological distress and self-esteem when perceived racist events and sexist events are examined simultaneously. Second, in addition to the potential direct links of perceived racist and sexist discrimination experiences with psychological distress and self-esteem, this study also examines the potential indirect links of perceived discrimination with these mental health indicators through sense of personal control. Finally, the present study controls for the roles of acculturation and enculturation in the relations of perceived racism and sexism with psychological distress and self-esteem. To address these aims, the present study examines the model presented in Figure 1, which tests the following hypotheses:

1. Perceived racist and sexist discrimination are related (a) positively to psychological distress, (b) negatively to self-esteem, and (c) negatively to sense of personal control.
2. Sense of personal control is related positively to self-esteem and negatively to psychological distress.
3. Perceived racist and sexist discrimination are related, indirectly through sense of personal control, to greater psychological distress and lower self-esteem.

In light of prior evidence linking acculturation and enculturation to perceived discrimination (e.g., Goto et al., 2002) and mental health variables (e.g., Kim, B. S. K. & Omizo, 2005, 2006; Wilton & Constantine, 2003), and the assertion that acculturation and enculturation are important individual difference factors to consider in studies with Asian American populations (e.g., Tsai et al., 2001), these variables are included in the model as covariates to provide a more stringent test of the hypotheses.

Additional Exploratory Investigations

In addition to the hypotheses just discussed, the current study also conducts several exploratory analyses. More specifically, as an extension of Moradi and Subich's (2003) examination of the interaction of perceived racism and sexism with African American women, this study explores the potential interaction of perceived racist events and sexist events in relation to sense of personal control, psychological distress, and self-esteem of Asian American women. Also, in light of some evidence that self-esteem may moderate the link between perceived discrimination and psychological distress (e.g., Corning, 2002; Fischer & Shaw, 1999; Moradi & Subich, 2004), this possibility is explored in the present study as well.

CHAPTER 3 METHODS

Participants

Data from a sample of 212 Asian American women were analyzed in the present study. Forty-two percent of the sample identified as Chinese, 17% as Vietnamese, 11% as Filipino, 10% as Taiwanese, 8% as Korean, 7% as Indian, 2% as Japanese, and 4% as Other (2% missing). Forty-seven percent of participants identified as first generation (i.e., participant came to the United States alone or with their parents/family), 45% as second generation (i.e., participant's parents were the first to come to the United States), and 8% as third-generation and beyond (i.e., participant's grandparents and beyond were the first to come to the United States). Participants ranged in age from 18 to 61 years ($M = 23.46$, $SD = 6.72$), with 60% of participants identifying as an undergraduate student, 21% as a graduate student, and 18% indicating that they were not students (1% missing). Twenty-seven percent of participants reported that they had a high school degree, 25% had some college education, 23% had a bachelor's degree, 18% of participants had a graduate or professional degree, 7% had some graduate or professional education, and 1% had completed middle/junior high school. The majority of the sample reported that they were not currently employed (60%), 27% were employed part-time, and 12% were employed full-time. With regard to social class, 52% identified as middle class, 23% as working class, 19% as upper middle class, 4% as lower class, and 1% as upper class. Forty-six percent of women reported that they were single, 29% reported that they were dating, 25% were married or in a committed relationship, and 1% were divorced or separated. Most participants identified as exclusively (89%) or mostly (7%) heterosexual, with 2% identifying as mostly (1%) or exclusively (1%) lesbian or gay and 1% identifying as bisexual (1% missing).

Procedures

Participants were recruited through (a) student centers (e.g., campus libraries, student union), (b) Asian American student organizations (e.g., Asian American Student Union, Vietnamese Student Organization), (c) personal contacts on campus and in the community, and (d) snowball sampling methods. Participants were informed that the study was about the life experiences and well-being of Asian and Asian American women. Participants were also informed that they must identify as Asian or Asian American and be 18 years of age or older to participate. If they were interested in participating, they received written information about the study and were given a survey packet that contained the instruments described in the next section. Survey packets were completed when they were received or at another time that was convenient for the participant and an appointment was made to retrieve the completed survey. Upon submitting their completed survey, participants received a written debriefing and a \$5.00 honorarium.

A total of 300 surveys were distributed and 232 surveys were returned (77% response rate). Thirteen participants missing more than 20% of the data on one or more of the main measures of interest (i.e., perceived racism, perceived sexism, sense of personal control, self-esteem, psychological distress, acculturation, and enculturation) were removed from analysis. Six additional participants were removed because they were missing demographic data needed for consideration of the covariates. Next, to address missing data points for the retained participants (i.e., those with at least 80% of data on every measure), ipsative (or valid) mean substitution (Dodeen, 2003) was utilized to replace missing data points on a given measure with the participant's mean of non-missing data points on that measure. Finally, utilizing Mahalanobis distance values, one participant determined to be a multivariate outlier was removed. These procedures resulted in retaining data from 212 Asian American women for the present analyses.

Instruments

Criterion Variables

Sense of personal control was measured with the *Environmental Mastery Scale (EM)*. The EM (Ryff, 1989) is a 14-item, Likert-type, self-report measure that assesses an individual's sense of perceived control in one's life and one's environment. Items are rated on a 6-point continuum: 1 = *strongly agree* to 6 = *strongly disagree*. Appropriate items are reverse scored and item ratings are summed or averaged to obtain an overall scale score; higher scores indicate a greater sense of personal control. Sample items include, "In general, I feel I am in charge of the situation in which I live" and "I often feel overwhelmed by my responsibilities." EM items yielded a Cronbach's alpha reliability estimate of .90 and 6-week test-retest reliability of .81 in the scale development sample (race/ethnicity not described; Ryff, 1989). The Cronbach's alpha value with the current sample was .83. With regard to validity, Ryff (1989) found EM scores to be correlated positively with life satisfaction and internal locus of control and correlated negatively with belief in the control of powerful others and chance. The EM scale has yielded meaningful results with samples from diverse racial/ethnic backgrounds, including those from purportedly collectivist cultures such as Latina/o and Arab American persons (Moradi & Hasan, 2004; Moradi & Risco, 2006).

Self-esteem was assessed with the *Rosenberg Self-Esteem Scale (RSE)*. The RSE (Rosenberg, 1965) is a 10-item, Likert-type, self-report measure that assesses personal self-esteem. Participants rate items on the 4-point continuum: 1 = *strongly disagree* to 4 = *strongly agree*. Five items are reverse scored and item ratings are summed or averaged to yield an overall score; higher scores indicate greater self-esteem. Sample items include, "I feel that I have a number of good qualities" and "At times I think I am no good at all." Wylie (1989) reported alphas ranging from .74 to .87 and test-retest reliabilities ranging from .63 to .91 across studies.

