

# Coping with Acculturative Stress among U.S. Latina Women Born in Mexico, Puerto Rico and Cuba

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Boston College  
Graduate School of Social Work

COPING WITH ACCULTURATIVE STRESS AMONG U.S. LATINA WOMEN  
BORN IN MEXICO, PUERTO RICO AND CUBA  
A CONTEXTUAL APPROACH TO IMMIGRATION CHALLENGES

A dissertation

by

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ABSTRACT  
COPING WITH ACCULTURATIVE STRESS AMONG LATINA WOMEN

A CONTEXTUAL APPROACH TO IMMIGRATION CHALLENGES

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**Purpose:** Acculturative stress has been found to mediate the relationship between acculturation and psychological distress, yet research investigating the impact of contextual factors on acculturative stress is non-existent. Based on family stress management theory (Boss, 2002), the current study investigates the contextual influence on acculturative stress and psychological distress of Latina women. Acculturation and systems of support were tested for their capacity to moderate the relationships between various significant contexts, acculturative stress and psychological distress. Unique experiences of women born in Cuba, Puerto Rico and Mexico were delineated and compared.

**Methods:** Using the National Latino Asian American Survey, the current study involves 639 Latina women born in Mexico (N=257), Cuba (N=264) and Puerto Rico (N=118). A mediated moderation analysis was conducted through Path Analysis in MPLUS.

**Results:** Findings indicate an inconsistent relationship between acculturative stress and psychological distress. For the combined group of Latina women, racial and daily discrimination shaped acculturative stress and psychological distress most often, followed by age and family-cultural conflict. Income and structural components of internal contexts (i.e. household decision-making power) impacted their psychological distress only. Country-specific variations argue against treating Latina women as a monolithic group. Biculturalism emerged as a more effective integration form. Only spousal support moderated the relationships between contextual factors, psychological distress and acculturative stress.

**Implications:** These findings will inform the development of culturally sensitive clinical interventions. Social work policy makers will gain a comprehensive understanding of resources needed to promote a healthy integration of Latina women into the U.S. Community organizers are encouraged to advocate on behalf of multi-cultural immigration policies that enable the retention of aspects of native culture deemed to buffer Latina women from the negative impact of contextual factors and acculturative stress.

This dissertation is dedicated to my mother (Flurije Bektashi), the source of my strength, perseverance, dedication and patience. Thank you, mom ,for your endless love and support

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## Table of Contents

### ABSTRACT

ACKNOWLEDGMENTS.....	i
Introduction.....	1
Purpose of the Study .....	3
Significance and Contributions of the Study .....	4
Organization of Dissertation .....	5
Literature Review.....	7
<i>Definition of key terms</i> .....	7
<i>Problem Statement</i> .....	10
<i>Theoretical Perspectives</i> .....	19
<i>Defining Acculturative Stress</i> .....	26
<i>Acculturative Stress and Contextual Factors</i> .....	30
<i>Acculturative Stress and Foreign-born Immigrants: Contextual Factors</i> .....	36
<i>Coping with Acculturative Stress: Non-Latina Immigrants</i> .....	46
<i>Acculturative Stress and Contextual Factors: Latina women</i> .....	47
<i>Latina women from Cuba, Puerto Rico and Mexico</i> .....	56
<i>Research Questions and Hypotheses</i> .....	61
Methodology .....	65
<i>Research Design</i> .....	65
<i>Data Source and Sample</i> .....	66
<i>Data Collection Procedures</i> .....	67
<i>Measures</i> .....	70
<i>Sample Characteristics</i> .....	74
<i>Analytical Strategy</i> .....	76
<i>Robustness of Results</i> .....	86
CHAPTER IV .....	88
Results.....	88
Preliminary Analyses .....	89
<i>Zero-Order Correlations</i> .....	90
Path Analyses for combined group of Latina women.....	93
<i>Acculturative Stress and Contextual Factors: Combined group of Latina women</i> ..	94
<i>Acculturative Stress Mediator; Contextual Factors and Psychological Distress: Latina women combined</i> .....	98
<i>Acculturative Stress and Psychological Distress Among Latina women</i> .....	99

<i>Contextual Factors and Psychological Distress Combined group of Latina women</i>	101
<i>Coping Mechanisms: Combined group of Latina women</i>	104
<i>Systems of support, contextual factors, acculturative stress and psychological distress</i>	108
<i>Country of Birth, Contextual Factors, Acculturative Stress and Psychological Distress</i>	109
<i>Cuban-born Latina women: Acculturative Stress and Psychological Distress</i>	111
<i>Cuban-born Latina women: Contextual Factors and Acculturative Stress</i>	112
<i>Cuban-born Latina women: Contextual Factors and Psychological Distress</i>	114
<i>Puerto Rican-born Latina women: Acculturative Stress, Contextual Factors and Psychological Distress</i>	115
<i>Puerto Rican-born Latina women: Contextual Factors and Acculturative Stress</i>	115
<i>Puerto Rican-born Latina women: Contextual Factors and Psychological Distress</i>	117
<i>Mexican-born Latina women Contextual Factors and Psychological Distress</i>	118
<i>Mexican-born Latina women: Contextual Factors and Psychological Distress</i>	119
CHAPTER V	121
Discussion	121
<i>Acculturative Stress and Latina women</i>	122
<i>Acculturative Stress and Psychological Distress in the Light of Contextual Factors</i>	125
<i>Contextual Factors, Acculturative Stress, Latina women and Country of Birth.</i>	126
<i>Contextual Factors and Acculturative Stress</i>	128
<i>Acculturative Stress Mediator Between Contextual Factors and Psychological Distress</i>	136
<i>Contextual Factors and Psychological Distress</i>	138
<i>Coping with Acculturative Stress</i>	141
CHAPTER VI	146
Conclusion	146
<i>Strengths and Limitations of the Study</i>	146
<i>Implications for Practice and Research</i>	150

## CHAPTER 1

This section introduces the topic of the study. It presents the study's aims, research questions and hypotheses. The study's significance and contribution to the general research and social work practitioners are also highlighted.

### Introduction

Due to the recent surge in immigration to the U.S., Latinos are the fastest growing segments of the U.S. population. In 2006 the Latino population was 17,690,524, reflecting growth of 25% from 2000. According to the U.S. Census Bureau (2008) and the Pew Hispanic Center (2007), the Latino population is predicted to constitute a quarter of the U.S. population by 2050. Mexican-Americans are predicted to account for more than half of that population. Research dedicated to psychological distress of Latina women living in the U.S. remains limited (Pew Hispanic Center, 2007).

Scholars have commonly applied an acculturation framework when exploring the variations in psychological distress of this population. That framework refers to the process of change in cultural attitudes and behaviors as a result of an encounter between two cultures (Berry, 1997). Studies suggest that acculturation negatively impacts psychological distress of Latina women (Falicov 2002; Escobar, Constanza & Gara, 2000). There is an inconsistency in these results, however. Those claiming that acculturation in itself is not always a negative experience (Rudmin, 2009) suggest that future research should examine how acculturation becomes a direct stressor in the lives of Latina women by distinguishing acculturation from acculturative stress. Yang et al (2010) found that the impact of acculturation in psychological distress of foreign-borns is

mediated by acculturative stress. His study, however, neglected to inspect the impact of contextual factors on acculturative stress and psychological distress of foreign-borns, disregarding the premises of widely tested theories such as Family Stress Management Theory (FSM) (Boss, 2002). Although intended to explain how the general stress affects the ability of a family to function, FSM's premise that the impact of stress on family's well-being depends on the context surrounding families could also explain the relationship between acculturative stress and psychological distress.

Nwadiora & McAdoo (1996) define acculturative stress as psycho-cultural stress resulting from the cultural differences between a host culture and an incoming culture. Acculturative stress is ~~marked~~ by reduction in the physical and mental health status of individuals or groups undergoing acculturation" (Nwadiora et al, 1996). Others (Berry et al, 1994) have indicated that acculturative stress is not automatically a pathology based solely on cultural differences. It is also driven by a list of contextual factors present in the lives of the acculturating individuals (Berry et al, 1987). Berry (1987) also indicated that acculturative stress can range from a low degree, which improves the more acculturated that individual becomes, to a high degree, which can become debilitating, especially when these individuals lack effective systems of social support (Berry, 1987). Although Born (1970) suggested a list of contextual factors likely to impact acculturative stress, empirical research designed to test the impact of the contextual factors on acculturative stress and psychological distress of acculturating individuals, remains limited.

In instances when acculturative stress impacts psychological distress of Latina women in the U.S., it is important to identify coping mechanisms that can buffer the

negative impact of acculturative stress on psychological distress. These findings may have practical implications for social work clinicians, policy makers and community organizers by informing them of the types of resources needed to promote positive mental-health among those undergoing acculturative stress. Research asserts that despite acculturative stress, Latina women fare better psychologically. Family and social support, maintaining transnational ties, employment and different strategies of acculturation play a significant protective role (Estrada & Firpo-Jimenez, 2000; Rivera, 2007; Vega, Kolody, Valle & Weir, 1991; Dominguez & Lubitow, 2008). Previous research focused mainly on the effect of the coping mechanisms on the psychological distress of Latina women and other groups. The coping mechanisms were not tested for capacity to moderate relationships between acculturative stress, contextual factors and psychological distress. To examine whether these systems of support and acculturation strategies buffer psychological distress of Latina women, the present study employed a broader lens that reflects their psychological well-being as a function of the complex interplay between many contextual factors. The research also investigated whether these systems of support and different types of acculturation strategies impact the relationship between acculturative stress and psychological distress and whether systems of support and acculturation strategies minimize the negative impact of different types of contextual factors on acculturative stress and psychological distress.

### Purpose of the Study

The current study intends to:

1. Undertake a thorough literature review on Latino and non-Latino immigrants to identify contextual factors that impact acculturative stress and psychological distress of Latina women.

2. Estimate which contextual factors directly impact acculturative stress, and directly and indirectly impact their psychological distress.
3. Highlight inter-country differences in relationships among the contextual factors, acculturative stress, and psychological distress of Latina women.
4. Examine how systems of support derived from relatives, friends and spouses impact the relationship among the contextual factors, acculturative stress, and psychological distress of Latina women.
5. Inspect whether acculturation strategies (assimilation and biculturalism) impact the relationship among the contextual factors, acculturative stress and psychological distress of Latina women.
6. Delineate a theoretical approach to the topic by relying on the Boss (2002) Family Stress Management theory (FSM), Yakushko et al (2005) and Chapman et al (2005) frameworks, and the literature on acculturation and psychological distress to assess the contextual influence in relationships between acculturative stress and psychological distress.

### Significance and Contributions of the Study

According to the U.S. Census, the number of Latinos will increase substantially by 2050, with Latinos comprising 2% of the entire US population. Additionally, the number of Latina women is increasing. According to National Council of La Raza, (2007) the U.S. workforce included 8.2 million Hispanic women in 2006. Women composed 39.7% of the Hispanic labor force. Despite these numbers, compared to White and Black female workers, Latina women had the lowest labor force participation rate, the lowest employment rate, and the lowest median weekly earnings (Mocan & Tekin, 2008). Research usually links low psychological distress with high self-esteem which in turn is linked to higher productivity and income. By depicting which contextual factors contribute to acculturative stress among this group of women and identifying the type of mechanisms Latina women employ to manage acculturative stress, policy makers will be

able to identify and advocate on behalf of the resources needed by these women for a healthier integration process.

The findings could also direct social workers looking to make changes that would alleviate the integration efforts of immigrants and to advocate on behalf of immigration policies that will encourage retention of cultural links to acculturative stress and psychological distress. Social workers may gain an integrated understanding of the challenges Latina women face to integrate in the new country and how these challenges interact with their acculturative stress. The acquired knowledge may enable the development of effective interventions that target these challenges. Incorporating positive aspects of Latina “ways of living” in any type of intervention could redefine acculturation as a predicament that does not cost Latina women the loss of important cultural aspects instrumental to their low psychological distress.

### Organization of Dissertation

This dissertation is organized as follows: Chapter Two, the Literature Review, presents the existing literature on acculturative stress and information on contextual factors that may impact acculturative stress among non-Latina and Latina immigrants. It also highlights differences among Latina women born in Cuba, Mexico and Puerto Rico. Chapter Three, Methods, discusses the research and provides the rationale for the chosen analyses. This part also delineates the analytical steps undertaken to test the hypotheses in the study. Chapter Four, Results, presents the findings of the tested hypotheses. Chapter Five, Discussion, reviews the results of the current study comparing them to the findings derived from the previous research. The dissertation ends with a conclusion

where study implications are presented along with the limitations and suggestions for future research.

## CHAPTER II

### Literature Review

This chapter examines the literature about contextual factors, acculturative stress and psychological distress. Existing literature on the role of contextual factors in the lives of the acculturating Latinas, and the relationship between acculturative stress and psychological distress are discussed. It also highlights differences among Latina women from Puerto Rico, Mexico, and Cuba. This discussion supports the need for a study that employs a multiple group analysis to elucidate the variations in the relationship among contextual factors, acculturative stress and psychological distress of Latina women born in Cuba, Mexico and Puerto Rico. This section also outlines the theoretical framework of Family Stress Management (Boss, 2002), and other frameworks on acculturation (Chapman et al, 2005, Yakushko et al, 2005) along with the existing literature on acculturation and psychological distress of Latina women, which guides the analyses in the current study. The chapter begins with a brief presentation of definitions of key concepts used in the current study.

#### *Definition of key terms*

*Acculturative Stress.* In the current study acculturative stress is defined as a “state of disequilibrium,” which occurs while acculturating individuals find that their established coping abilities and resources fall short of the changes they encounter while acculturating, either because of the speed of the process of acculturation, or because of the steep cultural differences between native and host country (Boss, 2002).

*Immigrants.* Foreign-born individuals of different ethnic backgrounds.

*External Contextual factors.* Contexts over which one has no control. These are divided into U.S. climate, cultural, developmental, global and economic contextual factors (Boss, 2002).

*U.S. Climate.* These factors include unfavorable contexts of reception (i.e. daily and racial discrimination, visiting family abroad difficulties, financial constraints and content with the decision to move to U.S.), U.S. region of residence, number of children in the household and years in the U.S. The variable, content with the decision to move to U.S., symbolizes Latina women' satisfaction with their overall experience in the U.S. Therefore, it is related to the U.S. climate.

*Unfavorable contexts of reception.* This concept represents the aspects of climate in the U.S. that may instill a feeling of unwelcome for Latinas(i.e. daily and racial discrimination, visiting family abroad difficulties, and financial constraints).

*Developmental Contexts.* Contextual factors designed to represent the developmental stages of immigrants, such as education level, age at immigration, age, marital status and English skills.

*Cultural contexts.* Family-cultural conflict, familism and religious comfort.

*Economic contexts:* These refer to the level of income.

*Global contexts:* Factors driven by global socio-political and economic forces that impact the experiences of immigrants in the U.S.

*Internal contexts.* Contexts over which a family or the individual has control. These contexts are divided into philosophical, structural and psychological dimensions and include personality and household decision-making power (Boss, 2002).

*Psychological distress.* This refers to a lack of general sense of well-being.

*Latina women.* According to Pew Hispanic Center, either the term Latino or Hispanic is universally embraced by the communities to which the terms apply. A 2006 survey by the Pew Hispanic Center found that while 26% of Latinos generally use the terms Latino or Hispanic, 24% call themselves American on first reference, 48% of Latino adults describe themselves by their country of origin. As far as their preference for the terms “Hispanic” and “Latino” is concerned, a 2008 Center survey found that 36% of respondents prefer the term “Hispanic,” 21% prefer the term “Latino” and the rest have no preference (Pew Hispanic Center, 2007). Furthermore, according to Korzenny & Korzenny (2005), the term Latino "encompasses almost anyone from a culture with Latin roots. That could be Italians, Romanians, Portuguese, French. The term Hispanic is generally used to identify people who come from the countries that Spain colonized, including those far away from America like the Philippines (Korzenny & Korzenny, 2005). In the current study, when Latina women born in Puerto Rico, Mexico and Cuba are aggregated into one group, they will be referred to as Latina women. To take into consideration the differences between Latina women born in Cuba, Mexico, and those born in Puerto Rico, Latina women in this study will be referred to as Cuban-, Puerto Rican-, and Mexican-born women when referred to individually. Although Latina women in this study are not born in the United States, they will not be referred to as foreign-born or immigrant women. Puerto Ricans are U.S. citizens and therefore not international migrants. They do not share many of the migration barriers of Mexican, Caribbean-based and South American populations (i.e., lack of citizenship status, border

crossing, customs, and barriers in communicating and visiting with families abroad) (Lee & Ferraro, 2009).

### *Problem Statement*

With the large influx of Latino immigrants entering the U.S., scholarly work which focuses on analyzing psychological distress of this population, has grown considerably. Much of the initial research supporting the *immigrant hypothesis* predicts that, compared to second generation immigrants, first generation immigrants exhibit higher psychological distress due to challenges and obstacles they encounter as they make their way into the new society. Some of these difficulties include those related to finding quality jobs, discrimination, small social network and lack of information on resources available to provide them with need-based support. These conclusions were supported by hospital and clinic records (Baker, 2004).

Subsequent studies revealed that not only was there no difference in psychological distress of U.S. -born and foreign-born individuals in the U.S., but that at least some immigrant groups experience lower psychological distress than their U.S. -born counterparts. As immigrants participate fully in American life, they become similar to U.S. -born individuals and their psychological distress improves overtime (Baker, 2004). Later, scholars explored the impact of acculturation and immigration experience on different groups of immigrants. More recently, attention has been paid to psychological distress of Latina women. Nonetheless, considerable gaps, particularly those related to the literature on the racially and ethnically different Latina women, and the impact of acculturative stress, characterize this research.

Despite the fact that these women are making strides to improve their socio-economic status and to pursue careers or succeed professionally, the research maintains that many continue to live in very low income levels, face high unemployment and poverty levels, and are more likely than other groups in the U.S. to be single mothers (U.S. Census, 2008). Research also reports that foreign-born women are likely to face high unemployment and financial constraints and are more likely than other groups in the U.S. to be single mothers (U.S. Census, 2008; Pew Hispanic Center, 2007). In addition, some studies have confirmed that Latina women experience higher acculturative stress than their male counterparts (Allen, Amason & Holmes, 1998). Several contextual factors influence the impact of acculturative stress in their psychological distress. Nonetheless, empirical studies examining the relationship between acculturative stress, the contextual factors and their psychological distress remain limited.

The lack of attention earlier to psychological distress of this population is attributed to the traditional perception of Latina women as “wives, mothers, or daughters of male migrants,” which suggests that women are dependent and that their experiences are tied to men and their families (Baker, 2004). A well-functioning family is essential to the overall well-being of Latinas. They often are pushed to immigrate to the U.S. in order to secure the well-being of their families (Hondagneu, 1992). According to Pedraza (1991), most scholars have ignored immigrant women’s mental health and experience with acculturation, perhaps because of the perception that an international immigrant is a young, economically-motivated male (Housetounet al, 1984). This opinion disregards the unique needs of women.

As social workers, it is our professional duty to produce the knowledge pertaining to the specific experiences of Latina women. Especially, since in some mental health related research and practice fields, sex role biases have enabled the support of status quo- “disadvantaged status for women” (Russo & Denmark, 1984). If the lack of knowledge on specific needs and experiences of Latina women persists, realities will be masked by stereotypes which will continue to shape the formulation of mental health policies, research and services.

In addition, even though there is abundant research examining psychological distress among Latino immigrants, much of this research either focuses exclusively on Mexican-Americans or treats Latino immigrants as a homogenous group (i.e., Stuber, Galea, Ahern, Blane & Fuller, 2003). These general findings might contribute to the universal knowledge of issues impacting psychological distress of this population, however, they are not sensitive to the unique needs of Latina women born in Puerto Rico, Cuba, and Mexico (Lee & Ferraro, 2009). While Latinos may share characteristics such as linguistic, cultural and family values (Gil, 1996), several differences exist, such as demographics, immigration status, and cultural differences, warning against generalization among all Latina women.

Age has been identified as a significant contextual factor in the relationship between acculturative stress and psychological distress of Latino immigrants (Mena et al, 1987). According to the U.S. Census Bureau (2008), while Mexicans have the most youthful age structure (i.e., about 30 percent of the population is younger than age 15), the age of Cubans is older, resembling that of whites (U.S. Census, 2008). Given the age differences, it is very likely that needs of Cuban immigrants differ from those of Mexican

immigrants, both from policy and clinical perspectives. Other differences include the role of the ethnic enclave on their socio-economic development and integration in the new society.

Not all Latina women enjoy equal support of their country-men and women. For example, Cuban enclave, which refers to second generation immigrants of Latino descent in the U.S., provided many opportunities for the early waves of Cuban immigrants; consequently, most of the Cubans moved quickly to the professional classes (Zembic, 2000). Such support, however, was not available to the two last waves of Cuban immigrants. The third wave of Cuban immigrants, known as Marielitos received minimal support from their enclave. Marielitos, considered to be the Cuba's unwanted part of the population associated with criminals and the mentally ill (Copeland, 1983), were stigmatized by both, the U.S. society and the Cuban enclave. In contrast, even though second-generation Mexican immigrant children experience the highest levels of social mobility, their ascendance up the socioeconomic ladder in the U.S. drops substantially with the third generation (Zsembik and Llanes, 1996). Compared to their Cuban counterparts, first and second generation Mexican immigrants aspiring to ascend the socio-economic ladder in the U.S. draw a limited support from their enclaves. Puerto Ricans also experience a highly constrained social mobility across generations (Landale, Oropesa, Llanes & Gorman, 1999) suggesting that they draw even less support from their ethnic enclaves compared to their Cuban and Mexican counterparts when attempting to better themselves economically. Research consistently shows that financial constraints are a major area of concern for Puerto Ricans women born in the U.S. (Baker, 2004), especially for those living in the Northeastern part of the U.S.

In addition to the impact of age and support from ethnic enclaves in the experiences with acculturation and acculturative stress, Castillo, Mcnally, Mchen, Blucker & Olds (2008) suggest that the time and the age of immigration to the U.S. and their legal status are critical contextual factors, as far as acculturative stress and psychological distress are concerned. These authors indicate that Mexican-, Puerto Rican- and Cuban-born Latina women may also differ from each other in terms of how old they were when immigrating into the U.S. (Castillo et al, 2008). Lastly, not all Latino immigrants are subjected to fears and insecurities related to their legal immigration status. Given their citizenship status, Puerto Rican-born Latina women do not fear apprehensions and deportation. On the contrary, Mexican immigrants that are most likely to hold an illegal status compared to other immigrants from Latin America, are likely to experience heightened distress associated with fears, worries, and insecurities of the consequences of possible illegal status (del Pilar, 2008). Lastly, given the historically strained socio-political relationships between Cuba and the U.S., Cuban-born women in the U.S. might be impacted substantially by their inability to visit family back home.

The above listed differences are only a few of the many contextual factors that contribute to the group differences in the relationships between contextual factors, acculturative stress and psychological distress among Latina women in the U.S. These differences stress the need to focus separately on each of these groups. Because the majority of Latinos in the U.S. consist of immigrants from Mexican origin, the results derived from studies that treat Latino immigrants as a monolithic may mask the substantial inter-country differences among this group of immigrants. The multi-group analyses employed in the current study are designed to explore how Cuban-, Puerto

Rican-and Mexican-born Latina women differ in how contextual factors impact their acculturative stress and psychological distress.

In addition to not accounting for group-specific differences in acculturative stress and psychological distress among Latina women in the U.S., there seems to be a lack of consistency in defining acculturative stress, and a neglect towards the impact of contextual factors on acculturative stress and psychological distress of Latina women. Often researchers, policy makers and practitioners assume that acculturative stress leads to negative symptoms such as depression, personality disorders, post-traumatic stress disorders and other forms of mental illnesses. Del Pilar (2008) states that, “DMS IV TR needs 410 different diagnostic labels to accomplish what acculturative stress does with just one” (del Pilar, 2008). According to Berry (2004), most of the individuals who undergo acculturative stress are able to overcome it and adapt successfully in the host country. Consequently, rather than associating acculturative stress with negative symptoms, scholars suggest that acculturative stress be treated as a function of the environment (Berry, 2007; Berry et al, 1987). Whether acculturative stress is negative or positive, it depends on immigrants’ exposure to various contextual factors, the available systems of support and coping mechanisms that could buffer the negative impact of acculturative stress and contextual factors in their psychological distress.

Host society’s contextual factors constitute a great portion of the context surrounding acculturating individuals. Yet, there is a lack of empirical research which examines how the host society’s receptiveness towards immigrants makes a difference in acculturative stress and psychological distress of Latina women. Studies have used such contextual factors as discrimination, financial constraints, and environmental safety as

indicators of the host society's receptivity to immigrants. Countries in which immigrants perceive lower levels of discrimination and more economic opportunities are identified as pluralistic (Born, 1970) and are considered to be more receptive to immigrant groups. Acculturative stress among immigrants is lower in these societies.

In a study focusing on acculturative stress among refugees, William et al (1991) listed several specific contextual factors that may impact acculturative stress. These contextual factors include the availability of social and cultural networks, social and cultural qualities of the acculturating groups, one's entry versus one's departure, socio-economic status, education, employment, foreign-born individuals prior knowledge of the new language and culture and intercultural encounters, contact experiences with the members of the native and host country, and the quality of such contact (William et al, 1991). Many of these factors may apply to other first generation Latino groups who often share a similar environment (Torres, 2010). Research testing the impact of host society's contextual factors and pre-immigration experience contextual factors on acculturative stress and psychological distress among Latina women is scarce. Limited research focuses on the impact of these contextual factors in Latino's experiences with acculturation. Details on this research are provided in a separate section below.

Acculturative stress has been addressed by several scholars but it has not been defined consistently. The inconsistent use of terms and indicators associated with acculturative stress has hampered my ability to synthesize the literature. Some researchers regard acculturative stress as a pathology, "associated by a reduction in the physical and mental health status of individuals or groups" (Nwadoria et al, 1996). Others (Boss, 2002) define it as a "state of disequilibrium," which transpires while

acculturating individuals find that their coping abilities and resources fall short of the changes they encounter while acculturating, either because of the speed of the process, or aspects such as steep cultural differences between native and host country.

The research is also inconsistent with regards to the measures of acculturative stress. While some studies employ indicators such as biological symptoms (Berry et al, 1987), others rely on multi-dimensional scales such as the Hispanic Stress Inventory (HIS; Cervantes, Padilla, and Salgado de Snyder, 1990, 1991). The HIS has been developed to be used for both, foreign-born and U.S. born Latinos. Additionally, the Social, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE; Padilla, Wagatsume and Lindholm, 1985) is used substantially in research. This type of a measure assesses numerous components of acculturative stress, including discrimination, barriers to adaptation, isolation, and communication difficulties (SAFE, Padilla, Wagatsume & Lindholm, 1985). However, while the utilization of the scales may facilitate analyses and assure possible multi-dimensional approaches to acculturative stress, these scales do not capture the entire range of contextual factors that could impact acculturative stress. Some researchers noted that some contextual factors, (i.e. discrimination commonly associated with high acculturative stress and psychological distress among immigrant groups) could be downplayed in empirical studies that employ scales such as SAFE (Goodkind et al, 2008). Most of the scales used to measure acculturative stress, such as SAFE and HIS, regard discrimination as part of the acculturation experience and consider it a component of acculturative stress. However, Goodkind et al (2008) suggested that despite the fact that acculturative stress is highly correlated with discrimination, discrimination is a distinct stressor that impacts one's

psychological distress separately. Kulis, Marsiglia and Nieri (2009) separated discrimination and acculturative stress into two indicators and in doing so found that discrimination emerged a stronger and a more influential contextual factor in predicting aspects of mental health (Kulis et al, 2009). Consistent with previous research (Kulis et al, 2009), the current study separates discrimination from acculturative stress.

