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Relations among psychosocial risk factors, coping behaviors, and depression symptoms in late adolescent West Indian girls.

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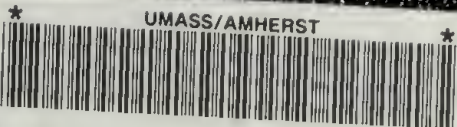
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RELATIONS AMONG PSYCHOSOCIAL RISK FACTORS, COPING BEHAVIORS,
AND DEPRESSION SYMPTOMS IN LATE ADOLESCENT WEST INDIAN GIRLS

A Dissertation Presented

by

SHARLENE TANICA BECKFORD

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

SEPTEMBER 2003

Department of Psychology
Clinical Psychology

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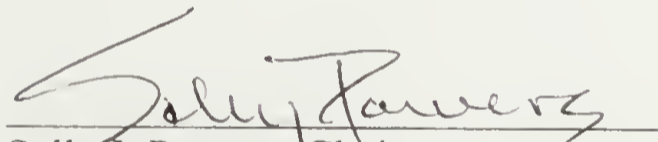
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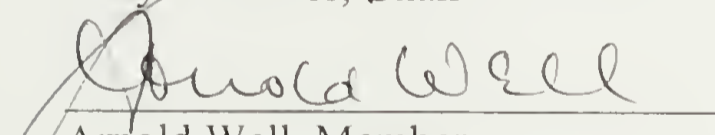
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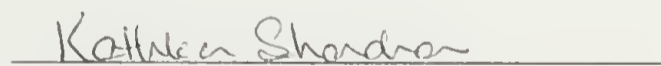
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DEDICATION

I dedicate this dissertation to my family; and especially to my mother for the sacrifices she made to ensure that I could pursue my dreams.

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I would like to thank my advisor and the Chair of my Dissertation Committee, Sally Powers, for her support, guidance, patience, and wisdom. Her thoughtfulness and her willingness to support my interests made this dissertation possible. I would also like to thank the other members of my dissertation committee, Arnold Well, Kathleen Shanahan, and Kevin Nugent, who all contributed greatly to my academic development and offered useful comments towards this dissertation. I must also thank Margaret Stephenson and Geert DeVries for their encouragement over the years.

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ABSTRACT

RELATIONS AMONG PSYCHOSOCIAL RISK FACTORS, COPING BEHAVIORS, AND DEPRESSION SYMPTOMS IN LATE ADOLESCENT WEST INDIAN GIRLS

SEPTEMBER 2003

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Many researchers attest to the emergence of gender differences in depression rates during adolescence, and have discussed how gender-linked risk factors and challenges faced in early adolescence might explain increased vulnerability in adolescent girls. However, many have not included immigrant and minority populations and on this basis the relations among acculturation related stress, race related stress, coping behaviors, and depression symptoms in late adolescent and young adult West Indian females were examined in this study. A sociodemographically diverse group of 130 first and second-generation immigrant females (aged 17-26) with ethnic roots in 12 Caribbean islands were recruited from colleges and community organizations in Massachusetts and New York. Participants completed a packet containing a demographics form and measures assessing acculturation, stressful life events, frequency and stressfulness of racist events, coping styles, and depression symptoms.

Independent t-test analyses comparing the two generations showed that first generation respondents were more immersed in their ethnic society and second

generation respondents were more immersed in dominant society. Paired t-tests showed that respondents from both generations perceived their parents to be more immersed in ethnic society, while they rated themselves as more immersed in dominant society.

Contrary to prediction, there were no generational differences in depression symptoms, perception of racist events, or the use of different coping behaviors. Hierarchical regression analyses in which the level of depressive symptoms was regressed on the generation status, risk factor score, coping behavior, risk factor X coping behavior interaction term, and generation X risk factor X coping behavior, revealed that coping behaviors moderated the relationship between psychosocial stressors and depressive symptoms for second generation respondents but not first generation respondents.

These findings illustrate the importance of integrating cross-cultural considerations in developmental models of depression. In addition, the impact of cultural socialization on the respondents' expectations and beliefs, and implications for therapy and research are discussed.

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CHAPTER 1

INTRODUCTION

Various explanations have been presented for the emergence of the gender difference in depression rates during adolescence. However, few models have considered the impact of ethnic minority status in their explanations. This is surprising given that ethnic minority and immigrant youths have increased exposure to factors linked to higher rates of depression. The present study explores the relations among acculturation related stresses, perception of racist events, and coping behaviors to depression symptoms, using a sample of late adolescent immigrant girls.

This dissertation includes a review of the risk factors for depression faced by immigrant youths from ethnic minority groups. The literature reviewed includes studies conducted mainly with Latino and Asian populations; however, the current study focuses on the factors associated with depressive symptoms among young West Indian immigrant women. Immigrant youths, in general, are understudied and not well understood, and the lack of research on West Indian youths is indicative of a much larger gap in this growing body of research. As immigrant populations continue to increase in this country however, diversity issues will become more prominent. As such, the utility of developmental models might be determined by their applicability to diverse groups.

The review also discusses existing models of the emergence of the gender difference in depression rates and discusses the applicability of these models to minority immigrant youths. Another aim of this study is to explore how individual differences contribute to girls' greater vulnerability and why some girls develop depression and other girls do not. The current study focuses on individual differences in life experiences and

depressive symptoms using a sample of late adolescent West Indian females. Throughout this dissertation, the terms *depressive* or *depression symptoms* are used to denote self-reported depression symptoms rather than clinical depression (Gjerde, Block, & Block, 1988). Investigating the range of depression symptoms is important to understanding the process that leads to clinical depression, as the presence of depressive symptoms is a significant risk factor for developing a major depressive disorder (Compas, Ey, & Grant, 1993). The present study will increase our understanding of immigrant adolescent females' vulnerability to depressive symptoms, and will strive to clarify current research findings from acculturation studies, as well as indicate useful therapy and research directions.

1.1 Overview of Research on Epidemiology of Depression

Starting in the 1970s, researchers and clinicians first noticed a rise in rates of depression among adolescents and young adults. It is during adolescence that depression most frequently appears, and the highest rates of depression are found among young adults. Depending on the criteria used in assessment, between 7% and 33% of adolescents are affected by depression (Petersen, Compas, Brooks-Gunn, Stemmler & Grant, 1993). Compare this to less than 1% among preschool age children (Kashani & Carlson, 1987), 2% to 3% of children under age 12 (Angold & Costello, 1993), and 17% lifetime prevalence among adults. In general, there is little, if any, gender difference in rates of depression among children. Where differences are found, there are higher rates of depression among boys than among girls (Nolen-Hoeksema & Girgus, 1994). These gender differences appear between ages 12 to 14 and remain constant through adulthood, then diminish among the elderly.

1.2 Culture and Depression

Review of cross-cultural studies and epidemiological reports suggest that culture and social norms affect the expression of psychological distress. For instance, one study comparing depression symptoms in Koreans living in Korea, Korean immigrants to China, and Chinese living in China, found that their presentation of symptoms fell within a continuum and reflected various social and cultural values (Kim, Li, & Kim, 1999). Koreans living with higher levels of depressive symptoms manifested more psychological symptoms and fewer somatic symptoms than did Chinese with higher depressive symptom scores. Interestingly, Korean-Chinese with higher levels of depressive symptoms were in the middle of the “somatic-psychological continuum”, and manifested intermediate levels of psychological and somatic complaints. In North America, many immigrants continue to exhibit a mix of somatic and psychological symptoms, but are closer to the somaticizing end of the continuum than are North Americans. Studies done in North America find that Korean American participants report more depressive symptoms than their American counterparts (Aldwin & Greenberger, 1987), and present more somatic complaints than psychological ones (Lin, Lau, Yamamoto, Zheng, Kim, Cho, & Nakasaki, 1992). Overall, studies conducted in developing countries find that depression often presents with somatic symptoms.

There are also studies that suggest cultural socialization plays a role in the level of depressive symptoms observed. Strong family loyalty is characteristic of many immigrant families from non-Western cultures, and the family is an important agent for cultural socialization; it then follows that cultural norms might have a larger influence on adolescent behavior within cultural groups with strong family bonds. For example, a

study conducted in Thailand and the U.S. found that Thai children and adolescents reported more internalizing problems than U.S. children and adolescents (Wiesz, 1987). The cultural background of Thai children emphasizes self-control and emotional restraint, which increases the likelihood of psychological distress being expressed through internalizing symptoms rather than through culturally unacceptable conduct problems. The diversity in the symptoms presented by U.S. children is attributed to weaker cultural norms around self-control or emotional restraint. Other studies have also revealed differences and similarities in the family process variables that contribute to depressed mood among youths from immigrant groups (Greenberger & Chen, 1996).

Although many studies have concluded that there is an increased risk for depressive symptoms among ethnic minority groups, the results are far from conclusive. Okazaki (1997) reviewed several studies that found ethnic differences in depression rates among a sample of female college students, such that Japanese, Chinese, and Korean American females had higher rates of depression than their White counterparts. However, Okazaki demonstrated that although Asian American participants reported more depressive symptoms than White Americans did, after controlling for levels of social anxiety, this difference was no longer significant. Studies with other immigrant populations have reported similar results. However, conceptual definitions of culture, race, and ethnicity are not always clear in these studies. Further, important psychosocial factors such as immigration stressors, acculturation level, and immigrant generation status are not always assessed.

1.2.1 The Immigrant Experience

Recent shifts in immigration rates and patterns have contributed to an increase in the number of racial minority immigrants and refugees living in the United States. The increasing diversity of the United States population requires a critical examination of theories and models that guide research. Even though there has been a significant increase in the quantity of studies on immigrant populations, most studies remain exploratory and tentative. Many studies discussed here represent seminal works in a growing area of research and have not yet been replicated.

The immigration process is a stressful experience, and places adolescents and their families at risk for economic strain, poverty, homelessness, and discrimination. Not only do members of ethnic minority groups experience lower socioeconomic status in society, but also adult members of first generation immigrant families often experience professional downward mobility and start life in their new country under trying economic and social conditions. For the most part, existing studies do not clearly separate the effects of immigration from social and economic risk factors. As a result, the effects of immigration are not widely understood. In light of these post-immigration stressors, Beiser (1987) has proposed that conditions after arrival in a new country may have more influence on psychological health than do pre-immigration conditions.

Further, in many studies, no distinction is made between immigrants and refugees. Refugees make up a significant portion of migrants living in the United States. However, their pre-migration and post-migration experiences differ from that of “voluntary” immigrants. Refugees often leave their country because of political oppression, war, starvation, or natural disasters. Many have a history of traumatic experiences and suffer

related psychological distress. Refugees often arrive in their new home without family or friends, and often without any knowledge of the whereabouts or status of important friends and relatives. This dissertation focuses on immigrant populations. Immigrants usually chose to migrate to the U.S. to improve their economic and educational opportunities or to reunite with other family members, without the threat of impending doom in their homeland. They often migrate with other family members or relocate to communities that have an ethnic enclave.

The severity of the losses experienced by refugees suggest they might experience higher levels of depressive symptoms, however, it is important to note that immigrants also endure the stressors of losing their homeland, their family, and their friends. As a result, many immigrant children and adolescents struggle with an overwhelming sense of loss. Suarez-Orozco and Suarez-Orozco (1995) note that among immigrant youths there is “a preoccupation with losses and a sense of sadness related to the upheaval of immigration... Not only are immigrant youths preoccupied with their own losses, but the stresses and losses of their parents affect their psychological ability to help their children meet the challenges of adolescence or adjust to the new country...[or] to help their children work through their losses and stresses” (p.187). Immigrant youths suffer through major losses and often have no one to turn to for guidance or support. Adolescents’ perceptions of available support have been shown to protect against the development of depressive symptoms (Samaan, 1998).

1.2.2 Acculturation and Depression

Not only is the immigration process itself stressful, but upon arriving in a new country a process of acculturation begins that may compound the stress experienced by

adolescents and their families. Broadly defined, acculturation refers to the process individuals and groups undergo when they come into continuous contact with people or societies different from their own (Berry, 1996), and irrespective of ethnic background, the process of acculturation appears to be predictable and similar across acculturating groups (Stephenson, 2000). Two main models of acculturation have been proposed in the literature. In one model, acculturation is conceptualized as a linear phenomenon, occurring along a continuum from unacculturated to acculturated (e.g. Salgado de Snyder, 1986). A more refined model describes acculturation as a process that occurs along two independent dimensions: immersion in the dominant society and immersion in the ethnic society, (for more detail see Berry 1996; see Table 1). More recently, researchers have also redefined different aspects of acculturation. For instance, Erkut et al. (2000) measured psychological acculturation or *identification* with ethnic or mainstream culture, and behavioral acculturation or *participation* in ethnic or mainstream cultures.

Some researchers also distinguish between different categories of acculturative stress, classifying acculturative stress into five categories: physical stressors (e.g. climate and housing), biological stressors (e.g. change in diet), cultural stressors (e.g. change in political and religious institutions), social stressors (e.g. change in status from majority to minority group status) and, psychological stressors (e.g. change in attitudes and values) (Shin, 1993). There are no empirical studies that examine these specific categories of acculturation stress or their associations with depressive symptoms.

Using a general measure of acculturative stress, Hovey (1998) explored the relations among acculturative stress, depression, and suicidal ideation in a sample of

Table 1: Acculturation strategies/outcomes

		ETHNIC SOCIETY IMMERSION	
		HIGH	LOW
DOMINANT SOCIETY IMMERSION	HIGH	INTEGRATION	ASSIMILATION
	LOW	SEPERATION	MARGINALIZATION

Mexican-American high school students. Among Mexican-American adolescents, high acculturative stress was associated with elevated depressive symptom levels and increased suicidal ideation. Similar results were found among adult Korean women, (Shin, 1993), but statistically controlling for age, education level, and income reduced the significance of the relationship.

Researchers have argued that women experience the stresses of immigration differently and more seriously than men, and that the severity of the stressors experienced is often expressed in symptoms of depression (Kim & Rew, 1994). Allen, Denner, Yoshikawa, Seidman, & Aber (1996) also note that the inconsistency between traditional cultural roles for women and middle-class white culture can create distress for adolescent Latino girls. Some researchers suggest that identification with mainstream culture appears to play a protective role for girls' self esteem (Erkut et al., 2000), and can also be a protective factor in the development of depressive symptoms in low income, urban Latino girls (Allen et al., 1996). It appears that cultural differences place less acculturated girls at increased risk for depression when they encounter adolescent challenges.

Salguero & McCusker (1996) studied clinical symptoms among a sample of Latino adolescent girls and found more symptoms of depression, oppositional and aggressive behaviors, and suicidal ideation among less acculturated girls compared to more acculturated girls. The authors argue that these behaviors (especially aggression and oppositional behaviors) might be a "desperate attempt" by less acculturated girls to communicate distress to their families. Low acculturation might diminish their ability to benefit from outside resources (e.g. therapy), while they might not benefit from their

internal resources (e.g. high self-esteem) (Allen et al., 1996). These studies suggest a strong link between low acculturation and high levels of depression. However, Sam and Berry (1995) found no relation between years of residence and psychological distress among immigrant youth in Norway, and Liebkind (1996) found psychological distress and anxiety increased with the number of years Vietnamese refugees lived in Finland. The number of years since immigration to a country is often used as an approximation of level of assimilation or immersion in mainstream society (Lay & Nguyen, 1998)

In general, evidence is inconsistent concerning the direction of the effects between depression and acculturation level. The use of simple and inadequate measures of acculturation in previous studies of acculturation and depression might explain the lack of consistent findings. Cultural norms might also account for some of the inconsistency. Immigrant youths might express psychological distress through depression symptoms because their ethnic culture discourages delinquent or acting out behavior, while non-immigrant adolescents and immigrant adolescents who are highly immersed in mainstream culture will present with externalizing disorders. The lack of distinction between immigrant generations might also explain equivocal findings. Immigrants are at risk for depression for different reasons. Acculturation status might be strongly associated with depression among first generation immigrants, while discrimination, racism, and minority status might have more predictive power among second-generation immigrants. This dissertation will attempt to clarify some of these relationships; others must be addressed in future research.