In terms of validity, RSE scores have been found to be related negatively to depressive affect, anxiety, psychosomatic symptoms, and interpersonal insecurity (Wylie, 1989). The RSE also was found to be unrelated to social desirability in a sample of Latina/o persons (Valentine, 2001). The RSE has been used with several Asian American samples (e.g., Liang, Li, & Kim, B. S. K., 2004; Tsai, Ying, & Lee, 2001) and Iyer and Haslam (2003) obtained a Cronbach's alpha of .89 for RSE items with their sample of South Asian women. A Cronbach's alpha value of .81 was obtained with the current sample.

Psychological distress was measured with the *Hopkins Symptom Checklist-58 (HSCL-58)*. The HSCL-58 (Derogatis, Lipman, Rickels, Uhlenhuth & Covi, 1974) is a 58-item, self-report measure that assesses psychological distress along the dimensions of somatization, obsessive-compulsivity, interpersonal sensitivity, depression, and anxiety. Items are rated on a 4-point continuum: 1 = not at all to 4 = extremely. Item ratings are averaged to yield an overall score, with higher scores indicating higher levels of psychological distress. Sample items include, "Feeling inferior to others," and "Worrying or stewing about things." Derogatis et al. (1974) obtained a Cronbach's alpha value of .87 for HSCL-58 items. A Cronbach's alpha value of .94 was obtained with the current sample. Validity of HSCL-58 scores was demonstrated with expected higher scores for outpatient psychiatric samples than for a sample from the general population, and with the sensitivity of the HSCL-58 to detect decreases in psychological distress through psychotherapeutic drug treatments (Derogatis et al., 1974). Lastly, the HSCL-58 has yielded meaningful results with diverse samples including East Asian immigrants (Barry & Grilo, 2002), African American persons (Klonoff & Landrine, 1999), and lesbian women (Szymanski, 2005).

Predictor Variables

Perceived racist events were assessed with the *General Ethnic Discrimination Scale (GED)*. The GED (Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006) is an 18-item, self-report measure that assesses the frequency and appraisal of perceived racist events for racial/ethnic minority individuals. Participants rate the frequency of each of the 18 GED Lifetime and GED Recent items on the 6-point continuum: 1 = *the event has never happened* to 6 = *the event happened almost all [i.e., more than 70%] of the time*, and rate the 17 appraisal items on the 6-point continuum: 1 = *not at all stressful* to 6 = *extremely stressful* (item 18 of the GED is not included in the GED Appraisal). Ratings across items for each measure are added or averaged to yield overall scores; higher scores indicate greater perceived frequency and stressfulness of racist events. Sample items include, “How often have people misunderstood your intentions and motives because of your race/ethnic group?” and “How often have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because of your race/ethnic group?” Cronbach’s alpha values for the GED Lifetime, Recent, and Appraisal items were .94, .94, and .96 respectively with a racially/ethnic diverse sample of women and men (6% Asian American, 72% women; Landrine et al., 2006). With regard to validity, GED scores were correlated positively with psychological distress in the development sample (Landrine et al., 2006). Due to Landrine and Klonoff’s (1996) conceptualization of recent racist events as the most proximal and salient predictor of psychological distress and the ambiguity observed by researchers about the meaning of appraisal scores (e.g., Fischer & Shaw, 1999), only GED-Recent scores are used in the present analyses. A Cronbach’s alpha of .90 was obtained with the GED-Recent items with the current sample of Asian American women.

Perceived sexist events were measured with the *Schedule of Sexist Events (SSE)*. The SSE (Klonoff & Landrine, 1995) is a 20-item, self-report measure that assesses the frequency

and appraisal of perceived sexist events. Participants respond to the 20 SSE Lifetime and SSE Recent items on the 6-point continuum: 1 = *the event has never happened* to 6 = *the event happened almost all [i.e., more than 70%] of the time*, and rate the 19 appraisal items on the 6-point continuum: 1 = *not at all stressful* to 6 = *extremely stressful* (item 20 of the SSE is not included in SSE Appraisal). Item ratings are added or averaged to obtain overall scores; higher scores indicate greater perceived frequency and stressfulness of sexist events. Sample items include, “How many times have you been treated unfairly by your boyfriend, husband, or other important man in your life because you are a woman?” and “How many times have people made inappropriate or unwanted sexual advances to you because you are a woman?” With their sample of racially/ethnically diverse women (5% Asian American), Landrine and Klonoff (1997) obtained Cronbach’s alpha values of .92, .90, and .93 for the SSE Lifetime, Recent, and Appraisal, respectively. A Cronbach’s alpha of .90 was obtained with the current sample. In terms of validity, Klonoff and Landrine (1995) found that SSE Lifetime and Recent scores were correlated positively with frequency of daily hassles and stressful life events. In addition, SSE scores have been found to have negligible or nonsignificant correlations with social desirability (Fischer et al., 2000). Similar to the GED, given Klonoff and Landrine’s (1995) conceptualization of recent sexist events as the most proximal predictor of psychological distress and high correlations among the three SSE scales (DeBlaere & Moradi, 2008), only SSE-Recent scores are used in the current analyses. The SSE-Recent has yielded meaningful results with samples of African American women (Moradi & Subich, 2003), a subsample of racial/ethnic minority women (Landrine, Klonoff, Gibbs, Manning, & Lund, 1995), and lesbian women (Szymanski, 2005).

Acculturation and enculturation was assessed with the *Asian American Multidimensional Acculturation Scale (AAMAS)*. The AAMAS (Chung, Kim, B. S. K. & Abreu, 2004) reflects the bilinear perspective of acculturation. It is a 15-item, self-report measure that assesses level of U.S. acculturation (AAMAS-EA) and level of enculturation to indigenous culture (AAMAS-CO). Following the recent recommendations of Miller (2007), the AAMAS contains items that reflect both cultural and behavioral adherence. Participants respond to items on the 6-point continuum: 1 = *not very well* to 6 = *very well*, once for their culture of origin and again for European American culture. One item is reverse scored and items are averaged to yield an overall score, with higher scores indicating greater adherence to the reference group culture. Sample items include, “How knowledgeable are you about the culture and traditions of your culture of origin?” and “How well do you speak the language of European American persons?” With samples of Asian American undergraduate students and Korean American persons, Chung et al. (2004) obtained Cronbach’s alpha values of .87 to .91 and .76 to .81 for AAMAS-CO and AAMAS-EA items, respectively. In addition, two-week test-retest reliability was .89 for the AAMAS-CO and .78 for the AAMAS-EA with a Korean American sample (Chung et al., 2004). Cronbach’s alpha values were .91 for the AAMAS-CO items and .90 for the AAMAS-EA items with the current sample. With regard to validity, AAMAS-CO and AAMAS-EA scores were related significantly with scores on another measure of acculturation in the anticipated directions and, as expected, AAMAS-CO scores were related negatively with generational status (Chung et al., 2004).

CHAPTER 4 RESULTS

Preliminary analyses were conducted to identify relevant demographic covariates in addition to acculturation and enculturation, examine descriptive information, and determine the appropriateness of the sample for path analysis. Tests of hypotheses and exploratory analyses were conducted following these preliminary analyses.