Discrimination will be represented by two measures: daily and racial discrimination, since not all Latinos experience equally these two types of discriminations. In doing so, an attempt will be made to capture the impact of both, acculturative stress and discrimination on psychological distress of Latina women, and the inter-country variations of the relationship between these two forms of discrimination on their acculturative stress and psychological distress.

When studies related to Latinos' experiences with acculturative stress focus on Latinos as a group, the specific challenges that Latina women face as women from different countries are neglected. Goodkind, Gonzales, Malcom & Espinosa (2008) state that Latina women' acculturative stress is driven by such contextual factors as role strain (stress associated with balancing multiple roles), and differences in gender role expectations between their country of origin and the U.S. Latinas may rely on traditional values despite the challenges these values may present to their integration efforts. That may be related to not having a say in their decisions to immigrate to the U.S. (Goodkind et al, 2008).

The present study examines how some of these contextual factors influence Latina women's experiences with acculturative stress. It will test for the impact of reliance in traditional gender-based roles at home, being content with the decision to

move to U.S., familism, family-cultural conflict, and financial constraints. The current study will also inspect how different systems of support, such as spousal support, friend and relative support moderate the impact of acculturative stress on psychological distress among these women and the impact of contextual factors on acculturative stress and their psychological distress.

The limited literature on acculturative stress lacks a firm grounding in theory. Organized information is more useful than information without any organization, and though in many cases it may not be sufficient, being grounded in theory will inform us of information that may be essential to answering a research question. Family stress management (FSM) theory (Boss, 2002), combined with other frameworks designed to capture the importance of environment in acculturation of Latina women [i.e. Chapman et al's (2005) and Yakusko et al, (2005) framework] serve as frameworks for the current study. Several studies have relied on Boss' theory to understand how families respond and manage stress, and how various contexts impact distress (2002), but this theory has never been applied to understanding the acculturative stress management among Latina women. Specific hypotheses of direct and indirect impact of mediating and moderating contextual factors on acculturative stress's effect and psychological distress will be informed by previous literature on acculturation. However, FSM will provide the conceptual framework for my efforts to understand the context that shapes Latina women' experience with acculturative stress.

### *Theoretical Perspectives*

#### *Family Stress Management Theory*

Family stress management (FSM) theory, one of the guiding frameworks for the current study, delineates the internal and external contextual factors that impact acculturative stress (Figure 1). This is an eco-system-based model. Boss (2002) expanded the original ABC-X model proposed by Hill (1949) to capture the importance of a person's internal context -one's perceptions and meanings- in determining his or her response to events and to managing distress. Family stress is defined as a "pressure on family" (Boss, 2002, p. 61). It is a circumstance under which family members find themselves when their constant state of being becomes upset, "pressured, disturbed and not at rest" (Boss, 2002, p. 62). Family stress does not always lead to a dysfunction, rather, it is family's perception and appraisal of the situation that may lead to stress triggering a more- negative or positive outcome. The stressor event is "an occurrence that is of significant magnitude to prove change in the family system" (Boss, 2002, p. 49). What is defined as a stressor event is highly influenced by the family's external contexts which is composed of those components over "which the family has no control," (Boss, 2002, p. 40) and the family's internal contexts, composed of those components "which the family can change and can control" (Boss, 2002, p. 44). Stress does not always lead to negative outcomes, but when a family is immobilized temporarily from the stress, it is said to be in crisis, or "disturbance in system equilibrium so acute and so strong that the family is at least temporarily immobilized" (Boss, 2002, p. 65). A family under stress is in a "distributed equilibrium," while a family in crisis is in "acute disequilibrium" (Boss, 2002, p. 67).

The external context impacting an individual's appraisal of stress consists of cultural, historical, economic, developmental, and hereditary contexts. Historical context

is the time in history in which a stress-triggering event occurs. This is a rather broad context involving very essential components of the overall environment. Identifying historical context involves asking such questions as: Did the event occur in a climate of choices or in one of discrimination, capture, or limited resources? Economic context represents the economic state that influences how a family reacts to an event that may be perceived as stressful. Developmental context is the stage in the life cycle of both family and individuals in which the stressful events occurs, while the hereditary context is represented by family's heritable and genetic background. Lastly, the cultural context represents —“customs and mores” (Boss, 2002, p. 40) by which families define the way they live and the possible conflict these characteristics trigger with the mainstream culture.

The three main dimensions of a family's internal context include structural, psychological, and philosophical dimensions. Structural dimensions refer to the form and function of the family boundaries, role assignments, and rules regarding who is within and who is outside these boundaries. The psychological context refers to the family's appraisal of stressful event, while philosophical context refers to the values and beliefs of the family.

Eco-system based models have proven very useful in identifying contextual factors that influence psychological distress of immigrants. Yakushko and Chronister (2005) employ such a model in identifying several contextual factors that impact psychological distress of this population. However, while the model may be sensitive to the needs of immigrant women and may serve as a guide to social work practitioners attempting to assess how environmental systems impact experiences with immigration, researchers may find that the model is not sensitive to potential interactions between

systems. For example, employment may interact with levels of discrimination to increase or decrease acculturative stress. Age at immigration may interact with social isolation to intensify acculturative stress, while a woman's age might increase the importance of family-cultural conflict on acculturative stress. In addition, based on the ethnicity, country of origin, and the region of residence in the U.S., some systems may be more influential on acculturative stress and psychological distress than others.

Chapman and Perreira (2005) proposed a framework based on Rumbaut's (2009) ecological framework which features the interplay among political and economic factors and individual characteristics. In the Chapman et al model (2005), some of the contextual factors drawn from an ecological system model proposed by Yakushko et al (2005) are mixed to allow the emergence of a new framework that captures the reality of immigration challenges facing Latino youth. This framework hypothesizes that the significance of the environment on psychological distress of Latino youth decreases from left to right, such that compared to the Latino youth individual-based contextual factors (see last column in Table 2), context of exit contextual factors (see first column in Table 2) exert a lesser influence.

Both of the above frameworks are necessary to capture the experiences of Latina women with acculturation and acculturative stress. While the information provided by Yakushko et al (2005) (see Table 1) is helpful in understanding different contextual factors that are likely to influence immigrant women regardless of age, ethnicity, racial background or economic status, Chapman et al (2005) framework is modified to fit the unique experiences of Latino youth, appropriate to their age, level of development and ethnicity. Yakushko et al (2005) framework provides a large pool of resources to draw

from, while Chapman et al (2005) and its development process is a blueprint that one may follow when in need of accounting for specific needs of a smaller population group.

The assumptions of Family Stress Management theory (FSM) apply widely to the experiences of Latina women with immigration, demographic and socio-economic challenges, and acculturative stress. Among others, the framework is designed to focus on the family as a unit of analysis. Research indicates that family is essential to the overall health of Latinas who often perceive health in a holistic way encompassing spiritual, physical, emotional, and familial dimensions (Vega et al, 2000). Other dimensions of FSM theory applicable to experiences of Latina women include the macro divisions of contextual factors into internal and external categories, stressor event, stress, and crisis, and the identification of coping mechanisms. Although this theory is being used as a guiding framework to organize the contextual factors that might impact psychological distress and acculturative stress of Latina groups (those born in Cuba, Puerto Rico and Mexico), the study will also rely on frameworks developed by Chapman et al (2005) and Yakushko et al (2005). The FSM Framework supports my efforts to view acculturative stress as separate and different from psychological distress, and to develop a systemic view of acculturative stress. This view of acculturative stress differs from the one supported by current literature which treats it as either a pathology, or constantly associates it positively with psychological distress among acculturating individuals. Furthermore, FSM theory guides my efforts to assess whether acculturative stress is impacted by a set of contextual factors that may be different from those impacting psychological distress. It allows me to test the impact of many relevant contextual factors in the developmental, cultural, historical, economic, structural, and

philosophical aspects of the lives of the Latina women. This theory will help in fulfilling the purpose of generating the needed knowledge that will inform readers on what contexts impact acculturative stress and psychological distress the most, and whether these contextual factors interact with each other in impacting acculturative stress and psychological distress. FSM suggests that these contexts interact with each other in impacting acculturative stress and psychological distress among this population, but FSM suffers from the same defect as other frameworks, it does not specify which contextual factors are more likely to interact with each other in impacting acculturative stress and psychological distress.

The current study relies on the literature on Latino and non-Latino immigrants on acculturation and psychological distress to identify the external and internal contexts that impact acculturative stress and psychological distress of Latina women. As it will be elaborated below, the external context shaping the impact of acculturative stress among this population consists of U.S. climate contexts, economic, developmental, and cultural factors which impact the Latina women' acculturative stress. U.S climate contexts are represented by unfavorable contexts of reception: daily and racial discrimination, visiting family abroad difficulties, financial constraints and content with the decision to move to U.S., U.S. region of residence, years in the U.S and having adolescents and children in their household. Developmental contexts are represented by: education level, age at immigration, English skills, age, and marital status. Cultural contexts are represented by family-cultural conflict, familism and religious comfort. Economic contexts are represented by the level of income, and global context is represented by 9-11 impact. The internal context comprises of those contextual factors that the family has control over

and can change. The internal context consists of structural dimensions such as personality and gender-based family-structure. Defined by Freebert & Stein as a set of attitudes that reflect the relative importance given to family membership in terms of support(1996), sacrifice and involvement, the structural dimension represents a set of rules different from those of the larger culture.

Few scholars have studied how Latina women manage acculturative stress. In some cases contextual factors such as utilization of counseling services, being employed, improving English speaking abilities (Chapman et al, 2005), family cohesion, and attending religious services (Rivera et al, 2008), were identified as the resources and coping mechanisms that help immigrants manage acculturative stress. Mulvaney-Day, Alegria & Scribnoyle (2007) found that even when controlling for language abilities and socioeconomic variables, family support remained a statistically significant predictor of psychological distress. Rivera et al (2008) suggested that Latina women rely on their families for emotional support, and are less likely to utilize the services in the host society. Family may buffer the negative impact of acculturative stress. Additionally, Rivera et al (2008) also found that Latina women are more likely to rely on individual and family members rather than in their neighborhood network for support. Maintaining ties with one's country of origin provided an additional social network that women could draw on for support. The more often Latina women managed to visit their countries, the more likely they were to report low levels of psychological distress (Rivera et al, 2008).

Boss' (2002) FSM also guides one's understanding of how family copes with the stress in crisis. Boss (2002) suggests two ways which families manage family stress: a) establishing independence or self-sufficiency through finding employment, soliciting

counseling services, and attending religious services and b) maintaining a sense of cohesiveness (Boss, 2002; Lazarus et al, 1976). Based on Boss' (2002) FSM, the proposed study will test the effectiveness of relative, friend, and spousal supports, as well as assimilation and biculturalism as coping mechanisms that can help Latina women manage acculturative stress (Chapman et al, 2005).

### *Defining Acculturative Stress*

This section is an overview of theoretical, conceptual, and empirical literature on acculturative stress, its relationship with acculturative stress and contextual factors.

#### *Acculturation and Acculturative Stress*

Scholars who link acculturative stress to acculturation do not address acculturative stress without first defining acculturation, often regarded as a process of adjusting to a different culture (Berry, 2006). Acculturation explains several changes that transpire to an acculturating individual as a result of the contact between two distinct cultures, the native and host country's culture. Burnam, Telles, Karno & Escobar (1987) theorized that as acculturation works through "shifts" such as language, cognitive style, personality characteristics and identity, it may lead immigrants modifying their native attitudes, values and behaviors (Phinney, 1994). In general, studies have found that the level of acculturation is associated with psychological distress among Mexican-Americans; that is, the higher the level of acculturation, the more psychological distress Latina women experience (Falicov 2002; Escobar, Constanza & Gara, 2000). Prevalence rates of three psychiatric disorders — phobia, alcohol/drug abuse and antisocial personality — increased with the level of acculturation in a study involving a large sample of adults with Mexican ethnic origin in Los Angeles (Burnam et al, 1987). In

addition, Escobar et al (2000) indicated that regardless of socio-economic status, Latino immigrants reported lower psychological distress than their U.S. -born counterparts. Inconsistent results characterize the research on relationship between acculturation and psychological distress among Latina women. The incongruence in the findings may stem from a lack of consistent measure of acculturation that has to do with its multi-dimensional nature and the lack of the researchers' resources to develop comprehensive scales. Developing scales that more closely represent acculturation entails asking many questions, running additional tests to check the validity and reliability of scales and may be time and financially costly. Other limitations are associated with the lack of consideration of the mediating impact of acculturative stress between the acculturation and psychological distress of foreign-borns and with the tendency to neglect the impact that various contexts may have on how acculturation influences psychological distress.

Earlier studies regarded acculturation as a unidimensional linear process, which resulted in a melting-pot of one language, identity and set of values. Generally immigrants entered the U.S. and inevitably modified their cultural traits to embrace those of the dominant culture. This linear process of acculturation is deemed a myth by contemporary scholarship, which argues that a melting-pot phenomena is achieved only in predominantly mono-cultural countries where newcomers have contact with only one culture (Szapoznik & Kurtines, 1980).

Since 1980, acculturation has been treated as a multi-dimensional process (Ryde, Alden, and Paulhus, 2000) transpiring into four different outcomes:

1. Newcomers may choose either marginalization, refusing to associate either with the culture of the host country or with that of the native country.

2. Integration, where they choose to accept a select traits of both cultures depending on the situation.
3. Foreign-borns pick assimilation, when they adopt the traits of the dominant culture, foregoing all their native traits; and
4. They opt for separation, if their behaviors are guided predominantly by their native cultural traits.

The adapted strategy of acculturation depends not only on the goals and aims of the newcomers, but also on the goals and aims of the members of the host society. In relationship to acculturative stress, researchers have found that while integration results in the lowest amount of acculturative stress, marginalization and separation were both associated with high acculturative stress (Rudmin, 2009).

Early studies associated acculturative stress with culture shock (Espin, 1987). Berry (1978, 1997), replaced the term cultural shock with acculturative stress. He was one of the first scholars to hypothesize that only in the presence of certain contextual factors acculturative stress is associated with high psychological distress. Berry (1997) theorizes that the term cultural shock is habitually associated with trials, tribulations and negative outcomes. During their initial contact with their host culture, acculturating individuals may perceive acculturative stress as insurmountable, but in most cases, given their resources and coping mechanisms, they are able to overcome it. Furthermore, according to Berry (1997), even in worse cases only moderate difficulties such as those related to psychosomatic problems are experienced. According to Shattel et al (2008), these problems are likely to improve steadily over time. Shattel et al (2008) also found

that not only do most people overcome acculturative stress, but as they undergo acculturative stress, they may even find opportunities to achieve goals beyond their initial expectations. Furthermore, the term cultural shock implies that only one culture may be involved, but the term acculturation signifies no limit to the cultures involved. Taking all these aspects into consideration, acculturative stress mirrors more correctly the experience among foreign-born individuals in a new country (Berry 1997).

An alternative and more accepted definition of acculturative stress considers it as a stress derived from the process of acculturation which transpires when the conflict between the host and native culture is both, problematic but also controllable and manageable (Shattel, Smith, Qinlan-Colwell & Villalba, 2008). Acculturative stress is greater when the differences between the culture of the native and host country are greater. This definition of acculturative stress is similar to the definition for general stress provided by Boss (2002) in her family stress management theory. According to Boss (2002), stress is a state of change that places an individual in the state of disequilibrium. In the case of foreign-born individuals, disequilibrium emerges when coping abilities and resources fall short to changes encountered, either because of the speed of the process, or because of insurmountable cultural differences (Berry, 2005; Padilla et al, 1986). Often immigrants experience a fit between their native culture and that of the host society. Then, acculturative stress may not be associated with psychopathology. It is only when individuals fail to achieve a cultural fit that the cultural conflict transpires into a psychopathology, negatively impacting their mental health (Berry, 1997). In the current study acculturative stress will be examined with a contextual approach. One of the major hypotheses of the current study is that

acculturative stress' impact on psychological distress is contextual. Whether acculturative stress leads to high psychological distress depends on the contexts defining the acculturating individuals' lives.

### *Acculturative Stress and Contextual Factors*

Previous sections of the current review inferred that one may not understand fully the impact of acculturative stress in psychological distress of immigrant population without considering the impact of various contextual factors. Although future research might test how different contextual factors mediate the relationship between acculturative stress and psychological distress, the current study will only test the direct impact of acculturative stress and psychological distress of Latina women, this study will also test the direct impact of contextual factors on acculturative stress and psychological distress, and the indirect impact of contextual factors in psychological distress of Latina women. Berry (2006) suggests that not only do contextual factors affect acculturative stress among foreign-born individuals, but that contextual factors interact with each other in impacting acculturative stress among this population. For example, the level of discrimination may increase the impact of low income on acculturative stress, or principles of familism may decrease the impact of discrimination on acculturative stress. The current study will examine possible interactions of contextual factors in acculturative stress and psychological distress of Latina women.

Some contextual factors may bear a stronger impact on acculturative stress among immigrants in the U.S. Born (1970) highlighted the term "relative deprivation," a term he associates with the state of unmet expectations experienced by most foreign-born individuals upon entering a new country, regardless of their country of origin Born

(1970). Born (1970) lists four types of most commonly experienced relative deprivations: the deprivation from possessions, social status, behavior and worth (Born, 1970). Even though all types of deprivations impact acculturative stress, deprivation of worth (newcomer's feeling that his or her values and purposes in life are not respected and accepted by the members of the host society) convey the strongest impact on acculturative stress, regardless of their gender. These terms are associated with the state of unmet expectations for immigrants because often, they do not expect to experience these deprivations. When expectations of the U.S. as a land of freedom, equality and opportunities are not met upon entering the country, immigrants may feel deprived of even basic rights that allow them to be loyal to their culture and religion. Born(1970) refers to this as the deprivation of worth.

Immigrants feel ~~relative~~ deprivations" when they are met with ~~un~~favorable contexts of reception (Born, 1970)." These include contexts such as forms of discriminations, lack of employment opportunities, lack of skill enhancement programs, (especially English as a Second Language Programs), lack of role models, and lack of opportunities to mingle with their U.S. born counterparts (1970). In other words, unfavorable contexts of receptions are related to all those aspects of the host society which make immigrants feel unwelcome and inferior to their U.S. born counterparts or immigrants of other origins. The unfavorable contexts of reception challenge immigrants' successful integration efforts as well as their efforts to ascend the socio-economic ladder in the new country. Born (1970) indicates that the more ~~un~~favorable" the contexts of reception in the host country, the greater the inner-conflict experienced by foreign-borns and the higher their acculturative stress. Schwartz, et al (2010) points out

that even when sharing a similar environment, immigrant groups may have different experiences with same contexts of reception. A public opinion poll conducted in the U.S. in the early 2000 suggested that historically, U.S. born citizens may have regarded Latino migrants more negatively than Canadians and Europeans (Cornelius, 2002).

Discrimination has been identified as one of the most detrimental unfavorable contexts of reception to the immigrants' integration in the U.S. Unfortunately, too many immigrants report some type of discrimination, either due to their race, accent, gender or lack of English skills. The discrimination may have been experienced at work, at school, in places of worship, or while acquiring needed services (Sedikides, Wildschut, Routledge, Arndt & Zhou, 2009). Discrimination transpires either overtly, in a form of inferior work or living conditions for immigrants, or discretely, through earlier decisions implemented in forms of policies and regulations that make the long-term mobility of immigrants difficult or impossible (Schwartz et al, 2009). Although much of the literature on discrimination focuses on low-income immigrants, discrimination is experienced by immigrants throughout socio-economic spectrum. Wealthier and thriving immigrants face discrimination by members of the host society who regard their success as lost opportunities for other fellow U.S. citizens (Schwartz et al, 2009). Nonetheless, while studies have examined the impact of discrimination on acculturation, research focusing on how discrimination impacts acculturative stress is lacking.

Other contextual factors that may influence acculturative stress include the existence of an ethnic enclave in the immediate environment of the acculturating individual. Immigrants in gateway cities such as New York, Los Angeles, San Francisco, Toronto, Sydney, London, Paris and Amsterdam (cities known to have hosted immigrants

for centuries) enjoy greater levels of support due to higher likelihood of interaction with others of similar background. Despite the fact that most literature suggests that the presence of a supportive ethnic enclave means lower acculturative stress among immigrants, the opposite may often be true. This is particularly the case when the difference between the native and host country's cultures is vast and when immigrants attempt to adopt certain traits of the new culture. The large heritage culture community may discourage this process by making the acculturating individual feel guilty for abandoning aspects of their native culture, which may lead to heightened acculturative stress (Schwartz, Montgomery & Briones, 2006; Schwartz, Unger, Zamboanga & Szaocznik, 2005).

Global events can also influence acculturative stress and psychological distress of foreign-borns. Immigrants that arrived post-9-11 period report higher perceptions of discrimination compared to the ones who entered the country prior to the 9-11 incident (Schwartz, et al, 2006). Shmitz (2010) lists a range of other contextual factors that may positively or negatively impact acculturative stress among immigrants. These contexts include past acculturation experiences, age, gender, immigration motivation, one's perceptions of the two cultural worlds as conflicting vs. harmonious, and such personality traits as being positive, polite, self-disciplined, tendencies at honoring of parents and elders, and being obedient and accepting vs. entitled and rebellious (Sedikides et al, 2009).

Maintaining equilibrium, which according to Boss (2002) is a key to preventing acculturative stress from disabling one's life, is often a result of one's capacity to access the correct resources. As immigrants enter the country, they may find that some of their

older habits are no longer effective in bringing them the desired outcomes (Born, 1970). Often the price they pay for loyalty to their culture is high and may affect not only their material life, but theirs and their families' psychological well-being. Therefore they may take the necessary steps to modify some of the behaviors (Born, 1970). Latino immigrants may decide to alter their native traits such as beliefs in external control, being present oriented, being cooperative (Mirowsky et al, 1989) and the tendency to rely on their family and social network for mental support (Escobar & Vega, 2000). Instead, they may decide to assume many of the values associated with predominantly Western culture in the U.S. such as emphasizing individual control of circumstances, relying on one's self to change circumstances, being future oriented, and being more individually focused (Murkowski & Ross, 1989). However, their efforts can backfire since research shows that an ethnic enclave may decide to isolate an acculturating individual if it is believed that he or she is abandoning traditional behaviors, drastically and quickly. Additionally, the support from the host society may not be readily available. The members of host society often have unrealistic expectations about how long it takes take for a person to shed old ways of coping or believing. Therefore, because the acculturating individual may not receive a positive response during the beginning stages of the process from any of the systems of support, he or she may decide to retreat to the stage of marginalization and associate neither with the members of host nor native society. Research suggests that marginalization is a form of acculturation most likely to be associated with higher acculturative stress. A third party intervention such government, non-profit with their services, or clinical intervention might be helpful at this point of the immigrants' lives.

The strong impact of some of the contextual factors attenuates the impact of acculturative stress on the psychological distress of these women. On a more positive note, Berry, Kim, Minde, and Mok (1987) found that acculturative stress triggers positive changes that capture physical appearances of immigrants, their living environments, better nutrition, and enhanced desire to learn about other cultures. On a negative note, acculturative stress may result in physical mal-adaptations, anxiety, depression (Rudmin, 2009), the feeling of marginalization and alienation, heightened psychosomatic symptom levels, identity confusion (Sedikides et al, 2006), loneliness due to the loss of social network and loss of the original culture traits, many of which can buffer them from negative impact of acculturative stress and contextual factors (Sedikides et al, 2006).

Data on the types of coping mechanisms that effectively moderate the relationship between the contextual factors, acculturative stress and psychological distress are lacking. Born (1970) suggested the term adaptation, which transpires when a person chooses reconciliation when she/he recognizes that there is a discrepancy between the two cultures and social structures in their native and the new country. Born (1970) suggests that only through internalizing the structures and characteristic of the dominant structure can a person adapt or cope best with acculturative stress (Born, 1970). Conversely, this approach has been challenged by other scholars (Berry, 1990) who propose that many of the ethnic values of immigrants effectively buffer psychological distress against environment and acculturative stress and should be encouraged despite the possible contextual pressures.

The current study will fill the gap in the literature by testing how the system of support comprised of spousal, friend and relative support and acculturation strategies moderate the impact of acculturative stress and contextual factors in psychological distress of Latina women.

### *Acculturative Stress and Foreign-born Immigrants: Contextual Factors*

To obtain an understanding of contextual factors likely to be associated with the high acculturative stress among Latina women, a macro perspective is employed to understand how Latina women fare in comparison to immigrants born in other countries. The previous section was an overview of conceptual literature addressing possible contextual factors that could impact acculturative stress and psychological distress of immigrants. The following section is an overview of empirical research that has tested the impact of certain contextual factors on the acculturative stress among different groups of immigrants.

The research literature reviewed in the current study captures experiences of diverse groups of immigrants, such as female high school, college students, and adolescents. Immigrants who were studied represented different religious background (i.e. Muslims, Catholics, Orthodox Christians, and others) and came from different countries (Kenya, South Asia, Croatia, Poland, South Asia, Saudi Arabia, Soviet Union, Turkey and Portugal). These individuals reported several of contextual factors that challenged their integration process: difficulties with learning English, financial constraints, missing family members in their home-countries, social isolation, cultural differences (particularly differences in language, race, dress, religion and costumes and values), lack of independence, age at immigration, content with the decision to move to

U.S., differences in educational systems, lack of safe environments, low social support, poorer quality of social support, family dysfunction, transportation-related problems, lack of employment, having adolescent children, and inter-family differences in rate of acculturation. Direct and indirect impact of these contextual factors was noted in both acculturative stress and psychological distress. A particular effort was made to highlight differences among these groups.

Most foreign-born individuals in these studies reported challenges associated with the lack of English Skills (Morrison and James, 2009; Matherson, Jorde & Anusman, 2008; Mona and Hovey, 2007; Pummarriega& Roth & Roth, 2005; Yakushko and Chronister, 2005; Pettit, Paukert and Perez, 2006; Liebkind, and Lhati, 2009). The language barriers had both, a direct and an indirect effect on their integration efforts. Turkish and Korean women reported that not knowing English prevented them from creating friendships with U.S. born counterparts (Bektas, 2004; Lee et al, 2004). Not being able to socialize with their U.S.born school-mates precluded them from partaking in several activities that may have facilitated their integration process. The subjects in both studies (Bektas, 2004; Lee et al, 2004) reported feelings of alienation, loneliness and failed attempts at effective communication. They shared a constant feeling of being misunderstood and non-belonging. For elderly Korean immigrants, accessing media, (watching TV, reading newspapers and magazines) was the most effective way of integrating into the new society (Lee, 2007). In Korea, information on daily developments of their neighborhoods normally informed them of ways they could get involved, meetings they could attend, people they could meet and friendships they could cultivate. Lack of English skills prevented them from taking advantage of these

informative outlets. Hence feelings of loneliness, isolation and detachment emerged (Lee, 2007).