1.2.3 Differential Acculturation and Depression

Another potential stressor for immigrant adolescents occurs when parents and adolescents experience the process of acculturation differently and do not have the same adaptation strategy or outcome. The difference in the acculturation outcome of parents and their children, referred to as *differential acculturation*, is thought to be due in part to differences in their acculturation processes (Nguyen & Williams, 1989; Berry, 1996). Whereas parents are well grounded in their ethnic identities, children of immigrants are more malleable to socialization and social pressures than are their parents. For instance, adolescents are socialized into the dominant society through the media, schools, and peer groups that often include members of the dominant group. This difference in process can result in adolescents being less entrenched in the values that are rooted in their ethnic societies. Few researchers have studied the topic of differential acculturation and none have explicitly examined the relationship between differential acculturation and immigrant girls' increased vulnerability to depressive symptoms.

Nguyen and Williams (1989) explored the cognitive adaptation of Vietnamese refugee adolescents and their parents to Western culture. They found that parents were more likely to endorse traditional Vietnamese values whereas their adolescents, especially girls, were more likely to reject these same values. Stronger effects for girls' than for boys most likely result because American family values for girls are different and less stringent than the traditional Vietnamese roles for girls. In addition, they also found that while parents adhered to traditional values, regardless of length of stay in the U.S., adolescents were likely to shift away from these values. Rasmussen, Negy, Carlson, & Burns (1997) found no gender differences in acculturation levels. They compared low

income Mexican American male and female adolescents and found that females had significantly higher depressive symptoms, lower self esteem scores, but were no different from males in acculturation levels as measured by the Acculturation Rating Scale for Mexican Americans (ARSMA). Gender differences in depression might be due to Mexican American female adolescents' experiencing more stress during adolescence because of cultural and gender role conflicts. Rasmussen et al. notes "the conflict between adhering to contemporary adolescent norms and maintaining relatively more traditional customs expected by less acculturated parents may be more intense, and thus more problematic, for Mexican American females than for Mexican American males" (pg. 402).

1.2.4 Socioeconomic Stress, Minority Status, Depression

Overall, members of ethnic minority groups experience lower economic status in society, and their low SES places them at high risk for psychopathology. Nationwide, 48% of Puerto Rican adolescents live in single parent households, and 51% of Puerto Rican children under 18 live in poverty (Erkut, Szalaha, Garcia Coll, & Alarcon, 2000). Further, racial or ethnic minority girls are more likely to live in poverty than are White adolescent girls, and the stressors experienced by underprivileged youths might exacerbate vulnerability to depressive symptomatology and adjustment disorders (Luthar & Blatt, 1995) and possibly interact with gender differences in vulnerability to depression.

Samaan (1998) reviewed several studies that identified the effects of socioeconomic status, culture, ethnicity, and race on the mental health of children and adolescents. Overall, children with a history of poverty had higher levels of depressive

symptoms and were at increased risk for mental health problems. Samaan argued that poverty had an indirect effect on depression through changes in parenting styles and also by disrupting supporting systems. Ethnic differences in depression scores were also noted in several studies. However, when SES is controlled, ethnic and racial differences in depression levels decrease in significance, and in some cases ethnic minority children and adolescents had lower rates of depressive symptoms than did white children at similar poverty levels. The author suggests religiosity and communal experiences might be possible mediators of the effects of poverty on psychological distress among ethnic minority children.

1.3 Models for the Emergence of Gender Differences in Depression During Adolescence

Reviewers of the research on adolescent depression have provided several models that help us to understand what may increase vulnerability for girls. Nolen-Hoeksema and Girgus (1994) present and evaluate three competing models for the emergence of gender differences in depression during early adolescence. They reviewed research that examined personality characteristics hypothesized to lead to gender differences in depression, and concluded that gender differences in these personality characteristics (e.g. coping, interaction styles and assertiveness) are established in childhood and therefore fail to explain the gender difference that arises in adolescence. A second major model that they evaluated states that different variables are correlated with depression in males and females. However, studies show that these variables (e.g. lack of instrumentality, peer popularity, and the presence of sexual abuse) are correlated with depression in both males and females, but girls experience these stresses more. Nolen-Hoeksema and Girgus (1994) conclude that the majority of studies on depression support

a third model. This model suggests that gender differences in pre-adolescent personality and behavioral styles are diathesis or risk factors that interact with major stressful experiences in early adolescence to contribute to greater depression in females than males.

Leadbeater, Blatt and Quinlann (1995) also reviewed the research on adolescent depression and argued “differential vulnerabilities to interpersonal or self-critical depressive experiences, when potentiated by stressful life events involving the self and/or others, differentially predict higher levels of internalizing or externalizing problem behaviors in girls and boys,” (pg.2). Two types of depressive vulnerabilities are discussed: interpersonal depressive style and self-critical depressive style. Leadbeater and colleagues believe that interpretations of negative life events will be guided by depressive vulnerabilities. Girls are presumably more reactive to interpersonal concerns and are no different from boys in their reactivity to self-critical incidents. Girls show higher levels of depression in reaction to both types of stressors. Boys, on the other hand, are less concerned with interpersonal stresses and react to self-criticism with externalizing behaviors.

Nolen-Hoeksema (1994) reviewed the literature on ruminative style of coping with depression symptomatology, gender differences in rumination, and gender differences in social conditions and negative life events. She argues that women of all ages are more likely to engage in ruminative coping (that is, passively ruminate on their problems and inner distress) than are males. Further, rumination is linked to longer periods of depression and more severe depressed mood. Nolen-Hoeksema (1994) also discussed important gender differences in social conditions and negative life events. For

example, adolescent girls are up to three times more likely to be victims of sexual abuse, and it is estimated that 35% of the gender difference in depressive disorder is associated to sexual abuse. Finally, gender role conformity is linked to increased risk for depression among girls but not boys. Nolen-Hoeksema concludes that a significant amount of the gender differences in depression rates seen in adolescents can be accounted for by the interaction between less active coping styles of pre-adolescent girls and the challenges faced in early adolescence.

Together, these models suggest gender differences in depression emerge in early adolescence because of an interaction between personality and coping styles and stressful life events. Nevertheless, they do not fully account for gender differences in depression. Evidence for these models was gathered primarily from studies that included White North American samples. While most authors acknowledge the role of psychosocial factors in gender-linked differences in psychopathology, these models overlook racial, ethnic, and cultural factors in adolescent girls' depression.

Although gender stereotyping is embedded in cultural values of appropriate sex role behavior, few researchers have considered whether this relation might differ across cultures or by ethnicity. One model that attempts to account for psychosocial factors in depression rates is Wichstrom's (1999) extended gender intensification model (EGIM). In general, sex roles attribute active, instrumental behaviors to males, and more passive, emotional behaviors to females. Further, sex roles vary in degree across cultures, creating larger gender differences between sex roles in certain cultures than in others. Through a large scale study, Wichstrom demonstrated that increased dissatisfaction with physical appearance among Western girls who idealize thinness, and the "acceleration of gender-

differential socialization in early adolescence” (pg. 232), accounted for 90% of the gender related variation in depressed mood among 12, 227 Norwegian high school students. This study also demonstrated that the gender difference emerged between ages 13 and 14, and then remained constant throughout adolescence. While most North American studies have identified a strong negative correlation between masculinity and depression, this study showed high scores for girls and boys on “masculinity”, and found that masculinity was uncorrelated with depressed mood. Although the gender difference in this study reflects that commonly seen in North American studies, the relationships among the predictor variables (e.g. masculinity and femininity) and depression were different, and seemed to reflect the more egalitarian cultural norms of Norway.

1.3.1 Application of Existing Models to Immigrant Youths

Nolen-Hoeksema and Girgus (1994) argued that certain gender-linked personality and coping styles interact with challenges in early adolescence and contribute to high levels of depression among adolescent girls. The majority of studies conducted among immigrant youths have compared them to nonimmigrant youths, and few have explored gender differences or individual differences in personality and coping styles among immigrant children and adolescents. Although there might be a similar pattern of individual differences in personality and coping styles among immigrant youths, expanding the context of investigation to include poverty, minority status, discrimination, immigration, and acculturation along with ethnic culture could reveal distinct patterns among these variables for immigrant girls.

Nolen-Hoeksema (1994) argues that females are more likely to enact ruminative coping than more active styles of responding to depression. She discussed evidence that

girls' face more adversities in early adolescence than do boys, and argue that the interaction between adverse life circumstances and rumination leads to increased depression rates among females. Research on immigrant youths identified frequent use of distracting coping styles, not rumination, in response to negative life situations. Colomba, Santiago, and Rosello (1999) found that among a sample of Puerto Rican adolescents, investing in family relationships and developing positive perceptions about life situations were negatively associated with the severity of depressive symptoms reported by adolescents. Further, developing positive perceptions about life situations was the most frequently used coping strategy. Beiser (1987) noted that adult refugees are more present oriented. Although previous research has provided no evidence of gender differences in the use of these strategies among immigrant groups, this is an important area to examine and understand further.

Nolen-Hoeksema (1994) and Nolen-Hoeksema and Girgus (1994) identify increased risk for sexual abuse as one of the challenges girls face in adolescence, however they provide no information on ethnic minority or immigrant girls. Roosa (1999) examined the relation of childhood sexual abuse to depression across ethnic groups and found significant ethnic differences after controlling for background variables. Severity of childhood sexual abuse was the strongest predictor of depression among Mexican American and non-Hispanic White women, but was not a significant predictor among African American or Native American women. Psychosocial factors, including oppression, slavery, and consequences of sexual abuse might begin to explain why women respond differently to sexual assault (Wyatt, 1992). However, cultural beliefs might also influence reactions to sexual assaults. For instance, women from

deeply religious cultures or cultures that place high premium on female “purity” might have more negative adjustment in reaction to sexual assault. Further, for immigrant girls, enduring sexual abuse along with chronic stressors and numerous daily hassles might heighten negative adjustment (i.e. depression, PTSD, substance abuse) to sexual abuse. Similarly, cultural beliefs might impact reactions to a wide variety of psychosocial stressors that have been linked to depressive symptoms.

Nolen-Hoeksema and Girgus (1994) and Wichstrom (1999) hypothesized that pressure to conform to gender role expectations contributes to higher levels of depressive symptoms among adolescent girls. Immigrant girls not only struggle with gender role expectations, but also experience stress from differential acculturation. Existing studies overwhelmingly indicate that cultural and gender role conflicts create more stress for immigrant girls compared to boys and nonimmigrant girls (Allen, 1996; Rasmussen et al., 1997; Nguyen et al., 1989; Salguero & McCusker, 1996).

1.4 The Current Study

This review suggests that culture plays an important role in shaping the type and degree of internalizing problems of adolescents. This review also highlights major shortcomings in this body of research. The majority of studies on girls’ vulnerability to depression have not included representative samples of immigrant and ethnic minority youths, and the majority of studies on immigrant groups have not included adolescents. . Further, because this is a relatively new area of research, there is no theoretical framework for research on immigrant youths. To explore the issues discussed above, this study examined the relations among racist discrimination, acculturation, differential

acculturation, coping responses, and depressive symptoms in late adolescent West Indian females

There are several areas that must be addressed to improve on the existing research. It is important that studies of immigrant populations use improved measures of acculturation. Acculturation is a complex process that cannot be adequately measured by unidimensional or single item (e.g. language use, years of residence in a country) measures. Multidimensional scales have been developed for use among specific populations and among multi-ethnic samples. Further, there is also a need for increased understanding of culture-specific coping strategies among minority and immigrant girls, along with investigations of the association between acculturation and differences in coping (Leite, 2000). Because the literature acknowledges that religion, community, and social supports are important coping resources of minority youths, using scales that measure these dimensions of coping will be an important addition to this area of research. Finally, many studies on immigrant youth are comparative and ignore important within group processes. For example, these studies do not usually examine first and second-generation immigrants as unique populations.

The diverse groups that comprise the Black community in the United States are not widely studied or well understood. Within the Black community there are West Indian and Caribbean immigrants of African descent, continental African immigrants, along with African Americans. Although West Indian immigrants' struggle with immigration and acculturation issues, they also share many common circumstances with African Americans. For example, members of both groups live in communities that are segregated by poverty and race, they share poor and often dangerous neighborhoods,

attend ill-equipped schools, and are subjected to many of the same stereotypes and discriminatory practices. Recognizing diversity in the Black community is important for understanding research findings and providing effective clinical interventions to young people of color from diverse backgrounds.

West Indians have lived in the United States in notable numbers since the early 1900's, however during the latter half of the twentieth century the West Indian population in the United States increased significantly, especially in the states of Florida and New York. Recent figures show that although foreign-born Blacks only make up 5% of the entire U.S. Black population, close to 35% of New York City's Black households are headed by West Indian immigrants (Waters, 1999). This does not include a count of second-generation West Indians living in the United States, for whom there is no census data. There has also been an increase in Caribbean referrals to mental health professionals (Gopaul-McNicol & Brice-Baker, 1997). In fact, in the past twelve years almost 50% of the clients seen in the Psychological Services Center (PSC) at UMass who identified as Black were of West Indian origin (PSC Database, 2001). The present study includes young women who were either born in the United States to West Indian parents (second-generation) or who themselves immigrated to the United States (first generation).

Adolescents who have migrated from the West Indies often experience some level of depression and decreased feelings of self-worth as they struggle to fit in with their new peer group (Arnold, 1997). Their immigrant status and skin color often lead to marginality and a new position as a minority. Although, racism and discrimination have been linked with negative mental and physical health consequences for African Americans, it is not clear in the literature how racism and discrimination affects

immigrant girls of African descent here in America. The most plausible conclusion from the available research is that perceived discrimination increases acculturative stress and decreases the psychological well being of immigrant girls (Liebkind & Jasinskaja-Lahti, 2000).

Similar to the adolescents described in other studies on acculturation (e.g. Nguyen, 1989), young West Indian women might also be drawn towards an American lifestyle which offers more freedom and greater equality than Caribbean households might (Waters, 1996). Leo-Rhynie (1997) discusses pervasive differentiation of boys from girls throughout various developmental stages. Although success and achievement are often encouraged in girls, they are admonished not to become too successful, as their social status should be gained through eventually partnering with a successful male (Brice-Baker, 1994). In general, girls are guided into more domestic and passive roles while boys are encouraged to pursue more active instrumental roles. This distinction keeps daughters close to home where they are monitored through adolescence. After migration, West Indian girls are still expected to help with household duties and to help care for younger siblings. West Indian girls often oppose performing household duties and caring for younger siblings when they recognize that their non-immigrant peers do not have to take on these responsibilities (Arnold, 1997).

The available research on adolescent adjustment provides no clear direction for understanding the adjustment of West Indian girls. Unfortunately, because measures of delinquency /conduct disorders are often exclusively used to assess adolescent adjustment among immigrant and minority youths, the level of depressive symptoms among West Indian girls has not been addressed. While Nicol (1971, cited in Arnold, 1997) reported

that conflicting gender roles contribute to worse outcomes in girls than boys following their migration to the UK from the Caribbean, it has also been argued that disruptions in West Indian families caused by migration affected boys more than girls. Overall West Indian immigrant boys face more racist and violent environments in America (Waters, 1994) and in Great Britain (Arnold, 1997), but receive less support from their parents. In addition, studies conducted in Jamaica suggest that “the absence of a stable maternal figure, low contact between mother and child, poor paternal role models, and instability in living arrangements” (Crawford-Brown, 1997, pg. 218) predict the presence and severity of adolescent conduct disorder among boys. It is possible that girls respond to these same challenges with internalizing symptoms while boys respond with externalizing symptoms.