Exploring Potential Covariates

Previous research with racially/ethnically diverse samples suggests that mental health indicators (e.g., self-esteem and psychological distress) may be linked with age, socioeconomic status, and relationship status (e.g., Cotton, 1999; Luo & Waite, 2005; Miyamoto et al., 2000; Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002; Twenge & Campbell, 2002; Yip, Gee, & Takeuchi). Thus, these variables, along with additional demographic variables were assessed; consistent with Tabachnick and Fidell's (2007) conceptualization, the relations of these demographic variables with the criterion variables of interest (i.e., sense of personal control, self-esteem, and psychological distress) were explored to determine whether they should be included as covariates in subsequent analyses.

First, for each of the categorical demographic variables, (i.e., relationship status: single, dating, married/committed relationship, divorced/separated; student status: not a student, undergraduate student, graduate student; employment status: employed full time, employed part time, not employed), an analysis of variance (ANOVA) was used to identify potential group differences on the criterion variables. With regard to relationship status, because only two participants indicated that they were divorced or separated, and adequate sample sizes for each cell are necessary to ensure sufficient power (Tabachnick & Fidell, 2007), the divorce/separated participants were excluded from the analysis. Results of this series of ANOVAs indicated that

student status groups did not differ significantly on any of the criterion variables. However, level of sense of personal control varied significantly with relationship status ($F [2, 208] = 7.71, p < .01$) and employment status ($F [2,210] = 6.32, p < .01$). Specifically, single Asian American women reported significantly lower levels of perceived personal control ($M = 3.96, SD = .62$) than women who were dating ($M = 4.29, SD = .61$) or married/in a committed relationship ($M = 4.12, SD = .68$); there was no significant difference between dating women and women who were married/in a committed relationship. In addition, Asian American women who were employed full time were found to report significantly higher levels of sense of personal control ($M = 4.57, SD = .74$) than women who were employed part time ($M = 4.12, SD = .64$) or not at all ($M = 4.01, SD = .65$); there was no significant difference between the latter two groups. Based on these findings, the data were coded to reflect single or not single relationship status groups and employed full time or not employed full time employment status groups. These dichotomous groups were utilized in the subsequent analyses.

Next, bivariate correlations between the demographic variables (i.e., age, generational status, years lived in the United States, highest degree obtained, sexual orientation, income, current socioeconomic status, familial socioeconomic status, personal religiosity, familial religiosity, dichotomized relationship status, dichotomized employment status) and the criterion variables were conducted. Given the number of comparisons being performed, a more conservative alpha of .01 was used. These analyses indicated that social class was correlated positively with self-esteem ($r = .21, p < .01$), relationship status (i.e., 0 = single, 1 = not single) was correlated positively with sense of personal control ($r = .26, p < .001$), and employment status (i.e., 0 = employed full time, 1 = not employed full time) was correlated negatively with sense of personal control ($r = -.24, p < .01$); other demographic variables were not correlated

significantly with any of the criterion variables. Consequently, social class, dichotomized relationship status, and dichotomized employment status were included in subsequent analyses.

Descriptive Statistics

Descriptive statistics, internal consistency reliabilities, and intercorrelations obtained with the current sample for the variables of interest are reported in Table 1. Overall, the present sample's mean scores on the variables of interest were similar to those obtained with other racially/ethnically diverse samples. More specifically, the mean scores and standard deviations obtained with the present sample for perceived racist events ($M = 1.56, SD = .54$) were comparable to those reported by Landrine, Klonoff, Corral, Fernandez, and Roesch (2006) with a sample of racially/ethnically diverse persons ($M = 1.52, SD = .62$). The present sample's mean scores for perceived sexist events ($M = 1.66, SD = .59$) were similar to those reported by Fischer and Holz (2007) with a sample of predominately White women ($M = 1.66, SD = .48$). The present sample's mean scores for self-esteem ($M = 3.36, SD = .46$), enculturation ($M = 4.74, SD = .85$), and acculturation ($M = 4.57, SD = .81$) were similar to those obtained by Chung, Kim, and Abreu (2004) with their sample of Asian American undergraduate students (RSE, $M = 3.26, SD = .51$; AAMAS-CO, $M = 4.34, SD = .83$; AAMAS-EA, $M = 4.75, SD = .64$). With regard to sense of personal control, the present sample's mean score ($M = 4.14, SD = .68$) was comparable to that reported by Moradi and Hasan (2002) with a sample of Arab American persons ($M = 4.41, SD = .77$). Finally, the current sample's mean score for psychological distress ($M = 1.57, SD = .36$) was similar to that reported by Szymanski and Meyer (2008) with their sample of African American sexual minority women ($M = 1.58, SD = .48$). Thus, the present samples' average scores on the variables of interest were generally comparable to averages obtained in prior studies with racially/ethnically diverse samples.

Appropriateness of the Sample for Path Analysis

Path analysis was deemed to be an appropriate and parsimonious approach for testing the hypothesized model because it allows for simultaneous examination of multiple direct and indirect relations. The sample size and univariate and multivariate normality of the data were examined prior to conducting the path analysis. With regard to sample size, Kline (1998) recommended at least five cases per parameter estimated when performing structural equation modeling (SEM). The path model in the current study involved the estimation of 49 parameters, requiring a minimum of 245 participants according to this criterion. However, simulation studies suggest that a sample size of at least 200 is sufficient to derive meaningful and interpretable models and fit indices (Hau & Marsh, 2004; Quintana & Maxwell, 1999). In addition, given that the analyses involved observed indicators (rather than latent variables); the path analysis can be conceptualized to be identical to a series of multiple regression equations. For the most complex regression model tested in the present study (i.e., eight predictors), power analysis indicated that a minimum of 40 participants, a number greatly exceeded by the current sample, would be required to achieve adequate power (i.e., .80). Thus, because the sample size was close to the minimum requirement defined by Kline (1998), exceeded 200 participants, and was being used in a form of structural equation modeling that does not require the estimation of latent variables; the current sample size was deemed appropriate for analysis.

Because the assumption that data are normally distributed is important to examine in both regression analyses and SEM (e.g., Field, 2000; Weston & Gore, 2006), both univariate and multivariate normality were explored with the current data. The univariate skewness and kurtosis values for each variable of interest were examined first. All of these values met the criteria summarized by Weston and Gore (2006) for univariate normality (i.e., absolute skewness values < 3, absolute kurtosis values < 10). Next, multivariate normality was explored and potential

multivariate outliers identified by evaluating the Mahalanobis distance value for each participant and comparing the magnitude of that value to the chi-square distribution using a stringent alpha of .001 (Meyers, 2006). A single case exceeded the critical chi-square value for this test (i.e., 29.59) and was dropped from further analyses.