Two of the most compelling factors that drive South Asian women to enter the U.S. were hopes for socio-economic advancement and creating better futures for their children (Pummarriega & Roth, 2005). However, lack of strong English often prevented them from obtaining even the jobs they once had in their countries of origin and resulted in loss of economic status and a descent in the social ladder. To assure a brighter future for their children, they worked two or three jobs. Similarly to Turkish and Korean-born females in U.S., women from Hong Kong living in the U.K. reported that lack of English challenged their efforts to make friends with their U.K. born counterparts (Bektas, 2004; Lee et al, 2004). Lack of friendship translated into a deep sense of loneliness, particularly since majority of women born in Hong Kong had separated from their spouses and entered the U.K. in search of better educational opportunities for their children (Lee et al, 2004). Women born in the Soviet Union, (Miller & Chandler, 2002) who did not know English reported helpless, but most of these women reported to be happy with their native-born friends. They indicated that quality of friendship was higher in the Soviet Union, more intimate and more caring, and that they did not yearn to strengthen their bonds with their U.S. born counterparts. However, better English, would permit them an easier access to basic services such as shopping for necessities, doctor appointments, and less reliance on their children and friends. They wished for more independence in their lives and felt that better English skills would make this happen (Miller et al, 2002).

Financial constraints emerged as the second most commonly mentioned factors that challenged the effective integration efforts of various immigrant groups. This was true especially for Korean elderly (Lee et al, 2007) and South Asian women in Canada (Talbani, 2000) and in the U.S. (Ahmed et al, 2004; Pummarriega, 2005). Lack of income prevented immigrants of different ethnicities from taking supplementary English classes, which were essential to their academic performances and optimal performance in their jobs. It also obstructed them from participating in social activities that could have facilitated their interactions with others in the host society. For many immigrants, lack of finances precluded them from devoting more quality time to other aspects of their lives such as non-traditional healing methods, spending quality time with their families and friends, exercise, and other areas impacting their psychological well-being. Consequently, financial constraints impacted their psychological distress in addition to their acculturative stress.

Lack of income for Korean elderly translated into excessive reliance on their children. In Korean culture wealth accumulation reaches its peak in the older age. Consequently, the older individuals become the more respect they earn and the more decision-making responsibilities they take on. Feelings of independence, self-sufficiency and worth reach a climax in the last stages of one's life. However, once in the U.S., Korean elderly income is likely to diminish and they are compelled to rely on their children, feel isolated and helpless (Lee et al, 2007). Research shows that compared to their counterparts who live with their children, Korean elderly living in group-homes reported lower levels psychological distress (Lee et al, 2007).

It is customary for Korean-born women to spend most of their time as care-takers in their home-countries. If necessary, they may work to supplement income, but usually not more than part-time. Once in the U.S., however, lack of sufficient income may oblige them to obtain full-time jobs. On one hand being fully employed increased their feelings of self-sufficiency and contentment; on the other hand, it robbed them of time normally devoted to their care-taking duties (Shin & Shin, 1999).

Ensuring that children have access to the best educational opportunities was essential for many South Asian women. Lack of finances challenged their efforts to realize that goal. Nonetheless, South Asian women and their partners reported working two or three jobs to assure their children's access to high quality education, which rendered them exhausted, stressed and unhappy (Pummariega & Roth, 2005). Both women born in Korea and those born in South Asia reported feelings of distress derived from their inability to balance their multiple roles (Shin & Shin, 1999; Pummariega & Roth, 2005).

Loneliness has often been associated with high acculturative stress. However, research notes that not all foreign-borns report high loneliness. Lack of social support was reported among elderly Korean immigrants, immigrant women from Hong Kong and Korea and immigrant women from the Soviet Union (Shin et al, 1999; Lee et al, 2007). These immigrant groups pointed to English skills, racism and notable cultural differences as essential contributory contextual factors to their lack of friends. Research participants highlighted their lack of support from their immediate friends and families, their lack of time and dynamic schedules as other contextual factors that obstructed their efforts to expand their social circle. In contrast, Korean elderly felt lonely due to their inability to

use the media and due to lack of the support from their children who were often too busy to attend to their elderly parents' needs (Lee et al, 2007). Lastly, women from Soviet Union stated that even when they did speak English well, and they managed to create friendships with their U.S. born counterparts, they continued to feel lonely. Friendships were different in the U.S., their interactions were superficial, and conversations appeared to them to be not as meaningful and caring as the interactions they shared with their friends in their former Soviet Union (Miller et al., 2002).

Immigrants often tend to settle in less than safe neighborhoods. Their choices of settlement are driven by income, access to transportation and availability of ethnic enclave. Nonetheless, in the current study, only women born in Korea and South Asia reported concerns with their unsafe environments. Women from Hong Kong who were temporarily separated from their partners, reported that they may have spent several sleepless nights, in the first few days (Lee et al, 2007). It was common for them to feel fear and anticipate break-ins in their apartment. Women from South Asia also shared the same concern (Pummariega & Roth, 2005; Ahmed et al, 2004).

Many women experience higher acculturative stress as a result of unmet expectations about the U.S. Most immigrant women enter U.S. to realize dreams of higher social mobility, career advancement, self-sufficiency, better education for their children and economic opportunities. As discussed in the theoretical research highlighted in a previous section of this dissertation, a majority of immigrants reported that, initially, hardly any of their expectations are met. For example, most of the immigrants from South Asia, males especially, had at least a bachelor's degree prior to entering the U.S. (Pummariega & Roth et al, 2005; Ahmed et al, 2004). Often they held professional jobs

that secured them a moderate standard of living in their countries of origin. Upon arriving in the U.S. however, they often found their professional experience not valued. In fact, most of these immigrants worked in blue-color jobs associated with service, (i.e. work at car-wash kiosks, gas companies, or grocery stores). Majority of immigrants take on a second job to help their children obtain a quality education. While many Korean women were able to secure jobs and therefore increased their independence, they found that the employment robbed them of time for care-taking activities, socializing with friends or time for themselves. Family-cultural conflict often transpired, which further increased their acculturative stress (Shin et al, 1999).

Other contextual factors reported to be associated with high acculturative stress included having adolescent children, age at immigration, and inability to acquire reliable transportation. Having adolescent children was associated with high acculturative stress for South Asian, Korean, and Portuguese parents (Shin et al, 1999; Pummarriega & Roth, 2005; Morrison & James, 2009). Family-cultural conflicts were fueled by contextual factors such as divergence in levels of acculturation among family members, parents' unavailability to attend to their adolescent children's needs due to busy work schedule, and mothers' difficulties in balancing roles of caretaker and provider. Most mothers with adolescent children reported that their children had acculturated at a fast rate, which made them extremely uncomfortable. For example, Portuguese immigrant women indicated that their children had learned, very quickly, both French and English, and refused to speak Portuguese at home. Divergence at the rate of acculturation between children and parents led to constant communication problems. Portuguese women also indicated that their children refused ethnic food. Given the importance of Portuguese food in

Portuguese culture, mothers experienced a considerable distress and disappointment (Morrison et al, 2009).

According to Morrison et al (2009), Portuguese women are likely to feel responsible for instilling traditional culture values in their children. Portuguese women are responsible for maintaining peace in their home. They do so on their own, in an attempt to not burden other family members. When they were unable to meet these familial expectations, they were likely to experience high acculturative stress (Morrison et al, 2009). A similar level of family-cultural dynamics was reported by South Asian families. South Asian adolescents who also acculturated at a much higher rate than their parents refused to wear traditional clothes, and rebelled against perceived double standards based on gender. It was customary for South Asian female adolescents to report that they were denied many rights that were granted to their male counterparts. For example, contrary to their brothers, South Asian adolescent females had early curfews, were prohibited from wearing modern clothes and could not date in their teenage years. South Asian female adolescents often reported that they rebelled vocally and expressed anger. Since respect for elderly and family tradition are traits shared by majority of South Asians immigrants, the rebellious behavior of adolescents disturbed South Asian mothers who felt responsible for their children. In contrast, South Asian males were bread-winners, spent minimal time at home and with the children (Pummarriega & Roth, 2005).

In addition to these contextual factors, transportation-related problems led to high acculturative stress among many of the foreign-born women reported in the research reviewed for this study. The impact of transportation was different depending on the part

of the U.S. in which these immigrants lived. In cities such as New York, Washington, Boston, San Francisco, or other gateway and metropolitan cities in the U.S., more options for transportation were available. However, even in these cities that are well equipped by public transportation, there might be delays (Morrison et al, 2009). On the contrary, in other parts of the U.S., where cars are a necessity, buses that run infrequently may not be a substitute for car. Transportation difficulties were frustrating especially for the Korean elderly (Lee et al, 2007) who were likely to report high levels of loneliness, and helplessness. The same transportation-related inconveniences were reported by Russian and Korean immigrant women. Russian immigrant women, in particular, indicated that transportation issues in the U.S. were new to them. In their home countries, most people used public transportation, which is very reliable and fast (Morrison et al, 2009).

These studies highlighted several contextual factors that challenged the integration process of foreign-born women of different backgrounds in the U.S. The literature points at both similarities and differences between groups. Often studies failed to control for immigrants' U.S. region of residence, age, religion, or countries of origin. For example, South Asian women were grouped into one category ignoring their many socio-economic, religious and ethnic differences (Ahmed et al, 2004; Pummarriega & Roth, 2005; Talbani, 2000). Discrimination may bear a different effect on South Asian women of Muslim vs. those of other faiths. Hindu women may find a greater support from the ethnic enclaves compared with other groups and educated South-Asian women may present unique needs. Similarly, lower-income Korean elderly immigrants' (Lee et al, 2007) needs may differ from those of their high-income counterparts (Shin et al, 1999). U.S. region of residence may make a difference in how family-cultural conflict

impacts the integration process of not only Portugal-born women. Living in cities such as Boston where Portuguese immigrants represent higher concentration of immigrants, compared to other ethnic groups, may ease some of the inter-familial conflicts. More support may be available to help these women not feel alone in dealing with their faster acculturating adolescent children and other issues they might face.

In addition, methodological limitations characterize the research on acculturative stress and non-immigrant women. Sample size was a predicament shared by many studies. Data analysis tended to be on the superficial side due to authors addressing many topics in one article. Some studies conducted simple correlational analyses; therefore, no explicit casual conclusions could be drawn. Correlations also precluded generalization of findings to broader populations (Poyrazli, 2004). Measures of indicators such as acculturative stress were inconsistent in many of these studies. Often acculturative stress was treated as a pathology. Furthermore, the impact of contextual factors in the relationship between acculturative stress and psychological distress was disregarded. Many of the studies were not cognizant of the possible interaction between various contextual factors in predicting acculturative stress. Multi-group analyses that could test how different contextual factors moderate existing relationship between acculturative stress and psychological distress are also non-existent. Lastly, while the available research may highlight many of the contextual factors that impact acculturative stress, there is a need for more focused research that inspects in greater depth how a selective set of contextual factors interact with each other to enhance or diminish acculturative stress and its impact on psychological distress of different immigrant groups.

The literature on non-Latina immigrants encompasses research on different populations including refugees, and foreign-born men and women of different socio-economic and cultural backgrounds. Their immigration experiences are unique and may or may not relate to the experiences of Latina women. In addition, studies often assume that acculturative stress is identical to psychological distress and did not test the impact of acculturative stress on psychological distress (Poyrazli et al, 2004). Furthermore, some literature (Shen and Tekeuchi, 2001) treated acculturative stress as pathology, measuring it by indicators of depression or anxiety (Shen & Tekeuchi, 2001).

#### *Coping with Acculturative Stress: Non-Latina Immigrants*

While empirical studies, which test how different contextual factors' impact levels of acculturative stress among Latina women are limited, literature dedicated to effective coping mechanisms which may buffer the negative impact of acculturative stress on immigrant women is even more scarce. Although theoretical scholarship has suggested several coping techniques and resources that may alleviate psychological distress, not many have been tested for their effectiveness. Some studies have found that religious comfort, family support, biculturalism, being happy for children's success, and use of non-traditional healing methods,(i.e. yoga, Ayurvedic, and homeopathy)were effective in diminishing the impact of acculturative stress in foreign-born women. The non-traditional healing methods were primarily used by South Asian Women (Talibani, 2000). Korean immigrant women, Portuguese women, and those from Soviet Union reported religious comfort to be an effective tool in alleviating acculturative stress. Religious comfort was important especially for Korean immigrant women. Often,

ministers organized community members to provide each other with more tangible resources, including help in finding apartments, jobs, and babysitting services (Shin et al, 1999).

The previous section explored a range of contextual factors that impact the integration experience of foreign-born women from different parts of the world, primarily those women living in the U.S. Effective coping mechanisms that impacted the relationship between acculturative stress and psychological distress among different groups of immigrants were also explored. The next section focuses specifically on the experiences of Latina women with acculturative stress. A compare and contrast analytical technique will be employed to denote similarities and differences between experiences of Latina women and those of foreign-born women from different countries.

#### *Acculturative Stress and Contextual Factors: Latina women*

Despite the many differences such as age, economic status, language, food, and education level, which sets Latina women apart from each other, a number of cultural traits are shared by most Latino immigrants. These cultural traits shape their attitudes, beliefs, and behaviors and differ from the Western cultural beliefs likely to dominate the culture in the U.S. It is important that we understand what these cultural traits are, particularly since they have been known to influence acculturation experience of Latina women. Miranda et al (2000) found that cultural elements can both, enhance and diminish acculturative stress and its impact on psychological distress of Latina women (Miranda et al, 2000). Research indicates (Rudmin, 2009; Born, 1970) that the level of acculturative stress is determined by the extent of differences between the host culture and native culture. The greater these cultural differences, the higher acculturative stress.

Given the differences between the predominantly Latino values and the dominant U.S. culture, one would expect that acculturative stress experienced by Latina women is significant.

The first and the most important value, familism, is central aspect of the Latino culture. Signifying collective loyalty to the extended family (Cauce & Domenech-Rodriguez, 2000; Guilamo-Ramos et al., 2007) familism defines the familial relations among this group of women. A well-functioning Latino family is characterized by the following: 1. *respeto* (mutual respect for each and especially respect for the elderly), 2. hierarchical regard towards those with power and position of authority, 3. *sipmatia* (avoidance of interpersonal conflict, demonstration of positive social behaviors at all times, and maintenance of harmony), and 4. *personalismo* (respect for relationships and unspoken expectation of reciprocity) (Falicov, 1996). As opposed to direct communication often valued in non-Latino cultures, immediate family members are expected to use paraphrasing and speak softly when addressing each other. The extended family or so called *la granfamilia* comprises three or four generations of relatives with horizontal relationships between adult siblings, cousins and others. *La Gran Familia* is extremely important to Latinos and any member of family can be counted on during times of need. For example, a godparent can always be asked to change a diaper or keep an eye on a toddler (Falicov, 1996).

There are several reasons why familism is known to reduce acculturative stress among Latina women. As it is indicated in a previous section of the current study, many non-Latina immigrant groups endure acculturative stress as a result of extreme loneliness and isolation. Similarly to non-Latino immigrant women, Latina women are likely to

report stress due to low English skills (Padilla et al, 2007). Language barriers may challenge their efforts to interact with the members of mainstream society. However, unlike other immigrant women, most Latina women are bound to the values of familism, which makes them likely to be devoted to their families and appreciate familial interactions (Padilla et al, 2007). They are also more likely to acquire familial support when needed and only in rare circumstances to forego the family circle to seek friendship with the native counterparts. Studies show that Latina women rely on their families not just for emotional nourishment, but also when in need of tangible resources such as help in finding employment, apartment hunting, or financial support (Hovey, 2000). It is likely that familism is as important to the Latina women, as the religious institutions are to foreign-born Korean women who as reported earlier, treat the church not only as a source of spiritual support, but as a resource for other tangible and non-tangible needs.

While familism has been treated as a buffer against negative aspects of acculturative stress, the second important Latino cultural value, machismo, has been associated with integration challenges. Machismo permits men to serve as authoritarian figures who dominate and impregnate women. Machismo is often associated with a patriarchal familial system where men are heads of household and bear responsibility for making most decisions. From childhood men and women are socialized in gender-based roles. Compared to females, males hold dominant positions throughout the life cycle and are granted more freedom. Females are assigned submissive roles and directed to accept the fact that men are superior (Gil, 1996). Lately scholars have pointed to several positive aspects that derive from machismo. Researchers indicate that machismo is also associated with male's physical strength, sexual attractiveness, virtue, dignity, personal

conduct, and respect for others. Machismo is linked to men's forcefulness of personality, strength of will, daringness, autonomy, commitment, responsibility, self-assertiveness and the ability to display emotionality (Soldberg & Carlstro, 2002). The last characteristics associated with positive aspects of machismo may enable a more supportive relationship between men and women of Latino origin. Such a dynamic may prove useful to Latina women experiencing high acculturative stress in new country, particularly since research suggests that spousal support is essential to well-being for Latina women (Hovey, 2000).

Another essential principle which most Latina are likely to subscribe, *Marianismo*, defines traits such as self-sacrifice on behalf of family, utter devotion to children and husband, submissiveness, and sexual inexperience, all of which characterize the behavior of Latina women. *Marianismo* is a term associated with the characteristics of the Virgin Mary. In a way, *marianismo* is a mechanism used for implementing principles of traditional machismo. Similarly to the Virgin Mary, Latina women are expected to exhibit a high degree of sacrifice and chastity on behalf of their husbands and children (Espin, 1997). The Virgin Mary suffered much ordeal in her life and Latina women are also expected to do so in order to experience later heavenly rewards. According to Mena (2000), women's efforts are compensated by an utmost and unwavering devotion by their children, and mothers are viewed as the vehicle in which the essence of family is passed on to the next generation. Consequently, Latina women, especially mothers, are regarded with much respect by the immediate and extended family and by the Latino at large (Mena, 2000).

These cultural schemas are likely to create challenges for immigrant Latina women in the new country. It has been indicated that Latina women are more likely than not to uphold traditional cultural traits described above, especially if they are first generation immigrants (Miranda et al, 2000; Goodkind et al, 2008; Padilla and Borrero, 2005). Miranda et al (2000) found that while it was true that the low acculturation families relied more on traditional aspects of their native culture and were more likely to uphold much of their traditional cultural values, bicultural and highly acculturated families were less likely to do the same. The bicultural and high assimilation families tended to prefer fluid family roles based on individual and family needs. Miranda et al (2000) found that bicultural families experienced less internal conflict compared to the low and high acculturation families which may suggest that bi-culturalism weakened the possible familial conflicts within Latino families. The family-cultural conflict increased in both sides of the acculturation levels, low and high (Miranda et al, 2000). Low acculturation immigrants uphold all of their traditional values, while high acculturation immigrants are likely to adopt all of values associated with the culture in the U.S. A balance between the two acculturation strategies seems to be the most effective strategy in managing acculturative stress among foreign-born groups.

Despite the level of acculturation or the length of stay in the U.S., studies have found that Latina women prefer to uphold traditional belief systems. For immigrant Latina women with adolescent children, fulfilling such an obligation may be damaging to their health. This is because often, most of the care-taking roles fall in women who may be overwhelmed yet feel guilty to admit such feelings and don't feel comfortable in soliciting the needed help. Similarly to South Asian and Portuguese adolescents

(Pummariega& Roth, 2005; Morrison et al, 2009), Latino adolescents acculturate at faster rates than their parents. Comparably to the foreign-born women from Portugal, Latina women see themselves as being responsible for instilling a sense of tradition on their children's lives (Saldana, 1994). When their adolescent children refuse to accept the gender-based norms and other cultural traits by exhibiting culturally unacceptable behaviors, (i.e. confrontation, raising voices, rebelling and disobeying their parents), family dysfunction transpires (Szapocanik & Scopetta, 2001). For most Latina women, health is a multidimensional concept in which family well-being takes a central role. Consequently, family dysfunction may lead to high acculturative stress manifesting in any of the negative mental health outcomes mentioned above (Castillio, Mcano, Mchen, Blucker & Olds, 2008).

Research has indicated that Latino immigrant women may not find their traditional beliefs system satisfying, when financial circumstances pressure them to find employment and contribute to the financial well-being of their families. Espin (1987) found that often Latino men despise the newly acquired independence of their female partners. Despite the ease in the financial burden the extra income might bring, they frequently fail to do their part in picking up household responsibilities and ease the stress in their partners' lives. Consequently, Latina women experience higher acculturative stress. Some research did find that foreign-born Latinos become supportive to their spouses, once in the new country. As Coltrane, Parke and Adams (2002) point out, Mexican-born fathers are more likely to spend time with their children when their wives are at work, despite, the common perception of Mexican men as Macho and masculine (Hoovey, 2000).

Comparably to immigrants from other countries (e.g. Korea, Hong Kong, Portugal, Saudia Arabia, Soviet Union, and Turkey) Latina women identified language barriers as essential challenges to their successful acculturation, in the U.S., or Australia (Dawson, 2009; Izupurua and Fisher, 2008). According to Izupurua et al (2008), 13 South American immigrants in a major city in Australia noted that difficulties with English directly and indirectly influenced their experience with acculturation. The lack of sufficient English skills made it impossible for them to obtain the jobs they thought they deserved. Consequently, most of these Latina women found employment in environments associated with harsh circumstances and minimal rewards, such factories or cleaning services. Much like the experiences of immigrant women from Korea (Shin et al, 1999), the long working hours left very little time for them to develop their English and strengthen their occupational skills to permit career advancement. Furthermore, discrimination related to their poor English or the presence of accents which exacerbated stress by impeding their interactions with the members of the host society. Often, these women faced more likely to uphold traditional gender values meant that these hard-working, blue-collar women, faced these difficulties without a strong support from family, friends, partners, or childcare services (Izupura et al, 2008). Izupura et al (2008) notes that familial support is limited or non-existent for many Latina women in Australia.

Latina women share the sense of unmet expectations about the U.S. with other foreign-born women from South Asia. Schwartz, Negy, and Ferrer (2009), indicated that most Latina women reported a sense of disappointment upon entering the U.S. But, Schwartz et al (2009), also noted that it was difficult to generalize how unmet expectations impacted acculturative stress, particularly since being unhappy with

different aspects of the life in the new country impacted acculturative stress differently. For example, discrimination is an unexpected predicament for many Latina women. In their home-countries they may have not experienced any of the “unfavorable contexts of reception” listed in earlier parts of this dissertation. In the U.S., they are likely to experience both, daily and racial discrimination. According to Schwartz et al (2009), being exposed to discrimination, (real or perceived) is associated with high acculturative stress among this group of women. In contrary, living in an unsafe environment did not lead to high acculturative stress (Shwartz et al, 2009).

Other contextual factors associated with high acculturative stress among Latina women include, age, age at immigration, (Shwartz et al, 2009), low income, and ability to participate in household decisions in a new country (Espin, 1987). From several articles reviewed, only one article touched on the importance of social support and availability of inter-personal relationship in acculturative stress among this group of foreign-born women. According to Vega et al (2000), Latina women recreate their social networks fairly easily, once in the new country. For those who are unable to so and for whom familial support may be unavailable, however, a lack of social network signifies extreme loneliness, social alienation and high acculturative stress (Caplan, 2007).

Even though the findings are inconsistent, much of the literature indicates that acculturative stress leads to high psychological distress among Latina women (Salgado de Snyder, 1990, 1991). Yet not much empirical research has been devoted to identifying coping mechanisms that buffer the mental health of Latina women against the negative impact of acculturative stress. Some researchers speculate that, fatalism, (putting faith in an external power in the face of adversity), family and social support, biculturalism,

personal characteristics of acculturating individuals and religious comfort are effective coping mechanisms. Family support is extremely important, particularly for Latino college students. This group of college students reaches out to their families for support even when family members are physically absent. According to Montila and Smith (2006), religion is important in most experiences of immigrant Latina women. Latina women incorporate their religious values in issues ranging from education, health, economic, political and familial. Spirituality and religion are central to Latino families' survival and resilience (Montila and Smith, 2006).

There is research that focuses on the impact of acculturation in psychological distress of Latina women. However, research addressing acculturative stress among this population is limited. As indicated earlier, much of the existing research treats all Latina women as a monolithic group, ignoring the unique aspects of specific culture and their effect on acculturative stress and psychological distress. Methodological limitations are a problem, however. Many of the studies suffer from a small sample size, do not address the possible effects of missing data, do not report their efforts to meet the assumptions of regressions or other quantitative techniques, and do not account for the impact of the country of birth in their results. Furthermore, the impact of contextual factors such as U.S. region of residence, citizenship status, socio-economic background and health status of immigrants prior to entering the U.S. are often neglected. Such limitation may impact the validity, and reliability of results.

This section reviewed the common cultural traits and contextual factors that have been found to impact acculturative stress of immigrant Latina women regardless of their

country of origin. The next section examines the empirical or theoretical literature focused on differences among Latina women born in Puerto Rico, Mexico, and Cuba.

*Latina women from Cuba, Puerto Rico and Mexico*

Although the previous section focused on the cultural similarities among all Latina women, there are several differences among these women. This section will elaborate on some of the differences that set these groups of women apart from one another.

Much of the literature focuses on the advantages Puerto Rican women in the U.S. have in comparison to other Latina women due to their citizenship status and the country's geographical proximity to the U.S. These advantages positively affect many aspects of their integration in the U.S., guarding them against a number of stressors for Latina women of other countries. According to Talor & Yazdijan (2006), like most of other Latina women, Puerto Rican women also feel responsible for "ethnic socialization" of their children. Talor et al (2006), define ethnic socialization as "the degree to which family members expose, discuss, and, possibly, directly teach children about their ethnic background" (p. 15). These scholars indicate that visiting one's country of origin often facilitates the efforts of the parents to ethnically socialize their children. Being closer to Puerto Rico and having no issues with legal documentation makes possible frequent travels, with less immigration-related hassles and with significantly less costs. Consequently, for Puerto Rican women ethnic socialization becomes a less arduous procedure.

Puerto Rican-born Latina women are also less likely to be devoted to the traditional beliefs, common to other women from different Latin American countries, especially those born in Mexico. In a study examining the impact of acculturation on the cultural values of Latinos in the U.S., the length of stay in the U.S. was associated with higher level of education among second generation Puerto Rican females, for example. For example, the more educated they become, the less likely they were to adhere to traditional sex education. According to Soto (1987), this was a result of their knowledge about their rights and their career-related aspirations. Nonetheless, more than 80 percent of Puerto Rican women reported that their parents were very strict with them, which suggests that, while they may be familiar with their ethnic culture's characteristics, they are more likely to embrace aspects of Western culture in order to move up the socio-economic ladder (Soto, 1987).

Cuban women are likely to differ from the rest of Latina women in the U.S. based on their pre-immigration experiences. In contrast to women from Mexico or Puerto Rico, the majority of Cuban women had very little say in their decisions to immigrate to the U.S. All waves of Cuban immigrations (four waves, in total) were politically driven, and in most cases, women were *pushed* to immigrate because of unusual political or economic circumstances. Understanding the history of Cuban immigration is extremely important since each of the Cuban immigration waves brought different groups of Cuban immigrants into the country that were distinguished by class, race and level of education. Not all four waves of Cuban immigrants enjoyed the same amount of support, either from their ethnic enclave or from the U.S. society.

According to Gonzalez et al (2005), the first immigration wave of Cubans occurred from 1960 to 1964. Identified as golden exile, this wave consisted of individuals mostly from Cuba's most educated, high socio-economic class citizens. Frequently, Cuban immigrants were wealthy and established professionals who fled to escape the newly constructed Cuban communist government. The second wave of immigration which lasted from 1965 to 1974, were from Cuba's working class that left Cuba primarily for economic survival. The third wave of immigrants, Marielitos, entered the country from 1980 to 1981. According to Gonzales et al (2005), many of the Marielitos were different from the rest of the Cuban refugees; most were black and many were individuals suffering from both, mental and physical illnesses. Marielitos also represented Cubans who had criminal records and were charged with serious crimes.