Outcomes might also differ according to immigrant generation status. Waters (1997) identifies a pattern of downward social mobility among second-generation West Indian immigrants, while other authors suggest the possibility of increased risk for poor psychological adjustment among second generation immigrants (Heras & Revilla, 1994). More specifically, studies conducted in Great Britain have shown that second-generation West Indian youths in Great Britain have higher rate of mental illnesses than their parents do (Littlewood & Lipsedge, 1988). Differences in the perception and experience of racist events might contribute to increased psychopathology among second-generation immigrants. In a large-scale study of second-generation immigrant children, Portes and Rumbaut (2001) report that over 70% of Jamaican-origin children reported experiencing discrimination from peers, teachers, and neighbors. Further, over 50% of the West Indian children in their study expected future discrimination. “The first generation tends to

believe that, while racism exists in the United States, it can be overcome or circumvented through hard work.... The second generation experiences racism and discrimination constantly and develops perceptions of the overwhelming influence of race on their lives” (Waters, 1996, p.191). Immigrant status, makeup of support network, occupation, and place of residence are some of the factors that impact West Indian immigrants’ perception of discrimination (Brice-Baker, 1994).

The majority of the research on West Indian immigrant youth focuses either on adjustment within their families or on psychotic disorders among African-Caribbean immigrants in Great Britain. The West Indies has long been recognized as a migratory society, with families frequently relocating within their own country, within the West Indies, or to North America or Europe. Frequently, parents migrate to the United States and after settling into a job and preparing suitable living arrangements, they have their children join them. This process might take many years. Upon relocating, the West Indian adolescent has to cope with the expected acculturation stressors, and must also negotiate the relationship with a parent she might not know very well. In addition, she is also leaving the relationship with her primary caregiver back home (Lashley, 2000; Roopnarine, 1997). Essentially, adjusting to life in America involves loneliness, new rules, new family relationships, a new peer network, and a shift to ethnic minority status and the stressors this engenders. Despite the numerous adjustment challenges that accompany immigration, mental health issues are not usually discussed among West Indians. Brice-Baker (1994) notes that among West Indians, “men handle psychological distress by going out with other men, while women deal with pain in church...if children

express any feelings that the family is not willing to recognize...that behavior will be seen as a sign of ungratefulness” (pg. 155).

Researchers in Great Britain have studied psychotic disorders among West Indian immigrants extensively, and have found higher rates of schizophrenia among West Indian immigrants (McKenzie, Samele, Van Horn, Tattan, Van Os, & Murray, 2001), especially women (Cochrane, 1977). Racism and the striking cultural shifts that are part of an urban lifestyle are cited as likely etiological factors with this population. There are no studies on depressive symptoms or major depression among West Indian girls in Great Britain.

1.5 Hypotheses and Exploratory Questions

The models reviewed here suggest that the increase in prevalence of girls’ depression emerges in early adolescence because of an interaction between personality styles and stressful life events. However, as girls pass through adolescence, depression rates continue to increase and become more stable. This study explored the relationship between psychosocial stressors and depressive symptoms in late adolescent West Indian females. The principal position of this dissertation is that young West Indian women all face numerous risk factors, specifically, psychosocial stressors that are overrepresented among minority immigrant girls. Despite this, there are likely to be individual differences in these stressors and how girls cope with the stressors, resulting in individual differences in depressive symptomatology.

1.5.1 Comparative-Descriptive Hypotheses

The following hypotheses relate to expected differences in participants’ rating of acculturation status.

1. First-generation West Indian participants will be more immersed in ethnic society than second-generation West Indian participants are. Also, second generation participants will be more immersed in dominant society in comparison to their first generation peers. Validation studies for the Stephenson Multigroup Acculturation Scale (Stephenson, 2000) have described decreased ethnic society immersion and increased dominant society immersion with successive immigrant generations through fourth generation immigrants.
2. All participants will report being more immersed in dominant society than they perceive their parents to be, while participants will perceive their parents to be more immersed in ethnic society than they are. It is acknowledged throughout the literature that children will perceive acculturation differences between themselves and their parents. This difference will hold even in cases where parents and children are from the same immigrant generation. .
3. First and second generation participants will differ in levels of depressed mood.
4. First and second-generation participants will differ with respect to appraisal/frequency of racist events experienced and also in coping strategies used.

1.5.2 Hypothesized Moderator Model

The associations between the variables included in the current study were expected to be complex. Currently there is a dearth of studies on the impact psychosocial stressors experienced by minority girls have on their coping behaviors and psychological adjustment. Past studies have identified racist discrimination and generic stressors as strong predictors of psychiatric symptoms among Blacks (Klonoff, Landrine, & Ulmann,

1999), while other studies have related differences in coping strategies used by immigrant Latina women and nonimmigrant minority women to the prevalence of depression across these groups (Liete, 2000). I expected these results to be confirmed here, but with some qualification when acculturation and differential acculturation were also included as additional risk factors, and coping strategies as moderator variables.

5. Coping strategies are expected to moderate the relationship between psychosocial stress and depression. The use of adaptive coping behaviors will buffer the relationship of stressor to depressive symptoms, while the use of less adaptive coping styles will predict an increase in depressive symptoms. The relationships should vary for the two generations of respondents.

CHAPTER 2

METHOD

2.1 Participants

The sample consisted of 130 first and second-generation West Indian immigrant females between the ages of 17 to 26 years, with a mean age of 20.63 years ($SD=2.05$). Forty of the women were born to immigrant parents, and 90 were born in the West Indies. Length of residency in the United States ranged from 1 to 20 years among the first-generation immigrant participants. Despite some inter-island variations, West Indian immigrants in the U.S. share similar histories, cultural institutions, and traditional practices. Although the countries of origin considered in the current study represent diverse cultures, there are substantial similarities among participants that justify the current grouping, and the majority of the participants in this study acknowledge a common West-Indian ethnic identity. First-generation women in the current study reported 12 islands as their place of birth, while the majority of second-generation women were born in the United States, with the exception of two who were born in Canada and England (Table 2). The majority of the participants (67.5 %) described their ethnic background as West Indian or by their Island of birth ($n = 85$), and 22.5% identified as West Indian/Caribbean American ($n = 28$), and 10% identified as African American ($n = 13$).

Due to limited access to women who fit these specific criteria, participants were recruited by various means. I relied on personal and professional contacts in Amherst, Springfield, Boston, and New York City, and also recruited participants through a

Table 2: Participants' Places of Birth

Countries	N	Percent
Antigua	1	0.8
Barbados	2	1.5
Canada	1	0.8
Dominica	1	0.8
England	1	0.8
Grenada	1	0.8
Guyana	13	10.0
Haiti	5	3.8
Jamaica	51	39.2
Monsterrat	5	3.8
St. Croix	1	0.8
St. Lucia	1	0.8
St. Kitts	1	0.8
Trinidad	8	6.2
USA	38	29.2

mushrooming sampling technique, whereby participants would refer friends and acquaintances that fit the study criteria. Posters were placed on college campuses in Amherst and flyers were handed out to students on campuses in New York City. Several participants were recruited from a primary care health center that serves a large Caribbean American population in Brooklyn, New York. Finally, individuals who themselves were not eligible to participate in the study, but who had significant contacts in the West Indian-American community were asked to identify eligible women who in turn were asked to complete surveys. As an incentive, psychology students at UMass received extra-credit. Respondents who were not enrolled in psychology classes at UMass were entered in a raffle for a first prize of \$100 and a second prize of \$50.

2.2 Measures

Demographic Form: Participants completed a demographic questionnaire designed to collect information on a number of issues related to them and their parents. Questions on this form addressed their age, racial and ethnic identification, age of migration, level of education, past and present psychological treatment, marital status, family living arrangements, and a rating of instrumental adults. Participants also answered questions about their parents' place of birth, occupation, and level of education. The form also inquired about their grandparents' place of birth. The primary information from this form that was used for hypothesis testing in this study was the participants' places of birth. Responses from the demographic form are summarized in Table 3.

Table 3. Participants' Demographic Information

	N	%
Racial Identification		
Black	112	86.2
Mixed/Biracial	5	3.8
Other (ex. West Indian, Guyanese)	9	7
Age at Migration		
< 5 Years Old	9	10
5 – 11 Years Old	20	22.2
12-18 Years Old	31	34.4
>18 Years Old	11	12.2
Missing	19	21
Marital Status		
Single	108	83.1
Married	2	1.5
Widowed	2	1.5
Other	15	11.5
Family Type		
Single Parent	63	48.5
Intact	64	49.2
Instrumental Adult		
Yes	64	49.2
No	63	48.5

Stephenson Multigroup Acculturation Scale (SMAS): Differential acculturation and acculturation were assessed with the Stephenson Multigroup Acculturation Scale (SMAS; Stephenson, 2000). The SMAS, a 32-item questionnaire, was designed to measure acculturation across ethnic groups. It assesses two acculturation dimensions, dominant society immersion (DSI; 15 items) and ethnic society immersion (ESI; 17 items). Within each dimension, questions tap language, interaction, food, and media use. Strong reliability and validity were demonstrated with the SMAS (Stephenson, 2000).. Coefficient alphas were .86 for the entire scale, .97 for ESI and .90 for DSI. Strong validity was demonstrated by the predictive ability of the SMAS regarding generational status and performance on the subscales, and with replication of previous findings regarding the mediating effects of the DSI subscale. Validity studies indicated good convergent and discriminant validity (Stephenson, 2000). For this sample, coefficient alphas were computed for the entire subscale and the ESI and DSI subscales for participants, their mothers, and their fathers. Coefficient alphas ranged from .80 to .86 for the entire scale. Alphas for ESI ranged from .76 to .88, and for DSI from .83 to .90. Table 4 presents the reliabilities.

Differential acculturation scores were calculated as the difference between the participants' acculturation scores and the scores of the participants' perception of their

Table 4. Cronbach's Alphas for Scores for the Stephenson Multigroup Acculturation Scale (SMAS), Africultural Stress Inventory (ACSI), Center for Epidemiological Studies- Depression Scale (CES-D), and the Schedule of Racist Events (SRE).

Scale	# of Items	Coefficient
SMAS		
Mother- full scale	32	.87
Dominant Society Immersion	15	.90
Ethnic Society Immersion	17	.84
Father – full scale	32	.80
Dominant Society Immersion	15	.89
Ethnic Society Immersion	17	.77
Self – full scale	32	.83
Dominant Society Immersion	15	.83
Ethnic Society Immersion	17	.89
CES-D	20	.80
ACSI		
Ritual Centered	3	.80
Collective-Centered	8	.87
Cognitive/Emotional Debriefing	11	.87
Spiritual Centered	8	.85
SRE		
Recent racist events	18	.93
Lifetime racist events	18	.95
Appraised racist events	17	.95

parents' acculturation. This resulted in four differential acculturation scores: MDDD- mother daughter dominant difference, FDDD- father daughter dominant difference, MDED-mother daughter ethnic difference, FEDED-father daughter ethnic difference.

Psychiatric Epidemiology Research Interview Life Events Scale (PERI-LES). The PERI-LES (Dohrenwend, Krasnoff, Askenasy & Dohrenwend, 1978) screens generic stressful life events. This scale was originally constructed to develop methods for psychiatric epidemiological research in community populations. The PERI-LES has since been used extensively among adults and youths from varying sociocultural backgrounds, and is a valid and reliable inventory of a variety of stressful events. Scores on this scale reflect the frequency with which participants experience stressful events. Participants in the current study had difficulty completing this scale, and so the data were not used in hypothesis testing. According to participants who were questioned afterwards, it was not clear to them how to respond when an item did not apply to them. Many respondents mistakenly checked the column for events that happened in the past 6 months (0-6 months), to indicate events that never happened to them.

Schedule of Racist Events (SRE): The SRE is a brief 18-item, self-report inventory used to obtain information on the frequency of racist events in the participants' entire lifetime, and in the past year. The SRE also assessed the extent to which these events were appraised as stressful. Participants received three scores for recent racist events, lifetime racist events, and appraised racist events. The score for appraisal of racist events is the participants' report of how stressful such racist events were. Data from the SRE were summed on the items that comprised the three categories: frequency of racist events in past year (recent racist events), frequency of racist events in lifetime (lifetime racist

events), and appraisal of the stressfulness of the racist events (appraised racist events). These scores were treated as different subscales, and all three have strong reliability coefficients (.95 for recent racist events, .95 for lifetime racist events, and .94 for appraised racist events). A series of significant correlations between the SRE and current symptoms on the Hopkins Symptom Checklist provided strong evidence for the concurrent validity of the SRE (Landrine & Klonoff, 1996). As shown in Table 4, the Cronbach alpha data for the SRE were equally high in this study.

Africultural Coping Systems Inventory (ACSI): Coping strategies were measured with the Africultural Coping Systems Inventory (ACSI; Utsey, Adams, & Bolden, 2000). The ACSI, a 30-item self-report measure, was designed to measure the unique coping behaviors employed by individuals of African descent. This instrument was designed to include spiritually grounded and culturally relevant coping behaviors, in addition to areas usually addressed in popular coping measures. It assessed four dimensions of coping behaviors: Cognitive/Emotional Debriefing (CED; 11 items), Spiritual-Centered Coping (SC; 8 items), Collective Coping (CC; 8 items), and Ritual-Centered Coping (RC; 3 items). Cognitive/Emotional Debriefing (e.g., Hoped things would get better with time) correlates with measures of detachment and focusing on the positive. Within the Africentric framework of this scale, they are seen as part of an African survival thrust that likely evolved out of a history of oppression. The second subscale reflects Spiritual-Centered Coping (e.g., Prayed that things would get better), which represents a basic component of the lives of many people of African descent. The third subscale of the ACSI, Collective Coping (e.g., Got a group of family or friends together) assessed the degree to which respondents rely on group-centered activities for coping with stressful

situations. Finally, Ritual-Centered Coping (e.g., Lit a candle for strength or guidance in dealing with the problem) represents carrying out rituals to cope with stressful situations.

To complete the ASCI, participants' report which coping strategies they used to cope with a stressful situation that they encountered in the past week. Participants respond on a 4-point Likert scale (0 = did not use, 1 = used a little, 2 = used a lot, 3 = used a great deal). Adequate internal reliability and validity was demonstrated with the ASCI (Utsey, Adams, & Bolden, 2000). Internal reliabilities ranged from .76 for RC, .78 for CC, .79 for CED, to .82 SC. Strong validity was demonstrated with the correlations with the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1980). Adequate internal reliability was also demonstrated in the current study. Internal reliability ranged from .80 to .87 (see Table 4 for details).

Center for Epidemiologic Studies Depression Scale (CES-D): The CES-D (Radloff, 1977) is a 20-item self-report measure that assesses the major dimensions of depression. The items included in the scale tap into four content subdomains: Negative affect, positive affect, interpersonal problems, and somatic or retarded activity. Adequate reliability and validity have been demonstrated with both clinical and community samples. Further, the CES-D has been used extensively with minority and immigrant populations (Salgado de Snyder, 1986; Noh, Avison & Kaspar, 1992; Manson, Ackerson, Dick, Baron, & Fleming, 1990). Possible scores range from 0 to 60, with a score of 16 or greater associated with the presence of depression. Scores for the women who completed the scale in this study ranged from 0 to 49 ($M = 15.36$). Cronbach alpha procedure was employed to assess the internal reliability of this scale for the current sample, and revealed an alpha of .86.

2.3 Procedures

One hundred and thirty young West Indian women who met the criteria outlined above completed the surveys, reflecting a response rate of 52% for the present study. Despite careful explanation of the nature of the survey and its confidentiality, the women in the sample population were skeptical and reluctant to participate in the study. Many of them shared negative views about psychology, and believed they were not suitable participants because they had no “psychological problems.” Others were uncomfortable with signing the consent form despite being made aware of the confidentiality process. Overall, women who were not known to this investigator or a colleague were least willing to participate in the study. Women in the community were also less willing to participate than women in college were. The reluctance expressed by many of the women not only slowed data collection, but also manifested in a considerable amount of missing data.