Path Analysis Examining Direct, Indirect, and Mediated Relations

Path analysis was used to test the proposed relations among the two predictor variables (i.e., perceived racist events and perceived sexist events), the intervening variable (i.e., sense of personal control), and the two outcome variables (i.e., psychological distress and self-esteem). In addition, based on prior literature suggesting that acculturation and enculturation are important individual difference factors to consider in studies with Asian American populations, the relations of these variables with the variables of interest were estimated in the model. Finally, the significant associations involving socioeconomic status, relationship status, and employment status that emerged in the previously described demographic covariate analyses were included in the model (see Figure 1).

Amos 7.0 (Arbuckle, 2006) and maximum likelihood estimation with the covariance matrix of the variables of interest as input were used to estimate direct and indirect paths. Values for the comparative fit index (CFI), incremental fit index (IFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR) were 1.00, 1.00, .00 (CI = .00, .08), and .02, respectively, indicating excellent incremental and absolute model fit to the data (Martens, 2005; Weston & Gore, 2006). These fit indices are likely due, at least in part, to the near saturation of the model. In such instances, the parameter estimates rather than the fit indices are of interest (Klem, 1995). Thus, parameter estimates, magnitudes of indirect effects, and variance accounted for in the outcome variables (i.e., sense of personal control, self-esteem, and psychological distress) are discussed. This model accounted for 19% of the variance

in sense of personal control, 42% of the variance in self-esteem, and 29% of the variance in psychological distress.

Hypothesis 1: Relations of Perceived Discrimination with Psychological Distress, Self-Esteem, and Sense of Personal Control

Hypothesis 1 predicted that perceived racist and sexist discrimination are related positively to psychological distress, negatively to self-esteem, and negatively to sense of personal control. As indicated in Table 1, bivariate correlations indicated that perceived racist events ($r = .24, p < .01$) and sexist events ($r = .22, p < .01$) were correlated positively with psychological distress. Perceived racist and sexist events were not correlated significantly with self-esteem or sense of personal control.

The pattern of findings was modified, however, when all of the variables were considered simultaneously in the path analysis (see Figure 1). In the path model, perceived racist events did not have unique direct links with psychological distress or self-esteem but was related negatively and directly with sense of personal control ($\beta = -.18, p < .05$). Perceived sexist events did not have unique direct links with self-esteem or sense of personal control but was related positively and directly with psychological distress ($\beta = .20, p < .05$). Thus, Hypothesis 1 was partially supported.

Hypothesis 2: Relations of Sense of Personal Control with Psychological Distress and Self-Esteem

Hypothesis 2 predicted that sense of personal control is related positively to self-esteem and related negatively to psychological distress. Indeed, bivariate correlations indicated that sense of personal control was correlated significantly and negatively with psychological distress ($r = -.48, p < .001$) and positively with self-esteem ($r = .63, p < .001$). This pattern of findings was replicated in the path analysis. Sense of personal control had a unique negative link with

psychological distress ($\beta = -.48, p < .001$) and a unique positive link with self-esteem ($\beta = .61, p < .001$). Hypothesis 2 was fully supported.

Hypothesis 3: Intervening Role of Sense of Personal Control in the Perceived Discrimination-Psychological Distress and Perceived Discrimination-Self-Esteem Links

Hypothesis 3 predicted that perceived racist and sexist discrimination are related, indirectly through sense of personal control, to greater psychological distress and lower self-esteem. A bootstrap procedure was utilized to test for the significance of the indirect effects. Bootstrapping has been argued to exhibit greater statistical power to detect mediation effects than other procedures (Mallinckodt, Abraham, Wei, & Russell, 2006). Briefly, the bootstrap procedures involved creating 1,000 samples from the original data set ($N = 212$) through random sampling and replacement and then deriving 1,000 estimates of each path coefficient. The mean indirect effects were then calculated. Specifically, standardized path coefficients were multiplied (a) between frequency of perceived discrimination experiences (i.e., racist events or sexist events) and sense of personal control and (b) between sense of personal control and the outcome variables (i.e., self-esteem and psychological distress). The lower and upper ends of the 95% confidence interval for the mean indirect effects were then estimated. If the confidence interval does not include zero, the indirect effect is considered significant at the .05 level (Shrout & Bolger, 2002). According to these analyses, frequency of perceived racist events had a significant indirect link of .09 with psychological distress through sense of personal control (i.e., $-.18 \times -.48 = .09, p < .05, B = .06, SE = .03, 95\% \text{ CI} = .004, .113$). There were no significant indirect links between perceived racist events and self-esteem or perceived sexist events and the criterion variables. Thus, hypothesis 3 was partially supported.

Additional Significant Model Results

In addition to the hypothesized direct and indirect relations among the perceived discrimination, sense of personal control, and mental health indicators, noteworthy direct and indirect relations were found among the covariates, sense of personal control, and mental health indicators as well. Specifically, acculturation ($\beta = .23, p < .001$), enculturation, ($\beta = .15, p < .05$), relationship status ($\beta = .22, p < .001$), and employment status ($\beta = -.26, p < .001$) each were found to have a significant and direct relation with sense of personal control. In addition, socioeconomic status was found to be related significantly and directly to self-esteem ($\beta = .15, p < .01$). Furthermore, acculturation, enculturation, relationship status, and employment status each had significant indirect links through sense of personal control with psychological distress (acculturation: $.23 \times -.48 = -.11, B = -.05, SE = .015, 95\% CI = -.081, -.022$; enculturation: $.15 \times -.48 = -.07, B = -.03, SE = .013, 95\% CI = -.058, -.055$; relationship status: $.22 \times -.48 = -.10, B = -.07, SE = .02, 95\% CI = -.133, -.035$; employment status: $-.26 \times -.48 = .13, B = .14, SE = .04, 95\% CI = .060, .216$) and with self-esteem (acculturation: $.23 \times .61 = .14, B = .08, SE = .02, 95\% CI = .038, .134$; enculturation: $.15 \times .61 = .09, B = .05, SE = .02, 95\% CI = .005, .095$; relationship status: $.22 \times .61 = .13, B = .12, SE = .04, 95\% CI = .052, .213$; employment status: $-.26 \times .61 = -.16, B = -.23, SE = .06, 95\% CI = -.355, -.102$).

Exploratory Analyses 1: Perceived Racist and Sexist Events Interactions in Sense of Personal Control, Psychological Distress, and Self-Esteem

To examine the potential interaction of perceived racist events and sexist events in relation to the criterion variables (i.e., personal control, psychological distress, and self-esteem), Baron and Kenny's (1986) moderator regression procedures were used. 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. A series of three hierarchical multiple regression analyses were conducted to test the interaction of racist and sexist events in relations with (a) sense of personal control, (b) psychological distress, and (c) self-esteem. As with the path model, appropriate covariates were included in the regression analyses. For each analysis, the covariates were entered in Step 1, main effects for perceived racist events and sexist events were entered in Step 2, and the interaction between racist events and sexist events (i.e., perceived racist events scores multiplied by perceived sexist events scores) was entered in Step 3. It is important to note that the choice of the predictor and moderator were arbitrary in this description of analyses as the regression equation would be identical if racist events were conceptualized as the moderator of the relations of sexist events to the outcome variables. Significant moderation or interaction 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. None of the interaction terms emerged as significant in the regressions for sense of personal control, psychological distress, or self-esteem.