The last wave of Cuban refugees, balseros also known as rafters, entered the U.S. in the spring and summer of 1994 (Smith and Furuseth, 2006). In an attempt to promote political changes in Cuba, at a faster rate, the U.S. tightened its embargo against Cuba, prohibiting foreign subsidiaries of U.S. companies from trading with Cuba, through the 1992 Cuban Democracy Act. This Act did not bring the desired political changes. Instead, it hurt the Cuban general population by making it difficult for them to obtain general supplies. Consequently, many Cubans on the Island left without the means to earn a living, built simple boats and risked their lives in the attempt to reach South Florida. These immigrants known as balseros or rafters, expected to be instantly received in the U.S. port. However, the U.S. government instantly returned these immigrants to Guantanamo base in Cuba. Although they were intended to be returned to Cuba, their

entrance to the U.S. was granted due to the pressure exerted on U.S. government by the Cuban community and humanitarian organizations (Smith and Furuseth, 2006).

The first two waves of Cuban immigrants who entered prior to 1980 had been regarded by the U.S. government as deserving immigrants, loyal to the U.S. and helpful to U.S. efforts to end the communism. These two first waves of Cuban immigrants became eligible for comprehensive resettlement assistance. In the contrast, the two last waves of Cuban immigrants, particularly the Marielitos, were largely excluded from the resources granted to earlier Cuban immigrants by the Federal government. They were ostracized to the socio-economic level of other disadvantaged racial and ethnic minorities (Portes and Shafer, 2005). That shift in policy towards Cuban immigrants was related to the composition of the Marielitos (i.e. as mentioned above, many of them turned out to be blacks, criminals, mentally ill, physically disabled and regarded as the Cuba's unwanted class). The U.S. saw no threat from communism anymore and the incentive to support immigrants from communist countries in an attempt to foster political changes was weakened.

Marielitos and Balseros began to be regarded as just ~~another~~ "another third world impoverished minority seeking to crash the doors of the nation" (Portes and Shafer, p. 15). Since the entrance of Marielitos, the U.S. government intensified its efforts at stopping the inflow of Cuban immigrants and treated new arrivals with much less benevolence than their predecessors. Blaming marielitos and balseros for the decline of Cuban's public image in the U.S., the earlier waves of the Cuban immigrants severed ties with these new waves and separated themselves both physically and socially from them. While the old middle-class Cubans settled in the more prosperous suburbs of Coral

Gables and Kendall, Florida, the last two waves of refugees mostly settled in the struggling neighborhoods of the city of Hialeah (Portes and Stepick 1993; Garcia 1996, cited by Portes and Shafer, 2006). Although still secluded and not treated as well as the first two waves of immigrants, balseros were received slightly better than Marielitos by both, U.S. community and settled Cubans. In contrast to the Marielitos, balseros were screened before being admitted to the U.S. . According to Gonzalez (2006), Balseros experienced a very stressful transition process from Cuba to the U.S. Many witnessed tortures of their countrymen who may have even died in the ocean from hunger, thirst and violence in refugee camps (Gonzales & Ramos, 2005). Consequently, they were afforded more empathy and understanding, were received with more warmth by the Cuban community and the U.S. population (Smith and Furuseth, 2006).

#### *Limitations of Existing Research*

The current literature focusing on acculturative stress is very limited. The information on contextual factors that possibly impact acculturative stress has been gathered from the articles examining on the impact of contextual factors on acculturation. I propose that that the contextual factors which impact acculturation, are also linked to acculturative stress, since acculturative stress is driven by acculturation. While the current literature is an excellent source of support for furthering specific research on this population, its many limitations preclude one from generalizing findings. For instance, most of these studies combined all Latino populations into one group, ignoring their plentiful diversity related to their race, country of origin, and cultural nuances. Although studies were cognizant of this limitations, very few conducted country-specific analyses (Wing & Chau, 2006; Meda, 2008). Often the surveys were conducted in English,

disregarding the subject's lack of English skills (Wing & Chau, 2006). Furthermore, often samples were drawn from narrow geographical regions. Given the lack of uniformity of immigrant policies across the United States and cultural heterogeneity among Latinos, their experiences with acculturation and acculturative stress vary from one state to another (Meda, 2008; Wilkinson et al, 2008; Castillo et al, 2008). Furthermore, samples consisted primarily of female immigrants (Kosick, 2008), which limited the results primarily apply to female immigrants or vice versa. Lastly, most of the studies either used a small set of variables to define acculturative stress. Scales did not capture the multi-dimensional nature of acculturative stress. For example, Caplan (2007), used biological symptoms to represent acculturative stress and did not test the impact of many important contextual factors on acculturative stress of immigrants (Mirand and Matheny, 2008).

### *Research Questions and Hypotheses*

The study's hypotheses have been drawn from the literature on acculturation and acculturative stress on foreign-born individuals and Family Stress Management Theory (Boss, 2002). The following is a list of research questions and hypotheses addressed in the current study:

1. What relationships exist among the contextual factors, acculturative stress, and psychological distress among Latina women in the current study?
  - H1a. Contextual factors have a direct impact on acculturative stress of Latina women.
  - H1b. Of all the external contextual factors, U.S. climate impacts acculturative stress the most, followed by economic and developmental contexts.
  - H1c. There is an interactive effect between contextual factors in impacting acculturative stress.

- H1d. Acculturative stress mediates the impact of contextual factors on the psychological distress of Latina women.
  - H1e. Depending on the presence of specific contextual factors, acculturative stress may or may not significantly impact their psychological distress.
  - H1f. Contextual factors have a direct impact on psychological distress of Latina women.
  - H1g. Of all the external contextual factors, U.S. climate contexts impact their psychological distress the most, followed by economic and developmental contexts.
2. What are relationships between acculturative stress, psychological distress and coping mechanisms?
- H2. The association between acculturative stress and psychological distress differs, depending on the coping mechanism and sources of support available to these women.
  - H2a. Compared to their counterparts with low level of assimilation, for Latina women with higher level of assimilation, the negative impact of acculturative stress and other contextual factors on psychological distress is less.
  - H2b. Compared to their counterparts with low level of biculturalism, for Latina women with high levels of biculturalism, the negative impact of acculturative stress and other contextual factors on psychological distress is less.
  - H2c. Compared to their counterparts with low level of spousal support, for Latina women with higher level of spousal support, the negative impact of acculturative stress and other contextual factors on psychological distress is less.
  - H2d. Compared to their counterparts with low level of friend support, for Latina women with high level of friend support, the negative impact of acculturative stress and other contextual factors on psychological distress is less.
  - H2e. Compared to their counterparts with low level of relative support, for Latina women with higher level of relative support, the negative impact of acculturative stress and other contextual factors on psychological distress levels is less.
3. Is there a difference in relationships among acculturative stress, psychological distress, selective set of external and internal contextual factors depending on the

country of origin?

- H3. Relationships among acculturative stress, psychological distress, external and internal contexts will differ, depending on the country origin.
4. What is the relationship between acculturative stress, the contextual factors and psychological distress of Cuban-born women?
    - H4a. Contextual factors have a direct impact on acculturative stress of Cuban-born women?
    - H4b. Of all the external contextual factors, U.S. climate impacts their acculturative stress the most, followed by economic and developmental contexts among Cuban-born women.
    - H4c. Acculturative stress mediates the impact of contextual factors on the psychological distress of Cuban-born women.
    - H4d. Contextual factors have a direct impact on psychological distress of Cuban-born women.
    - H4e. Of all the external contextual factors, U.S., climate contexts impacts their psychological distress the most, followed by economic and developmental contexts among Cuban-born women.
  5. What is the relationship between acculturative stress, the contextual factors and psychological distress of Puerto Rican-born women?
    - H5a. Contextual factors have a direct impact on acculturative stress of Puerto Rican-born women?
    - H5b. Of all the external contextual factors, U.S. climate impacts their acculturative stress the most, followed by economic and developmental contexts among Puerto Rican-born women.
    - H5c. Acculturative stress mediates the impact of contextual factors on the psychological distress of Puerto Rican-born women.
    - H5d. Contextual factors have a direct impact on psychological distress of Puerto Rican-born women.
    - H5e. Of all the external contextual factors, U.S. climate impacts their psychological distress the most, followed by economic contexts and developmental contexts among Puerto Rican-born women.
  6. What is the relationship between acculturative stress, the contextual factors and psychological distress of Mexican-born women?
    - H6a. Contextual factors have a direct impact on acculturative stress of Mexican-born women?
    - H6b. Of all the external contextual factors, U.S. climate impacts their acculturative stress the most, followed by economic and developmental contexts among Mexican-born women.

- H6c. Acculturative stress mediates the impact of contextual factors on the psychological distress among Mexican-born women.
- H6d. Contextual factors have a direct impact on psychological distress of Mexican-born women.
- H6e. Of all the external contextual factors, U.S. climate impacts their psychological distress the most, followed by economic and developmental contexts among Mexican-born women.

## CHAPTER III

### Methodology

The current study is a secondary data analysis that makes use of cross-sectional survey data and employs Path Analysis, a component of Structural Equation modeling to conduct a multiple group analysis testing direct effect of contextual factors on acculturative stress among Latina women. The current study also tests the direct and indirect impact of contextual factors on their psychological distress. This chapter describes the methods utilized for the analysis including research design, data source and sample, procedures, measures, data analysis plan and techniques employed to ensure robust results.

#### *Research Design*

The current study employs a secondary cross-sectional survey design. This type of design involves the collection of data on at least two variables from a number of cases in one point in time. The data are then used to decipher patterns of associations between variables in either the entire group or subgroups sharing similar attributes (Lewin, 2005). My study relies on the National Latino Asian American Survey completed by the Center for Multicultural Mental Health Research of the Cambridge Health Alliance in 2002-2003. There are several advantages and disadvantages associated with the use of the cross-sectional survey designs. On a more positive note, analysis can be completed within a short period of time and with minimal expense. Researchers who collect the cross-sectional data encounter fewer problems with attrition compared to those who are involved longitudinal surveys. In addition, the response rate can be relatively high. The

National Latino Asian American Study had a response rate of 75.5%.

Disadvantages associated with these types of research designs include limits to the generalizability; that is, the researchers may not be able to determine whether the sample chosen to conduct the study is a true representation of all Latina women living in the U.S., particularly since Latina women are a largely heterogeneous group. Other limitations involve inability to discern causative relationships (it is difficult to separate the cause from effect due to the constructs being measured at the same time). In addition, generalized research may be achieved by disregarding specific results that apply to sub-sections of the population, or even individuals. Lastly, some of the concepts used in the current study such as assimilation, biculturalism, family-culture conflict are complex and may not be adequately represented by the indicators used in the current study.

#### *Data Source and Sample*

The National Latino Asian American Study is based on a stratified area probability sample design. This type of sampling strategy involves ordering the data collection frame by one or more desired characteristics and then selecting the same percentage of people or items from each sub-group using either probability sampling or simple random selection (Lewis et al, 2009). This type of sampling is usually done to maximize the between-group and minimize the within-group variances for the independent variables in a study. The stratified area probability sample design reduces sampling error and makes the samples more precise. A limitation of this strategy is that in order to stratify a sample, the researcher must have accurate and up-to-date information about the target population: this information may not always be available. Even in situations when a researcher has accurate information about the different groups

that make-up the target population, it is possible that this information may be out-of-date by the time the research based on how the sample is actually conducted. This is especially true when the sample is large and complex and in situations where the composition of the target population may change rapidly and consistently. The more characteristics that are used to develop the sampling frame, the more complex this procedure will be. The fact that stratified quota sample selection is not truly random may mean it is not representative of a target population (Mertens, 2010).

### *Data Collection Procedures*

The University of Michigan's Institute for Social Research (ISR) conducted data collection between May 2002 and November 2003. Eligibility criteria for the Latino sample of the National Latino Asian American Study included age (persons 18 years or older), ethnicity (persons who were of Latino, Hispanic, or Spanish origin), and language (persons who spoke English or Spanish). The Institute for Social Research used face-to-face interviews for the current study. Each interview averaged 2.6 hours, in either Spanish or English, depending on the interviewee's preference. The length of the interview was largely attributable to the detailed diagnostic assessment, especially among those who met criteria for a psychiatric diagnosis. All study materials were translated and adapted into Spanish to meet the needs of the non-English speaking individuals. The interviewing procedures, consent forms, and recruitment process met the approval of three Internal Review Board Committees: Cambridge Health Alliance, the University of Washington, and the University of Michigan (Alegria et al, 2004).

According to Alegria et al (2004), before administering the NLAAS, its measures were translated following the steps described by Bravo, Canino, Rubio-Stipec, and Woodbury (1991) in their study of methodological challenges in cross cultural mental health research. The new content areas were translated and back-translated by professionals and were reviewed by a multinational bilingual committee which assessed whether Spanish translation was culturally relevant for Latinos. This process occurred during the first year of the survey. Following the recommendations of the bilingual committee, the content was reviewed again, by twelve focus groups with Spanish speaking respondents (four each with Mexican, Cuban and Puerto Rican respondents) who ensured the instrument was adequately translated and adapted. Upon the completion of the focus groups, investigators met to consider which one of the focus groups' suggestions they would incorporate into the NLAAS Specific instrument. The final revisions involved changes to the Spanish, and English versions.

Following the translation and adaptation, the NLAAS was pre-tested via 25 in-depth interviews with Puerto Ricans, Cubans and Other Latinos for further feasibility and comprehension. Following this pre-test, the investigators discussed the findings and agreed on what additional changes were to be incorporated to the survey. Following this last set of changes, the measures were programmed as a part of the computer assisted interview (CAI) of the NLAAS and was subjected to additional assessment including the pre-test with 70 Latino respondents (50 English-speaking, and 20 Spanish-speaking) undertaken to evaluate the interview length, comprehension, consent, cultural issues, the respondent's manual, among others. Measures deemed to be cognitively difficult, irrelevant, or to not adequately represent the construct were modified or deleted. Lastly,

the internal consistency of the final scales was calculated using the most common estimator of reliability, Cronbach's coefficient alpha (Cronbach, 1951) by Latino subgroup (Puerto Rican, Cuban, Mexican, and other Latino) and by language of interview (English and Spanish). The following scales' internal consistency was checked,: family pride, family cohesion, everyday experiences of discrimination, perceived discrimination, family cultural conflict, acculturative distress, language proficiency (in English and Spanish), social cohesion, and neighborhood safety.

In the National Latino Asian American Study (NLAAS) interviews were completed with 4,864 adults, of whom 2,095 were of Asian descent, 2,554 Latinos, and 215 non-Hispanic, non-Asian white respondents. The NLAAS was designed to provide a nationally representative sample of all of its Asian and Latin origin groups, regardless of geographic residential patterns. In addition, with its high density (HD) supplements, NLAAS was intended to over-sample geographic areas with moderate-to-high density (>5%) of targeted Latino households in the U.S. Weighting reflects the joint probability of selection from the pooled Core and HD samples and provides sample-based coverage of the full national Latino population. The weighted sample is similar to the 2000 Census in sex, age, education, marital status and geographical distribution, but differs in nativity and household income, with more Latino immigrants and lower-income respondents (Alegria et al, 2004). The current study attempts to examine relationships of socio-economic, demographic and contextual factors, and acculturation strategies among 637 Latina women, born in Mexico, (N=257) Cuba (N=264) or Puerto Rico (N=118). Table 3 presents demographics of the participants including their country of origin, years living in the U.S., age at immigration, current age, and education level, household income, marital

status, whether they have adolescent children living in their household, as well as median and standard deviation of other independent and dependent variables used in the current study.

### *Measures*

Literature on acculturation and psychological distress among all foreign-born individuals has been consulted to identify as many contextual factors hypothesized to impact both, acculturative stress and psychological distress of Latina women in the current study. The contextual factors of interest in the current study include daily and racial discrimination, country of origin, years in the U.S., U.S. region of residence, 9-11 impact, marital status, visiting family abroad difficulties, having children and adolescents in the household, financial constraints and level of income; age at immigration, current age, content with the decision to move to U.S., decision-making power, education level, family-culture conflict, English skills, religious comfort, familism, and personality. Coping mechanisms and resources that weaken the negative impact of acculturative stress and contextual factors on psychological distress among these women include assimilation, biculturalism, relative support, spousal and friend support. National Latino Asian American Study was designed to measure the prevalence of and the impact of environment on several psychological disorders among Latino and Asian populations. As such, it is rich on variables that can be used to either measure or serve as proxies for the constructs used in the current study. Such measurements have an established validity by being used frequently in previous studies (Alegría, 2004). Below is more detailed information about the methods of measuring the variables. The reported

Cronbach's  $\alpha$  reflects the internal consistency of the variables used from the NLAAS (Alegria, 2004) data set to create measures used in the current study.

*Acculturative Stress.* Acculturative stress is measured using an acculturative stress scale comprised of nine items (Alegria, 2004). The scale's internal consistency is high (Cronbach's  $\alpha = .88$ ). Items have been obtained from Mexican-American Prevalence and Service Survey. The original scale measures the experiences of psychosocial stress for Hispanic population. The scale has been tested repeatedly for appropriateness in general Latino populations (Cervantes et al, 1991). NLAAS incorporates only nine items from these scales.

*Racial Discrimination.* Racial discrimination is measured by three items found in NLAAS. The internal consistency of this scale is very high (Cronbach's  $\alpha$  is .81). The scale measures the frequency of routine experience of unfair treatment but based on race or ethnicity (Alegria et al, 2004). The items were taken from the Detroit Area Study (DAS), (Williams, Yu et al, 1997) and the scale has been used substantially in the mental health research (Finch et al, 2002; Mays and Cochran, 2001).

*Familism.* Familism is congruent with value of familism reported in Latino cultures and described by several scholars (Vega, 1990; Ortiz, 1995). In the current study it incorporates both, opinions of shared familial cultural values, such as trust between family members, loyalty to the family, family pride, and a general orientation toward family, and the family cohesion and the willingness of family-members to spend time with each other. The scale has been used frequently with the people of Latin origin. The scale consists of ten items and its internal consistency for this sample is high (Cronbach's  $\alpha = .80$ ).

*Family-cultural conflict* is measured by five items that are drawn from a subscale of the Hispanic Stress Inventory (HIS) (Cervantes et al, 1991). It intends to measure cultural and intergenerational conflict between Latina women and their families. The scale's internal consistency for this population is high. Cronbach's Alpha is .81.

*English skills.* English skills is measured by three items in NLAAS intended to measure respondents' reading, speaking and writing abilities in English. The internal consistency of the scale is very high (Cronbach's  $\alpha = .93$ ).

*Psychological distress.* Kessler's psychological distress Scale (K10) is used as a proxy for the general psychological distress of Latina women in the current study. This measure is widely recommended as a simple and valid means of assessing psychological distress (Furukawa, Kessler, Slade & Andrews, 2003). The K10 consists of 10 questions about the levels of general anxiety and depression experienced in the past 30 days. Due to missing variables, this scale will only consist of 7 items. Internal consistency is high (Cronbach's  $\alpha = .85$ ).

*Personality.* Personality is assessed with a measure of one's good nature, temperament, patience, and the ability to perceive the environment from a more positive angle, among other items. The scale's internal consistency is high, (Cronbach's  $\alpha$  is .76). Ten items represent this construct. NLAAS assess social desirability with 9 items from the social desirability scale of the Zuckerman Personality Scales and a subset of the screening questions from the screening scale developed in conjunction with the International Personality Disorder Examination. Affirmative responses (yes = 1 or no = 0) were summed and the with higher scores indicated more social desirability (Ta et al, 2009).

*9-11 Impact.* 9-11 impact is represented by seven different items in NLAAS. The internal consistency among these items is high (Cronbach's  $\alpha$  is .74).

*Social Support.* Social support is being represented by three different scale items. Each one of these scales consists of three individual items used in prior studies to measure items such as social and /or friend support (Mulvaney-Day et al, 2007). The internal consistency for the scales used in the current study is relatively high (Cronbach's  $\alpha$  is at .78 for friend support, .80 for relative support and .81 and spousal support).

*Assimilation and Biculturalism.* Language (English and Spanish) use is used as a proxy for, both, assimilation and biculturalism. The rationale for this approach is provided by Krause, Bennett, and Tran (1989). Both of these scales, assimilation and biculturalism, have a high rate of internal consistency with Cronbach's  $\alpha$  of .88 for both. While assimilation is comprised of items that measure Latina's women English proficiency and their use of English in different environments; biculturalism comprises variables intended to measure their use of both, Spanish and English in the same environments. Scholars in general advocate for a more comprehensive measure of both assimilation and biculturalism. However, the language remains one of the most important tools through which a person acculturates, rendering this simplistic measure of assimilation legitimate (Alegria et al, 2004). Variations of this scale have been used in the past to represent assimilation strategies (Lee, Nguyen & Tsui, 2009).

*Gender-based family structure.* Gender-based family structure is measured by the item asking who has the final say in major decisions in the household. The available literature indicates that this construct can be used as indicators of whether Latina women live in a household where a traditional gender-based structure is in place. In such

households, normally men are responsible for major decisions and household expenses, while women normally are in charge of household chores (Baker, 2004).

Other one-item constructs include immigration and current age, marital status, adolescents in the household, children in the household, country of birth, U.S. region of residence, religious comfort, education level, years in the U.S., income, Content with the decision to move to U.S., financial constraints and visiting family abroad difficulties.

### *Sample Characteristics*

Latina women in the current study vary from each other in a number of variables. So that the inter-group differences are detected with more ease, Table 3 shows descriptive statistics for both, combined group of Latina women, and Latina women separated into those born in Cuba, Mexico and Puerto Rico. While in the overall sample, 62% of Latina women are married, there are significant differences in frequencies between the countries. Compared to their counterparts, women born in Cuba are most likely to be married (71.2%) while approximately 56% of both, women born in Puerto Rico and Mexico, are likely to be married. Participants born in Puerto Rico (31.4%) are most likely to be divorced, separated, or widowed; while those born Mexico are more likely to have never been married (16.7%). Most Latina women in the current study (54.0%) live in the Southern region of the country; women born in Mexico are more likely to live in the Western part of the country (57.6%) while most women born in Puerto Rico (61.9%) reside in the northeastern part of the U.S. Similarly to the entire group and in contrast to their counterparts, women born in Cuba (92.0%) are most likely to live in the Southern region of the U.S.

Contrary to the general literature which suggests that immigrants arrive in the U.S. at a young age, in this sample, most of the Cuban-born women (41%) were older than 30 when entering the country. Most of the participants born in Puerto Rico (39%) entered the U.S. at an age younger than 12, which given their citizenship status, the relationship between the U.S. and Puerto Rico, and geographical proximity between the two countries, it is to be expected. The same factors could also contribute to the fact that 18.6% of women born in Puerto Rico reported no visiting family abroad difficulties. On the contrary, nearly 57% percent of Cuban-born women and 38% of those born in Mexico indicate that it is *very difficult* for them to visit their families back home.

Compared to participants from Mexico and Puerto Rico, women born in Cuba report the highest level of education with 22% of them having acquired more than 16 years of education. Only 4.7% and 13.8% of women born in Mexico and Puerto Rico, (respectively) share this level of education. These two latter groups of Latina women are also less likely to have completed their high school education (66.4 % and 42.9% respectively). Compared to other women in the sample, women born in Mexico are also most likely to hold full time jobs. The Mexican-born women, along with their Puerto Rican counterparts, are also more likely than the Cuban-born women to share decision-making with their partners (41.2% and 43.5% respectively). A majority of the participants (50%) report to have lived in the U.S. for more than twenty years. All Latina women combined into one group, regardless of the country of birth indicate that they are content with their decision to move to U.S. Compared to their counter parts born in Cuba and Puerto Rico, most of the Mexican-born women (51%) reported to be employed.

Mexican-born women report the highest acculturative stress ( $M=10.61$ ;  $SD=2.27$ ) and the highest levels of Spanish culture retention ( $M=13.39$ ;  $SD=3.03$ ). Compared to their counterparts, these women also report the lowest levels of psychological distress ( $M=10.28$ ,  $SD=4.46$ ), biculturalism ( $M=3.93$ ;  $SD=1.60$ ) and are the youngest ( $M=36.32$ ;  $SD=13.09$ ). The Cuban-born-women are the oldest ( $M=53.7$ ;  $SD=16.5$ ), report the highest level of familism ( $M=38.01$ ;  $SD=4.04$ ), are most affected by global events such as 9-11 ( $M=13.18$ ,  $SD=3.71$ ) and have the highest levels of relative (  $M=16.00$ ;  $SD=3.0$ ), social, ( $M=15.01$ ;  $SD=2.69$ ) and spousal supports ( $M=27.36$ ;  $SD=4.51$ ). They are the least likely to have high levels of family-culture conflict ( $M=4.97$ ;  $SD=1.64$ ) and report the lowest levels of racial ( $M=4.57$ ;  $SD=2.11$ ) and daily discrimination ( $M=12.15$ ;  $SD=5.04$ ). Similar to other U.S. citizen Latina women, women born in Puerto Rico, report highest levels of biculturalism ( $M=4.78$ ;  $SD=1.90$ ), assimilation ( $M=9.33$ ;  $SD=1.41$ ), family-culture conflict ( $M=5.30$ ;  $SD=1.73$ ), strongest English skills ( $M=6.96$ ;  $SD=3.18$ ), but are most likely to experience episodes of racial ( $M=5.91$ ;  $SD=2.64$ ) and daily discrimination ( $M=15.39$ ;  $SD=6.01$ ). Contrary to women born in Cuba, women born in Puerto Rico report to be least affected by 9-11 incident ( $M=12.09$ ;  $SD=3.75$ ), report the lowest levels of spousal support ( $M=25.30$  ;  $SD=5.57$ ), and consistently with the literature, are least likely to retain Spanish culture ( $M=11.61$ ;  $SD=3.94$ ). (Please refer to Table 3 for more details)

### *Analytical Strategy*

The current study employs a simple mediation path and multi-group analysis using MPLUS (Muthen & Muthen, 2005). MPLUS enables successful execution of analyses involving different types of variables, continuous, censored, binary, ordered

categorical (ordinal), unordered categorical (nominal), counts, or combinations of these variable types. The measure of association used to estimate models in MPLUS habitually takes into account the nature of the variables: Pearson correlation is generated for two continuous variables, a tetrachoric correlation for two binary variables, or a polychoric correlation for two ordered polytomous variables, etc (Muthen and Muthen, 2005).

Through robust maximum likelihood method (MLR) available in MPLUS—robust to non-normality--researchers may estimate models using variables that may not meet the normality assumptions and can treat ordinal covariances of three and more categories as continuous. The current study treats all the ordinal variables with at least four levels as continuous. According to Dr. Muthen (2010), several regression books show that observed exogenous variables may either be continuous or binary and when estimating a model, in all cases they are treated as continuous (Muthen, 2010). However, categorical variables such as marital status and U.S. region of residence were transformed into binary variables to facilitate the analysis. Dichotomous variables such as content with decision to move to U.S, were left in their original, dichotomous form.