The majority of the participants were from communities and colleges in Boston and New York City, and a small percentage were from colleges in Western Massachusetts. Participants completed the survey either in an office at UMass, or on their own, and returned it to the researcher within two days of receiving it. Participants were told that the purpose of the study was to learn more about their life experiences as young West Indian women. They received a questionnaire packet that included a consent form, the questionnaires, and a written debriefing statement. They were instructed to read and sign the consent form. Participants then completed the six measures included in this study and were instructed to retain a copy of the written debriefing statement that was included in the packet. They were also verbally debriefed when they returned the packet to the

investigator. Participants who completed the study at UMass were verbally debriefed and given a copy of a written debriefing statement. Finally, respondents were invited to provide feedback, or contact this researcher with follow-up questions.

CHAPTER 3

RESULTS

Analyses of responses from this sample of West Indian females allowed the assessment of the association of acculturation, race, and gender with their adjustment. This group of young women, who are often invisible to most Americans, represents a significant and understudied segment of the Black community. In addition, the use of this sample provides a better understanding of the factors that contribute to increased levels of depression symptoms among late adolescent and young adult females from minority and immigrant groups. Subsequent analyses will explore ways in which this sample of young West Indian women cope with the stressors they experience, and if there are culturally relevant coping strategies that are related to different levels of depressive symptoms. This information will contribute to the existing literature an increased understanding of their inner resources in relation to their psychosocial experiences.

Preliminary analyses examined descriptive statistics for all demographic variables, predictor variables, and the outcome variable. Distributions were generated for all continuous variables involved in this study and a series of bivariate analyses examined the associations between the predictor variables, demographic variables, and the outcome variable.

3.1 Descriptive Data

The distribution of the various West Indian groups in the current study closely reflects the demographic characteristics of the West Indian immigrant population in the United States. The majority of the women were from Jamaica, Guyana, and Trinidad. Thirty-nine percent of the participants identified as Jamaicans ($n = 51$), 10% as Guyanese

($n = 13$) and 6.2% as Trinidadian ($n = 8$). In the overall sample, over 50% of their mothers ($n = 67$) and fathers ($n = 68$) were born in Jamaica, 10% in Guyana (Mother $n = 14$; Father $n = 13$) and 7.7% in Barbados (Mother $n = 10$; Father $n = 10$). Among the second-generation participants, 5% had one parent who was born in the USA ($n = 9$). Sixty-five percent the young women ($n = 85$) were college educated, 2% were enrolled in graduate school ($n = 3$), and 21.5% had a high school education ($n = 25$). Ten percent did not report their education level ($n = 14$). Most of the young women were single ($n = 108$) and only 9 percent were parents ($n = 12$).

Almost half of the participants (49%) came from single parent homes. The diversity in socioeconomic status was significant; one participant's mother was incarcerated for murder while others were housekeepers, and another participant's mother was a lawyer. Many of the participants reported that their mothers worked in medical jobs (31% were Certified Nurse's Assistant, Registered Nurse, Home Health Aide etc.), were skilled workers (11% were dressmakers, cosmetologists, etc.), teachers (8.5%) or held managerial (8.5%) and clerical positions (7.7%). The occupations of their fathers were equally diverse: several fathers were unemployed, one was a shipmate, and another a judge. The majority of the fathers were skilled workers (33% were mechanics, construction workers, carpenters, etc.), while others worked in professional fields (12% were engineers, accountants, etc.) and managerial positions, and another 7.7% were described as self-employed.

Tables 5 and 6 report the means and standard deviations associated with the Stephenson Multigroup Acculturation Scale (SMAS), the Africultural Coping Systems Inventory (ACSI), the Center for Epidemiological Studies-Depression Scale, and the

Table 5. Descriptive Statistics for Stephenson Multigroup Acculturation Scale (SMAS), Africultural Stress Inventory (ACSI), Center for Epidemiological Studies-Depression Scale (CES-D), and the Schedule of Racist Events (SRE). (Generation 1)

		N*	Minimum	Maximum	Mean	SD
SMAS						
ESI	Participant	90	32	68	59.94	7.51
	Mother	87	30	68	62.35	7.07
	Father	77	39	68	61.44	6.81
DSI	Participant	90	31	60	50.02	7.61
	Mother	82	18	60	48.47	10.80
	Father	78	15	60	47.13	10.14
CES-D						
		84	0	48	16.19	10.86
ACSI						
	Spiritual	81	0	24	10.67	6.3
	Collective	82	0	24	9.86	6.3
	Cognitive	81	0	33	14.51	8.1
	Ritual	80	0	9	1.41	2.4
SRE						
	Appraised	69	17	92	33.80	19.1
	Recent	80	18	76	29.86	13.6
	Lifetime	79	18	92	32.72	16.1

* Respondents omitting more than 15% of the items on a scale were not included in calculating descriptives.

ESI – Ethnic Society Immersion

DSI – Dominant Society Immersion

Table 6. Descriptive statistics for Stephenson Multigroup Acculturation Scale (SMAS), Africultural Stress Inventory (ACSI), Center for Epidemiological Studies-Depression Scale (CES-D), and the Schedule of Racist Events (SRE). (Generation 2)

		N*	Minimum	Maximum	Mean	SD
SMAS						
ESI	Participant	36	31	68	53.89	10.89
	Mother	34	41	68	60.29	7.33
	Father	30	47	68	61.45	5.67
DSI	Participant	38	41	60	54.17	4.93
	Mother	36	38	60	52.45	5.89
	Father	33	28	60	49.57	9.77
CES-D						
		36	3	49	13.44	8.96
ACSI						
	Spiritual	37	0	24	10.43	6.05
	Collective	37	0	19	9.75	6.30
	Cognitive	37	0	32	15.18	8.70
	Ritual	37	0	6	1.32	2.20
SRE						
	Appraised	37	17	81	40.93	23.30
	Recent	39	18	72	30.80	14.50
	Lifetime	38	18	85	37.55	19.00

* Respondents omitting more than 15% of the items on a scale were not included in calculating descriptives.

ESI – Participants' Ethnic Society Immersion

DSI – Participants' Dominant Society Immersion

Schedule of Racist Events (SRE) separated by generations. Six of the participants did not complete the SRE, and 18 reported that they had never experienced a racist event.

However, for the majority of the young women who completed this survey, racism was a common experience. The most common events included being treated unfairly by teachers/professors, by people in service jobs and by total strangers. The participants also reported that these events were stressful. In addition to the events listed here, many participants also noted other sources of considerable stress including “wanting to tell people off for being racist, but saying nothing” and “walking around feeling angry about something racist that was done to them.”

Analyses of the frequency of responses on the ACSI showed that the most common coping strategy was “prayed that things would work out.” Other highly used coping strategies included “left matters in God’s hands,” “hoped things would get better with time,” “shared feelings with family and friends,” and “occupied self with other things.”

The most frequently experienced depression symptoms that first generation women reported on the CES-D were “feeling everything was an effort,” “feeling lonely,” “trouble concentrating,” and “feeling depressed.” Second generation respondents experienced “feeling everything was an effort” the most. These young women experienced these symptoms 1-2 days a week.

3.2 Bivariate Correlations and Comparisons

Participants with more than 15% missing data were not included in the calculation of scores for the scales. Among the remaining participants, there were a large percentage

of non-missing values. Respondents who randomly omitted less than 15% of the items were assigned a missing value using their individual mean. This approach to accounting for missing data resulted in a reduction of the final sample size used in analysis, and increased the risk of Type II errors. Despite this drawback, this procedure resulted in final scores that more accurately reflected the attitude of the participants.

The correlations between participants' acculturation and their report of their parents' acculturation are presented in Table 7. Participants' report of their ethnic society immersion was positively correlated with their perception of their parents' immersion. The same was true for immersion in dominant society. There was no significant correlation between ethnic society immersion and dominant society immersion. Tables 8 and 9 present the correlations among the remaining demographic variables. Among first generation participants, the length of time living in the United States was positively correlated with immersion in dominant society and negatively correlated with immersion in ethnic society.

Correlational analyses explored the relationships among participants' acculturation and coping styles and scores on the Schedule of Racist Events (SRE). There were no significant correlations between acculturation scores and SRE scales, although the correlations between recent racist events and immersion in dominant society approached significance for first-generation participants. Young women who reported less immersion in dominant society also reported experiencing more frequent racist events in the past year. Among second-generation participants, Cognitive/Emotional Debriefing was positively associated with the appraisal of stress from racist events ($r = .367, p < .05$), and Collective Coping behaviors were marginally associated with

Table 7. Pearson Product-Moment Correlation Coefficients for the Subscales of the SMAS.

	Ethnic Society Immersion (ESI)		Dominant Society Immersion (DSI)	
	Mother	Father	Mother	Father
Generation 1				
Participant				
ESI	.364***	.451***	-.051	.078
(N)	(87)	(77)	(82)	(78)
DSI	.097	.154	.642***	.504**
(N)	(87)	(77)	(82)	(78)
Generation 2				
Participant				
ESI	.707***	.677***	-.141	.016
(N)	(34)	(30)	(34)	(30)
DSI	.035	.267	.412**	.356*
(N)	(33)	(30)	(35)	(33)

*** $p < .001$ ** $p < .02$ * $p < .05$

Table 8. Correlations Among Demographic Variables (Generation 1)

Variable	1	2	3	4	5	6	7	8	9	10	11
1 Residence	—	-.081	.019	.166	.202	.257*	-.100	-.097	-.074	-.142	-.093
2 ESI		—	-.009	.043	-.008	-.062	.094	.018	.159	.001	.072
3 DSI			—	-.198	-.173	-.169	-.003	.157	.015	.061	-.307**
4 Recent				—	.924**	.860**	.037	.103	-.134	.117	.176
5 Lifetime					—	.949**	.043	.060	-.154	.078	.151
6 Appraisal						—	.085	.057	-.141	.108	.201
7 Cognitive							—	.667**	.593**	.639**	.099
8 Collective								—	.663**	.669**	-.025
9 Spiritual									—	.527**	-.036
10 Ritual										—	.240*
11 Depression											—

ESI – Participants' Ethnic Society Immersion

DSI – Participants' Dominant Society Immersion

** Significant at the .01 level (2-tailed)

* Significant at the .05 level (2-tailed)

Table 9. Correlations among Demographic Variables (Generation 2)

Variable	1	2	3	4	5	6	7	8	9	10	11
1 Residence	—	.048	-.372*	.232	.389*	.351*	.209	.247	.142	.002	-.069
2 ESI		—	.068	.166	.140	.093	-.205	-.041	.021	-.217	-.070
3 DSI			—	-.071	-.076	.134	.212	-.070	-.049	-.083	.132
4 Recent				—	.896**	.769**	.181	.230	.155	.250	.386*
5 Lifetime					—	.868**	.235	.330*	.138	.108	.258
6 Appraisal						—	.367*	.233	-.020	.024	.358*
7 Cognitive							—	.426**	.335*	.231	.305
8 Collective								—	.430**	.272	-.143
9 Spiritual									—	.335*	-.008
10 Ritual										—	.240*
11 Depression											—

ESI – Participants' Ethnic Society Immersion

DSI – Participants' Dominant Society Immersion

** Significant at the .01 level (2-tailed)

* Significant at the .05 level (2-tailed)

the frequency of lifetime racist events ($r = .330, p = .053$), and recent racist events ($r = .294, p = .08$).

Unlike the respondents from Massachusetts, the participants from New York City were from communities that were predominantly Caribbean, and that also had a high concentration of other minority immigrant groups. Independent t -tests explored differences between respondents from New York ($n = 59$) and Boston ($n = 63$) on the SRE, SMAS, and ACSI. There were no differences in individual acculturation scores, differential acculturation score, or depression scores between Massachusetts and New York respondents (Table 10). However, all comparisons on the SRE were significant. According to these results, Massachusetts' residents reported experiencing more racist events in the past year ($M = 32.73$) than did New York participants ($M = 27.94$), $t(110) = -2.04, p < .05$. Massachusetts residents also reported experiencing racist events more frequently in their lifetime ($M = 39.14$) than did New York respondents ($M = 29.21$), $t(109) = -3.17, p < .01$. Finally, Massachusetts' respondents also appraised racist events as more stressful ($M = 42.76$) than New York City respondents ($M = 29.44$), $t = -3.41, p < .01$.

A final set of analyses assessed the relations among SRE and ACSI subscales within each of these groups. There were no significant associations among New York respondents. Among Massachusetts' residents, Collective Coping Behaviors were positively associated with the frequency of racist events in a lifetime ($r = .317, p < .05$) and the appraisal of how stressful racist events were ($r = .296, p < .05$). Ritual Coping Behaviors were positively associated with racist events experienced in the last year, racist

events experienced in their lifetime, and the appraisal of how stressful racist events have been.

3.3 Comparative-Descriptive Hypotheses

The descriptive hypotheses examined were: 1. First-generation West Indian young women will be more immersed in ethnic society than their second-generation counterparts. Additionally, second generation participants will be more immersed in dominant society in comparison to their first generation peers; 2. All participants will report being more immersed in dominant society than they perceive their parents to be, while participants will perceive their parents to be more immersed in ethnic society than they are; 3. First and second generation participants will report different levels of depression symptoms.

A series of *t*-tests were conducted to determine if the data in the study supported hypotheses 1, 2, and 3. An independent sample *t*-test assessing hypothesis 1 was significant, $t(124) = 3.56; p < .002$. First generation respondents were more immersed in ethnic society ($M = 59.94, SD = 7.51$) than were second-generation respondents ($M = 53.89, SD = 10.89$). Despite the significant difference, it should be noted that both groups reported being highly immersed in their ethnic society. Hypothesis 1 also predicted significant differences in immersion in dominant society. A second independent sample *t*-test showed that first generation women were less immersed in dominant society ($M = 50.02, SD = 7.61$), than were second-generation women ($M = 54.16, SD = 4.93$) $t(126) = -3.09; p < .003$.

Table 10: T-Tests for Place of Residence.

Variables	Mean	SD	T	df	Lower	95% CI - Upper
ESI						
New York	58.7	9.49				
Massachusetts	57.33	8.91	.80	116	-1.99	4.71
DSI						
New York	51.66	7.94				
Massachusetts	51.36	6.23	.23	118	-2.27	-2.87
MDDD						
New York	.85	8.17				
Massachusetts	2.35	7.39	-1.00	108	-4.44	-1.44
FDDD						
New York	2.47	8.97				
Massachusetts	4.34	9.84	-1.02	103	-5.51	-1.76
MDED						
New York	-2.85	9.26				
Massachusetts	4.83	7.74	1.23	111	-1.19	5.15
FDED						
New York	-2.52	7.77				
Massachusetts	-3.00	7.44	.31	98	-2.55	3.50
ACSI						
Cognitive						
New York	25.05	9.48				
Massachusetts	24.34	8.46	.43	112	-2.61	4.04
Spiritual						
New York	17.93	7.26				
Massachusetts	17.74	5.93	.15	112	-2.26	2.64
Collective						
New York	17.25	7.80				
Massachusetts	17.39	5.91	-.11	112	-2.27	2.41
Ritual						
New York	4.39	3.06				
Massachusetts	3.79	1.72	1.30	111	-.31	1.51

ESI – Participants' Ethnic Society Immersion

DSI – Participants' Dominant Society Immersion

MDDD – Mother-daughter dominant society difference

FDDD – Father-daughter dominant society difference

MDED – Mother-daughter ethnic society difference

FDED – Father-daughter ethnic society difference

To test hypothesis 2, data from the two groups of young women were combined to complete the following analyses comparing them with their parents. A paired t-test showed that daughters rated their fathers as more immersed in ethnic society than they were ($M = 58.79$, $SD = 8.12$), $t(106) = -3.66$, $p < .001$. They also rated their mothers as more immersed in ethnic society than they were ($M = 61.77$, $SD = 7.17$), $t(120) = -4.87$, $p < .000$. As predicted, daughters saw themselves as more immersed in dominant society than their mothers. A paired t-test showed a significant difference between the mean scores for mothers and their daughters ($M = 51.48$, $SD = 6.98$), $t(116) = 2.53$, $p < .02$, and fathers were also perceived as less immersed in dominant society ($M = 47.86$, $SD = 10.05$) than they were ($M = 51.14$, $SD = 7.33$), $t(110) = 3.63$, $p < .001$. These results support Hypothesis 2. Table 11 presents descriptive statistics for the differential acculturation variables.