Exploratory Analyses 2: Self-esteem as a Moderator in the Perceived Discrimination-Psychological Distress Link

To examine the potential moderating role of self-esteem in the links of perceived racist events and sexist events with psychological distress, the same procedures discussed in the previous section were followed. Two hierarchical multiple regression analyses were conducted. For each analysis, the appropriate covariates were entered in Step 1. The centered predictor (i.e., perceived racist events or perceived sexist events) and centered moderator (i.e., self-esteem) were entered in Step 2 predicting psychological distress. The interaction between the predictor (i.e., perceived racist events or perceived sexist events) and self-esteem was entered in Step 3. As shown in Table 2, a significant interaction was found in both models indicating that self-esteem moderated the links of perceived racist events and perceived sexist events to psychological

distress. The adjusted R^2 values for the regression equations examining perceived racist events and sexist events indicate that the main and interaction effects accounted for 24% and 25% of the variance in psychological distress, respectively. The interaction terms of self-esteem with perceived racist events and sexist events each accounted for 2% of the variance in psychological distress.

Patterns underlying the significant interactions were explored using simple slope analysis recommended by Aiken and West (1991). In this procedure, the criterion variable is regressed on the predictor, the moderator at a conditional value (e.g., high or low), and the interaction of the predictor and the moderator at a conditional value. Again, appropriate covariates were considered in the model. Covariates were entered on Step 1. The predictor, self-esteem at a conditional value (e.g., high or low), and the interaction of the predictor and self-esteem at a conditional value were entered in Step 2. The t test for the regression coefficient of the predictor variable (i.e., perceived racist events or perceived sexist events) in this equation tests the direction and significance of the simple slope (i.e., whether the slope is significantly different from zero). As shown in Table 3, the simple slope analyses indicated that the relations between perceived racist events and psychological distress and between perceived sexist events and psychological distress were significant and positive for Asian American women with low self-esteem but nonsignificant for those with high self-esteem. In addition, the significance of the interaction terms in the tests of the moderator effects indicates that the difference between the regression lines for participants with low versus high self-esteem was also significant (Aiken & West, 1991).

Table 4-1. Descriptives and Bivariate Correlations

Scale	1	2	3	4	5	6	7	8	9	M	SD	α
1. Racist Events										1.56	.54	.90
2. Sexist Events	.65***									1.66	.59	.90
3. Personal Control	-.14	-.02								4.14	.68	.83
4. Self-Esteem	-.12	-.04	.63***							3.36	.46	.81
5. Psychological Distress	.24**	.22**	-.48***	-.45***						1.57	.36	.94
6. Acculturation	-.03	.19**	.15*	.16*	-.07					4.57	.81	.90
7. Enculturation	.90	-.03	.06	.03	.08	-.24***				4.74	.85	.90
8. Relationship Status	-.04	-.06	.26***	.11	-.03	-.07	.11			.54	.50	
9. Employment Status	.07	.07	-.24**	-.12	.10	.19**	.14*	-.14*		.88	.33	
10. SES	.02	.04	.10	.21**	-.05	.18*	-.10	.01	-.05	2.90	.79	

Note. Relationship status (0 = single, 1 = not single) and employment status (0 = employed full time, 1 = not employed full time) variables were dichotomized. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4-2. Moderating Effects of Self-Esteem on the Relation Between Perceived Discrimination and Psychological Distress

Step and Variable	B	β	t	Total R ²	Adj. R ²	R ² inc.	F inc.	df
Link between racist events and distress								
Step 1								
Acculturation	-.02	-.05	-.72	.01	.00	.01	.84	2, 209
Enculturation	.03	.06	.88					
Step 2								
Racist Events	.12	.18	2.90**	.24	.22	.23	31.17****	2, 207
Self-Esteem	-.33	-.43	-6.94****					
Step 3								
Racist Events x Self-Esteem	-.18	-.13	-2.10*	.25	.24	.02	4.41*	1, 206
Link between sexist events and distress								
Step 1								
Acculturation	-.02	-.05	-.72	.01	.00	.01	.84	2, 209
Enculturation	.03	.06	.88					
Step 2								
Sexist Events	.13	.21	3.45**	.25	.24	.24	33.35****	2, 207
Self-Esteem	-.34	-.44	-7.14****					
Step 3								
Sexist Events x Self-Esteem	-.15	.07	-.12*	.27	.25	.02	4.20*	1, 206

Note. * p < .05, ** p < .01, **** p < .001

Table 4-3. Simple Slope Regression of Perceived Discrimination Predicting Psychological Distress at Low and High Self-Esteem

<i>Variable</i>	<i>B</i>	β	<i>t</i>	<i>df</i>
Link between perceived racist events and distress at low self-esteem				
Acculturation	.01	.01	.22	5, 206
Enculturation	.02	.06	.91	
Racist Events	.28	.42	3.22**	
Self-Esteem	-.33	-.42	-6.82***	
Racist Events x Self-Esteem	-.18	-.27	-2.10*	
Link between perceived sexist events and distress at low self-esteem				
Acculturation	-.02	-.03	-.51	5, 206
Enculturation	.03	.07	1.20	
Sexist Events	.27	.44	3.47**	
Self-Esteem	-.33	-.43	-7.00***	
Sexist Events x Self-Esteem	-.15	-.26	-2.05*	
Link between perceived racist events and distress at high self-esteem				
Acculturation	.01	.01	.22	5, 206
Enculturation	.02	.06	.91	
Racist Events	-.05	-.08	-.58	
Self-Esteem	-.33	-.42	-6.82***	
Racist Events x Self-Esteem	-.18	-.29	-2.10*	
Link between perceived sexist events and distress at high self-esteem				
Acculturation	-.02	-.03	-.51	5, 206
Enculturation	.03	.07	1.20	
Sexist Events	.00	.00	-.03	
Self-Esteem	-.33	-.43	-7.00***	
Sexist Events x Self-Esteem	-.15	-.25	-2.05*	