Prior to estimating the models, steps were undertaken to assure that only theoretically sound covariates that significantly correlate with either or both acculturative stress and psychological distress were entered in the model, and that required assumptions are met. First, two bivariate statistical tools were used: correlations and analysis of variance. An analysis of the correlation involved an examination of Pearson correlation to check for statistical significance of covariates and the two dependent variables (See Table 4). Only those contextual factors determined to have a significant relationship with acculturative stress and psychological distress were kept in the analysis.

For all Latina women these variables included decision-making power, daily and racial discrimination, years in the U.S., 9-11 impact, visiting family abroad difficulties, financial constraints and level of income; age at immigration, age, content with the decision to move to U.S., and education level, family-culture conflict, English skills, religious comfort, familism, and, region of residence. Non-significant contextual factors included marital status, having children and adolescents in household, and personality type.

Tables 5, 6 and 7 show the statistics of the variables determined to significantly predict either, or both acculturative stress and psychological distress for the Latina women in the three countries, separately: Cuba, Mexico and Puerto Rico. Results incorporate findings of eight baseline models and several multi-group analyses. The first five baseline models represent three combinations of contextual factors in which acculturative stress was associated with psychological distress. Two models capture a combination of contextual factors where acculturative stress was not associated with psychological distress. The remaining three models present the impact of contextual factors on psychological distress and acculturative stress separately, for women born in Cuba, Puerto Rico and Mexico. Among 80 multi-group analyses, eight were conducted for cross-validation purposes of the eight baseline models, and the rest were designed to test if statistically significant differences existed in the paths for the three baseline models where acculturative stress significantly predicted psychological distress for different groups of Latina women. The multi-group analyses answered the following questions (Kline, 1998):

- Does being born in Puerto Rico, Cuba or Mexico moderate the relationships between

contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?

- Does the level of assimilation among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of biculturalism among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of spousal support among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of relative support among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of friend support among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?

The study also checked for significant two-way interactions using *fitint*, a stata model designed to test for two-way interactions. Three interactions were determined to be statistically significant, but only in predicting acculturative stress among combined group of Latina women. Figure 4., illustrates these interaction effects. Years in the U.S., interacts with financial constraints, familism and racial discrimination in predicting acculturative stress. Prior to testing for interactions, continuous variables and the ordinal variables were treated as continuous and mean-centered and categorical variables were transformed into dichotomous variable to avoid collinearity. To check for the statistical

significance of interactions and to determine the existence of main effects in addition to the interaction, the following was undertaken:

1. First years in the U.S., racial discrimination and the interaction term were entered in equation as covariates of the endogenous variable, acculturative stress.
2. If the p value was lower than 0.05 the items were deemed significant.
3. The same steps were followed to check for statistical significance of other two interaction terms.

The analysis also involved bivariate statistical tool of ANOVA to test mean differences on the major constructs in the current study among Latina women born in Cuba, Mexico and Puerto Rico. To determine which groups differed, the Scheffe post-hoc tests were examined. There are numerous post hoc tests that can be computed, however, the Scheffe was selected because it is considered to have the strongest ability to safeguard against committing a Type I error (Hazard-Munro, 2001). MANOVA was also administered to check Levene's Test, Welsh, and Brown- Forsythe which delineated a violation of the homogeneity of variance assumption. Furthermore, the Kruskal–Wallis, a non-parametric test, was computed to examine the null hypothesis that claims no significant differences exist among subjects studied with regards to the major ordinal and continuous variables in the study. Only ANOVA test results will be presented in the current study for clarity and to avoid redundancy. The tests found that Kruskal-Wallis H results were consistent with those of ANOVA and findings were similar.

Once the statistically significant covariates were determined, regression diagnostics were conducted to check for linearity, homoscedasticity, and absence of

multicollinearity (Hazard-Munro, 2001). Linearity, assuring that covariates and dependent variables have a linear relationship, was examined through linearity tests and graphical representations, using scatter plots with an imposed regression line. The current study employed Kolmogorov-Smirnov and Shapiro-Wilk tests of normality to check for normality. Histograms for each individual variable were also evaluated and gplots and qplots were administered for each one of the variables to assess which transformation best achieved normality assumptions. Although several variables were log-transformed, (i.e. acculturative stress, psychological distress, racial discrimination, daily discrimination, age, family-cultural conflict were log transformed, English skills and September 11<sup>th</sup> impact were inversed) the final examination showed that some of the variables retained a level of skewness (Table 3). Consequently, the robust maximum likelihood method (MLR), an estimator robust to non-normality was employed. Heteroscedasticity was assessed by plotting the residuals against the independent variables. Lastly, the variation inflation factor (VIF) was administered to detect for possible multicollinearity among the covariates. Multicollinearity was assumed to exist if the VIF exceeded four. In addition, correlations were computed among all the variables. Any correlation with a coefficient of above 0.85 was further examined to rule out possible collinearity (Hazard-Munro, 2001). All the items were checked for missing data, if the variables had more than 10% of missing data, they were dropped from the analysis.

The current study employs path analysis, a variant of structural equation modeling (SEM). Path analysis, which takes a confirmatory (i.e. hypothesis testing) approach to the multivariate analysis of a structural theory, presents tentative causal

associations under investigation by a series of structural equations (Byrne, 1998). The structural equations can also be represented visually to allow for a clearer conceptualization of the theory under study.

Although social scientists may disagree on what constitutes an adequate sample size to obtain stable estimates in path analysis, some general guidelines indicate that a sample size of 100 or less is small, a medium sample size is between 100 and 200, and a large sample size is greater than 200 (Kline, 1998). However, the more complex the model is, the larger the data set is required. Some researchers suggest that the ratio between the sample size and parameters should ideally be 20:1 but others suggest that 10:1 is adequate and likely more realistic (Kline, 1998). Furthermore, some researchers (Anderson & Garbing, 1988; Ding, Velicer & Harlos, 1995) suggested that 100 to 150 subjects is the minimum satisfactory sample size when constructing structural equation models. There is a total of 637 Latina women in the sample used in the current study. The first model estimated for all Latina women incorporates 13 variables, the second 12 variables, and the third model incorporates 11 variables. The two models estimated for all of the Latina women in the sample where acculturative stress is not statistically associated with psychological distress incorporate 13 and 12 variables. For the models estimated using all the Latina women in the current study, it seems that 20 variables per 10 subject rule of thumb holds. In the current study, there are 257 women born in Mexico, 264 women born in Cuba and 118 women born in Puerto Rico. The model estimated for women born in Mexico incorporates 9 variables; those born in Cuba 10 and those born in Puerto Rico 7 variables.

Once the descriptive analysis was conducted and all the SEM assumptions met, the path models were estimated following these steps:

1. Theory and previous literature was consulted in identifying those contextual factors associated with psychological distress and acculturative stress.
2. Bivariate correlation analyses were carried out to determine which contextual factors significantly predicted acculturative stress and psychological distress.
3. *Specification search* (Schumacker and Lomax, 2004) was followed in order to seek a better fitting model, starting with simple path analysis comprised of two outcomes and one covariate, and adding other covariates, one by one until a better fitting model was achieved. Statistically non-significant parameters were eliminated. For the inclusion of additional parameters, the modification index (MI) was followed which delineated the expected value that a chi-square test would decrease by if such a parameter were to be included. Statistical significance of parameters were also considered and only parameters that retained their significance were remained in the model. Prioritizing the selection of variables was theory and research-driven.
4. To test for the mediation effect of acculturative stress, an effort was made to estimate as many models where acculturative stress significantly predicted psychological distress. According to Mackinon (2008), there needs to be a significant relationship between the dependent and independent variables for mediation to occur. In the current study, acculturative stress is the independent variable and psychological distress is the dependent variable. For mediation to occur, acculturative stress had to significantly predict psychological distress of

Latina women. Path analysis is an appropriate technique for evaluating mediation. MPLUS automatically calculates the indirect effects of covariates. When such meditative effect occurs, the estimated total effect is disaggregated into individual indirect effects and the direct effects (Kershaw, Abdou, Rafferty and Jackson, 2010).

The current study utilized multiple indices to determine if the model being tested should be accepted or rejected, and to establish model-to-data fit or the model's ability to mimic the relationships in the data (Kline, 1998). The most utilized indices are categorized as absolute, comparative, parsimony, and noncentrality-based indices. The most widely used absolute fit index is the Chi-square, which is a badness-of-fit measure. A non-significant Chi-square implies a good model fit, while a significant Chi-square implies a bad model fit (Hu & Bentler, 1995; Muthen and Muthen, 1998, 2004). Two of the most widely used non-centrality-based indices are the Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). The RMSEA is one of the most informative criteria in covariance structure modeling (Byrne, 2001). It takes into account the error of approximation in the population. The model fit is considered acceptable when CFI are less than or equal to .95, SRMS is less than or equal to .08 and RMSEA is less than or equal to 0.06 (Hu and Bentler, 1999). Lastly, the current study employed Tucker Lewis Index (TLI) which according to Marsh, Balla, and McDonald (1988), it is relatively independent of sample size. Values over .90 or over .95 are considered acceptable (e.g., Hu & Bentler, 1999).

In addition to conducting ANOVA and MANOVA to check whether the means of the continuous variables varied across the three groups of Latina women, multi-group

analysis was employed to determine whether there is any difference on the paths based on the country of birth. Multi-group analyses was also used to examine any differences in paths based on the level of assimilation, biculturalism, and relative, friend and spousal support.

Multi-group analyses were conducted using this method:

1. Prior to entering biculturalism, assimilation, relative, friend and spousal support in the multi-group analyses, their medians was calculated. These variables were then transformed into dichotomous variables using the split median method. For example, the biculturalism was transformed high and low level of biculturalism , assimilation was transformed into high and low level of assimilation and the remaining variables such as relative, friend and spousal support followed with the same pattern, as well.
2. The two groups of each variable were entered in the analysis while imposing cross-group equality constraints on path coefficients (Kline, 1993) and then stacking the two groups in the analysis but path coefficients are allowed to vary among each other.
3. The constrained versus unconstrained models are compared with each other by contrasting the chi-square of the model with its path coefficients constrained to equality against that of the model with path coefficients unconstrained. If the relative fit of the constrained model was worse than that of the unconstrained model, one concluded that the model paths differed across the groups (Kline, 1998).

4. The Satorra Bentler scale chi square difference was used in this instance since models were estimated using the MLR estimator (Satorra and Bentler, 2001).

### *Robustness of Results*

According to Byrne (2003), meeting multivariate normality is extremely important in path analyses to assure that fit indices have accurate values (Chi-square becomes excessively large and the values of other fit indices and standard errors are underestimated when multivariate normality assumption is not met). When the standard errors are underestimated, the regression paths and error variances will appear to be statistically significant. To guard against multivariate non-normality, MLR was utilized to estimate standard errors. Although scholars suggest employing the use of the “bootstrap” procedures to produce more accurate values for standard errors, according to Muthen & Muthen (2005), standard errors estimated through MLR are very close to the standard errors produced through “bootstrap” methods. This is because the MLR or maximum likelihood parameter, estimates with standard errors and a chi-square test statistic that are robust to non-normality and non-independence of observations. The MLR standard errors are computed using a sandwich estimator. This is what we generally call robust standard errors. Consequently, there was no need for utilization of bootstrap procedures in the current study.

All the estimated baseline models (the five models applied to all Latina women and three models applied to women born in each individual country) were cross-validated using the holdover cross-validation technique which incorporates the following steps:

1. Models were first estimated using only one randomly selected half of the sample.

The second random half was retained for validation purposes.

2. Next, both random halves of the overall group in a multiple-group path analysis were entered to determine if there was substantial capitalizing on chance during the model re-estimation.
3. Overall multiple-group path analysis comparing the two randomly divided samples with all paths freed (unconstrained) versus all paths constrained for all models were conducted. Again, the Satorra Bentler Scale Chi square difference was used (Satorra and Bentler, 2001), to compare the fit of the two models. The test was not significant for all eight estimated models indicating that the overall baseline models tested on the two random groups were cross-validated.

## CHAPTER IV

### Results

This chapter is organized around four parts. The first section presents the results from the preliminary analyses. This includes bivariate analyses of correlations and ANOVA results, where the relationships between contextual factors and acculturative stress and psychological distress for all Latina women combined into one group are examined. It also includes country-specific bivariate analyses undertaken to inspect the relationship between the contextual factors, acculturative stress and psychological distress for Latina women born in Cuba, Mexico and Puerto Rico, separately. The findings from ANOVA exhibit how contextual factors and the two dependent variables, acculturative stress and psychological distress vary among Latina women born in Cuba, Mexico and Puerto Rico. The next three parts are related to the findings from all the path analyses administered to test the hypotheses of the study. The analyses include eight baseline models and 88 multi-group analyses. The second part presents the results of five baseline Path models inspecting the relationships between statistically significant contextual factors, acculturative stress and psychological distress for combined group of Latina women. This part also presents the results of the interactions between the contextual factors in predicting acculturative stress among Latina women combined into one group. The third part presents the results of multi-group analyses undertaken to assess whether the identified coping mechanisms moderate relationships between contextual factors, acculturative stress and psychological distress among combined group of Latina women. Multi-group analyses were only applied to the three baseline models

where acculturative stress was associated with psychological distress of Latina women in the current study. The chapter ends with the fourth section featuring the results of the last multi-group analysis and three separate baseline models carried out to examine whether the relationships between contextual factors, acculturative stress and psychological distress vary for women born in Cuba, Mexico and Puerto Rico.

### Preliminary Analyses

Preliminary analyses consisted of one-way analysis of variance (ANOVA) and Scheffe post-hoc tests administered to examine statistically significant differences among Latina women born in Mexico, Puerto Rico and Cuba on the contextual factors, and the two dependent variables, acculturative stress and psychological distress. Zero-order correlations were conducted to assess which contextual factors significantly correlated with acculturative stress and psychological distress. Contextual factors tested included Latina's marital status, U.S. region of residence, age at immigration, religious comfort, education level, adolescents and children in the household, content with the decision to move to U.S., years in the U.S., decision-making power, financial constraints, family-culture conflict, familism, financial constraints, racial and daily discrimination, English skills, personality, visiting family abroad difficulties, and 9-11 impact. Statistical significant differences between the groups are noted on acculturative stress, ( $df=511$ )=21.013,  $P<0.01$ , age ( $df=626$ )=81.388,  $p<0.01$ , daily discrimination, ( $df=626$ )=15.54,  $p<0.00$ , English Skills, ( $df=630$ )=22.660,  $p<0.00$ , familism, ( $df=631$ )=17.61,  $p<0.00$ , psychological distress, ( $df=631$ )= 7.423,  $p= 0.001$ , income ( $df=636$ )=6.76,  $p<0.001$ , and racial discrimination,  $F(df=626)=18.47$ ,  $p=0.00$ .

As seen in Table 3, The Scheffe test presents results of within group differences. Levels of *racial and daily discrimination* differed between women born in Cuba and Puerto Rico and Mexico and Cuba, level of *acculturative stress* varied between women born in Cuba and Mexico and Puerto Rico and Mexico, *age, and English skills* level varied among all the groups, *familism* varied between women born in Cuba, Puerto Rico and Mexico. Differences in *psychological distress* were noted between women born in Cuba and those born in Puerto Rico and Mexico.

#### *Zero-Order Correlations*

In a similar vein, the heterogeneity of the sample is depicted in the results of zero-order correlations. Correlations were calculated between the contextual variables of Latina's marital status, U.S. region of residence, age at immigration, religious comfort, education level, adolescents in the household, number of children, being content with the decision to move to U.S., years in the U.S., decision-making power, financial constraints, family-culture conflict, familism, financial constraints, racial and daily discrimination, English skills, personality type, visiting family abroad difficulties, and 9-11 impact and the two dependent variables, acculturative stress and/or psychological distress. Four sets of zero-order correlations were employed. One for Latina women combined into one group (Table 4); the remaining three sets of zero-order correlations were employed for women born in Cuba (Table 5), Mexico (Table 6), and Puerto Rico (Table 7).

For Latina women grouped together, the U.S. region of residence, age, age at immigration, religious comfort, education level, content with decision to move to U.S., years in the U.S., decision-making power, financial constraints, family-culture conflict, income, racial and daily discrimination, English skills, visiting family abroad difficulties,

and 9-11 impact significantly predicted their acculturative stress and psychological distress. Thus when not controlling for any other third contextual factor, the higher the levels of English skill, familism and income, the lower the level of acculturative stress among all Latina women combined into one group and the better their psychological distress. On the contrary, the higher their level of racial and daily discrimination, and family-cultural conflict, the higher their acculturative stress and their psychological distress. The older these women became, the lower their psychological distress, but the higher their acculturative stress. The correlations of the ordinal and categorical variables suggested that when not controlling for any third contextual factor, having financial constraints, and facing visiting family abroad difficulties was associated with high acculturative stress and psychological distress. Religious comfort was associated with higher acculturative stress. Latina women with decision-making power at home were likely to report better psychological distress, compared to their counterparts.

Mirroring the results from ANOVA analyses, (Table 3), zero-order correlation results also show differences in correlations among contextual factors, psychological distress and acculturative stress for Latina women from Cuba, Mexico and Puerto Rico (Tables 5-7). Only those covariates that significantly correlated with either or both, acculturative stress and psychological distress were reported. While the details such as differences in the direction of the correlations are reported in Tables 5-7, the results indicate that the following contextual factors, age, age at immigration, religious comfort, content with the decision to move to U.S., years in the U.S., decision-making power, financial constraints, family-culture conflict, income, racial and daily discrimination, English skills, visiting family abroad difficulties, and 9-11, significantly predict

acculturative stress and/or psychological distress of Mexican-born Latina women.

Psychological distress and/or acculturative stress among Cuban-born Latina women were significantly correlated with age at immigration, education level, content with the decision to move to U.S., years in the U.S., decision-making power, financial constraints, family-culture conflict, racial discrimination, familism, English skills, and facing visiting family abroad difficulties. Lastly, a considerably smaller number of contextual factors predicted psychological distress and acculturative stress of women born in Puerto Rico. These contextual factors included, decision-making power, age at immigration, facing visiting family abroad difficulties, education, financial constraints, English skills level, racial discrimination, family-cultural conflict and familism.

Central to the purpose of the current study was the detection of statistically significant interactions between the contextual factors in the study and the two dependent variables, psychological distress and acculturative stress. The fitint module identified three interactions as statistically significant, years in the U.S. and familism, years in the U.S. and racial discrimination and years in the U.S. and financial constraints. Two of these interactions were entered in models and will be further explained below in accordance with their relationship to acculturative stress and psychological distress when in the presence of other contextual variables.

### Path Analyses for combined group of Latina women

This section presents the results of five baseline path models that were conducted to answer the following research question and test these hypotheses:

What relationships exist among the contextual factors, acculturative stress and psychological distress among Latina women in the current study?

- H1a. Contextual factors have a direct impact on acculturative stress of Latina women.
- H1b. Of all the external contextual factors, U.S. climate impacts acculturative stress the most, followed by economic and developmental contexts.
- H1c. There is an interactive effect between contextual factors in acculturative stress.
- H1d. Acculturative stress mediates the impact of contextual factors on the psychological distress of Latina women.
- H1e. Depending on the presence of specific contextual factors, acculturative stress may or may not significantly impact their psychological distress.
- H1f. Contextual factors have a direct impact on psychological distress of Latina women.
- H1g. Of all the external contextual factors, U.S. climate contexts impact their psychological distress the most, followed by economic and developmental contexts.

Table 4 presents the results of the zero-order correlation analysis (Table 4). The following contextual variables were statistically significant covariates of psychological distress and/or acculturative stress among Latina women grouped together: the U.S. region of residence, age, age at immigration, religious comfort, education level, adolescents in the household, number of children, content with the decision to move to U.S., years in the U.S., decision-making power, financial constraints, family-culture conflict, income, racial and daily discrimination, English skills, visiting family abroad difficulties, and 9-11 impact. Post-hoc path analyses was undertaken to incorporate as many of these contextual factors and assess how they impacted acculturative stress. An effort was made to assess both situations, when acculturative stress did significantly

predict psychological distress of Latina women and when it did not. Using *specification search* (Schumacker and Lomax, 2004), contextual factors were added one by one until a better fitting model was achieved. Statistically non-significant parameters were eliminated. For the inclusion of additional parameters, modification index (MI) was consulted. Prioritizing the selection of variables was theory and research-driven. Based on the literature on acculturative stress, the following variables were given priority, daily and racial discrimination, income, familism, English skills, family-cultural conflict, decision-making power, difficulties visiting family abroad, financial constraints, age at immigration, cent with decision to move to U.S. and religious comfort. However, the results showed that some of these variables could not be entered jointly in the model. They either weakened the model fit, or rendered each other insignificant. For instance, when familism and family-cultural conflict were entered into two separate path equations, they significantly predicted acculturative stress and psychological distress; when entered jointly in one equation, they both turned insignificant. The same transpired for the following contextual factors, financial constraints, difficulties visiting family abroad, and education; years in the U.S. and age at immigration; familism and decision-making power; English skills and education level; and familism and religious comfort. Given that research shows that all of these contextual factors are essential to shaping acculturative stress and psychological distress, five baseline models were estimated to inspect their impact. The subsequent section demonstrates the findings of each one of the hypotheses tested.

*Acculturative Stress and Contextual Factors: Combined group of Latina women*

H1a. Contextual factors have a direct impact on acculturative stress of Latina women.

The results in all five path models indicated that content with the decision to move to U.S., visiting family abroad difficulties, family-cultural conflict, racial discrimination, age, religious comfort, English skills, familism, years in the U.S., financial constraints, 9-11 impact and spousal support, positively impact acculturative stress (see Table 8). Compared with Latina women who are not content with the decision to move to U.S., those who are content report lower acculturative stress. On the contrary, English skills, age, years in the U.S., and spousal support, negatively impacted acculturative stress, consistently in all five of the models estimated, in which they emerged as significant predictors. This suggests that an increase in the levels of English skills, age, and the time in the U.S. was associated with a decrease in their acculturative stress. Hypothesis 1a. was supported by the findings that contextual factors have a direct impact on acculturative stress among Latina women.

H1b. Of all the external contextual factors, U.S. climate impacts acculturative stress the most, followed by economic and developmental contexts.

Figure 4 demonstrates the results of Path analyses combined, color-coding paths from contextual factors to acculturative stress and from contextual factors to psychological distress, according to the types of contexts they represent. The denser the line of the path, the more frequently it emerged in path models to significantly impact acculturative stress and psychological distress among Latina women. Results indicate that content with the decision to move to U.S., English skills, racial discrimination and years in the U.S., most consistently shaped acculturative stress, emerging as significant in all five path models. While on one hand, racial discrimination was positively associated

with acculturative stress, on the other, English skills, Content with the decision to move to U.S. and years in the U.S. were negatively associated with acculturative stress.

Family-cultural conflict impacted acculturative stress in four out of five path models, while contextual factors such as visiting family abroad difficulties, religious comfort, financial constraints, age, spousal support and 9-11 impact emerged in at least one model to impact acculturative stress. As shown in Table 8, English skills made the strongest impact on acculturative stress, demonstrating the highest coefficient value in all five models. It was followed by racial discrimination (second highest coefficient in all five models). Visiting family abroad difficulties emerged as a significant path in only two out of five models, but it demonstrated third largest coefficient, next to English skills and racial discrimination, in both models. A considerably large coefficient was exhibited by years in the U.S., (particularly in the models 3, 4, and 5 when in the absence of visiting family abroad difficulties, years in the U.S. had the third largest coefficient, next to English Skills and Racial Discrimination (seen in Tables 8 & 9). Although family-cultural conflict significantly influenced acculturative stress, in four out of five models, its coefficient was consistently lower than most other contextual factors (English skills, racial discrimination, and years in the U.S). 9-11's impact, spousal support and having financial constraints, demonstrated the lowest level of impact, with a coefficient of less than or equal to 0.10 in all models in which they emerged as significant contextual factors.

Consequently, based on the above and as exhibited in Figure 4, contextual factors representing U.S. climate context (particularly unfavorable contexts of reception such as racial discrimination) most consistently influenced acculturative stress among Latina

women bearing the strongest impact. Development contexts (age and English skills), followed next. Cultural context was present consistently, however family-cultural conflict's coefficient was significantly lower than that of other contextual factors present in all four models in which family-cultural conflict emerged as a significant predictor. These findings support H1b. hypothesis indicating that U.S climate contexts take the lead, followed by development contexts, followed by cultural context, and global contexts in shaping acculturative stress among combined group of Latina women.

H1c. There is an interactive effect between contextual factors in impacting acculturative stress.

The fitint, a stata model designed to test for two-way interactions, was employed to test whether internal and external contextual factors interact with each other in impacting acculturative stress among this group of women. Contextual factors such as years in the U.S. racial discrimination and familism, interact with each other in predicting acculturative stress. The interaction of the variables (Tables 8 and 9) demonstrate that in all levels of racial discrimination, the Latina women who have been in the U.S. five to ten years, experience the highest acculturative stress. From the similar direction of all the lines representing number of years in the U.S., we can infer that the impact of racial discrimination on the effect of number of years on acculturative stress, increases the level of racial discrimination. The lines representing the categories of the years in the U.S. cross each other and the shapes of the lines are not similar. This crossing is an indication that the two constructs interact with each other in shaping acculturative stress among combined group of Latina women (Figures 11 and 12). It is

also an indication that the two constructs do not interact with other consistently when impacting acculturative stress.

Figure 13 exhibits the interaction between the familism and years in the U.S. Not only are the lines of both constructs different, but the distance between points varies. This indicates that the impact of familism in the impact of years in the U.S. on acculturative stress varies depending on the category of years in the U.S. Nonetheless, consistently with the previous research, familism seems to be consistently strongest when women have been in U.S. for less than five years and weakest when women have been in U.S. more than 20 years. Familism is expected to decrease the longer the Latina women live in the U.S., and so is its impact on acculturative stress (Figure 13). The findings indicate that H1d hypothesis was partially supported since only three contexts interact with each other in impacting acculturative stress.

*Acculturative Stress Mediator; Contextual Factors and Psychological Distress: Latina women combined*

H1e. Acculturative stress mediates the impact of contextual factors on psychological distress of Latina women

According to Mackinon (2008), there needs to be a significant relationship between the dependent and independent variables in order to test the effects of mediation on the relationship between independent and dependent variables. Path analysis is an appropriate technique for evaluating mediation. MPLUS automatically calculates the indirect effects of covariates. When such a mediating effect occurs, the estimated total effect is disaggregated into individual indirect effects and the direct effects (Kershaw, Abdou, Rafferty and Jackson, 2010). As it is indicated in Figure 4 and in Tables 8 and 9, acculturative stress mediates the impact of the following contextual factors on

psychological distress of Latina women, visiting family abroad difficulties, racial discrimination, English skills, years in the U.S., and family-cultural conflict. None of these contextual factors impacted psychological distress of Latina women directly.

Consequently, the results show that an increase in the visiting family abroad difficulties, racial discrimination, and family-cultural conflict are associated with higher acculturative stress, which in turn was linked with higher psychological distress among combined group of Latina women. An increase in the levels of English skills and years in the U.S. are associated with a decrease on acculturative stress, which in turn is linked with a decrease in their levels of psychological distress. Given the fact that acculturative stress mediates the impact of only a select number of contextual factors on acculturative stress, H1e.hypothesis is only partially supported.

#### *Acculturative Stress and Psychological Distress Among Latina women*

H1f. Depending on the presence of specific contextual factors, acculturative stress may, or may not significantly impact psychological distress.