Post-hoc analyses showed that the participants perceived their mothers as more immersed in dominant society ($M = 49.73$, $SD = 9.77$) than their fathers ($M = 47.55$, $SD = 10.14$), $t(99) = -2.155$, $p < .05$, but perceived no differences in their parents' immersion in ethnic society, $t(101) = -.784$, $p = ns$.

Hypothesis 3 predicted a difference in the experience of depressive symptoms by first and second-generation respondents. An independent sample t-test comparing first and second-generation respondents was not significant, $t(117) = 1.43$, $p = ns$. Although there is no significant difference, as a group the first-generation respondents' mean score meets the cut-off point for clinical depression, while the second-generation participants'

Table 11. Distribution of Differential Acculturation Scores

	N	Minimum	Maximum	Mean	SD
Generation One					
MDDD	82	-23	29	1.79	8.29
FDDD	78	-22	27.14	2.62	9.15
MDED	87	-32.6	32	-2.45	8.27
FDED	77	-27	19.5	-1.56	7.39
Generation Two					
MDDD	35	-11	21	1.73	5.78
FDDD	33	-18	24	4.83	9.24
MDED	34	-24	13	-6.90	7.78
FDED	30	-23	6	-5.45	7.07

MDDD – Mother-daughter dominant society difference

FDDD – Father-daughter dominant society difference

MDED – Mother-daughter ethnic society difference

FDED – Father-daughter ethnic society difference

mean score does not. Forty of the first generation participants reached the cut off point with a score of 16 or greater, while only 10 second generation participants had a score of 16 or more.

Hypothesis 4 predicted that first and second-generation participants would differ with respect to appraisal/frequency of racist events experienced and in coping strategies used. A multivariate analysis of variance (MANOVA) compared first and second-generation participants' scores on the three subscales of the SRE, while a second multivariate analysis compared first and second-generation participants' scores on the four subscales of the ACSI. A one-way MANOVA assessing the effect of generation status on the three subscales of the SRE found no significant differences between the groups of young women. No significant differences were found in a second MANOVA that was conducted to determine the effect of immigrant generation status on the ACSI. The results of these tests thereby failed to support hypothesis 4.

3.4 Coping Behaviors as Moderators

Additional preliminary analyses were conducted before testing for moderation effects of coping style on depression symptoms. A series of multiple regression equations conducted separately for each immigrant generation determined which differential acculturation variables were meaningful and statistically based predictors of depression. The differential acculturation indices used were: Father daughter dominant society immersion difference (FDDD); Mother daughter dominant society immersion difference (MDDD); Father daughter ethnic society immersion difference (FDED); Mother daughter ethnic society immersion difference (MDED) as predictor variables and the depression score as the criterion variable. These analyses showed that increased differences with

mothers in dominant society immersion (MDDD) predicted increased depression symptoms among second generation participants, $\beta = .49, p < .01$. Increased differences with fathers in dominant society immersion (FDDD) also predicted increased depression symptoms among first generation respondents, $\beta = .32, p < .02$. Similarly, FDDD was marginally related to higher levels of depression symptoms among second-generation immigrants, $\beta = .34, p = .08$.

Two separate multiple regression analyses were conducted predicting depression scores from participants' own acculturation scores (ESI and DSI). Immersion in dominant society significantly predicted depression among first generation immigrants, $\beta = -.46, p < .01$. First generation participants who were more immersed in dominant society reported fewer depression symptoms.

While the acculturation and differential acculturation variables were considered in a more exploratory manner, the relevant literature has suggested that racist discrimination is predictive of depression. As a result, all three SRE subscales were used to assess the moderator hypothesis.

Hypothesis 5 was exploratory, and predicted that the coping strategies assessed in this study would moderate the relations between psychosocial stress variables and depression. The use of adaptive coping behaviors would buffer the relations of stressor to depressive symptoms, while the use of less adaptive coping styles would predict an increase in depressive symptoms. A series of hierarchical regressions were used to assess the role of immigrant generation, acculturation-related variables, and racist discrimination variables in predicting depression. The moderation effects of the four subscales from the coping scale were examined separately for each risk indicator. In each equation the level of

depressive symptoms, as determined by scores on the CES-D, was regressed on the generation status, risk factor score, coping behavior, risk factor X coping behavior interaction term, and generation X risk factor X coping behavior. A significant contribution to the equation by the interaction terms was taken as evidence that the coping behaviors moderated the relationship between psychosocial stressors and depressive symptoms.

To reduce possible multicollinearity problems, variables were centered (i.e. means were subtracted from raw scores) before they were entered in the regression equations. Despite the use of preliminary analyses to reduce the amount of predictor variables used to test for moderation, a total of 28 hierarchical regressions were conducted. Given the fairly large number of regression analyses computed, some of the significant effects may be due to chance. To limit this problem, a conservative approach was employed in interpreting significant results. The results reported below represent a pattern of effects for each class of coping behavior. Collective Coping, Cognitive/Emotional Debriefing, and Spiritual Coping behaviors were shown to have a moderating effect on various predictor variables. There were no significant changes related to Ritual Coping behavior.

3.4.1 Collective Coping Behaviors

The first multivariate regression analyses revealed no significant main effects for Generation, MDDD, and Collective Coping. A pattern of collective coping behavior moderating the effects of several types of risk factors was revealed (see Table 12). The three-way interaction between Generation, MDDD, and Collectivism enhanced the prediction of depression symptoms. The second-generation participants who perceived themselves to be highly differentiated from their mothers, experienced less depression

symptoms when they reported using more collective coping behaviors. Collective coping behaviors did not benefit first generation participants, or second generation participants who did not perceive as much difference from their mothers.

FDDD was entered as the risk factor in the next regression analysis. The analyses revealed significant main effects for generation and FDDD, but no significant 2-way interactions. However, Collective Coping also moderated the impact of FDDD on depression symptoms. Collective Coping behaviors were beneficial for second-generation participants at high levels of FDDD, but had no substantial effect for first generation participants, or participants with lower dominant society immersion differences. Collective Coping behaviors did not moderate the relationship between ESI and depression or DSI and depression (see Table 13).

The SRE variables were assessed next. Recent racism was entered along with generation and Collective Coping behaviors. There was a significant main effect for recent racism, indicating that participants who experienced more recent racist events also reported higher levels of depression symptoms. Further, Collective Coping behaviors moderated the effect of experiencing recent racist events on depression symptoms. Second generation participants, who experienced a high frequency of recent racist events, reported less depression symptoms when they reported using more Collective Coping behaviors. This relationship did not hold among first generation participants.

Table 12: Results of Hierarchical Regression Analyses Predicting Depression.

Model	Predictor	B	T
MDDD			
1	Generation	-3.799	-1.609
	MDDD	.125	.903
	Collective Coping	-.012	-.078
2	Generation x MDDD	.881	2.484*
	Generation x CC	-.411	-1.167
	MDDD x CC	.017	.816
3	Generation x MDDD x CC	-.152	-2.341*
1	Generation	-3.351	-1.437
	MDDD	-.118	-.864
	CED	-.183	1.523
2	Generation x MDDD	.739	1.930*
	Generation x CED	-.008	-.028
	MDDD x CED	-.000	-.010
3	Generation x MDDD x CED	.098	1.967*
FDDD			
1	Generation	-5.177	-2.186*
	FDDD	.343	2.913**
	Collective Coping	-.070	-.469
2	Generation x FDDD	.063	.223
	Generation x CC	-.213	-.585
	FDDD x CC	-.008	-.449
3	Generation x FDDD x CC	-.133	-2.074*
ESI			
1	Generation	-2.871	-1.205
	ESI	.035	.289
	SC	-.052	-.326
2	Generation x ESI	-.198	-.539
	Generation x SC	-.023	-.089
	ESI x SC	-.040	-1.983*
3	Generation x ESI x SC	.060	1.479

* $p < .05$

** $p < .01$

Continued next page

Table 12 (continued): Results of Hierarchical Regression Analyses Predicting Depression.

Model	Predictor	B	T
Recent Racist Events			
1	Generation	-3.946	-1.790
	Recent	.163	2.226*
	Collective Coping	-.064	-.421
2	Generation x Recent	.134	.865
	Generation x CC	-.391	-1.104
	Recent x CC	.004	.366
3	Generation x Recent x CC	-.057	-2.234*
Lifetime Racist Events			
1	Generation	-4.110	-1.800
	Lifetime	.099	1.628
	Collective Coping	-.052	-.337
2	Generation x Lifetime	.065	.501
	Generation x CC	-.436	-1.180
	Lifetime x CC	.001	.073
3	Generation x Lifetime x CC	-.047	-2.158*
Appraisal			
1	Generation	-4.988	-2.187*
	Appraisal	.126	2.448*
	Collective Coping	-.068	-.437
2	Generation x Appraisal	.056	.531
	Generation x CC	-.421	-1.153
	Appraisal x CC	-.002	-.248
3	Generation x Appraisal x CC	-.035	-1.945*

* $p < .05$

** $p < .01$

Participants who reported experiencing more frequent lifetime racist events reported more depressive symptoms. This relationship was moderated by Collective Coping. Collective Coping behaviors moderated the effect of lifetime racist events by reducing depression symptoms for second-generation immigrants who experienced more frequent racist events, but not for first generation immigrants.

A similar relationship was observed for the appraisal of racist events. Participants who appraised racist events as more stressful also experienced more depression symptoms. However, for second-generation participants who appraised racist events as most stressful, the use of more Collective Coping behaviors was related to fewer depression symptoms.

3.4.2 Cognitive/Emotional Debriefing

The relationship between MDDD and depression symptoms was also moderated by the use of Cognitive/Emotional coping behaviors. For second-generation girls who reported greater MDDD, an increase in depression symptoms was associated with an increase in their use of Cognitive/Emotional Debriefing styles. Cognitive/Emotional Debriefing did not moderate the relationship between any of the other predictor variables and depression symptoms.

3.4.3 Spiritual Coping Behaviors

There was a significant interaction between spiritually based coping behaviors and participants' own ethnic society immersion, $\beta = -.040$, $t = -1.98$, $p = .05$. This interaction was not associated with a significant change in R^2 . Among participants who were more immersed in ethnic society, lower levels of depression symptoms were associated with the use of more Spiritual Coping behaviors, while the use of more

Spiritual Coping behaviors was associated with more depression symptoms among participants who were less immersed in ethnic society. Spiritual Coping behaviors did not moderate the relationship between any of the other predictor variables and depression symptoms.

CHAPTER 4

DISCUSSION

This study examined the relationship between psychosocial stressors and depressive symptoms in young West Indian women. The results showed the complexity of associations between acculturation, perceptions of racist events, coping behaviors, and depression symptoms. Overall, the results provided strong support for the hypothesized differences in acculturation between first generation and second-generation respondents. There was also support for the hypothesized differences in acculturation between respondents and their parents. However, there was no support for the hypothesis that first and second generation respondents would differ in their use of various coping strategies, perception of racist events and experience of depression symptoms. Finally, the hypothesis that coping behaviors would moderate the relations between stress variables and depression symptoms received support from hierarchical regression analyses.

4.1 Acculturation, Differential Acculturation, and Perceptions of Racist Events

The findings in this study indicated that first generation immigrants remained more immersed in their ethnic society in comparison to second-generation immigrants, while second generation respondents rated themselves as more immersed in dominant society than their first generation counterparts. These findings fit with the current understanding of the acculturation process that immigrants undergo, which is in part a reflection of their socialization. Usually, first generation immigrants are socialized both in their home countries as well as in American society, while second generation women are socialized only in American society. Exploratory analyses showed that first generation immigrants who lived in America for a long time were more immersed in

dominant society and less immersed in ethnic society; a trend that is well documented elsewhere (Liebkind & Jasinskaja-Lahti, 2000; Rick & Forward, 1992).

The young women in this study also perceived significant acculturation differences between themselves and their parents. They described their parents as more immersed in ethnic society while they rated themselves as more immersed in dominant society. This difference, which defines differential acculturation, has been discussed and measured in past research (Nguyen & Williams, 1989), but has only recently been isolated and examined as an important predictor of family adjustment in published research (Farvar, Narang, & Badha, 2002). Differential acculturation among parents and their daughters occur when daughters become more involved in mainstream society than their parents, and when their parents retain more of their ethnic practices and beliefs than their daughters. This difference has important consequences for family relationships and for the individual adjustment of young adults and their parents (Dumka et al. 1997)

Immigrant generation status did not predict the appraisal/frequency of racist events or the use of various coping strategies. The lack of significant findings in this study suggests that the relationship among these variables is not a simple one, and likely involves unidentified variables. For instance, this study shows that place of residence is significantly related to perceptions of the frequency and stressfulness of racist events, and that the relations among coping and perceived discrimination differs with the residence of the participants. The existing literature also presents mixed findings. While some researchers have found that newly arrived immigrants are often subject to more severe discrimination (Liebkind & Jasinskaja-Lahti, 2000), others have described an increased perception of discrimination among second-generation youth (Portes & Rumbaut, 2001).

Although there were no generational differences in the report of depression symptoms, the present study revealed that 44.4% of the first generation respondents reached the cut off point established for the depression scale used in this study, compared to 25% of the second-generation respondents. Previous studies have established that approximately 18% of the general population meets this cut-off point (Salgado de Snyder, 1987). Despite the lack of a statistically significant difference here, these results clearly suggest that depression symptoms are widely experienced among young immigrant women.

Another important finding in this study concerns the states of residence of the respondents – New York and Massachusetts. Brice-Baker (1994) suggested that place of residence could impact perception of discrimination among West-Indian immigrants, and in fact state of residence was an important predictor of appraisal/frequency of racist events. New York City respondents perceived fewer and less stressful racist events than those from Massachusetts, and appraised perceived racist events as less stressful. The New York participants were recruited from Brooklyn, Queens, and the Bronx, the three boroughs with the largest Caribbean populations in New York. The observed difference may very well be due to the fact that Massachusetts' respondents had higher levels of interaction with White Americans than New York respondents. For the New York City respondents, many of their classmates, coworkers, teachers, and doctors may have been Caribbean or from another immigrant group. Further, many important institutions in their communities were developed specifically for Caribbean immigrants, such as schools and churches. It follows that if their interactions were primarily with individuals like themselves or from other immigrant groups, they had fewer opportunities to experience

the racist events young women from Massachusetts, a state with a smaller minority population, confront regularly.

Differences between daughters and their parents in dominant society immersion also predicted depression symptoms. Previous studies suggest that more acculturation (i.e. more immersion in mainstream society) among parents is adaptive and reduces stressors on children (Dumka et al. 1997). Parents who are less immersed in American society, and therefore more differentiated from their daughter, will not be able to effectively assist their daughters to adjust to mainstream society. These acculturation differences are associated with an increase in family conflict (Heras & Revilla, 1994), and family conflict is significantly related to adolescent depression (Cole & McPherson, 1993). Presumably, parents who are more involved in mainstream society will be more aware of the challenges their children face. Also, their greater involvement in mainstream society should increase their awareness of the opportunities that are available for their children and the means of accessing these resources. Children of immigrant parents who have to negotiate mainstream society without the guidance of their parents will often challenge their parents' authority at home. This role-reversal damages the traditional family structure, and further limits the support that might be gained from the family environment. Essentially, the stress-buffering effects of more positive parent-adolescent relationships are lessened in dyads where there is differential acculturation in dominant society immersion.

Although the young women in this study reported being differentially acculturated from both parents on both dimensions of immersion, the young women perceived their fathers as less immersed in dominant society than their mothers, but perceived no

differences in their parents' immersion in ethnic society. Previous findings on gender differences in acculturation have been inconsistent. While some studies have found that females are likely to be more acculturated (Nguyen & Williams, 1989), others have found no gender differences (Rasmussen et al. 1997; Yeh, 2003). It is possible that the mothers' greater immersion in dominant society reflects their greater involvement in jobs outside of the home and their longer residence in the United States. In many Caribbean immigrant families, the women migrate first and are more likely to find employment in mainstream society.