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

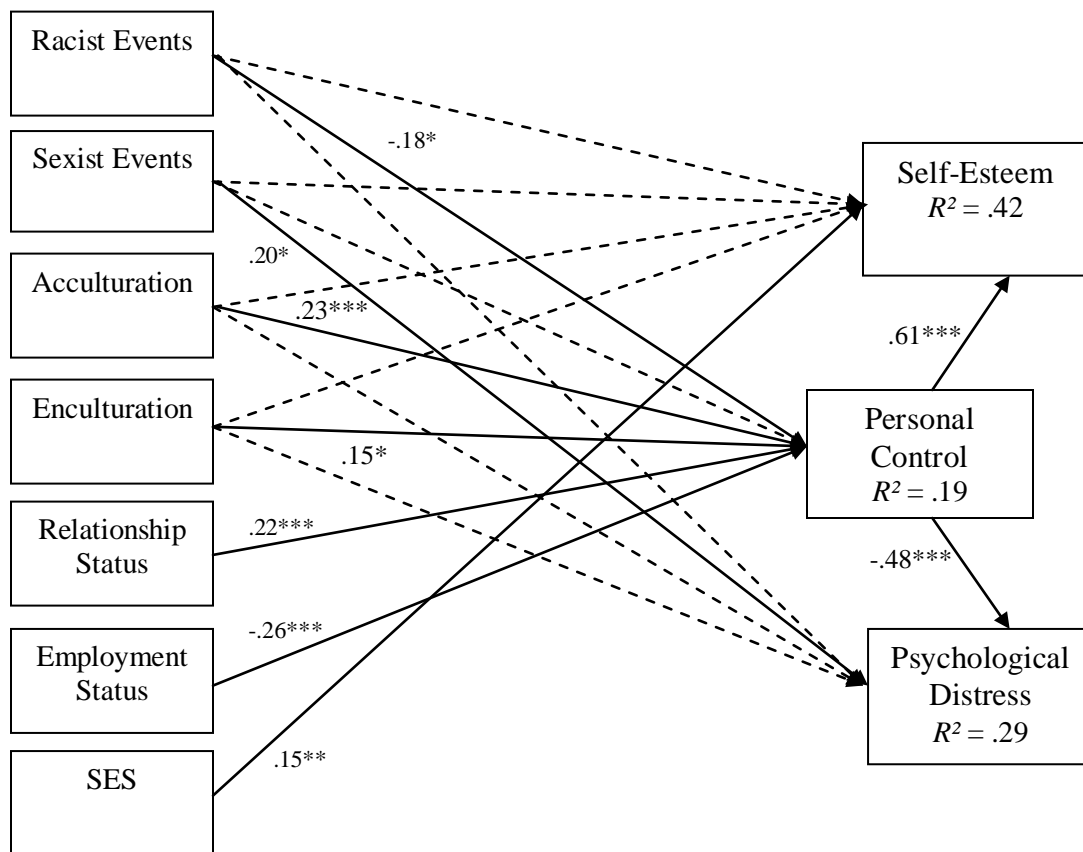


Figure 4-1. Path model testing direct and indirect relations in the variables of interest.
Note. Values reflect standardized coefficients. For the sake of parsimony, estimated covariances of the predictors were omitted in the figure. The magnitudes and correlations of the predictors are presented in Table 1. The correlation between the residual terms for self-esteem and psychological distress was $-.21$, ($p < .01$). * $p < .05$, ** $p < .01$, *** $p < .001$

CHAPTER 5 DISCUSSION

The present study extends the literature on the link between perceived discrimination experiences and mental health in a number of important ways. First, the present study focused on Asian American women, a population whose experiences have received limited attention in prior research on discrimination and mental health. Second, this study examined perceived racist and sexist events simultaneously, allowing for tests of their unique relations with mental health indicators. Third, in addition to the potential direct links of perceived discrimination experiences with psychological distress and self-esteem, this study also examined indirect relations through sense of personal control. Finally, the current study accounted for the roles of acculturation and enculturation in the relations of perceived discrimination experiences with mental health.

Accumulating evidence supports the links of perceived racist events and perceived sexist events with psychological distress in samples of racial/ethnic minority persons, predominately White women, and African American sexual minority women (e.g., Klonoff & Landrine, 1995; Landrine & Klonoff, 1996; Lee, 2003, 2005; Moradi & Subich, 2003; Szymanski & Meyer, 2008). The findings from the present study support such a link with Asian American women as well. Bivariate correlation analyses indicated that perceived racist events and sexist events each were related positively to psychological distress. The pattern of findings was modified, however, when perceived racist events and sexist events were considered simultaneously in the path model. More specifically, the unique relation of perceived racist events with psychological distress became nonsignificant while perceived sexist events maintained a unique positive link with distress. The fact that perceived sexist events emerged as a unique correlate of psychological distress in the current sample suggests that perceived sexist events are important to

consider when exploring the mental health of Asian American women (and likely other groups of racial/ethnic minority women as well).

These results are consistent with those reported by Moradi and Subich (2003) with their sample of African American women. Operationalizing perceived racist events and sexist events very similarly to the current study, Moradi and Subich (2003) found that when racist events and sexist events were examined separately, both variables were correlated positively with psychological distress. However, when perceived racist events, perceived sexist events, and their interaction were included simultaneously in a single path model, only perceived sexist events accounted for significant variance in psychological distress. Similarly, in the current investigation, the interaction of perceived racist events and sexist events was not found to be a significant and unique predictor of sense of personal control, psychological distress, or self-esteem. Moradi and Subich (2003) suggested that the significant correlation between perceived racist events and perceived sexist events ($r = .69$), combined with their overlapping relations with psychological distress, may point to an underlying fused construct of racism and sexism for African American women. Considering that the correlation between perceived racist events and sexist events was also quite high with the current sample ($r = .65$), and the magnitude of the correlation between perceived racist events and psychological distress ($r = .24$) and perceived sexist events and psychological distress ($r = .22$) was quite similar, an analogous fused or overlapping construct may be present for Asian American women as well. However, the potential influence of shared method variance (i.e., similar questions and identical response format of the GED-Recent and SSE-Recent) should not be overlooked.

Given calls in the literature to attend to indicators of psychological well-being as well as psychological distress (e.g., Sandage, Hill, & Vang, 2003; Seligman, Steen, Park, & Peterson,

2005), the links of perceived racist events and perceived sexist events with self-esteem were also examined in the present study. As discussed previously, the findings regarding a link between perceived discrimination and self-esteem have been mixed, with some studies reporting a negative relation (e.g., Swim et al., 2001; Pak, Dion, & Dion, 1991) and others reporting no such link (e.g., Cassidy, O'Connor, Howe, & Warden, 2004; Moradi & Subich, 2004) with samples of Asian women and predominately (or presumably) White women. In the present sample of Asian American women, bivariate correlations of perceived racist events and sexist events with self-esteem were non-significant and in the path analysis, perceived racist events and sexist events did not have unique direct or indirect links with self-esteem. Lack of a significant link between perceived sexist events and self-esteem is consistent with prior literature with samples of predominately White women (e.g., Fischer & Holz, 2007; Moradi & Subich, 2004). While there is some prior support for a perceived racism-well-being link with Asian American samples (e.g., Pak et al., 1991), previous studies did not include other indicators of discrimination in their analyses. It is important to acknowledge that findings from prior studies of racial/ethnic minority samples of women and men and samples of predominately White women may not be directly comparable to the current study given this study's focus on Asian American women and simultaneous examination of perceived racist events and sexist events. However, in the only study to examine ethgender discrimination (a combination of racism and sexism) and self-esteem with a sample of African American women, King (2003) found no relation between ethgender discrimination and global self-esteem. Furthermore, as with the present study, global self-esteem was operationalized with the Rosenberg Self-Esteem scale (1965). Thus, the current examination could be considered to be an extension of King's (2003) findings to Asian American women.