As shown in Tables 8 and 9, and in Figure 4, for combined group of Latina women, acculturative stress is not always associated with their psychological distress. While in models 1-3, acculturative stress significantly influences psychological distress, in models 4 and 5, acculturative stress is no longer associated with their psychological distress. Equations designed to examine psychological distress among Latina women in models 1-3 demonstrate that in the presence of such significant contextual factors as discrimination, age, income, familism, family-cultural conflict, education, financial constraints, and content with the decision to move to U.S., acculturative stress impacts psychological distress of these Latina women. However, as portrayed in Table 8,

equations in models 1-3 incorporate variables such as daily discrimination, income, family-cultural conflict and financial constraints, one at a time. In model 1, for instance, daily discrimination and income, (two contextual factors which according to research negatively impact psychological distress of immigrant women) are entered simultaneously. However, familism, a contextual factor speculated to negatively be linked with psychological distress is also a part of this equation. In the second model's equation, daily discrimination and family-cultural conflict is entered along with the level of education, speculated to negatively be linked with psychological distress of Latina women. The third model's equation incorporates financial constraints and content with decision to move to U.S, (again two contextual factors suggested to strongly impact psychological distress among these women) along with familism. Furthermore, in these three models' equations in which acculturative stress impacts psychological distress among Latina women, compared to other contextual factors, acculturative stress has the smallest coefficient.

In psychological distress' equations of models 4 and 5, acculturative stress is no longer associated with psychological distress among Latina women. Decision-making power is negatively linked with psychological distress among this group of women, as present in model's 4 equation. However, model 4 also incorporates contextual factors such as daily discrimination, financial constraints, and family-cultural conflict which have more significant impact in psychological distress. Research consistently asserts that all these three contexts have a strong positive impact on psychological distress of Latina women. This suggests that when other influential factors are present in an environment, they may weaken the impact of acculturative stress on the Latina's psychological distress.

Latina women may have other issues facing them, which they may consider more important, and may be able to cope well with acculturative stress. In the last model's equation, daily discrimination is entered along with financial constraints. In the same model, spousal support and religious comfort are entered in the equation of acculturative stress. Further analyses could be conducted to test whether spousal support and religious comfort are impacting the relationship between acculturative stress and psychological distress among Latina women in model 5. These results suggest that whether or not acculturative stress is linked to psychological distress among Latina women in general, it depends on the types of other contextual factors incorporated in the model. When the context of Latina women consists of such factors as daily discrimination, financial constraints, family-cultural conflict, etc., which are known to have a strong impact in their psychological distress, acculturative stress may not so significant for them. The results are consistent with the H1e tested in this section, as well as the theoretical premise of Family Stress Management Theory (Boss, 2002).

*Contextual Factors and Psychological Distress Combined group of Latina women*

H1g. Contextual factors have a direct impact on psychological distress of Latina women.

Results from five path models shown in Tables 8 and 9 denote that, in addition to acculturative stress, several contextual factors impact psychological distress of Latina women. These include daily discrimination, age, income, family-cultural conflict, education level, familism, and decision-making power. Similarly to acculturative stress, family cultural-conflict and daily discrimination are positively associated with psychological distress of Latina women. This indicates that increased levels of daily

discrimination and family-cultural conflict are linked with high levels of psychological distress among this group of women. Similarly with acculturative stress, income and familism are negatively associated with psychological distress. Hence, with higher levels of income and familism, psychological distress is lower.

In contrast to acculturative stress, two new contextual factors impact psychological distress in the estimated five path models, education level and decision-making power in the household. The results show that higher level of education among this group of women is associated with a decrease in their psychological distress. Additionally, while the increase in the age was associated with a decrease in their acculturative stress, increased age was linked to increasing levels of their psychological distress, indicating that older age might be associated with more psychological distress for Latina women. The results in this section show support for H1f. hypothesis confirming that yes, contextual factors show direct impact in the levels of psychological distress among Latina women.

H1h. Of all the external contextual factors, the U.S. climate contexts impact the levels of psychological distress the most, followed by economic and developmental contexts.

When it comes to predicting the levels of psychological distress among Latina women, development contexts (age), bear the strongest impact on the levels of psychological distress among this population. Age emerges as a significant path to psychological distress in all five models consistently demonstrating a positive association with psychological distress. Next, follow contexts of U.S. climate (particularly the context of unfavorable reception such as daily discrimination). Daily

Discrimination emerges as a significant covariate of psychological distress in four models. Its coefficient is the highest after age, in all four models. Family-cultural conflict, a variable of cultural context, emerges next as a predictor of psychological distress in two models. The coefficient, however is very strong, bearing the second strongest value, next to age, in all two of the models in which it emerges as a significant path to psychological distress. Two additional elements of the cultural contexts, familism, and having decision-making power in the household, also impact psychological distress of Latina women combined together. Coefficients of these paths, however, are moderately strong.

In sum, in contrast to the H1f hypothesis, developmental context seems to have the greatest influence on psychological distress of Latina women, followed by unfavorable contexts of reception, such as daily discrimination. Not only do these two contexts have a strong influence, they also demonstrate a positive association showing that an increased age and discrimination are linked with an increase in psychological distress among these women. On a positive note, unlike with acculturative stress, familism, seems to buffer effectively psychological distress of Latina women in the current study. Familism did not emerge as a significant context in shaping acculturative stress of Latina women combined, in any of the five estimated models. The results indicate that an increase in levels of familism is linked with decreased psychological distress among this group of women, when combined into one group. Decision-making power in the household, a contextual factor representing internal context of the environment, emerges as a significant path to psychological distress among Latina women. This contextual factor is negatively associated with psychological distress,

showing that the more decision-making power in the household these Latina women have, the lower their psychological distress.

*Coping Mechanisms: Combined group of Latina women*

To investigate the moderating effects of levels of biculturalism, assimilation and systems of support, several multiple group analyses were administered. Multigroup-analyses answered the following questions (hypotheses tested follow):

- Does being born in Puerto Rico, Cuba or Mexico moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of assimilation among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of biculturalism among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of spousal support among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of relative support among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?
- Does the level of friend support among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the models where acculturative stress impacted psychological distress?

H2a. Compared to their counterparts with low level of assimilation, for Latina women with higher level of assimilation, the negative impact of acculturative stress

and other contextual factors on psychological distress is less.

To determine if the parameters vary across Latina women with high level and low levels of assimilation, contrast was made between the constrained and unconstrained models. After first estimating the unconstrained model in which the parameters were permitted to be free in both groups, a fully constrained model was estimated with all of the parameters constrained to be equal for all three groups. Based on the difference between Satorra chi-square results of the unconstrained model ( $\chi^2=18.84$ ,  $df=14$ ,  $p=.17$ ) and constrained model ( $\chi^2=41.70$ ,  $df=26$ ,  $p=.03$ ) it is concluded that, overall, the hypothesized third model differs by level of assimilation ( $\chi^2=22.92$ ,  $df=12$ ,  $p=0.03$ ). As shown in Table 10, the results of the Satorra chi-square tests indicate that paths in model 1 and 2 do not vary according to levels of assimilation. Consequently, only the results of the third model are highlighted in this section. In order to test whether or not Latina women with high level of assimilation differed from those with low level of assimilation on each individual path in the overall model, additional analyses were administered. These analyses included running additional 13 high/low assimilation stacked models in which each individual path was constrained one at a time, simultaneously for women in both groups. The results from each constrained model were compared to the ones with all 13 paths freed. Whether the paths significantly differed from each other was determined by comparing the satorrachi-square value of the high assimilation/low assimilation model ran with all 13 paths freed, with the individual chi-square statistic of each one of the 13 high/low assimilation models, in which the paths were constrained one at a time. The analyses indicated that the following paths differed for Latina women with high assimilation vs. those with low assimilation: the

path leading from acculturative stress to psychological distress, the path leading from Interaction between years in U.S. and familism and acculturative stress, and the path leading from 9-11 impact to acculturative stress. Once these paths were identified to be different for the two groups, the constraints were removed. Lastly, to confirm that these differences truly existed, Satorra chi-square of the partially restrained model in which these three paths were freed was compared with that of the unconstrained model. No statistically significant difference between the unconstrained and partially constrained models was found ( $\chi^2=5.3$ ,  $df=10$ ,  $p=0.87$ ). The results of this model will be presented.

In the partially constrained model, contextual factors such as financial constraints, content with the decision to move to U.S., age, and familism are linked with psychological distress. English skills, racial discrimination, years in the U.S, 9-11 impact, and financial constraints were associated with acculturative stress (Tables 12). Namely, while for Latina women with lower levels of assimilation, acculturative stress moderately predicted psychological distress, ( $p=0.06$ ), for Latina women with higher levels of assimilation, acculturative stress no longer predicted their psychological distress. The level of assimilation also moderated the impact of age in psychological distress of this group of women and the impact of 9-11 on acculturative stress.

Whereas for women with low level of assimilation, the increase in age was linked with an increase in their levels of psychological distress. This relationship became insignificant for women with high levels of assimilation. This suggested that unlike the case with their counterparts, for Latina women with high level of assimilation, increase in age makes no difference in their levels of psychological distress.

Belonging to Latina women with low level of assimilation rendered the impact of 9-11 on acculturative stress insignificant. For Latina women with low levels of assimilation, the 9-11 impact was not significantly linked with acculturative stress. However, for Latina women with high levels of assimilation, the 9-11 was significantly associated with acculturative stress. The results in this section do not show a full support for H2a.hypothesis since the level of assimilation moderated only a few estimated relationships of contextual factors, acculturative stress and psychological distress among Latina women in the current study.

*Biculturalism, Contextual Factors, Acculturative Stress and Psychological Distress*

- H2b. Compared to their counterparts with low level of biculturalism, for Latina women with high levels of biculturalism, the negative impact of acculturative stress and other contextual factors on psychological distress is less.

To determine if the parameters vary across Latina women with high and low levels of biculturalism, the same procedures undertaken to determine the differences in parameters across Latina women with high/low levels of assimilation were carried out. Based on the difference between Satorra chi-square results exhibited in Table 11, it was concluded that, overall, the hypothesized relationships in the third Path model differ by level of biculturalism. Identical steps to the multi-group analysis explained above were undertaken. It was determined that following path differed for Latina women with high biculturalism vs. those with low biculturalism.

The Satorra Bentler scale chi-square difference tests produced the finding that being a Latina with high level vs. low level of biculturalism moderated only the 9-11 impact on the level of acculturative stress among Latina women. Namely, while for Latina women with low levels of biculturalism, the 9-11 impact was not significantly

linked with acculturative stress, for Latina women with high levels of biculturalism, the 9-11 was significantly associated with acculturative stress. The increased 9-11 impact led to higher acculturative stress among this group of women, only. Nonetheless, although no differences were noted in the impact of acculturative stress to psychological distress of combined group of Latina women, for both groups this association was insignificant. The results in this section do not show a full support for H2b. hypothesis since the level of biculturalism moderated only a few estimated relationships between contextual factors, acculturative stress and psychological distress among combined group of Latina women together in the current study.

*Systems of support, contextual factors, acculturative stress and psychological distress*

H2c. Compared to their counterparts with low level of spousal support, for Latina women with higher level of spousal support, the negative impact of acculturative stress and other contextual factors on psychological distress.

Satorra Bentley (2002) test indicated that spousal support moderated the relationships between the contextual factors, acculturative stress and psychological distress, and only in the second model. Table 14 shows how the paths specified in model 2 differ when Latina are divided by their low/high levels of spousal support.

In this second model, contextual factors such as acculturative stress, discrimination, age, family-cultural conflict and education, were linked to psychological distress of Latina women. Content with the decision to move to U.S., visiting family abroad difficulties, English skills, family-cultural conflict, racial discrimination, years in the U.S. age and the interaction between the years in the U.S. and racial discrimination were linked with acculturative stress. Results show that being a Latina with high vs. low level of spousal support moderated the impact of family-cultural conflict to acculturative

stress and the impact of the interaction between the years in the U.S. and racial discrimination on acculturative stress. Namely, compared to Latina women with low levels of spousal support, for Latina women with high levels of spousal support, the family-cultural conflict was not significantly associated with high acculturative stress. Compared to Latina women with low levels of spousal support, for Latina women with high levels of spousal support, familism and years in the U.S. did not interact with each other in shaping acculturative stress (Table 16 ).The results do not fully support the H2c hypothesis. The level of spousal support moderated only a few estimated relationships between contextual factors, acculturative stress and psychological distress of combined group of Latina women into one group.

- H2d. Compared to their counterparts with low level of friend support, for Latina women with high level of friend support, the negative impact of acculturative stress and other contextual factors on psychological distress is less.
- H2e. Compared to their counterparts with low level of relative support, for Latina women with higher level of relative support, the negative impact of acculturative stress and other contextual factors on psychological distress levels is less.

No differences were discerned in both groups according to the multi-group analysis. Consequently these hypotheses are not supported.

#### *Country of Birth, Contextual Factors, Acculturative Stress and Psychological Distress*

- H3: Relationships among acculturative stress, psychological distress, external and internal contexts will differ, depending on the country origin.

Research asserts that Latina women share a range of cultural and other differences, regardless of their common Latino heritage. Consequently, previous studies caution us against any research attempts designed to deliver results generalizable to all Latina women. The current study employs multi-group analyses to inspect whether being

born in Puerto Rico, Cuba or Mexico makes a difference in the relationships between contextual factors, acculturative stress and psychological distress specified in any of the three estimated path models where acculturative stress is significantly associated with psychological distress among the population studied. Satorra Bentley (2002) chi-square difference test revealed differences in the second Path model (Tables 14 and 15, Figure 7) where acculturative stress, daily discrimination, age, family-cultural conflict and education impacted the levels of psychological distress and content with the decision to move to U.S., visiting family abroad difficulties, family-cultural conflict, racial discrimination, years in the U.S., age, and English skills significantly shaped acculturative stress among Latina women. Being born in Puerto Rico, Cuba or Mexico moderated the impact of age, and familism in the levels of psychological distress. Namely, age shaped psychological distress only for Cuban-born women when compared to Latina women born in Puerto Rico and Mexico. An increase in age was associated with enhanced psychological distress for this group of Latina women, only. Lastly, only for women born in Mexico, increased levels of familism was associated with decreased levels of psychological distress.

Being born in Puerto Rico, Cuba or Mexico also moderated the impact of a number of contextual factors on acculturative stress among Latina women. For instance, content with the decision to move to U.S. and years in the U.S., impacted acculturative stress of only Cuban- and Mexican-born Latina women; that is, an increase in the number of years in the U.S. was associated with an increase in acculturative stress for women born in Cuba and Mexico. On the contrary, Mexican-born women who reported being content with decision to move to U.S reported lower levels of acculturative stress

compared to their counterparts who were not content with their decision to move to U.S. For women born in Cuba, compared to women born in the other two countries, an increase in age was linked with decreasing acculturative stress. There were some consistencies in the analyses across groups: English skills was negatively associated with acculturative stress among women in all three groups of Latina women and visiting family abroad difficulties, family-cultural conflict and racial discrimination were all positively linked with acculturative stress of women in all three groups of Latina women.

Country of origin moderated the indirect impact of contextual factors on the levels of psychological distress among Latina women in the current study. Compared with women born in Puerto Rico and Mexico, for Cuban-born women, visiting family abroad difficulties, level of racial discrimination, English skills and religious comfort indirectly impacted their psychological distress. Compared with women in the other two groups, for women born in Cuba, high levels of visiting family abroad difficulties, racial discrimination, and religious comfort were associated with heightened acculturative stress which in turn was linked to high levels of psychological distress. In contrast to women born in Mexico and Puerto Rico, for women born in Cuba, high levels of English skills was associated with lower acculturative stress, which in turn was linked with decreased levels of their psychological distress. Compared to women born in Cuba and Puerto Rico, for women born in Mexico, years in the U.S. and the level of family-cultural conflict was associated with increased acculturative stress, which in turn was linked to increased levels of psychological distress

*Cuban-born Latina women: Acculturative Stress and Psychological Distress*

Three baseline models were estimated to inspect the relationship among the contextual factors, acculturative stress and psychological distress among Latina women born in Cuba, Mexico and Puerto Rico, separately. A similar procedure was followed to the models 1 through 5. After inspecting the zero-order correlations to extract those contextual factors which significantly predicted acculturative stress and psychological distress for women born in all three of the countries, path models were estimated. Only significant covariates were retained. Using *specification search* (Schumacker and Lomax, 2004), contextual factors were added one by one until a better fitting model was achieved. Statistically non-significant parameters were eliminated. For the inclusion of additional parameters, modification index (MI) was consulted. Prioritizing the selection of variables was theory and research-driven. The results are presented for hypothesis (H1a-H1d) for each group of Latina women (Cuban, Mexican, and Puerto Rican) separately.

*Cuban-born Latina women: Contextual Factors and Acculturative Stress*

H4a. Contextual factors have a direct impact on acculturative stress of Cuban-born women?

For Cuban-born women, English skills, religious comfort, visiting family abroad difficulties, level of racial discrimination, content with the decision to move to U.S. and age at immigration shaped their acculturative stress. Whereas the content with the decision to move to U.S. and the English skills were negatively linked with their acculturative stress, religious comfort, visiting family abroad difficulties, level of racial discrimination, and the age at immigration were positively associated with their acculturative stress. Namely, an increase in their English skills levels was associated

with diminished acculturative stress. In contrast, an increase in religious comfort, visiting family abroad difficulties, racial discrimination, and age at immigration, was linked with an increase in their acculturative stress. Compared to their counterparts, Cuban-born women content with the decision to move to U.S. move, reported lower acculturative stress. Consequently we accept the H1a hypothesis. Contextual factors do have a direct impact in acculturative stress among Cuban-born Latina women.

H4b. Of all the external contextual factors, U.S. climate impacts their acculturative stress the most, followed by economic and developmental contexts among Cuban-born women.

Contextual factors and acculturative stress were related in this order of influence: having visiting family abroad difficulties, racial discrimination, age at immigration, content with decision to move to U.S, and religious comfort. Developmental contexts (English skills particularly) influence acculturative stress of Cuban-born women the most. U.S. climate contexts (particularly the unfavorable contexts of reception, such as racial discrimination and visiting family abroad difficulties) are also influential. Neither cultural nor economic contexts impact acculturative stress among Cuban-born women. Consequently, we reject the H1b.hypothesis which indicates that for Cuban-born women, U.S. climate contexts are the most influential contextual factors in their acculturative stress.

H4c. Acculturative stress mediates the impact of contextual factors on the psychological distress of Cuban-born women.

There needs to be a significant relationship between the dependent and independent variables for a mediation to occur. Path analysis is an appropriate technique for evaluating mediation, while MPLUS habitually calculates the indirect effects of covariates. When there is a mediation, the estimated total effect is

disaggregated into individual indirect effects and the direct effects (Kershaw, Abdou, Rafferty and Jackson, 2010). As indicated in Table 16, acculturative stress mediates the impact of the following contextual factors on psychological distress of Cuban-born Latina women: visiting family abroad difficulties, racial discrimination, and English skills. In other words, an increase in English Skills is associated with lower level of acculturative stress, which in turn is associated with lower levels of psychological distress. An increase in the visiting family abroad difficulties and racial discrimination is associated with higher acculturative stress among Cuban-born women, which in turn is associated with higher levels of psychological distress. Not all of the contextual variables were mediated by acculturative stress. Consequently, the hypothesis H3c. was partially supported.

*Cuban-born Latina women: Contextual Factors and Psychological Distress*

H4d. Contextual factors have a direct impact on psychological distress of Cuban born women.

In addition to English skills, racial discrimination, and visiting family abroad difficulties which indirectly impacted psychological distress among Cuban-born women, contextual factors such as age and family-cultural conflict also impact the levels of psychological distress among this group of women. Both age and family-cultural conflict demonstrate a positive relationship with the dependent variable, psychological distress; that is, an increase in the levels of family-cultural conflict and age is linked with heightened psychological distress among this group of Latina women. Results show support for H1d. hypothesis.

- H4e. Of all the external contextual factors, U.S., climate contexts impacts their psychological distress the most, followed by economic and developmental contexts among Cuban-born women.

In addition to acculturative stress, age and family-cultural conflict shape psychological distress among Latina women from Cuba. Family-cultural conflict, which comprises cultural context of the environment, induces the greatest influence followed by age, which represents the developmental age. Consequently, for Cuban-born Latina women in the U.S., cultural context bear the most significance to their levels of psychological distress. It appears that the higher the level of family-cultural conflict, the more psychological distress these women experience. This is not the case for women born in Mexico or Puerto Rico. We fail to accept the Hypothesis speculating that U.S. climate contexts impact the levels of psychological distress for Cuban-born women the most.

*Puerto Rican-born Latina women: Acculturative Stress, Contextual Factors and Psychological Distress*

Zero-order correlation analyses (Table 6) indicate that the following contextual factors are significantly correlated with acculturative stress and/psychological distress among Puerto Rican-born Latina women: decision-making power, age at immigration, visiting family abroad difficulties, education, financial constraints, English skills, racial discrimination, family-cultural conflict and familism.

*Puerto Rican-born Latina women: Contextual Factors and Acculturative Stress*

For Puerto Rican-born women, level of racial discrimination, English skills, visiting family abroad difficulties, and age at immigration shaped their acculturative stress. Whereas English skills were negatively linked with their acculturative stress,

visiting family abroad difficulties, level of racial discrimination, and the age at immigration were positively associated with their acculturative stress. Namely, an increase in their English skills was associated with diminished acculturative stress. In contrast, an increase in visiting family abroad difficulties, racial discrimination, and age at immigration, was linked with an increase in their acculturative stress. H5a hypothesis is supported by these results.

H5b. Of all the external contextual factors, U.S. climate impacts their acculturative stress the most, followed by economic and developmental contexts among Puerto Rican-born women.

Contextual factors and acculturative stress were related in this order of influence in their relationship to acculturative stress of Puerto Rican-born women. Racial discrimination induced the strongest impact on acculturative stress, followed by English skills, visiting family abroad difficulties, and age at immigration. In contrast with both Cuban-born and Mexican-born counterparts, U.S. climate contexts (particularly the unfavorable contexts of reception such as racial discrimination, in particular, but also visiting family abroad difficulties and age at immigration) impacted acculturative stress of Puerto Rican-born women. Consequently, we fail to reject the H5b. hypothesis which indicates that for Puerto Rican-born women, U.S. climate contexts are the most influential contextual factors in their acculturative stress.

H5c. Acculturative stress mediates the impact of contextual factors on the psychological distress of Puerto Rican-born women.

As it is indicated in Table 19, acculturative stress does not mediate the impact of any of the contextual factors on the psychological-distress among Puerto Rican-born

women. Acculturative stress is not significantly linked with psychological distress of this group of women. H5c. hypothesis is not supported.

*Puerto Rican-born Latina women: Contextual Factors and Psychological Distress*

H5d. Contextual factors have a direct impact on psychological distress of Puerto Rican-born women.

Psychological distress among Puerto Rican-born Latina women is influenced by racial discrimination and financial constraints. Both contextual factors demonstrate a positive relationship with the dependent variable, psychological distress; that is, an increase in the levels of racial discrimination and financial constraints is linked with an increase in psychological distress among this group of Latina women. The results show a support for H5d. hypothesis.

H5e. Of all the external contextual factors, U.S. climate impacts their psychological distress the most, followed by economic contexts and developmental contexts among Puerto Rican-born women.

Table 16 demonstrates that U.S. climate contexts (unfavorable contexts of reception in particular, racial discrimination) impact their levels of psychological distress the most, followed by economic contexts (financial constraints). Consequently I accept the hypothesis H5e. speculating that for Puerto Rican-born women, U.S. climate contexts impact the levels of psychological distress the most, followed by economic contexts, and development contexts.

*Mexican-born Latina women Contextual Factors and Psychological Distress*

H6a. Contextual factors have a direct impact on acculturative stress of Mexican-born women?

For Mexican-born women, contextual factors such as content with the decision to move to U.S., level of racial discrimination, English skills, visiting family abroad difficulties, religious comfort, and age at immigration shaped their acculturative stress. English skills, and content with decision to move to U.S were negatively linked with their acculturative stress, and religious comfort, visiting family abroad difficulties, level of racial discrimination, and age at immigration were positively associated with their acculturative stress. Namely, an increase in their English skills levels was associated with diminished acculturative stress. In contrast, an increase in religious comfort, visiting family abroad difficulties, racial discrimination, and age at immigration, was linked with an increase in their acculturative stress. Compared to their counterparts, Mexican-born women who were content with the decision to move to U.S. move reported lower acculturative stress. Consequently, H1a.hypothesis is supported.

H6b. Does the level of assimilation among Latina women moderate the relationships between contextual factors, acculturative stress and psychological distress specified in the model?"

Contextual factors and acculturative stress were related in this order of influence: Age at immigration had the strongest impact on acculturative stress, followed by visiting family abroad difficulties, content with the decision to move to U.S., religious comfort, racial discrimination and English skills. Similar to Cuban-born women, developmental contexts (age at immigration) influence acculturative stress of Mexican-born women the most. U.S. climate contexts (particularly the unfavorable contexts of reception such as visiting family abroad difficulties, and content with the decision to move to U.S. were

also influential.) In contrast to the Cuban-born Latina women, religious comfort seemed to be very influential. However, for Mexican-born women English skills play a less significant role for their acculturative stress. Consequently, we reject the H1b hypothesis which indicates that for Cuban-born women, U.S. climate contexts are the most influential contextual factors in their acculturative stress.

H16. Acculturative stress mediates the impact of contextual factors on the Psychological distress of Mexican-born women.

As it is indicated in Table 19, acculturative stress mediates the impact of the following contextual factors on psychological distress of Mexican-born Latina women, racial discrimination, and religious comfort. Namely, an increase in racial discrimination and religious comfort is associated with higher acculturative stress among Cuban-born women, which in turn is associated with higher levels of psychological distress. The results show support for the H1c hypothesis.

*Mexican-born Latina women: Contextual Factors and Psychological Distress*

H16. Contextual factors have a direct impact on psychological distress of Mexican-born women.

In addition to racial discrimination and religious comfort which indirectly impacted psychological distress among Mexican-born women, familism also impacts psychological distress of Mexican-born women, directly. Familism demonstrates a positive relationship with psychological distress, showing that an increase in the levels of familism is linked with a decrease in psychological distress among this group of Latina women. H1d hypothesis is supported.

H16. Of all the external contextual factors, U.S. climate impacts their psychological distress the most, followed by economic contexts and developmental contexts among Mexican-born women.

Only cultural contexts (familism) impacted the psychological distress of Mexican-born women in this model. Consequently H1e.hypothesis is not supported.