Differences in ethnic society immersion did not predict depression symptoms in this study. One reason for this might be that cultural socialization plays a role in the level of depressive symptoms observed (Wiesz, 1987), and while West Indian culture might impact the development of externalizing problems (Crawford-Brown, 1997), it does not impact the presentation of internalizing disorders such as depression. On the other hand, the available literature indicated that less acculturated immigrants (i.e. less immersed in dominant society) have an increased prevalence of depression (Takeuchi, Chung, Shen, Kurasake, Chun, & Sue, 1998), and have a diminished ability to benefit from internal or outside resources (Salguero & McCusker, 1996; Allen, 1996). The present study showed that first and second generation respondents who were more immersed in dominant society reported less depression symptoms. So, while less immersion in mainstream society placed them at risk for depression when they encounter adolescent challenges, immersion in mainstream society is beneficial and is related to better outcomes.

4.2 Moderating Models

An interesting pattern was observed for the moderator variables assessed in this study. Collective coping acted as a moderating variable in linking MDDD and FDDD to depression, but only for second-generation respondents who reported high levels of differences in dominant society immersion with their parents. It is unclear as to why collective coping behaviors did not function as a buffer for the first generation girls, considering that first generation respondents used collective coping behaviors at the same rate as their second-generation counterparts. In general, collective coping behaviors provide the opportunity to receive positive reinforcement from others, whether it comes from sharing feelings or from gaining success in group activities. One possible explanation for the observed generational difference may be that second generation girls place greater value on support from peers than first generation girls. For example, Jamaican females, who represent a majority of the sample, are socialized to solve their problems on their own (Brice-Baker, 1994). Although unexplored in this study, it is possible that second-generation respondents' expectations regarding social support from peers enhanced their ability to benefit from collective activities.

Second, the relationship between MDDD and depression symptoms was also moderated by the use of Cognitive/Emotional Debriefing coping strategies. Second - generation respondents, who were highly differentiated from their mothers in terms of dominant society immersion and tended to detach and focus on the positive, reported more depression symptoms. These findings suggest that although Cognitive/Emotional Debriefing is conceptualized as a culturally adaptive response to stressors, the behaviors captured on the Cognitive/Emotional Debriefing subscale of the Africultural Stress

Inventory represent a group of maladaptive coping responses for second-generation girls. These strategies represent a passive approach to problem solving and accounted for an increase in depression symptom for second-generation girls who were experiencing the stress of being differentially acculturated from their mothers. Cognitive/Emotional Debriefing can be an adaptive response to stress when utilized in situations where respondents have little or no control over their stressors. Historically, this would have been an adaptive response for African Americans who lived in an oppressive society. In this study, it is possible that Cognitive/Emotional debriefing is not detrimental for first-generation respondents who may have less control over their environments than do second-generation respondents.

Third, the use of Collective Coping behaviors moderated the relationships between experiencing frequent and stressful racist events and experiencing depression symptoms for second-generation respondents but not for first generation respondents. The impact of their socialization has already been explored as one possible reason why Collective Coping strategies are not effective first generation women. Although they are as likely to engage in Collective Coping behaviors, young women who were born in the Caribbean are not likely to be open about their problems (Brice-Baker, 1994). There is no shared belief in the healing power of talking about your struggles with your peers, and so first-generation girls may have peers who are also experiencing varying degrees of acculturative stress, and are unable to be helpful to each other. Also, depending on the length of time since migration, their peer network might be relatively new.

A second possibility also exists. It may be that second-generation respondents have a shared understanding of the extent of racism in American society, while first

generation immigrant women have a very different view of race relations, and might not have access to peers who are receptive to their reports of discriminatory experiences.

While African Americans believe that collective effort and solidarity is important in overcoming discrimination (Waters, 1999), immigrants of African descents are unable to use attachment to their race as a buffer, as they may be struggling with their new identity as a Black person in America (Kibour, 2001). When confronted with discrimination in American society many West Indian immigrants might deny its impact, while others naively believe their immigrant status gives them immunity from being treated unfairly because of their race (Brice-Baker, 1994; Waters, 1999). Many believe that while racism and discrimination exists, the impact on their life can be circumvented by hard work.

Finally, the study found that respondents who were more immersed in ethnic society reported less depression symptoms when they used more spiritual coping behaviors. The connection between ethnic society immersion and spirituality suggests that the young women's socialization engendered a belief that their spirituality was a source of personal strength. Religion and spirituality have always played a principal role in the Black community, and spirituality is so interwoven into the traditional societies of the West Indies, that it may be difficult to distinguish between spiritual beliefs and cultural beliefs. Spirituality provides a sense of confidence that things will turn out all right and increases the likelihood that instrumental problem solving approaches will be used (Bressler, 1991), which are associated with less depression symptoms (Spence, Sheffield, & Donovan, 2003).

4.3 Summary

The results discussed here show the importance of extending current models of the etiology of depression to include cross-cultural considerations, and more importantly, the benefits of examining within group process rather than focusing primarily on comparisons between minority groups and White American samples. The young women assessed in this study experienced significant stress from acculturation and racist events that are not always acknowledged in reviews of models of the emergence of gender differences in depression. Further, this study highlighted how little is known about the coping behaviors of first generation immigrant girls and young adults. In this study, the conceptualization of coping is based on an Africentric framework (Utsey et al. 2000), which considers historical and environmental factors that impact how individuals of African descent respond to problems. Although much of the research on coping identify spirituality and community support as important for minority youth, the results from this study suggests that the Africultural Stress Inventory (Utsey et al., 2000) might be more relevant for individuals of African descent who are born here in America, such as the second generation participants, than for foreign born members of minority groups. Future research is needed to assess useful coping behaviors for first generation adolescents and young adults.

The models of depression reviewed here suggest that increases in depression among adolescent girls result from an interaction between increased stressful life events in adolescence and ineffective coping styles. For instance, Nolen-Hoeksema (1994) suggested that females are more likely to enact ruminative coping than more active coping styles in response to negative life events. However, Spiritual Coping behaviors

were the most common coping behavior observed for this sample, and in fact spiritual beliefs are a primary source of strength for many individual of African descent. Spiritual coping behaviors involve faith based practices, such as going to church, or reading an holy book, as well as beliefs, such as leaving it in God's hands. These behaviors are not the same as rumination or distraction, which are the more frequently observed passive coping styles. The lack of significant findings among first-generation respondents also challenges the assumption of important risk and protective factors outlined in these models.

4.4 Limitations

Having discussed the significance of the observed results, there are some methodological issues that need to be discussed. The first concerns the small sample size, which may have contributed to insufficient power to detect significant effects in some of the comparative hypotheses. Future researchers will need to consider cultural factors that have an impact on participation and response rates. The small sample resulted from unwillingness among Caribbean immigrants to share personal information with strangers. Special care should be taken to communicate the adequacy of anonymity and confidentiality procedures in future studies using participants from a Caribbean population. This study also highlighted the importance of collaborating with trusted community figures to gain cooperation from this population.

All of the measures used in this study were self-report, including the measures of parental acculturation, which makes them susceptible to informant bias. Although it can be argued that the perception of the respondent is what is most important, as the purpose of the study is to understand their adjustment, it is just as valid to acknowledge that using

multiple informants would have enriched the data, and might have indicated different patterns of associations and points of intervention for clinicians.

4.5 Implications

This research illustrates the importance of incorporating cross-cultural factors in research on adolescent depression and exploring individual differences in samples of immigrant youth. It is clear from this study that different factors are important in explaining the presence of depression symptoms among immigrant youth from different immigrant generations. For instance, we now know that while collective behaviors moderate the impact of stressful events for second-generation young women, the same is not true for first-generation young women. Also, the results suggest that while the frequency and stressfulness of racist events are important considerations in understanding depression symptoms among second generation immigrants, the direct effects of acculturative stress due to low immersion in dominant society and differences in acculturation with parents are important for first generation immigrants. Therapists and researchers must consider these differences in their work with young immigrant women.

The consistency of the moderating effect of collective coping behaviors suggests that it is an important behavior to reinforce among young adults from this group. The significant interaction between spirituality and ethnic society immersion highlights the importance of exploring the use and importance of spirituality among first generation clients (who, according to this study, will be more immersed in ethnic society).

Spirituality is closely associated with being psychologically healthy, and when treating women who are very spiritual, it is important that therapists integrate their patients' beliefs into their treatment. Highly spiritual women of color will often identify

spiritual forces rather than social or personal ones in explaining their problems (Comas-Diaz, 1991). Integrating the coping behaviors that these women are already prone to use may be a very powerful intervention that could increase their participation and commitment to therapy.

4.6 Future Directions

Future studies should include qualitative analysis of the stressors that the young women report, and considering that the coping behaviors examined here were not significant for first generation participants, they should also include a qualitative analyses of coping behaviors. Given the lack of research on this population, and the questions raised in this study, qualitative studies will generate questions that are based on the experiences of women from this population. Future studies should also seek to explore what personality and cognitive variables might moderate the impact of stress on adjustment for immigrant girls. For example, the two-way interaction between immersion in ethnic society and spirituality was a significant predictor of depression. Spiritual coping seems related to internal/external attributions, which are related to the severity of depression and self esteem (Abramson, Seligman, & Teasdale, 1978). An increased understanding of the relations of well-researched cognitive variables and spirituality would enhance the usefulness of future theoretical and empirical analyses with this population.

APPENDIX A

MATERIALS

Participant Consent Form

Demographic Form

Stephenson Multigroup Acculturation Scale

PERI-LES

CES-D

ACSI

SRE

Written Debriefing Statement

Participant Consent Form-General

The purpose of this study is to find out about adjustment to stressful life events. If you decide to participate in this study, you will be asked to fill out a number of questionnaires, which will take you approximately 30 minutes to complete. You will be asked to answer questions about your background, and to write about problems you experience and how you cope with problems.

There are no known risks to participating in this study. In the event that any of the questionnaires bring up emotions, which are upsetting, the experimenter is trained to evaluate your mental state and make appropriate referrals to professional counseling services. Your participation is totally voluntary and you may discontinue participation at anytime without penalty.

Following the collection of data, your individual identity will be removed from all records and remain confidential at all times. Only number will identify your responses.

You are free to ask questions about the study or your participation at this time or at anytime during your participation.

I have decided to participate in this study. My signature below indicates that I have decided to participate and that I have read and understood the information in the consent form. I realize that I am completely free to withdraw consent and discontinue participation at any time.

Print Name

Signature

Date

Address

Phone Number

I have fully explained the study described above, including the nature and purpose, to the participant.

Investigator

Date

Demographic Form

Please respond to these questions by either checking the appropriate answer following the statement, or by filling in the response on the line following the question.

1. Age _____
2. Male _____ Female _____
3. Place of Birth: _____. If not the U.S. how old were you when you moved here _____
4. Mother's Place of Birth _____ (Fill in)
5. Father's Place of Birth _____ (Fill in)
6. Grandmothers' Place(s) of Birth
1. _____ (Fill in)
2. _____ (Fill in)
7. Grandfathers' Place of Birth
1. _____ (Fill in)
2. _____ (Fill in)
8. Your Marital Status: Single ___ Divorced ___ Widow ___ Married ___ Separated ___
Other _____
9. Do you have any children? _____ If so how many? _____
10. What is your mother's current occupation? _____
11. What is your father's current occupation? _____
12. What is your mother's level of education? _____

Less than 7th grade _____	Partial College (at least one year) _____
Junior High School (9th grade) _____	Specialized Training _____
Partial High School (ex. 11th grade) _____	College Graduate (ex. UWI) _____
High School graduate _____	Graduate or Professional Training _____

12. What is your father's level of education?

Less than 7th grade _____
Junior High School (9th grade) _____
Partial High School (ex. 11th grade) _____
High School graduate _____
Partial College (at least one year) _____
Specialized Training _____
College Graduate (ex. UWI) _____
Graduate or Professional Training _____

13. What's your highest level of education? _____
14. How do you identify yourself racially (example: Black, Asian)? _____
15. How do you identify yourself ethnically (example: African American, West Indian, Caribbean-American, Trini, Bajan, etc.)? _____
16. Other than your parents are there, or have there been significant adults in your life?
No _____ Yes _____
- If yes, would you consider these adults supportive of you? Yes _____ No _____
17. Would you consider him or her instrumental in your life in some way?
No _____ Yes _____
- If yes how?

18. Did you grow up with both parents? Yes _____ No _____

b. If not, who did you grow up with _____

19. How many times have you visited the Caribbean? _____

20. Has anyone in your family, including yourself, ever seen a psychiatrist, psychologist, social worker, doctor, school counselor, pastor, or other professionals for a psychological or emotional problem? _____

If yes, who?

Why? _____

21. Are you currently being treated for any medical conditions (ex. flu, diabetes, gynecological problems, etc)? _____

QUESTIONNAIRE 1

Below are a number of statements that evaluate changes that occur when people interact with others of different cultures or ethnic groups.

For questions that refer to "COUNTRY OF ORIGIN" or "NATIVE COUNTRY", please refer to the country from which your family originally came.

For questions referring to "NATIVE LANGUAGE", please refer to the language spoken where your family originally came.

Circle the number that matches your response to each statement

		FALSE	PARTLY FALSE	PARTLY TRUE	TRUE
1	I understand English, but I'm not fluent in English.	1	2	3	4
2	I am informed about current affairs in the United States	1	2	3	4
3	I speak my native language with my friends and acquaintances from my country of origin.	1	2	3	4
4	I have never learned to speak the language of my native country	1	2	3	4
5	I feel totally comfortable with (Anglo) American people.	1	2	3	4
6	I eat traditional foods from my native culture.	1	2	3	4
7	I have many (Anglo) American acquaintances	1	2	3	4
8	I feel comfortable speaking my native language.	1	2	3	4
9	I am informed about current affairs in my native country.	1	2	3	4
10	I know how to read and write in my native language.	1	2	3	4
11	I feel at home in the United States.	1	2	3	4
12	I attend social functions with people from my native country.	1	2	3	4
13	I feel accepted by (Anglo) Americans.	1	2	3	4
14	I speak my native language at home.	1	2	3	4
15	I regularly read magazines of my ethnic group.	1	2	3	4
16	I know how to speak my native language.	1	2	3	4
17	I know how to prepare (Anglo) American foods.	1	2	3	4
18	I am familiar with the history of my native country.	1	2	3	4
19	I regularly read an American newspaper.	1	2	3	4
20	I like to listen to music of my own ethnic group.	1	2	3	4
21	I like to speak my native language.	1	2	3	4
22	I feel comfortable speaking English.	1	2	3	4
23	I speak English at home.	1	2	3	4
24	I speak my native language with my spouse or partner.	1	2	3	4
25	When I pray, I use my native language.	1	2	3	4
26	I attend social functions with (Anglo) American people.	1	2	3	4
27	I think in my native language.	1	2	3	4
28	I stay in close contact with family members and relatives in my native country.	1	2	3	4
29	I am familiar with important people in American history.	1	2	3	4
30	I think in English.	1	2	3	4
31	I speak English with my spouse or partner.	1	2	3	4
32	I like to eat American foods.	1	2	3	4

QUESTIONNAIRE 2

Below are a number of statements that evaluate changes that occur when people interact with others of different cultures or ethnic groups.

For questions that refer to "COUNTRY OF ORIGIN" or "NATIVE COUNTRY", please refer to the country from which your father originally came.

For questions referring to "NATIVE LANGUAGE", please refer to the language spoken where your father originally came (ex. Patois or creole).