In addition to examining the direct links of perceived racist events and perceived sexist events with mental health indicators, their indirect links through sense of personal control, were also examined. As predicted, sense of personal control was found to be related to greater psychological distress and lower self-esteem. In addition, when all variables were considered simultaneously in the path analysis, perceived racist events were found to be related, indirectly through sense of personal control, to psychological distress. This result is consistent with both Moradi and Hasan's (2004) and Moradi and Risco's (2006) findings with samples of Arab American persons and Latina (o) persons, respectively. It is also consistent with Branscombe and Ellemers (1998) assertion that perceived discrimination experiences undermine an individual's sense of personal control which, in turn, is related to greater psychological distress. Unlike Moradi and colleagues' (2004, 2006) findings, however, the indirect relations between perceived racist events and self-esteem, through sense of personal control were not significant in the present study. Taking into consideration that many of the constructs (perceived racist events, sense of personal control, self-esteem) were operationalized with identical measures in all three studies, it seems important to examine the deviations of the current model.

First, unlike the studies conducted by Moradi and her colleagues (2004, 2006) which analyzed data from women and men, the present study focused on the experiences of Asian American women alone. Second, the model in the current study included a measure of perceived sexist events in addition to a measure of perceived racist events. Finally, the present study accounted for the influence of several covariates. Thus, it may be that the current model represents a more stringent examination of the perceived discrimination-mental health link with Asian American women, resulting in slightly modified results. However, it is important to highlight the consistent link, directly and indirectly through sense of personal control, between

perceived racist events and psychological distress in the three separate investigations. Racism has been conceptualized to have deleterious effects on the mental health of racial/ethnic minority persons (e.g., Fisher & Shaw, 1999; Klonoff & Landrine, 1996) and the current study contributes to accumulating data that are consistent with this assertion.

Beyond the stated hypotheses, a number of additional important findings were obtained. First, consistent with Moradi and Risco's (2006) results with Latina (o) persons, acculturation and enculturation were found to be related directly and positively to sense of personal control. Also consistent with their findings, acculturation and enculturation were each found to be related, indirectly through sense of personal control, to lower psychological distress and greater self-esteem. Prior studies with Asian American samples have found a fairly consistent relationship between acculturation and greater mental health (e.g., Mehta, 1998; B.S.K. Kim & Omizo, 2005, 2006). Findings regarding enculturation have been more complex. Hovey, Kim, and Seligman (2006) found that enculturation was related positively to psychological distress and negatively to self-esteem with a sample of Korean undergraduates. On the other hand, with their subsample of Chinese American women, Tsai, Ying, and Lee (2001) found that pride in Chinese culture was related positively to self-esteem.

It is important to note that Hovey et al. (2006) did not examine the experiences of Korean American women and men separately. Given that Asian American women report greater psychological distress than Asian American men (e.g., Chung & Kagawa-Singer, 1993) and have been found to report significantly lower self-esteem (Tsai, et al., 2001), it may be that combining Asian American women and men into a single group obfuscates important gender differences in the variables of interest. Furthermore, prior studies with Asian American samples have not examined potential intervening variables in the links of acculturation and enculturation with

mental health. Considering the findings of the current study, and the ostensibly complex nature of the constructs of acculturation and enculturation, additional studies are needed to explore the relations of acculturation and enculturation to mental health-related variables with Asian American samples and other samples with recent immigration histories.

In addition, self-esteem was found to be a significant moderator in the perceived racist events-distress and perceived sexist-events-distress links. More specifically, perceived discrimination experiences (i.e., racist events and sexist events) were found to be related positively to psychological distress for Asian American women with low self-esteem but were unrelated to distress for Asian American women with high self-esteem. These results are consistent with findings reported with samples of predominately White women and sexual minority men (Moradi & Subich, 2004; Szymanski, 2009). These authors found that the links between perceived sexist events and psychological distress and between perceived heterosexual events and psychological distress were moderated by self-esteem. Furthermore, as in the current study, simple slope analyses in these prior studies indicated that the positive associations of perceived sexist events and heterosexual events with psychological distress were significant only for participants with low self-esteem. It may be that individuals with a stronger sense of their own self-worth are more able to dismiss negative interpersonal interactions (i.e., perceived racist, sexist, heterosexual discrimination) than are individuals with a lower sense of their own worth (Moradi & Subich, 2004). Thus, the perceived discrimination-distress link may be especially important to attend to with clients presenting with self-esteem concerns in counseling. Finally, although the percentage of total variance accounted for in psychological distress by the interaction terms seems low, 2% is well within the range (i.e., 1% to 3%) typically observed in nonexperimental research (McClelland & Judd, 1993).

Limitations

The findings of the present study should be considered in light of a number of limitations. First, the present sample of predominately undergraduate and graduate students is not representative of the diverse population of Asian American women. Additional studies are needed to determine the replicability of the present findings with other samples of Asian American women who vary in terms of age, level of education, socioeconomic status, and sexual orientation.

Another limitation of the current study is the use of self-report measures. With self-report data, results are based on individual's judgments which may or may not be accurate reflections of actual experiences. Indeed, evidence suggests that minority group members may deny experiencing personal discrimination (Crosby, 1984); thus, the data reported here may underestimate the current sample's actual experiences with racism. Fischer and Shaw (1999) discuss the considerable ambiguity that may be present when making inferences about perpetrator's motives (e.g., racism, sexism, personal animosity) in a negative interpersonal interaction. However, in a study comparing interview and self-report methods in the assessment of borderline personality disorder, Hopwood et al. (2008) found that self-report methods were superior to interview methodology when assessing more experiential symptoms (e.g., identity issues, feelings of emptiness). This may be relevant to the self-reported constructs in the current investigation (i.e., perceived experiences of discrimination, sense of personal control, psychological distress, self-esteem) which seem experiential in nature.

In addition, the present cross-sectional, correlational design does not allow for causal inferences. Consequently, perceptions of discrimination may lead to greater psychological distress or greater psychological distress may lead to more perceptions of discrimination. Future

experimental and longitudinal studies could help to clarify the direction of causality and prediction in the posited relations between perceived discrimination and mental health indicators.

Lastly, perceived racist events and perceived sexist events exhibited a good deal of overlapping variance in the current study ($r = .65-.67$). This may have made unique relations in the path analysis more challenging to identify. The measures used to operationalize perceived racist events and sexist events were quite similar in terms of types of questions asked and identical in the response scale used. Consequently, it is difficult to ascertain whether the shared variance between perceived racist events and sexist events was the result of similar, fused, or intersecting constructs or method variance. Future studies utilizing more distinct measures of perceived discrimination could help to elucidate this relationship and the link of these variables to indicators of mental health.