## CHAPTER V

### Discussion

The study attempted to produce a tenable model for Latina women that would further our understanding of the interactions among contextual factors, acculturative stress, psychological distress and coping variables. The efforts led to eight baseline simple mediation path models. The first five models represent three combinations of different contextual factors in which acculturative stress is associated with psychological distress, and two models in which acculturative stress is not associated with psychological distress among Latina women. The remaining three models capture the unique experiences of Cuban- Mexican- and Puerto Rican-born women with relationships between contextual factors, acculturative stress and psychological distress. Multi-group analyses were conducted to examine the effectiveness of selective coping mechanisms in buffering psychological distress of Latina women from the negative impact of environment and acculturative stress. The findings indicate that a) psychological distress of Latina women as a group is a function of several contextual factors and that depending on the types of contextual factors present in the acculturating Latina's environment, acculturative stress may or may not be a significant factor; b) certain contextual factors representing the U.S. climate (i.e. contexts of reception) are the most important factors to their levels of acculturative stress and psychological distress and c) acculturative stress mediates the impact of several contextual factors (racial discrimination, visiting family abroad difficulties, English skills and years in the U.S) on psychological distress. Country-specific variations emerge in several estimated relationships but only in one of

the three models in which acculturative stress significantly influenced psychological distress. For example, age significantly impacts acculturative stress of only Cuban-born women, while years in the U.S and being content with the decision to move to U.S. impacts acculturative stress of both Cuban- and Mexican-born women. Family-cultural conflict impacts acculturative stress of Mexican-born women, only. As far as psychological distress is concerned, family pride or principles of familism impact psychological distress of Mexican-born women, while income emerges as a significant factor for psychological distress of Cuban- and Puerto Rican-born women. Variations are also noted in the indirect impact of several contextual factors. For example, the number of years in the U.S. and family-cultural conflict, indirectly impacts psychological distress of Mexican-born women only. The following additional findings for the combined group of Latina women merged from the study: 1) the contextual factors such as years in the U.S. and familism, and years in the U.S. and racial discrimination, interact with each other in impacting acculturative stress, 2) biculturalism is a more effective coping mechanism in moderating the impact of acculturative stress in psychological distress, than assimilation, and 3) none of the sources of support moderate the impact of acculturative stress in psychological distress of the combined group of Latina women.

#### *Acculturative Stress and Latina women*

Previous research suggests that especially when the differences between their native and host culture are vast (Berry, 1987), immigrant women are likely to report high acculturative stress. In the current study, Latina women, as a group, did not report severely high acculturative stress. This occurred despite a vast amount of differences between their native Latino culture and the predominantly white Western culture in U.S.

(Saldana, 1994; Falicov, 1996). While some explanations might pertain to the types of questions asked to assess acculturative stress which might not be culturally appropriate for women in the current study, descriptive data of Latina women in the current study might elucidate this quandary.

In the current study, Latina women report relatively high levels of familism and support, particularly spousal support, shown consistently to significantly buffer their psychological distress against different types of contextual factors and acculturative stress. Bivariate analyses reveal that familism and systems of support are all significantly negatively correlated with their acculturative stress. Previous research suggests that familism defined as familial pride or a strong sense of family care and familial obligation is manifested through a shared set of expectations by family members. It is simply expected that family members rely on each other in times of distress, especially when suffering from poor health. Taking care of the ill or the elderly is not perceived burdensome, but it is a familial obligation that is carried out usually by female members of the family with utmost love and care (Padilla et al, 2006). The low acculturative stress among the population in the current study could be explained by the observation that Latina women might enjoy the support of other female family members who take on care-giving roles and offer the needed support to each other.

Another explanation for lower than expected acculturative stress among this population may derive from the fact that the majority of women in the current study report to not having any adolescent children in their household and to have lived in the U.S. for more than 20 years. Research on non-Latina foreign-born women shows that it is likely that foreign-born mothers who raise adolescent children while becoming

acculturated in the new culture are likely to experience a more challenging acculturation, thus leading to higher acculturative stress (Bhattacharya and Schoppelrey, 2004). This is partially because of the divergence in the inter-familial levels of acculturation where adolescent children are likely to become acculturated at a faster rate than their parents (Pummarriega& Roth et al, 2004). Fast acculturation of adolescent children led to acculturative stress of numerous foreign-born mothers, such as those from Portugal (Morrison et al, 2009). Because Portuguese mothers felt responsible for instilling a sense of Latino culture in their adolescent children, when their children rebelled by adapting more Western cultural traits, these mothers reported disappointment, deprivation and feelings of guilt (Morrison et al, 2009). Again, in the current study, most women have lived in the U.S. for more than 20 years suggesting that Latina women in this sample might be more acculturated than the general Latina women in the U.S. population. Research also suggests that the more acculturated foreign-borns become, the lower their acculturative stress (Rudmin, 2009).

Among all Latina women in the current study, women who were born in Mexico report the highest acculturative stress and the lowest level of psychological distress. Latina women from Mexico possess the lowest level of English skills, have the highest level of marginalization and lowest level of acculturation. All of these factors have been shown to drive up acculturative stress of different immigrant groups, including those from Vietnam (Tran, 1993). Based on the response of the Mexican-born women, the low psychological distress might be associated with their relatively high levels of familism and relatively low level of family-cultural conflict. These contexts have been

instrumental to the psychological well-being of Mexican-born women in several studies (Cabassa, 2007).

*Acculturative Stress and Psychological Distress in the Light of Contextual Factors*

Consistent with theory of family stress management (Boss, 2002), the results of the current study confirm that acculturative stress is not always associated with psychological distress among Latina women. In two out of five estimated models, acculturative stress did not significantly shape psychological distress of this population (Table 9). A review of previous research did not seem to shed light on inconsistency of the relationship between acculturative stress and psychological distress. Research that examines the complex nature of the impact of acculturative stress on psychological distress is non-existent.

Results from the current study indicate that contextual factors such as content with the decision to move to U.S., family-cultural conflict, age, financial constraints, familism, education, decision-making power, income and daily discrimination are significant predictors of psychological distress among Latina women. Furthermore, the impact of acculturative stress in psychological distress of Latina women is diluted or eliminated when the environment is comprised of only unfavorable contexts of reception (model 4) or when a strong and an important source of support (Spousal support) is present (model 5). In model 4, for example, daily discrimination, family-cultural conflict, financial constraints, and age (all unfavorable contextual factors) emerge as significant predictors of psychological distress, indicating that perhaps in this instance Latina women face several challenges which might impact their psychological distress more than acculturative stress. In these situations, they might be more concerned with

episodes of daily discrimination, family-cultural conflict, being older, and financial constraints. Acculturative stress may seem insignificant to them in the light of other challenges. Furthermore, in the cases when acculturative stress does significantly impact their psychological distress, its coefficient is weak compared to coefficients of such contextual factors as daily discrimination, family-cultural conflict, and age. These contextual factors exhibit the strongest coefficients in all of the models and emerge as significant predictors to psychological distress of Latina women, suggesting that daily discrimination, age, and family-cultural conflict induce a strong impact in psychological distress of Latina women.

*Contextual Factors, Acculturative Stress, Latina women and Country of Birth.*

In addition to examining the contextual factors and acculturative stress on all Latina women, I also explored how these associations varied based on the country of origin of the sample. Multi-group analyses discerned differences only in one model, suggesting that only in some instances inter-country variations emerge. When it comes to the impact of acculturative stress on psychological distress of Latina women in the current study, no inter-country variations were noted. Acculturative stress significantly impacted psychological distress of all Latina women. This finding appears probable since not all the unfavorable contextual factors impacted directly or indirectly psychological distress of Puerto Rico-, Mexican- and Puerto Rican-born women. For example, income level directly impacted psychological distress of Cuba- and Puerto Rico- born women, while familism directly impacted psychological distress of Mexican-born women only. As far as indirect impact of contextual factors is concerned, years in

the U.S. and family-cultural conflict indirectly impacted psychological distress of Mexican-born women, while age indirectly impacted psychological distress of Puerto Rican-born women.

To better capture the unique experiences of Cuba-, Puerto-Rico- and Mexican-born women with acculturative stress and contextual factors, separate baseline models were estimated. Contrary to the multi-group analysis which demonstrated no inter-country differences in the significant impact of acculturative stress on psychological distress of these Latina women, the results from the baseline model estimated for Puerto Rican-born women suggests that acculturative stress does not impact their psychological distress. For these women, it is rather the financial constraints and racial discrimination that impact their psychological distress. The difference could be explained by the fact that compared to other women in the current study, Puerto Rican-born women entered the U.S. younger than 12 years old, majority are unemployed, and compared to their counterparts from Cuba and Mexico, these women possess lower levels of education and report the highest levels of acculturation and racial discrimination. Research shows that adolescents acculturate at a higher rate and that acculturation level is negatively associated with acculturative stress. The fact that Puerto Rican-born women entered the U.S. at younger age, may explain their relatively high levels of acculturation. Furthermore, the fact that Latina women from Puerto Rico are more likely to be unemployed and uneducated, may explain their excessive concerns with the financial constraints. The results resonate well with the data provided by Baker (2004) showing that Puerto Ricans and Dominicans constitute the two Latino groups with the lowest household income levels in the U.S.

### *Contextual Factors and Acculturative Stress*

*U.S. climate contextual factors and acculturative stress.* Contextual factors related to the U.S climate had the greatest impact on acculturative stress among combined group of Latina women. From all of these contextual factors, such unfavorable contexts of receptions (Born, 1970) as racial discrimination, content with the decision to move to U.S. and years in the U.S., impacted acculturative stress among this group of women the most. In contrast two other contexts, racial discrimination was positively associated with acculturative stress showing that more racial discrimination these women experience, the higher their acculturative stress. These findings resonate with the previous research. Born (1970), for example, a pioneer in theorizing on the importance of environment to acculturative stress of foreign-borns, suggested that from all the environmental factors, relative deprivation challenges the acculturation efforts of the foreign-borns the most. Born (1970) stated that upon entering a new country, all foreign-borns, at one time or the other, may feel deprived from their possessions, social status, behavior and worth. While all of these forms of deprivation challenge their acculturation experiences, it is foreign-borns' feelings of being deprived of their worth (belief that their values and purposes in life are not respected and accepted by comrades in their new society) that accentuate the strongest challenge to their acculturating efforts (Born, 1970). Racial discrimination might be a form of self-deprivation.

Since 2000, U.S. Census guidelines have asked Latinos in the U.S. to indicate their origin in the question on Hispanic origin, not in the question on race. In the Federal statistical system, ethnic origin is considered to be a separate concept from race. As far as racial category is concerned, Latinos may pick White, Black or African American,

American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and some “Other” race. However, being of a racial background becomes a great component of one’s identity when in the U.S. Minorities in the U.S. perceive high levels of racial discrimination, overtly through observable specific actions or covertly, through policies and legislations which preclude them from benefiting equally from opportunities available. For many Latina women, the racial discrimination might either be a new experience, or, as in most cases, a replication of a painful past. For some Latina women, race symbolizes more than a color of skin. It underlies one’s values, cultural beliefs and purposes in life. By being racially discriminated, they feel despised as second-class citizens. An encounter with racial discrimination disheartens their efforts to integrate in the new country. Their possible dreams and expectations of America as a land of the free, may be shattered, causing them a great deal of distress. They may see it as inevitable to integrate in the new country in an effort to move up the socio-economic ladder and regain the possible lost status. Integration, particularly if measured by English skill levels, has been repeatedly associated with high income and better employment. However, feelings that their values are not respected and accepted by others in new society, may transform any genuine desire to embrace aspects of the new culture, into a strong retreat to marginalization or separation. Both of these adaptation strategies, marginalization and assimilation, are associated with high acculturative stress (Berry, 1987; Born, 1970). An increase in racial discrimination was associated with an increase on acculturative stress among Latina women. Latina women report relatively high levels of both racial and daily discrimination in the current study.

The longer Latina women reside in the U.S., the less acculturative stress they experience. This finding emerged consistently in all aspects of analyses and is consistent with the previous research, particularly since years in the U.S. has been linked consistently with the acculturation level (Alegria, 2004). Yet, length of residence interacts significantly with two other contextual factors- familism and racial discrimination. The longer the Latina women live in the U.S., the more episodes of racial discrimination they encounter. Consistent with previous research, certain aspects of familism such as those associated with honor and family pride diminish with increased levels of acculturation (Marin, 1993; Sabogal, Marin, Otero-Sabogal, Marin & Perez-Stable, 1987). This finding should alarm clinicians, policy makers, and Latina women themselves, particularly since familism has been found to buffer psychological distress against the deleterious impact of racial discrimination. The number of years in the U.S. emerges as a significant predictor of acculturative stress, not only for combined group of Latina women, but also for Latina women born in Mexico and Cuba separately. However, it was not significant for women born in Puerto Rico. Given the relationship between the two countries, Puerto Rican-born women may regard Puerto Rico as a part of the U.S. Puerto Rican-born women may perceive themselves to have always lived in the U.S. therefore may not regard this question as relevant.

Consistently with the previous research, findings in the current study suggest that contrary to their counterparts, Latina women who report to be content with the decision to move to U.S. are likely to report lower acculturative stress. Being content with the decision to move to U.S. can be an indicator of whether Latina women' expectations with the U.S. have been met. The current study infers that being happy with the overall

experience in the U.S. does suggest that integration challenges are lower. Some Latina women who may come from a lower socio-economic background may consent that regardless of the challenges associated with their integration (acculturative stress)-they still would move to the U.S. because of a range of other socio-economic benefits they may experience. In other words, there might be a mediating contextual factor that impacts the relationship between being content with the decision to move to U.S. and their acculturative stress. Perhaps the relationship between this variable and acculturative stress should be studied separately in light of such contextual factors as income, English skills, forms of discrimination, and familism. Schwartz, Negy, and Ferrer (2009) suggest that most Latina women report a sense of disappointment upon entering the U.S., however, Schwartz et al (2009) also noted that it was difficult to generalize how unmet expectations impacted acculturative stress, since being unhappy with different aspects of the life in the new country impacted acculturative stress differently. For example, for many Latina women, discrimination is an unexpected predicament. Being a part of the dominant group in their home-countries, they have never before experienced any of the “unfavorable contexts of reception” (Born, 1970). In the U.S. they are likely to experience both, daily and racial discrimination. Incongruously, living in an unsafe environment did not lead to high acculturative stress (Shwartz et al, 2009). A longitudinal study that examines the relationship of being content with the decision to move to U.S. and acculturative stress of women who have resided for a long time in the U.S., might elucidate the paradox. Being content with the decision to move to U.S. is associated with acculturative stress for all except Puerto Rican-born women. This might be explained by the fact that, given the relationship between the two countries, Puerto Rican-born women

might identify Puerto Rico as a part of the U.S. Puerto Rican-born women may perceive themselves to have always lived in the U.S. Therefore, this question may not pertain to them.

*Developmental contexts and acculturative stress.* Developmental contexts, particularly age, emerge as a significant regression path in three models. Age's strong coefficient suggests that this contextual factor is extremely important for this group of Latina women. The older they become, the lower acculturative stress they report. However, when using multi-group analyses and comparing Latina women based on their country of origin, we find that age is a significant path only for Cuba-born women who also are the oldest. An explanation for this association may lie in the fact that the younger immigrants may not have a strong system of support and rely on their elderly relatives for support. Different rates of acculturation may impact the quality of their relationships. For instance, Sodowsky and Lai (1997) analyzed the impact of age on Asians' experience with acculturation and found that younger age was associated with higher acculturative stress. Consistent with findings of the current study, Yeh (2003) suggested that compared to the elderly, foreign-born youth are more vulnerable. Approaching adulthood and undergoing extra developmental challenges may pre-dispose them to higher acculturative stress (Chin & Ring, 1998).

English skills, a developmental contextual factor, strongly shapes acculturative stress of Latina women. Higher level English skills are associated with lower acculturative stress. This theme emerged not only for the Combined group of Latina women, but also for Mexican-, Cuban- and Puerto Rican-born women, separately, signifying the importance of English skills for their healthy integration experience.

These findings are consistent with the previous research on as diverse foreign-born populations as foreign-born women from Turkey, Portugal, Kenya and Korea (Marthenson et al, 2008; Pummariega & Roth et al, 2005; Yakushko et al, 2005). While the current study suggests that English skills have a direct impact on acculturative stress of Latina women, future research could identify the mediators through which the English skills impact their acculturative stress. Research has speculated that English skills challenge the acculturation experience of foreign-borns by precluding their access to social circles with the natives in the U.S., employment opportunities, access to needed social services, etc. Lack of English skills among Latina mothers may increase their inter-familial cultural conflict, which then may contribute to their high acculturative stress. By not knowing English, they might not be able to understand their faster acculturating adolescents which might then lead to familial conflicts and misunderstandings. This is particularly important, given that family relationships are essential to the well-being of Latina women.

The next development context, age at immigration, was found to significantly impact acculturative stress of Latina women from all three different countries. The older the Latina women reported to be at the time of immigration, the stronger acculturative stress they reported. This finding is consistent with the previous research on different groups of foreign-borns.

*Cultural contexts and acculturative stress.* One element of cultural context, family-cultural conflict, produces a strong impact on acculturative stress among all Latina women, especially for Mexican-born women. In the current study, we do not inspect covariates of family-cultural conflict. However contributors of family-cultural conflict

among Mexican-born women could include aspects of descriptive statistics such as their young age, lowest level of social and relative support, English skills and low level of education. In addition, Mexican-born women are more likely than their counterparts in the current study to have at least one adolescent child living with them. Mexican-born women might struggle to juggle their roles of a caretaker and provider amidst low, social, relative and spousal support. Espin (1987) indicates that although Mexican men might enjoy the extra financial support availed to them by their partners' full-time employment; they are often not willing to provide the needed spousal support at home. Furthermore, Mexican-born women's low English skills, as reported in the current study, might strain their relationship with their children, who are likely to be acculturated at a faster rate. Strong and consistent association of family-cultural conflict with acculturative stress is pertinent given the fact that the previous research has consistently shown that family support is instrumental to healthy immigration experience of foreign-borns of different backgrounds. Conceivably, future research should focus on the effective ways of handling the family-cultural conflict among Mexican-born women. For example, in a study on Portuguese women living in Canada (Morrison et al, 2007), it was found that Portuguese women solved the inter-familial conflicts through negotiation techniques. Portuguese women negotiated between their own needs and those of other family members by using acceptance, religious comfort and faith, and seeking help from other family members or friends. Investigating the effectiveness of these mechanisms in diminishing the level of family-cultural conflict among Mexican-born women might prove helpful to clinicians who work with Latina women undergoing high acculturative stress as a result of high levels of family-cultural conflict.

Padilla et al (2006) suggested that pressures in environment may turn many of the cultural values, which may normally buffer immigrant women from acculturative stress, into negative factors, increasing instead of decreasing their acculturative stress. The same rationale may apply to the positive association between religious comfort and acculturative stress of the current study. For example, majority of Latina women in the current study are of middle age. In a study conducted to test how various factors determine the levels of religious coping among Kenyan immigrants, Lilian and Odera (2007) found that compared to younger Kenyan immigrants, older immigrants utilized religious coping more often when stressed by the acculturation process. Chatters and Taylor (1989) stated that elderly immigrants are more likely to rely on religion as a coping mechanism compared to their younger counterparts. This is because their frail health precluded their participation in coping activities available to many of their younger counterparts. Furthermore, research indicates that the length of stay is significantly negatively correlated with the religious coping. The majority of foreign-born women in the current study have lived in the U.S. for more than 20 years. With migration to the U.S., religious coping in the context of American culture may not be as effective as in their native countries. Fast-paced immigrant lifestyles characterized by long working hours and low wages may prevent consistent devotion to religious activities. My findings are also similar to Edwards (2008), who found that the more acculturated immigrant women came to have lower levels of religious comfort. With higher access to social capital and other forms of social support, including a more extensive network of family members and friends, the more seasoned immigrants presented a lesser need for religious comfort. Pruitt (1978a) indicates that coping mechanisms or activities of home could be

replaced with new activities that are more likely to be available in the U.S. . Especially since studies have consistently shown that religion is central to Latina women's well-being. If religious activities could be made culturally and age appropriate, they might continue to serve as effective coping mechanisms against heightened acculturative stress. Another explanation of the positive relationship between religious comfort and acculturative stress may stem from the cross-sectional nature of the data which precludes one from making assumptions of causality. The association between religious coping and acculturative stress may be a reflection of the fact that those with high level of stress, including acculturative stress, may often turn to religion for coping, consequently, those undergoing stressful situations, may also regularly turn to religion for comfort thus explaining the positive relationships between the contexts.

*Acculturative Stress Mediator Between Contextual Factors and Psychological Distress*

The findings in the current study infer that some of the contextual factors impact psychological distress of foreign-borns only through acculturative stress. Consequently, although acculturative stress may not have a direct impact on psychological distress of Latina women, it often is a link through which contextual factors such as racial discrimination, English skills, difficulties visiting family abroad, years in the U.S., and religious comfort, impact psychological distress of all Latina women. It makes sense that these contextual factors do not directly impact psychological distress of Combined group of Latina women. An increase in these contextual factors is normally only associated with an increase on acculturative stress. Studies have consistently shown that not knowing English, having difficulties in visiting family abroad, and being religious increase adjustment difficulties, which then increases psychological distress of

Latina women. This multi-dimensional mediating impact of acculturative stress portrays the importance of acculturative stress for psychological distress of immigrant women such as Latina women in the current study. Consequently, it is important that policy makers and community organizers are cognizant of the contextual factors that impact acculturative stress. Sufficient resources could then be provided to counter-balance the strength of these contextual factors in driving up acculturative stress among Latina women.

Some of contextual factors lost the indirect impact in acculturative stress in multi-group analyses and three baseline models dedicated to women from specific countries. For example, acculturative stress did not significantly impact the psychological stress of Latina women from Puerto Rico in one part of the analysis. Perhaps this could be explained by the fact that, in the current study, Latina women from Puerto Rico reported the highest level of acculturation, highest levels of English skills, and lowest acculturative stress. Compared to their counterparts, Puerto Rican-born women also report the highest percentage on the Latina women who have lived in the U.S. for more than 20 years, and who have immigrated at the age of 12 or younger. Studies have repeatedly confirmed the importance of high levels of acculturation, English skills, and an increase in the number of years in the U.S. to low acculturative stress (Oh et al, 2002; Lee et al, 2007; Bektas, 2004). Immigrating at a younger age (Shwartz et al, 2009) is a consistent significant factor in low acculturative stress among immigrants of different groups since it has been shown that younger immigrants acculturate at faster rates, tend to be more resilient, and are able to navigate systems of support with much ease (Shwartz et al, 2009). Additionally, some of the questions that are used to measure acculturative

stress are related to missing family back home and not being able to access services due to lack of proper documentation.

Years in the U.S. and religious comfort indirectly impact psychological distress of both, Mexico- and Puerto Rican-born women. However, the level of English skills and difficulties visiting family abroad indirectly impacted psychological distress of Puerto Rican-born women only. The differences in these relationships could be explained by the fact that given the political relationship between the Cuba and the U.S., Puerto Rican-born women encounter many difficulties in visiting families back home. These travel difficulties extend beyond those related to geographical distance, possible lack of proper travel documentation, and financial constraints that apply to Mexican-born women. Puerto Rican-born women may be banned forever from visiting their countries due to political reasons. Only in 2008 did President Obama lift several restrictions permitting Cuban U.S. nationals to visit and send financial assistance to their family members back in Cuba. Consequently, when these women miss their families at home, difficulties (fear of political persecution which may be related to traumatic moments) may emerge, not only impacting their integration efforts, but also their psychological distress.

### *Contextual Factors and Psychological Distress*

*Developmental contexts and psychological distress.* The difference between acculturative stress and psychological distress is noted in the fact that different contextual factors may impact the levels of these two outcomes differently. Contrary to the relationship between the age and acculturative stress, the older Latina women become, the more psychological distress they experience. Age seems to be a more significant

factor of the Cuban women's psychological distress. The explanation might lie in the fact that Cuban-born Latina women subscribe to the highest levels of principles of familism, which may indirectly affect the relationship between the age and their psychological distress. Most Latina women are likely to take it upon themselves to fulfill the familial obligations of multiple generation caretaking. This care provision, although fulfilling at times, it may be overwhelming and as such it can lead to depressive symptoms, especially as one ages. The lifelong emphasis on sacrifice for the family and their inability to care-take as well as they previously did, may prevent some women from developing material and emotional resources for coping with aging (Swenson et al, 2000).

*Cultural contexts and psychological distress.* Cuban-born women also seem to be impacted by the high levels of family-cultural conflict. The findings in the current study are consistent with those of Truss et al (2000) who found that acculturation and inter-generational problems among Cuban families tend to be higher than in most other Latino groups. Much of the inter-familial contention stem from the changes in the family structure and family roles resulting from different acculturation rates among family members. The contention seems to impact the Cuban mothers the most. Nearly 52 percent of these mothers reported mother- and child-role conflicts in the current study. Similar to the Portuguese mothers (Morrison et al, 2009), the Cuban mothers tend to blame themselves for not helping to preserve the old cultural values and norms in their families, as their children were exhibiting American cultural values and behaviors. These incompatible demands were a source of stress for the Cuban mothers, 67 percent of whom reported using sedatives and tranquilizers. The researchers also found that Cuban mothers who used prescribed drugs more often experienced conflicts with their children

and with their husbands, were rigidly entrenched in traditional Cuban cultural values, were stricter, and had husbands who did not share in the tasks of child rearing (Tursi, 2000).

*U.S. climate contexts and psychological distress.* Similarly with acculturative stress, contextual factors drawn from the U.S. climate context impact psychological distress of Latina women, regardless of their country of origin—more than developmental and the internal contexts. Daily discrimination has the strongest impact on psychological distress of these foreign-born women. Similarly, Noh and Kaspar (2003) found a modest and significant association between perceived discrimination and depressive symptoms. In Noh and Kaspar's study (2003) the association between daily discrimination and psychological distress remained significant even when emotional reaction was added in the regression and in the presence of demographic variables such as sex, marital status, education, income, employment, status, age, and years of residence in Canada. In fact, much research has found a strong connection between daily discrimination and psychological distress, both, among immigrant women in general., (Snyder, 1987) and among highly-educated professional immigrant women (Amaro, Ruso and Johson, 2005). Exposure to daily discrimination may lead to acute illness and chronic stress (Clark, Anderson, Clark and Williams, 1999). In fact, consistently with our results, research confirms that discrimination is not a part of acculturative stress, but an extra stressors that threatens the psychological well-being of immigrant women separately from acculturative stress. As such, an extra effort should be invested to address its impact in psychological distress of these women by mobilizing unique sources that might be different from those required to combat acculturative stress. The current study contributes

to the growing body of research which suggests that discrimination impacts psychological distress of foreign-borns living in diverse developmental contexts including age, geography, ethnicity and socio-economic status (Gee, 2002).

*Economic contexts and psychological distress.* Not surprisingly, financial constraints exert a stronger impact on psychological distress than on acculturative stress of Latina women. Parts of the analysis show that, compared to Cuba- and Mexican-born women, Puerto Rican-born women might experience the impact of financial constraints and income on their psychological distress the most. The results from the current study are consistent with those from the previous research (Kleinman, 1990; Piementel, 2008). According to the U.S. census (2008), Puerto Ricans report the highest rates of poverty and substandard living conditions among Latino residents in the U.S. Puerto Ricans suffer the highest level of poverty among Latinos (foreign and U.S. born), exceeded only by Dominicans (U.S. Census 2008). In early 2000s, the poverty rate in Puerto Rico was about 45 percent while that of Puerto Ricans residing in U.S. was close to 26 percent. Furthermore, majority of Latina women in the current study live in North East, and Baker (2002) reports that the average median family income for Puerto Ricans in North East was much lower than those in the South and West. Puerto Rican median family income in the North East was only \$18,708 in 2002, in West it was \$26,000, in the Midwest \$19,740 and in South, Puerto Rican median family income was \$23,000.