Circle the number that matches your response to each statement

		FALSE	PARTLY FALSE	PARTLY TRUE	TRUE
1	My father understands English, but is not fluent in English.	1	2	3	4
2	My father is informed about current affairs in the United States	1	2	3	4
3	My father speaks his native language with his friends and acquaintances from his country of origin.	1	2	3	4
4	My father has never learned to speak the language of his native country	1	2	3	4
5	My father feels totally comfortable with (Anglo) American people.	1	2	3	4
6	My father eats traditional foods from his native culture.	1	2	3	4
7	My father has many (Anglo) American acquaintances	1	2	3	4
8	My father feels comfortable speaking his native language.	1	2	3	4
9	My father is informed about current affairs in his native country.	1	2	3	4
10	My father knows how to read and write in his native language.	1	2	3	4
11	My father feels at home in the United States.	1	2	3	4
12	My father attends social functions with people from his native country.	1	2	3	4
13	My father feels accepted by (Anglo) Americans.	1	2	3	4
14	My father speaks my native language at home.	1	2	3	4
15	My father regularly reads magazines of his ethnic group.	1	2	3	4
16	My father knows how to speak his native language.	1	2	3	4
17	My father knows how to prepare (Anglo) American foods.	1	2	3	4
18	My father is familiar with the history of his native country.	1	2	3	4
19	My father regularly reads an American newspaper.	1	2	3	4
20	My father likes to listen to music of his own ethnic group.	1	2	3	4
21	My father likes to speak his native language.	1	2	3	4
22	My father feels comfortable speaking English.	1	2	3	4
23	My father speaks English at home.	1	2	3	4
24	My father speaks his native language with his spouse or partner.	1	2	3	4
25	When my father prays, my father uses his native language.	1	2	3	4
26	My father attends social functions with (Anglo) American people.	1	2	3	4
27	My father thinks in his native language.	1	2	3	4
28	My father stays in close contact with family members and relatives in his native country.	1	2	3	4
29	My father is familiar with important people in American history.	1	2	3	4
30	My father thinks in English.	1	2	3	4
31	My father speaks English with his spouse or partner.	1	2	3	4
32	My father likes to eat American foods.	1	2	3	4

QUESTIONNAIRE 3

Below are a number of statements that evaluate changes that occur when people interact with others of different cultures or ethnic groups.

For questions that refer to "COUNTRY OF ORIGIN" or "NATIVE COUNTRY", please refer to the country from which your mother originally came.

For questions referring to "NATIVE LANGUAGE", please refer to the language spoken where your mother originally came (ex. Patois or creole).

Circle the number that matches your response to each statement

		FALSE	PARTLY FALSE	PARTLY TRUE	TRUE
1	My mother understands English, but is not fluent in English.	1	2	3	4
2	My mother is informed about current affairs in the United States	1	2	3	4
3	My mother speaks her native language with her friends and acquaintances from her country of origin.	1	2	3	4
4	My mother has never learned to speak the language of her native country	1	2	3	4
5	My mother feels totally comfortable with (Anglo) American people.	1	2	3	4
6	My mother eats traditional foods from her native culture.	1	2	3	4
7	My mother has many (Anglo) American acquaintances	1	2	3	4
8	My mother feels comfortable speaking her native language.	1	2	3	4
9	My mother is informed about current affairs in her native country.	1	2	3	4
10	My mother knows how to read and write in her native language.	1	2	3	4
11	My mother feels at home in the United States.	1	2	3	4
12	My mother attends social functions with people from her native country.	1	2	3	4
13	My mother feels accepted by (Anglo) Americans.	1	2	3	4
14	My mother speaks her native language at home.	1	2	3	4
15	My mother regularly reads magazines of her ethnic group.	1	2	3	4
16	My mother knows how to speak her native language.	1	2	3	4
17	My mother knows how to prepare (Anglo) American foods.	1	2	3	4
18	My mother is familiar with the history of her native country.	1	2	3	4
19	My mother regularly reads an American newspaper.	1	2	3	4
20	My mother likes to listen to music of her own ethnic group.	1	2	3	4
21	My mother likes to speak her native language.	1	2	3	4
22	My mother feels comfortable speaking English.	1	2	3	4
23	My mother speaks English at home.	1	2	3	4
24	My mother speaks her native language with her spouse or partner.	1	2	3	4
25	When My mother prays, My mother uses her native language.	1	2	3	4
26	My mother attends social functions with (Anglo) American people.	1	2	3	4
27	My mother thinks in her native language.	1	2	3	4
28	My mother stays in close contact with family members and relatives in her native country.	1	2	3	4
29	My mother is familiar with important people in American history.	1	2	3	4
30	My mother thinks in English.	1	2	3	4
31	My mother speaks English with her spouse or partner.	1	2	3	4
32	My mother likes to eat American foods.	1	2	3	4

QUESTIONNAIRE 4

Please Read Instructions for each ITEM: Listed below are a number of events that sometimes bring about changes in the lives of those who experience them and which necessitate social readjustment. **Please check those events that you have experienced in the recent past by indicating the time period during which you experienced each event.**

		0-6 months	7-12 months	In your lifetime
1	1. Marriage			
2	2. Detention in jail			
3	3. Death of a spouse or partner			
4	4. Major change in sleeping habits (e.g., much more or much less sleep)			
5	A Death of a close family member:			
6	357. mother			
7	358. father			
8	359. brother			
9	360. sister			
10	361. grandmother			
11	362. grandfather			
12	363. other			
13	364. Major change in eating habits (e.g., much more or less food intake)			
14	365. Foreclosure on a loan			
15	366. Death of a close friend			
16	367. Arrested by police			
17	368. Outstanding personal achievement			
18	369. Minor law violations (e.g., traffic)			
19	370. Partner's/girlfriend's pregnancy			
20	371. Own pregnancy			
21	372. Transferred to a new school			
22	373. Changed work situation (e.g., different working hours, promotion)			
23	374. New job			
24	B. Serious illness or injury of close family member:			
25	375. mother			
26	376. father			
27	377. brother			
28	378. sister			
29	379. grandmother			
30	380. grandfather			
31	381. other			
32	382. Sexual difficulties			
33	383. Trouble with employer or advisor			
34	384. Trouble with partner's parents			
35	385. Major change in financial status			
36	386. Major change in closeness of family members			

37	387. Gaining a new family member (e.g., through birth adoption, family member moving in, etc.,)			
38	388. Change of residence			
39	389. Separation from partner/spouse due to conflict			
40	390. Major change in church activities (e.g., increased/decreased attendance)			
41	391. Reconciliation with partner/ spouse			
42	392. Major change in number of arguments with partner/spouse			
43	393. Change in partner/spouse's work			
44	394. Major change in usual type and/or amount of recreation			
45	395. Borrowing more than \$10,000			
46	396. Borrowing less than \$10,000			
47	397. Being fired from a job			
48	398. Being expelled from school			
49	399. Partner/girlfriend having an abortion			
50	400. Own abortion			
51	401. Major personal illness or injury			
52	402. Major change in social activities			
53	403. Major change in living conditions of family			
54	404. Divorce from spouse/partner			
55	405. Serious injury or illness of close friend			
56	406. Separation from spouse/partner due to work, travel, etc.			
57	407. Engagement			
58	408. Breaking up with boyfriend/ girlfriend			
59	409. Leaving home for the first time			
60	410. Getting back together with boyfriend/girlfriend			
61	411. Moved in with partner			
62	412. New romantic relationships.			
63	Other recent experiences which have had an impact on your life. Please list & rate:			
64				
65				
66				

QUESTIONNAIRE 5

The following statements on this page are about how people feel sometimes. Please put an "X" to indicate the number of days you have felt that way in the last week. Include today as part of that week.

During the Past Week:

		Rarely (less than 1 day)	A Little (1-2 Days)	Moderate (3-4 days)	Most (5 days or more)
1	I was bothered by things that usually don't bother me.				
2	I did not feel like eating; my appetite was poor.				
3	I felt that I could not shake off the blues even with help from my family and friends.				
4	I felt that I was just as good as other people.				
5	I had trouble keeping my mind on what I was doing.				
6	I felt depressed.				
7	I felt that everything I did was an effort.				
8	I felt hopeful about the future.				
9	I thought that my life had been a failure.				
10	I felt fearful.				
11	My sleep was restless.				
12	I was happy.				
13	I talked less than usual.				
14	I felt lonely.				
15	People were unfriendly.				
16	I enjoyed life.				
17	I had crying spells.				
18	I felt sad.				
19	I felt that people disliked me.				
20	I could not get going.				

QUESTIONNAIRE 6

In the space below, please describe a stressful situation that occurred within the past week or so.

Using the 4-point scale provided next, indicate which coping strategies you used in coping with the stressful situation described above.

	0 (did not use)	1 (used a little)	2 (used a lot)	3 (used a great deal)
1. Prayed that things would work themselves out.	0	1	2	3
2. Got a group of family or friends together to help with the problem.	0	1	2	3
3. Shared my feelings with a friend or family member	0	1	2	3
4. Remembered what a parent (or other relative) once said about dealing with these kinds of situations.	0	1	2	3
5. Tried to forget about the situation.	0	1	2	3
6. Went to church (or other religious meeting) to get help from the group.	0	1	2	3
7. Thought of all the struggles Black people have had to endure and this gave me strength to deal with the situation.	0	1	2	3
8. To keep from thinking about the situation I found other things to keep me busy.	0	1	2	3
9. Sought advice about how to handle the situation from an older person in my family or community.	0	1	2	3
10. Read a scripture from the Bible (or similar book) for comfort and/or guidance.	0	1	2	3
11. Asked for suggestions on how to handle the situation from an older person in my family or community.	0	1	2	3
12. Tried to convince myself that it wasn't that bad.	0	1	2	3
13. Asked someone to pray for me	0	1	2	3
14. Spent more time than usual doing group activities.	0	1	2	3
15. Hoped that things would get better with time	0	1	2	3
16. Read passage from a daily meditation book	0	1	2	3
17. Spent more time than usual doing things with friends and family	0	1	2	3
18. Tried to remove myself from the situation	0	1	2	3
19. Sought out people I thought would make me laugh	0	1	2	3
20. Got dressed up in my best clothing.	0	1	2	3
21. Asked for blessings from a spiritual or religious person	0	1	2	3
22. Helped others with their problems.	0	1	2	3
23. Lit a candle for strength or guidance in dealing with the problem	0	1	2	3
24. Sought emotional support from family and friends	0	1	2	3
25. Burned incense for strength or guidance in dealing with the problem.	0	1	2	3
26. Attended a social event (dance, party, movie) to reduce stress caused by the situation.	0	1	2	3

27. Sung a song to myself to help reduce the stress	0	1	2	3
28. Used a cross or other object for its special powers in dealing with the problem.	0	1	2	3
29. Found myself watching more comedy shows on TV	0	1	2	3
30. Left matters in God's hands	0	1	2	3

QUESTIONNAIRE 7

We are interested in your experiences with racism. As you answer the questions below, please think about your ENTIRE LIFE, from when you were a child to the present. For each question, please circle the number that best captures the things that have happened to you. Answer each question TWICE, once for what has happened to you IN THE PAST YEAR, and once for what YOUR ENTIRE LIFE HAS BEEN LIKE. Use these numbers:

Circle 1 = If this has NEVER happened to you

Circle 2 = If this has happened ONCE IN A WHILE (less than 10% of the time)

Circle 3 = If this has happened SOMETIMES (10%-25% of the time)

Circle 4 = If this has happened A LOT (26%-49% of the time)

Circle 5 = If this has happened MOST OF THE TIME (50%-70% of the time)

Circle 6 = If this has happened ALMOST ALL OF THE TIME (more than 70% of the time)

1. How many times have you been treated unfairly by teachers and professors because you are Black?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

2. How many times have you been treated unfairly by your *employers, bosses, and supervisors* because you are Black?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

3. How many times have you been treated unfairly by your *coworkers, fellow students and colleagues* because you are Black?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

4. How many times have you been treated unfairly by *people in service jobs* (store clerks, waiters, bartenders, bank tellers, and others) because you are Black?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

5. How many times have you been treated unfairly by *strangers* because you are Black?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

6. How many times have you been treated unfairly by *people in helping jobs* (doctors, nurses, psychiatrists, caseworkers, dentists, school counselors, therapists, social workers, and others) because you are Black?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

7. How many times have you been treated unfairly by *neighbors* because you are Black?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |
8. How many times have you been treated unfairly by *institutions* (schools, universities, law firms, the police, the courts, the Department of Social Services, the Unemployment Office, and others) because you are Black?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |
9. How many times have you been treated unfairly by *people that you thought were your friends* because you are Black?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |
10. How many times have you been *accused or suspected of doing something wrong* (such as stealing, cheating, not doing your share of the work, or breaking the law) because you are Black?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |
11. How many times have people *misunderstood your intentions and motives* because you are Black?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |
12. How many times did you want to *tell someone off for being racist but didn't say anything*?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |
13. How many times have you been *really angry about something racist that was done to you*?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |
14. How many times were you *forced to take drastic steps* (such as filing a grievance, filing a lawsuit, quitting your job, moving away, and other actions) to deal with some racist thing that was done to you?
- | | | | | | | |
|-------------------------------------|------------|---|---|---|---|-----------|
| How many times in the past year? | 1 | 2 | 3 | 4 | 5 | 6 |
| How many times in your entire life? | 1 | 2 | 3 | 4 | 5 | 6 |
| | Not at All | | | | | Extremely |
| How stressful was this for you? | 1 | 2 | 3 | 4 | 5 | 6 |

15. How many times have you *been called a racist name like nigger, coon, jungle bunny* or other name?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

16. How many times have you *gotten into an argument or a fight about something racist that was done to you or done to someone else?*

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

17. How many times have you been *made fun of, picked on, pushed, shoved, hit, or threatened with harm* because you are Black?

How many times in the past year?	1	2	3	4	5	6
How many times in your entire life?	1	2	3	4	5	6
	Not at All					Extremely
How stressful was this for you?	1	2	3	4	5	6

18. How different would your life be now if you HAD NOT BEEN treated in a racist and unfair way
In the past year?

Same as now	A little different	Different in in a few ways	Different in in a lot of ways	Different in most ways	Totally different
1	2	3	4	5	6

In your entire life?

Same as now	A little different	Different in in a few ways	Different in in a lot of ways	Different in most ways	Totally different
1	2	3	4	5	6

THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY.

Written Debriefing Statement

Thank you for participating in this study. I am interested in the experience of depressive symptoms in West Indian immigrants, specifically late adolescent girls. In this study, I want to understand differences in depressive symptoms based on the relations among your experience of stressful life events, especially racist discrimination, acculturation, and acculturation differences with your parents' and your coping behaviors. I believe that West Indian girls have a wealth of coping resources available to them, and are able to cope with numerous stressful life events. However, there are differences in individual ability to cope, and the amount of stressors individuals experience. I am interested in how these differences are related to depression symptoms.

Sometimes when people discuss their life experiences they decide they would like to further discuss these concerns with a professional counselor. I would like to provide you with the number of three professional counseling services at the University of Massachusetts/Amherst.

PSC (413) 545-0041

UHS Mental Health Division (413) 545-2337

Everywoman's Center (413) 545-0800

Once again, thank you for your participation, and please raise any questions you may have about this study. This study will be completed in May 2002. If in the future you would like to find out about the results of this study, you can contact me, Sharlene Beckford, M.S., through email at sharlene@psych.umass.edu or contact Dr. Sally Powers at powers@psych.umass.edu

Once again, thank you!

APPENDIX B

TABLES

Table 13: Results of Hierarchical Regression Analyses.