Implications for Future Research and Practice

Despite the limitations just discussed, the current study provides useful information for future research and practice. The current study was the first to examine the simultaneous links of perceived racist events and perceived sexist events with mental health of Asian American women. Results indicated that perceived sexist events were related directly and positively with psychological distress and perceived racist events were related indirectly to greater psychological distress through sense of personal control. Such findings underscore the importance of attending to perceived discrimination experiences in research and practice with Asian American women. In addition, the results of the current study support the assertion made by scholars who examine the experiences of racial/ethnic minority women (e.g., Porter, 2000) that it is important to consider the multiple minority identities of racial/ethnic minority women and the experiences that possessing multiple minority identities may elicit from others. For instance, in practice, it may be important for therapists to assess and explore perceived racist and sexist events with intention

when working with Asian American women. By introducing these topics, and their potential relation to psychological distress for Asian American women, therapy could provide an opportunity to explore and discuss these discrimination experiences in a safe context.

These findings also highlight the importance and potential benefits of investigating complex interrelations in the experiences of Asian American women. For instance, examination of the simple bivariate correlations of acculturation and enculturation with mental health indicators suggested that acculturation was related positively to sense of personal control and self-esteem and unrelated to psychological distress. Similarly, enculturation was not correlated significantly to any mental health-related variable. When all variables were considered concurrently, however, both direct and indirect relations beyond what emerged in the bivariate correlational analyses became apparent. Furthermore, these findings support the emerging conceptualization of acculturation and enculturation as a bidimensional process whereby an individual can report low to high adherence to the host and indigenous cultures. Indeed, the current sample was highly acculturated ($M = 4.57$, $SD = .81$, Range = 1- 6) and enculturated ($M = 4.75$, $SD = .85$, Range 1- 6), suggesting that the two concepts are not mutually exclusive.

Finally, the findings of the present study point to the potential importance of sense of personal control and self-esteem in the mental health of Asian American women. With regard to sense of personal control, despite the seemingly individualist origins of this construct, this variable emerged as an important one to consider. In the path analysis, sense of personal control was found to have direct links with perceived racist events, acculturation, enculturation, relationship status, employment status, self-esteem, and psychological distress. Additionally, perceiving more racist events, being more acculturated, being more enculturated, not being single, and being employed full-time each were related to less psychological distress and greater

self-esteem, indirectly through sense of personal control. These findings highlight the importance of utilizing prior research (e.g., Moradi & Hasan, 2004) and theoretical considerations (e.g., Branscombe & Ellemers, 1998) in choosing potential intervening variables of interest. Our findings suggest that helping Asian American women to develop greater sense of personal control could be a point of intervention.

Importantly, these interventions should not aim to persuade Asian American women that they can control discrimination, which could be harmful. Rather, future studies are needed to explore mechanisms of promoting sense of personal control with samples of Asian American women (and other minority samples). One potentially fruitful area for examination is participation in collective action. For instance, Szymanski and Owens (2009) found that involvement in feminist activities (e.g., participating in feminist rallies, donating money to feminist organizations) moderated the relation between perceived sexist events and psychological distress. Perhaps involvement in consciousness-raising activities increases one's sense of personal control which, in turn, is related to less psychological distress.

Despite the common utilization of self-esteem as an indicator of well-being in the discrimination-mental health literature (Moradi & Risco, 2006), few studies have examined the potential buffering role of self-esteem in the link of discrimination with psychological distress (Moradi & Subich, 2004). Thus far, self-esteem has been found to moderate the racism-distress (Fischer & Shaw, 1999), sexism-distress (Corning, 2002; Moradi & Subich, 2004), and heterosexism-distress (Szymanski, 2009) links with samples of African American individuals, predominately White women, and sexual minority men, respectively. The results of the current study add to the accumulating evidence by finding that self-esteem moderates both the racism-distress and sexism-distress links with Asian American women. These findings have important

potential implications for practice. If self-esteem indeed buffers the psychological distress effects of myriad discrimination experiences perceived by diverse minority populations, self-esteem levels would be especially important to assess in therapy. Furthermore, specific interventions aimed at promoting greater self-esteem levels could prove fruitful. Future studies are needed to replicate and extend these findings with other samples of racial/ethnic minority and sexual minority samples.

Studies such as this one, which find a link between perceived discrimination experiences and mental health, point to a need to examine ways in which the discrimination experienced by minority individuals may be reduced. In order to combat discrimination most effectively, investigations of both the targets and perpetrators of discrimination are needed. In an interesting investigation with undergraduate students, Hing, Li, and Zanna (2002) utilized a hypocrisy induction intervention to reduce discriminatory behavior toward Asian individuals on campus. More specifically, participants who endorsed items reflecting aversive racist attitudes (i.e., low explicit racism and high implicit racism) were asked to write an essay discussing the importance of treating minority students fairly on campus. Subsequently, participants in the hypocrisy condition were also asked to briefly describe two situations in which they had treated an Asian individual in a discriminatory manner. Finally, participants were asked to complete an anonymous ballot concerning budget cuts across 10 student groups at the university. Discriminatory behavior was operationalized as the percent of budget cuts proposed for the Asian Student's Association (ASA). The authors found that aversive racists in the hypocrisy condition made significantly fewer cuts to ASA's budget than those in the control condition. Hing et al. (2002) hypothesize that participant's recognition of inconsistencies between their behavior and purported egalitarian attitudes may result in feelings of guilt and discomfort. In

turn, these negative feelings could motivate behavior change. Additional studies that examine discrimination experiences from the perpetrator's perspective, with the goal of reducing prejudicial attitudes and discriminatory behaviors, are needed.

Summary

Results of the current study largely replicate prior findings on the roles of sense of personal control and self-esteem in the relation of perceived discrimination experiences with mental health (e.g., Moradi & Hasan, 2004; Moradi & Risco, 2006; Moradi & Subich, 2004). Sense of personal control and self-esteem emerged as important variables to consider in the perceived discrimination-mental health link; with self-esteem emerging as a moderator in this link and personal control emerging as a mediator in the relation between perceived racist events and psychological distress. In addition, the current investigation's findings suggest that attending to acculturation and enculturation is also important with Asian American women. Future studies should examine mechanisms for promoting sense of personal control in samples of Asian American women and replicate the current study's findings with other minority samples. Studies that investigate ways in which to reduce perpetrator's prejudicial attitudes and discriminatory behaviors are also needed.

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BIOGRAPHICAL SKETCH

Cirleen DeBlaere was born in Okinawa, Japan. She grew up overseas and in South Florida. She graduated cum laude with a Bachelor of Arts in psychology from Boston University in 2000 and received a Master of Arts in psychology from New York University in 2004. She received her Doctor of Philosophy in counseling psychology from the University of Florida in the summer of 2009 and will subsequently begin her appointment as an Assistant Professor in the APA-accredited Counseling Psychology Program in the College of Education at Lehigh University.