Model	Predictor	B	t
MDDD			
1	Generation	-3.793	1.620
	MDDD	.125	.899
	SC	-.008	-.047
2	Generation x MDDD	.857	2.399*
	Generation x SC	-.135	-.382
	MDDD x SC	.026	1.199
3	Generation x MDDD x SC	-.070	-1.053
1	Generation	-3.497	-1.152
	MDDD	.078	.580
	RC	1.062	2.260*
2	Generation x MDDD	.839	2.360*
	Generation x RC	-.588	-.477
	MDDD x RC	.036	.649
3	Generation x MDDD x RC	.303	1.310
FDDD			
1	Generation	-5.203	-2.222*
	FDDD	.348	2.954
	SC	-.170	-.106
2	Generation x FDDD	.180	.610
	Generation x SC	-.101	-.277
	FDDD x SC	-.015	-.832
3	Generation x FDDD x SC	-.025	-.569
1	Generation	-5.142	-2.225*
	FDDD	.356	3.083**
	RC	.728	1.602
2	Generation x FDDD	.017	.058
	Generation x RC	-.940	-.704
	FDDD x RC	.035	.725
3	Generation x FDDD x RC	.045	.326

* $p < .05$

** $p < .01$

Continued next page

Table 13: Results of Hierarchical Regression Analyses.

Model	Predictor	B	t
FDDD (cont'd)			
1	Generation	-4.896	-2.079*
	FDDD	.335	2.837**
	CED	.146	1.192
2	Generation x FDDD	.051	.184
	Generation x CED	.168	.622
	FDDD x CED	.018	1.336
3	Generation x FDDD x CED	.055	1.692
ESI			
1	Generation	-2.878	-1.207
	ESI	.033	.273
	CC	-.026	-.177
2	Generation x ESI	-.183	-.752
	Generation x CC	-.388	-1.022
	ESI x CC	-.018	-.862
3	Generation x ESI x CC	.050	1.204
1	Generation	-2.196	-.944
	ESI	.068	.573
	RC	1.119	2.503*
2	Generation x ESI	-.145	-.582
	Generation x RC	-.026	-.018
	ESI x RC	-.010	-.139
3	Generation x ESI x RC	.171	1.132
1	Generation	-2.455	-1.035
	ESI	.038	.318
	CED	.184	1.567
2	Generation x ESI	-.118	-.482
	Generation x CED	.101	.365
	ESI x CED	-.020	1.196
3	Generation x ESI x CED	.024	.653

* $p < .05$

** $p < .01$

Continued next page

Table 13: Results of Hierarchical Regression Analyses.

Model	Predictor	B	t
Recent Racism			
1	Generation	-3.994	-1.813
	Recent	.157	2.176*
	SC	-.021	-.130
2	Generation x Recent	.081	.518
	Generation x SC	-.081	-.233
	Recent x SC	-.008	.624
3	Generation x Recent x SC	-.034	-1.289
1	Generation	-3.628	1.709
	Recent	.108	1.517
	RC	1.293	2.745**
2	Generation x Recent	.130	.835
	Generation x RC	-.916	-.735
	Recent x RC	.010	.321
3	Generation x Recent x RC	-.003	-.041
1	Generation	-3.601	-1.648
	Recent	.148	2.077*
	CED	.195	1.679
2	Generation x Recent	.123	.783
	Generation x CED	.094	.365
	Recent x CED	.009	1.109
	Generation x Recent x CED	.020	1.095
Lifetime			
1	Generation	-4.135	-1.810
	Lifetime	.096	1.587
	SC	-.006	-.039
2	Generation x Lifetime	.014	-.104
	Generation x SC	-.038	.111
	SC x Lifetime	.010	.828
3	Generation x Lifetime x SC	-.021	-.896

* $p < .05$

** $p < .01$

Continued next page

Table 13: Results of Hierarchical Regression Analyses.

Model	Predictor	B	t
Lifetime (cont'd)			
1	Generation	-3.635	-1.659
	Lifetime	.062	1.074
	RC	1.365	2.908
2	Generation x Lifetime	.051	.413
	Generation x RC	-.578	-.477
	Lifetime x RC	.014	.492
3	Generation x Lifetime x RC	.044	.655
1	Generation	-3.630	-1.600
	Lifetime	.085	1.434
	CED	.204	1.726
2	Generation x Lifetime	.044	.341
	Generation x CED	.098	.367
	Lifetime x CED	.009	1.181
3	Generation x Lifetime x CED	.004	.238
Appraisal			
1	Generation	-5.014	-2.196*
	Appraisal	.123	2.385*
	SC	-.008	-.047
2	Generation x Appraisal	.026	.250
	Generation x SC	-.007	-.021
	Appraisal x SC	.077	.686
3	Generation x Appraisal x SC	-.013	-.655
1	Generation	-4.412	-2.003*
	Appraisal	.100	2.030*
	RC	1.271	2.718**
2	Generation x Appraisal	.065	.619
	Generation x RC	-.533	-.453
	Appraisal x RC	.016	.692
3	Generation x Appraisal x RC	.061	1.127

* $p < .05$

** $p < .01$

Continued next page

Table 13: Results of Hierarchical Regression Analyses.

Model	Predictor	B	t
Appraisal (cont'd)			
1	Generation	-4.637	-2.010*
	Appraisal	.115	2.229*
	CED	.116	.944
2	Generation x Appraisal	.053	.473
	Generation x CED	.050	.177
	CED x Appraisal	.009	1.391
3	Generation x Appraisal x CED	.007	.583
DSI			
1	Generation	-1.656	-.728
	DSI	-.331	-2.274*
	CC	.010	1.726
2	Generation x DSI	.743	1.727
	Generation x CC	-.199	-.549
	DSI x CC	-.023	-1.156
3	Generation x DSI x CC	.035	.406
1	Generation	-1.630	-.716
	DSI	-.354	-2.390*
	SC	-.076	-.492
2	Generation x DSI	.734	1.689
	Generation x SC	.043	.124
	DSI x SC	.016	.729
3	Generation x DSI x SC	.022	.317
1	Generation	-1.290	-.581
	DSI	-.333	-2.328*
	RC	1.088	2.503*
2	Generation x DSI	.692	1.634
	Generation x RC	.052	.043
	DSI x RC	.007	.113
3	Generation x DSI x RC	.429	1.369

* $p < .05$

** $p < .01$

Continued next page

Table 13: Results of Hierarchical Regression Analyses.

Model	Predictor	B	t
DSI (cont'd)			
1	Generation	-1.225	-.540
	DSI	-.349	-2.384*
	CED	.183	1.597
2	Generation x DSI	.562	1.286
	Generation x CED	.288	1.084
	DSI x CED	-.022	-1.123
3	Generation x DSI x CED	.096	1.569

* $p < .05$

** $p < .01$

REFERENCES

- Abramson, L. Y., Seligman, M. E. P. & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49-74.
- Aldwin, C., & Greenberger, E. (1987). Cultural differences in the predictors of depression. *American Journal of Community Psychology*, 15, 789-813.
- Allen, L. R., Denner J., Yoshkawa, H., Seidman, E. & Aber, J. L. (1996). Acculturation and depression among Latina urban girls. In B. J. R. Leadbeater & N. Way (Eds.), *Urban girls: Resisting stereotypes, creating identities* (pp. 337-352). New York: University Press.
- Angold, A., & Costello, E. (1993). Depressive comorbidity in children and adolescents: Empirical, theoretical, and methodological issues. *American Journal of Psychiatry*, 150, 1779-1791.
- Berry, J. W. (1996). Immigration, acculturation and adaptation. *Applied Psychology: An International Review*, 46, 5-34.
- Beiser, M. (1987). Changing time perspective and mental health among Southeast Asian refugees. *Culture, Medicine, and Psychiatry*, 11, 437-464.
- Brice-Baker, J. R. (1994). West Indian women of color: The Jamaican woman. In L. Comas-Diaz & B. Greene (Eds.), *Women of Color: Integrating ethnic and gender identities in psychotherapy* (pp. 139-160): New York: Guilford Press.
- Chung, R. C., Bemak, F., & Kagawa-Singer, M. (1998). Gender differences in psychological distress among Southeast Asian refugees. *The Journal of Nervous and Mental Disease*, 186, 112-119.
- Cole, D. A. & McPherson, A. E. (1993). Relation of family subsystems to adolescent depression: Implementing a new family assessment strategy. *Journal of Family Psychology*, 7, 119-133.
- Colomba, M. V., Santiago, E. S., & Rosello, J. (1999). Coping strategies and depression in Puerto Rican adolescents: and exploratory study. *Culture, Diversity & Ethnic Minority Psychology*, 5, 65-75.
- Compas, B. E., Ey, S., & Grant, K. E. (1993). Taxonomy, assessment, and diagnosis of depression during adolescence. *Psychological Bulletin*, 114, 323-344.
- Erkut, S., Szalaha, L. A., Coll, C. G., & Alarcon, O. (2000). Puerto Rican adolescents' self-esteem patterns. *Journal of Research on Adolescence*, 10, 339-364.

- Florsheim, P., Tolan, P. H., & Gorman-Smith, D. (1996). Family processes and risk for externalizing behavior problems among African-American and Hispanic boys. *Journal of Consulting and Clinical Psychology, 64*, 1222-1230.
- Gjerde, P. J., Block, J., & Block, J. (1988). Depressive symptoms and personality during late adolescence: Gender differences in the externalization-internalization of symptom expression. *Journal of Abnormal Psychology, 97*, 475-486.
- Greenberger, E., & Chen, C. (1996). Perceived family relationships and depressed mood in early and late adolescence: A comparison of European and Asian Americans. *Developmental Psychology, 32*, 707-716.
- Heras, P., & Revilla, L. A. (1994). Acculturation, generational status, and family relationship of Pilipino Americans: A study in cultural adaptation. *Family Therapy, 21*, 129-138.
- Hovey J. D. (1998). Acculturative stress, depression, and suicidal ideation among Mexican-American adolescents: Implications for the development of suicide prevention programs in schools. *Psychological Reports, 83*, 249-250.
- Kashani, J., & Carlson, G. (1987). Seriously depressed preschoolers. *American Journal of Psychiatry, 144*, 348-350.
- Kelly, W. E. (1999) Gender differences in depression among college students: a multi-cultural perspective. *College Student Journal, 33*, 72-76.
- Kibour, Y. (2001). Ethiopian immigrants' racial identity attitudes and depression symptomatology: An exploratory study. *Cultural Diversity and Ethnic Minority Psychology, 7*, 47-58.
- Kim, K., Li, D., & Kim, D. (1999) Depressive symptoms in Koreans, Korean-Chinese and Chinese: A transcultural study. *Transcultural Psychiatry, 36*, 303-316.
- Kim, S., & Rew, L. (1994). Ethnic identity, role integration, quality of life, and depression in Korean-American women. *Archives of Psychiatric Nursing, 8*, 348-356.
- Klonoff, E. A., Landrine, H., & Ullman, J. B. (1999). Racial discrimination and psychiatric symptoms among Blacks. *Cultural Diversity and Ethnic Minority Psychology, 5*, 329-339.
- Lay, C. & Nguyen, T. (1998). The role of acculturation-related and acculturation non-specific daily hassles: Vietnamese-Canadian students and psychological distress. *Canadian Journal of Behavioural Science, 30*, 172-181.

- Leadbeater, B. J., Blatt, S. J., & Quinlan, D. M. (1995). Gender-linked vulnerabilities to depressive symptoms, stress, and problem behaviors in adolescents. *Journal of Research on Adolescence*, 5, 55-70.
- Lin, K. M., Lau, J. K. C., Yamamoto, J., Zheng, Y. P., Kim, H. S., Cho, K. H., & Nakasaki, G. (1992). Hwa-Byung: A community study of Korean Americans. *The Journal of Nervous and Mental Disease*, 18, 386-391.
- Luthar, S., & Blatt, S. (1995). Differential vulnerability of dependency and self-criticism among disadvantaged teenagers. *Journal of Research on Adolescence*, 5, 431-449.
- Manson, S. M., Ackerson, L. M., Dick, R. W., Baron, A. E., Fleming, C. M., (1990). Depressive symptoms among American Indian Adolescents: Psychometric characteristics of the Center for Epidemiologic Studies Depression Scale (CES-D). *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 2, 231-237.
- Nguyen, A. N., & Williams, H. L. (1989). Transition from East to West: Vietnamese adolescents and their parents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 2, 505-515.
- Noh, S., Avison, W. A., Kaspar, V. (1992). Depressive symptoms among Korean immigrants: Assessment of a translation of the Center for Epidemiologic Studies-Depression Scale. *Psychological Assessment*, 4, 84-91.
- Nolen-Hoeksema, S. (1994). An interactive model for the emergence of gender differences in depression during adolescence. *Journal of Research on Adolescence*, 4, 519-534.
- Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender differences in depression during adolescence. *Psychological Bulletin*, 115, 424-443.
- Okazaki, S. (1997). Sources of ethnic differences between Asian American and white American college students on measures of depression and social anxiety. *Journal of Abnormal Psychology*, 106, 52-60.
- Petersen, A., Compas, A., Brooks-Gunn, B., Stemmler, J., & Grant, M. (1993). Depression in adolescence. *American Psychologist*, 48, 155-168.
- Petersen, A. C., Sargiani, P. A., & Kennedy, R. E. (1991). Adolescent Depression: Why more girls? *Journal of Youth and Adolescence*, 21, 247-271.
- Radloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied psychological Measurement*, 1, 385-401.

- Rasmussen, K. M., Negy, C., Carlson, R., & Burns, J. M. (1997). Suicide ideation and acculturation among low socioeconomic status Mexican American adolescents. *Journal of Early Adolescence*, 17, 390-407.
- Roosa, M. W. (1999). The relation of child sexual abuse and depression in young women: comparisons across four ethnic groups. *Journal of Abnormal Child Psychology*, 27, 65-76.
- Salgado de Snyder, N. (1987). Factors associated with acculturative stress and depressive symptomatology among married Mexican immigrant women. *Psychology of Women Quarterly*, 11, 475-488.
- Salguero, C., & McCusker, W. R. (1996). Symptom Expression in inner-city Latinas: Psychopathology or help seeking? In B. J. R. Leadbeater & N. Way (Eds.), *Urban girls: Resisting stereotypes, creating identities* (pp. 328-336). New York: University Press.
- Samaan, R. A. (1998). The influences of race, ethnicity, and poverty on the mental health of children. *Journal of Health Care for the Poor and Underserved*, 11, 100-110.
- Shin, K. R. (1993). Factors predicting depression among Korean-American women in New York. *International Journal of Nursing Studies*, 30, 415-423.
- Spence, S. H.; Sheffield, J. K., Donovan, C. L. (2003). Preventing adolescent depression: An evaluation of the Problem Solving For Life program. *Journal of Consulting & Clinical Psychology*, 71, 3-13.
- Stephenson, M. (2000). Development and validation of the Stephenson Multigroup Acculturation Scale (SMAS). *Psychological Assessment*, 12, 77-88.
- Suarez-Orozco, C., & Suarez-Orozco, M. (1995). *Transformations: Immigration, family life, and achievement motivation among Latino adolescents*. Palo Alto, CA: Stanford Univ. Press. 266 pp.
- Takeuchi, D., Chung, R., Lin, K., Shen, H., Kurasake, K., Chun, C., & Sue, S. (1998). Lifetime and twelve-month prevalence rates of major depressive episodes and dysthymia among Chinese Americans in Los Angeles. *American Journal of Psychiatry*, 155, 1407-1414.
- Waters, M. C. (1999). *Black Identities: West Indian immigrant dreams and American realities*. New York City, NY: Russell Sage Foundation.
- Wichstrom, L. (1999). The emergence of gender differences in depressed mood during adolescence: The role of intensified gender socialization. *Developmental Psychology*, 35, 232-245.

- Wiesz, J. R, Suwanlert, S., Chaiyasit, W., Weiss, B., & Walter, B. (1987). Over- and undercontrolled referral problems among children and adolescents from Thailand and the United States: The wat and wai of cultural differences. *Journal of Consulting & Clinical Psychology*, 55, 719-726.
- Wyatt, G. E. (1992). The psychosocial context of African American and white American women's rape. *Journal of Social Issues*, 48, 77-91.
- Yeh, C. J. (2003) Age, acculturation, cultural adjustment, and mental health symptoms of Chinese, Korean, and Japanese immigrant youths. *Cultural Diversity and Ethnic Minority Psychology*, 9, 34 - 48