#### *Coping with Acculturative Stress*

A flair of inconsistency characterizes the research focusing on the impact of acculturation processes on psychological distress of foreign-born populations. As early as during the 1970s, Born (1970) speculated that acculturative stress influences the

relationship between acculturation and psychological distress. Yang (2010) confirmed this premise by finding that while acculturation induces a great impact in psychological distress of foreign-born Koreans, acculturative stress functioned as a mediator between acculturation and psychological distress. That is, the process of acculturation led to high acculturative stress which in turn led to high psychological distress. In the current study, we do not test the already confirmed impact of acculturation on acculturative stress. Instead, we inspect whether the two of the most studied forms of acculturation, assimilation, and biculturalism, moderate the negative impact of acculturative stress in psychological distress of foreign-borns. The fact that in the current study, only slight differences exist between the lowly and highly assimilated groups and lowly and highly bi-cultured groups might indicate that acculturation strategies are not constantly effective in protecting Latina women from the negative impact of acculturative stress and other contextual factors. Multi-group analyses, however, show that slightly more differences existed in estimated relationships of contextual factors, acculturative stress and psychological distress between lowly and highly bi-cultured groups, than between lowly and highly assimilated groups. For example, acculturative stress impacted psychological distress of only the Latina women with low levels of assimilation. No differences in the impact of acculturative stress on psychological distress existed between lowly and highly bi-cultured Latina women. This suggests that biculturalism might be a slightly better coping mechanism than assimilation.

The results in the current study which deem biculturalism as slightly more effective acculturation strategy in reducing the impact of acculturative stress in psychological distress of Latina women, are inconsistent with those of several researchers

(El-Khadiri De Rose, 2009; Pruitt, 1978; Winkelman, 1994). El-Khadiri De Rose (2009) concentrated on the experiences of Arab Americans of two faiths, Muslims and Christian and found that the more integrated in the mainstream culture Arab Americans became, the less acculturative stress they experienced. However, differences were noted between Muslim Arabs and Christian Arabs. Similarly to Arab Americans, Latina's cultural and socio-economic backgrounds, as well as their differences in pre-emigration experiences, should not be ignored (Baker, 2004) when assessing the impact of acculturation processes on acculturative stress and psychological distress.

Although the effect of coping mechanisms might be impacted by country of origin. Different acculturation processes might shape the impact of acculturative stress on psychological distress differently for Cuba- Mexico- or Puerto Rican-born women. Nonetheless, immigrants at any level of acculturation can be at risk for detrimental psychological consequences. For example, highly acculturated individuals may realize that becoming acculturated and identifying with the host culture does not always result in acceptance by mainstream society. This realization can lead to them developing interpersonal conflicts, alienating themselves from traditional supports, frustration, demoralization, and internalization of society's prejudicial attitudes. On the other hand, low-acculturating individuals may face multiple stressors when negotiating an unpredictable majority cultural milieu, which may lead to feelings of isolation, low self-esteem, and helplessness. Research proposes that low psychological distress outcomes may be achieved from balancing one's multiple cultures, thus further supporting our study's results.

As far as systems of support are concerned, for all Latina women, only spousal support makes a difference in the relationships between acculturative stress, contextual factors and psychological distress. Neither social nor relative support makes a significant difference in how Latina women, as a group, deal with the negative impact of acculturative stress in their psychological distress. Again, the lack of significance could be attributed to the fact that Latina women from diverse cultural settings are pooled into a single aggregate group. Other explanations might be explained by Hanningan's (2009) study of international students and the impact of social support in their acculturative stress. Hanningan (2009) found that although international students may expand their social network in their host country, happy interactions with their new friends might make them miss their friends back home even more, increasing rather than decreasing their acculturative stress. The same might happen with Latina women in the current study. Additionally, Poyazrli et al (2004) found that Latinos who primarily socialized with non-Americans reported more acculturative stress than those who socialized with Americans, or those who interacted equally with members of both groups (Poyazrli, 2004). Perhaps a future study could distinguish how socializing with Latino vs. American friends could impact acculturative stress of Latina women in the U.S.

Other reasons for spousal support being more important for these women's healthy psychological profiles may lie in the fact that the majority of these women combined in one group tend to be married, a little under half are unemployed, are more likely than not to retain Spanish culture, have low levels of family-cultural conflict, and demonstrate high adherence to the principles of familism. Often the spousal support dwindles when Latina women find employment (Espin, 1997). This might be associated

more with being exposed to an institution (place of the employment), they are likely to be compelled to interact with the members of the new society and shed some of their older values and beliefs. Research shows that foreign-born women face more difficulties in adjustment, particularly due to stronger loyalties to their native cultures, compared to their male counterparts (Budhwani, 1998 ). Given that their partners are likely to acculturate at a faster speed, their husbands' support might be instrumental to lower acculturative stress and better psychological profiles.

## CHAPTER VI

### Conclusion

#### *Strengths and Limitations of the Study*

Although researchers warn against aggregating Latina women into one category, comparisons between ethnicities in terms of acculturative stress have not been made (Poyrazil, Kavanaugh, Baker & Al-Timimi, 2004). The current study fills the gap in research by first inspecting the relationships between the contextual factors, acculturative stress and psychological distress of combined group of Latina women, and by exploring inter-country variations in the relationships between contextual factors, acculturative stress and psychological distress.

Despite the many strengths that characterize the current study, the following limitations should be noted. First, previous research highlights several indirect relationships between the contextual factors, acculturative stress and psychological distress among non-Latina immigrants which were not captured in the current study and might make a difference in the experiences of Puerto Rico- Mexico- and Puerto Rican-born women with acculturative stress. Researchers suggest that low levels of English skills are associated with both low levels of social support and high family-cultural conflict (Pummarriega et al, 2005; Yakushko et al, 2005). In turn, low social support and high family-cultural conflict are both associated with high acculturative stress. Jin (2008) speculated that having financial constraints leads to high family-cultural conflict, which then leads to high acculturative stress, especially among foreign-born Korean elderly (Jin, 2008) and South-Asian families (Bhattacharya et al, 2004). Additionally, an

increase in the years in the U.S. may be associated with a decrease in principles of familism and an increase in racial discrimination, both of which induce different impacts on acculturative stress and psychological distress. These and many other relationships between contextual factors, acculturative stress and psychological distress can be estimated for Latina women in the future to contribute to a more comprehensive contextual approach to investigating the relationship between acculturative stress and psychological distress.

A second data-related limitation of the current study stems from the cross-sectional nature of the data, where the temporal ordering among the constructs in all the estimated models is based exclusively on theoretical premises and literature review. Consequently, even though the models have been cross-validated to assure the estimated parameters are stable, it is entirely possible to delineate divergent casual sequences among the contextual constructs and the two outcome variables in the current study. Furthermore, psychological distress is being measured as a uni-dimensional construct (i.e. low psychological distress to high psychological distress). Literature indicates that acculturative stress impacts the entire well-being of Latina women and that Latina women view health and mental health holistically as comprised of familial, spiritual, physical and mental symptoms (Vega et al, 2000). Clearly, for a more comprehensive understanding of Latina women psychological well-being, a multi-dimensional scale incorporating familial, spiritual and other dimensions should be designed in the future.

Several authors (Padilla et al, 2009) have suggested that environment interacts with the cultural values when impacting the health of Latina women. The current study primarily tested the direct impact of the cultural, economic, and global contexts in

psychological distress and acculturative stress among Latina women. For example, familism has several dimensions, each of which might be impacted differently by the different forms of acculturation, which might interact differently with other contextual factors, to impact acculturative stress and psychological distress of Latina women or other immigrant groups. Although some dimensions of familism such as the importance of family support does not change with acculturation (Rodriguez, 1998; Sabogal et al, 1987; Steidel & Contreras, 2003), the more acculturated Latinos ascribe less to the overall principles of familism, especially to the beliefs of familial interconnectedness and familial honor. An in-depth study which explores different dimensions of these contextual factors and their impact on acculturative stress and psychological distress of these women might assure a more in-depth understanding of Latina women' journey of integration in their new society.

Another limitation includes the generalizability of the findings due to a small sample size. Many Latina women are settling in non-gateway cities. Their experiences might not be similar to the experiences of Latina women in the current study who reportedly live primarily in parts of the country which historically have been associated with high numbers of immigrants.

Lastly, in the current study, the two processes of acculturation, assimilation and biculturalism are measured through a much modified version of the Cuellar scale (Cuellar, Harris, and Jasso 1980). The comprehensive Cuellar scale for acculturation reflects its multi-dimensional nature by accounting for items such as ethnic identification, nativity of self, parents, and others. Nonetheless, according to Vega et al (1993), the usage of English language, which is what our scales are based on, captures variations of

acculturation and remains the acculturation's most important element. The results of the current study obtained by employing a modified scale of acculturation, should be compared with those derived from studies incorporating a much comprehensive scales of acculturation to achieve higher level of precision, validation and reliability.

Despite the above-mentioned limitations, this is the first study to focus specifically on Latina women from Cuba, Mexico and Puerto Rico. It conducts both within and across country analyses in an effort to enable practitioners, policy makers and clinicians to have a general sense of the experiences of all Latina women with acculturation. It then provides country-specific analyses where differences and similarities between Latina women from Cuba, Puerto Rico and Mexico are highlighted in how specific contextual factors impact their acculturative stress and psychological distress. It is the first study to examine the impact of numerous contextual factors on psychological distress of this population. In addition, it inspects the two-way interactions of all the variables. In doing so, familism and racial discrimination emerged as two contextual factors likely to interact with the years in the U.S. in impacting acculturative stress in this population. Consequently, the comprehensive analysis provides the most thorough knowledge on the impact of environment, cultural values and acculturation strategies on psychological distress of Latina women.

While many studies regard forms of discrimination to be part of acculturative stress among immigrant groups (Goodkind et al, 2008; Kulis, Marsiglia & Nieri, 2009), the current study not only separates the discrimination and acculturative stress into two indicators, but more fully represented the concept of discrimination by two measures. By measuring daily and racial discrimination, it captures the impact of both acculturative

stress and discrimination on psychological distress of Latina women. Likewise, while previous research has inspected the direct impact of systems of support in the relationship between the contextual factors, acculturative stress and psychological distress of foreign-borns, this is the first study to further our understanding of how these systems of support moderate the impact of contextual factors in these two dependent variables.

While many of the studies in the past have relied on such theories as Berry's (1997) theory of acculturation and Born's (1970) model for acculturative stress, this is the first study to rely on a comprehensive theory as family stress management (FSM) (Boss, 2002). This framework was appropriate, given the richness of the NLAAS data which granted the capability to examine the impact of as many contextual factors identified in FSM in psychological distress and acculturative stress of Latina women.

Another strength of the current study is that it provides a large foundation in which smaller but more concentrated studies can be undertaken to test the impact of the referenced contextual factors on acculturative stress and psychological distress of various foreign-born groups. The inconsistent relationship between acculturative stress and psychological distress of Latina women encourages future research to investigate for possible mediators between acculturative stress and psychological distress.

### *Implications for Practice and Research*

It is imperative for counselors to be culturally competent when working with immigrant clients, which includes an acknowledgment of the client's specific cultural value and countries of origin. The findings in the current study have several implications for social work practitioners and researchers. Clinical social workers may, on a daily basis, see Latina clients who show symptoms of acculturative stress. Experienced social

work clinicians may develop treatment plans by appreciating the fact that psychological distress of Latina women is underlined by an intricate interplay of numerous contextual factors and their experiences with acculturation. However, this empirical study equips them with specific information about the nature of this interplay. More specifically, the findings in the current study inform that acculturative stress may or may not be the leading factor to their psychological distress. In other words, although Latina women may experience adjustment difficulties, they may still be functional. Their psychological distress may depend on such contexts such as family-cultural conflicts, financial constraints, and daily discrimination.

Next, the current study provides information on within-group differences between Latina women from Cuba, Mexico, and Puerto Rico during the acculturation process so that treatments can become more culture-specific and effective. For instance, it is possible that Puerto Rican-born women might be more concerned with financial constraints and racial discrimination than acculturative difficulties. Other within group differences highlighted in the current study will inform clinicians that not all immigrants, even those within the same ethnic group, acculturate and manage acculturative stressors the same way. Depending on their country of origin, Latina women may have unique resources (e.g., financial and family supports) and barriers (family-cultural conflicts, language skills, difficulties in visiting families back home) that not only shape their acculturation experience and acculturative stress, but also determine the types of interventions that might work. It is important that clinicians understand what contexts are more likely to impact psychological distress of foreign-borns in different types of

acculturation levels. The multi-group analysis in the current study captures some of this variation.

The current study's implications for policy-makers are innumerable. The current study does not only contribute to the general knowledge on Latina women experience with integration, but also it provides country-specific information to the policy makers on the how different contexts present in the lives of Latina women interact with their acculturative stress and psychological distress. The observation that acculturative stress does not always lead to psychological distress implies that Latina women may undergo the integration process without incurring additional mental health problems. This is especially likely to occur when sufficient spousal support is available or when immigration policy captures elements of biculturalism, permitting the retention of aspects of native culture such as principles of familism. It is clear from the current study that the more likely Latina women are to retain dimensions of familism, the less psychological distress they experience. Perhaps policies designed to facilitate the integration process of these foreign-borns (i.e. provision of English classes, education opportunities, income) should include the importance of family. English classes and other skill-enhancement programs might be designed to accommodate both the younger Latina women and the older generation. The results in the current study, clearly show the significance of English skills for the low levels of English skills. English skills significantly impacted acculturative stress in every single one of the models estimated. This contextual factor also had one of the highest coefficients in all of the models. It not only impacts acculturative stress of women in this sample, but it also indirectly impacts their psychological distress, through acculturative stress. Yet in states such as Massachusetts,

immigrants may have to wait years, before they are able to enroll in the low-cost English classes (Rhor, 2004). Policy makers should invest more efforts into advocating in behalf of more English classes. Incorporating child-care in these integration-oriented programs might facilitate the participation of both, Latina women and their partners.

Considering the significance of spousal support in their acculturative stress, integration policies should also be more gender sensitive. It has been found that the more acculturated Latina women become, the less likely they are to ascribe to more traditional aspects of their culture where men are entitled to making most decisions in the household. Research has also shown that foreign-born Latino men acculturate at a faster rate than their female counterparts, which could be considered positive, given that in the current study, Latina women with decision-making power in the household report less psychological distress. However, at the same time, the current study shows that family-cultural conflict is a strong contributor to their psychological distress further supporting the development of family oriented integration policies. Lastly, given the strong impact of discrimination in both acculturative stress and psychological distress of Latina women, policy makers in the field of immigration might consider working jointly with colleagues in other fields to eliminate forms of discrimination in educational and financial institutions, real-estate, businesses, non-profits, hospitals, medical centers, and other places where Latina women are likely to encounter discrimination. Research has repeatedly shown that pluralistic societies characterized with multi-cultural tolerance and low levels of forms of discrimination, are associated with healthier immigrant population with low levels of both psychological distress and acculturative stress.

Table 1

*Contextual factors that influence the health among Latina women living in the U.S. (Yakushko et al, 2005)*

Macro System	Exosystem	Mesosystem	Micro System	Individual Based Factors
Cultural values at home and host environments	Political and economic climate at home and host environments	Relations among immigrants' social support networks	Family composition	Age
Religious values and beliefs	Relationship between home and host countries		Urban or rural setting	Sex
Gender and sexual identity	Legal immigration status		Family conditions of migration,	Physical and Cognitive Abilities
Racial and ethnic compositions at home and host countries	Availability of legal financial and social benefits.		Occupation status	Personality Type
Social status of immigrants in home and host countries			Educational background	Coping styles
Political and economic values			Financial resources in home and host environments	Resiliency
			Social support at home and host environment	Language proficiency
			Racial and ethnic composition	Achievement
			Acculturation and length of time in host culture.	Motivations
				Expectations

Table 2

*Contextual factors that influence the health among foreign-born Latino youth (Chapman and Perreira, 2005)*

Context of Exit from the country factors	The family context factors	School Context	Well-being of youth
Socioeconomic factors	Household size	The school safety	Substance use
Employment	Marital status, and adolescent parenting	Teacher's support and satisfaction	School performance
Community size and income	Parent's employment and health	Student-Teacher ration	Academic and school drop-out
Cultural orientations, i.e. assimilation and biculturalism	Family functioning	Ethnic composition	Adolescent parenting
		Class size	Work participation

Table 3

Descriptive Statics, ANOVA and Scheffe Results for the combined group of Latina women and Separated by Country of  
 n=639

	All Latina women	Foreign born from Cuba	Foreign born from Mexico	Foreign born from Puerto Rico
Ordinal Variables	N= 639	N=264	N=257	N=118
Marital Status (%)				
Married/ Cohabiting	62.2	71.2	55.6	55.9
Divorced/Separated/Widowed	23.9	17.0	27.6	31.4
Never Married	13.9	11.7	16.7	12.7
Region (%)				
Northeast	16.3	8.0	3.9	61.9
Midwest	5.6		5.4	18.6
South	23.6	92.0	57.6	2.5
West	54.5		33.1	16.9
Age at immigration (%)				
Less than 12 years	24.7	18.2	24.5	39.0
13-17 Yrs	12.7	6.8	16.7	16.1
18-34	33.7	33.7	52.2	33.1
35+	21.6	40.9	6.2	11.0
Comfort in Religion (%)				
Often	41.8	45.5	27.3	37.8
Sometimes	25.4	11.0	27.7	24.4
Rarely	13.3	23.9	18.1	17.5
Never	19.1	19.7	26.9	18.4
Education (%)				
0-11 years	49.9	33.7	66.5	42.9
12 years	21.3	25.1	19.9	22.6
13-15 years	15.6	19.0	8.8	20.7
>16 years	12.8	22.22	4.7	13.8
Employment (%)				
Fully employed	58.7	34.2	50.8	35.4
Not employed	41.3	65.8	49.2	64.6
Adolescents in households(%)				
Zero	82.0	84.5	79.4	82.2
One	12.8	14.0	12.8	10.2
Two or more	5.2	1.5	7.8	7.6
Content with the decision to move to U.S.(%)				
Yes	92.7	96.6	92.6	89.0
No	6.1	3.4	6.2	7.6
Years in the US (%)				
Less than 5	7.0	20.1	19.1	5.10
5-10 yrs	13.3	10.06	16.7	5.9
11-20	21.6	11.0	32.7	20.3
20 +	49.1	58.0	30.7	67.8
Has a Final Say in Household Decision (%)				
Always	8.3	15.5	26.5	15.3
Sometimes	55.3	34.1	41.2	43.5
Never	31.5	9.1	4.7	27.4
Financial Constraints/Difficulty in paying monthly bills				
Not at all difficult	15.0	15.2	12.8	15.3
Somewhat difficult	26.3	24.6	25.3	24.6
Not very difficult	40.8	33.0	43.6	40.7
Very difficult	17.9	21.6	13.2	14.4
Visiting family abroad difficulties	(%)			
No relatives abroad	4.60	8.3	1.9	1.7
Not at all difficult	21.7	11.4	23.0	41.5
Not very difficult	10.7	7.6	10.9	16.9
Somewhat difficult	20.9	16.3	26.5	18.6
Very difficult	42.0	56.1	37.7	18.6

Combined group of Latina women Cuban-born Latina women Mexican-born Latina women Puerto Rican-born Latina women

Continuous Variables	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>M</i>	<i>SD</i>	<i>Range</i>
Acculturative stress ***bc	9.97	1.93	8-16	9.63	1.56	8-14	10.61	2.27	8-16	9.33	1.41	8-13
Biculturalism level***ac	4.12	1.68	3-9	4.03	1.60	3-9	3.93	1.60	3-9	4.78	1.90	3-9
Marginalization Level***ac	12.97	3.37	3-15	13.13	3.20	3-15	13.39	3.03	3-15	11.61	3.94	3-15
Assimilation Level***ac	4.84	2.92	1-12	4.69	2.79	3-13	4.69	2.68	3-15	6.03	3.41	3-15
Age***abc	45.15	16.61	18-79	52.75	16.15	18-97	36.32	13.09	18-81	47.35	15.36	18-83
Famil- Cultural Conflict	5.11	1.62	4-12	4.97	1.64	4-12	5.18	1.60	4-10	5.30	1.73	4-12
Familism ***	36.69	4.86	10-40	38.01	4.04	13-40	35.89	4.78	19-40	35.44	6.17	10-40
Relative Support***	15.53	3.04	6-20	16.01	3.00	7-20	15.02	2.94	6-20	15.56	3.17	7-20
Social Support***b	14.64	2.74	9-20	15.11	2.69	9-20	14.23	2.65	9-20	14.90	2.72	9-20
Spousal Support***a	26.53	4.80	9-32	27.36	4.51	11-32	26.23	4.66	9-32	25.30	5.57	9-32
Psychological distress***bc	11.29	5.61	7-35	11.80	6.25	7-35	10.28	4.56	7-35	12.36	5.88	7-29
Racial Discrim***ab	5.23	2.38	3-12	4.57	2.11	3-12	5.59	2.36	3-12	5.91	2.64	3-12
Daily Discrim ***ab	13.61	5.9	9-42	12.15	5.04	3-12	14.31	6.33	9-42	15.39	6.01	9-33
English Skills***abc	5.51	3.16	3-12	5.69	3.34	3-12	4.68	2.69	3-12	6.96	3.18	3-12
Personality	12.92	3.4	10-20	12.91	2.42	10-20	13.14	2.54	10-20	12.43	1.85	10-19
9-11 impact	12.64	4.16	7-28	13.18	3.71	7-26	12.32	4.65	7-28	12.09	3.75	7-27

Table 3 (continued).

Note. \*\*p<0.01, \* p<0.05 .

a denotes significant group differences between women born in Cuba and Puerto Rico

b denotes significant group differences between Cuba and Mexico

c denotes significant group differences between Mexico and Puerto Rico

Table 4

*Zero Order Correlation Matrix among Combined group of Latina women*

	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Acculturative S.	1																
	Psychological D.	.144**	1															
3	Content with decision to move	-.193**	-.135**	1														
4	Household Dec.	-.093	-.100*	.046	1													
5	Age at immigratio	.282**	.071	-.024	-.058	1												
6	Visiting Family D	.403**	.113**	-.040	-.063	.249**	1											
7	Education	-.140**	-.098*	.020	.174**	-.163**	-.083*	1										
8	Employment	.153**	.242**	-.082	-.174**	.156**	.128**	-.333**	1									
9	Financial Con.	.215**	.265**	-.106**	-.100	.145**	.255**	-.197**	.230**	1								
10	Years in U.S.	-.379**	.069	.080*	.057	-.369**	-.216**	.006	-.113*	-.091*	1							
11	9-11 impact	.113*	.114**	-.015	.059	.000	.045	.081*	-.049	.134**	.033	1						
12	Age	-.192**	.157**	.037	.074	.466**	-.014	-.052	.007	.054	.449**	.043	1					
13	English Skills	-.425**	-.092*	.032	.147 <sup>7</sup>	-.608**	-.268**	.481**	-.342**	-.188**	.364**	.060	-.139**	1				
14	Racial D.	.367**	.125**	-.149**	-.045	-.113**	.119**	-.008	-.039	.160**	-.099*	.160**	-.228**	.036	1			
15	Family Cul-Conflict	.211**	.271**	-.175**	.004	-.099*	.062	.030	-.032	.157**	.023	.191**	-.090*	.091*	.255**	1		
16	Familism	-.086	-.206**	.088*	-.038	.203**	.028	.061	-.057	-.141**	-.086*	-.034	.127**	-.111**	-.170**	-.539*	1	
17	Rel. Comfort	.100*	.067	-.020	-.056	.043	-.002	.042	.060	.037	.087*	.051	.158**	.038	-.014	.015	.126**	
18	Income	.158**	.188**	.155**	.118*	-.204**	-.061	.349**	-.411**	-.179**	.096*	.052	-.064	.323**	.019	-.060	.109**	
19	Daily Discrimin	.233**	.256**	-.153**	-.033	-.181**	.070	.050	-.026	.168**	-.049	.141**	-.215**	.145**	.467*	.347*	-.278**	

Note, \*\*p&lt;0.01, \*p&lt;0.05

Table 5

*Zero Order Correlation Matrix among Cuban-born Latina women*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Acculturative Stress	1																
2 Psychological D.	.197**	1															
3 Content with Decision to move to U.S.	-.281**	-.150*	1														
4 Household Decision	.028	-.106	.036	1													
5 Age at immigration	.319**	.083	-.080	-.044	1												
6 Visiting Family Abroad Difficulties	.365**	.111	-.045	-.065	.129*	1											
7 Education	-.055	-.195**	.043	.184*	-.368**	-.058	1										
8 Employment	.085	.388**	-.095	-.236**	.182*	.102	-.312**	1									
9 Financial Constraints	.222**	.269**	-.090	-.140	.116	.228**	-.213**	.220**	1								
10 Years in U.S.	-.323**	.045	.148*	-.054	-.401**	-.121*	-.057	-.041	-.180**	1							
11 9-11 impact	-.010	.074	.039	.104	-.081	-.001	.100	-.100	.099	.088	1						
12 Age	-.074	.143*	.010	-.075	.532**	.020	-.364**	.152*	-.029	.371**	-.014	1					
13 English Skills	-.377**	-.180**	.108	.072	-.760**	-.168**	.508**	-.326**	-.175**	.349**	.117	-.397**	1				
14 Racial D.	.321**	.025	-.235**	.147	-.089	.115	.095	-.094	.196**	-.084	.183**	-.178**	.065	1			
15 Family Cul-Conflict	.189**	.238**	-.231**	-.015	-.117	.056	.125*	-.017	.063	.020	.215**	-.094	.118	.241**	1		
16 Familism	-.151*	-.210**	.084	-.112	.199**	.022	-.051	.019	-.058	-.109	-.054	.097	-.166**	-.177**	-.583**	1	
17 Religious Comfort	.066	.120	-.080	-.116	.038	.024	-.025	.210**	.017	.112	.077	.132*	.030	.000	.059	.127*	1

*Note.* \*\* p<0.01 , \* p<0.05

Table 6

*Zero Order Correlation Matrix among Mexican-born Latina women*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Acculturative Stress	1																
2 Psychological D.	.173*	1															
3 Content with Decision to move to U.S.	-.187**	-.116	1														
4 Household Decision	-.136	-.084	.091	1													
5 Age at immigration	.366**	.017	-.029	-.090	1												
6 Visiting Family Abroad Difficulties	.475**	.085	-.024	-.032	.225**	1											
7 Education	-.121	-.034	-.078	.128	-.213**	-.159*	1										
8 Employment	.110	.114	-.112	-.160	.182*	.093	-.154*	1									
9 Financial Constraints	.241**	.174**	-.137*	-.079	.188**	.260**	-.186**	.176*	1								
10 Years in U.S.	-.447**	.014	.120	.127	-.393**	-.317**	.020	-.167*	-.075	1							
11 9-11 impact	.220**	.175**	-.041	.005	.016	.089	.000	.015	.134*	-.014	1						
12 Age	-.177*	.062	.092	.051	.315**	-.160*	-.085	-.002	.063	.542**	.027	1					
13 English Skills	-.413**	-.013	.062	.108	-.616**	-.311**	.415**	-.264**	-.188**	.357**	-.032	-.126*	1				
14 Racial D.	.403**	.173**	-.060	-.129	-.025	.226**	.007	-.068	.182**	-.131*	.280**	-.149*	.010	1			
15 Family Cul-Conflict	.224**	.325**	-.156*	-.035	-.025	.104	.025	-.106	.220**	-.001	.128*	-.053	.062	.218**	1		
16 Familism	.019	-.246**	.119	-.007	.129*	-.013	-.002	-.011	-.167**	-.075	.050	.048	-.186**	-.074	-.476**	1	
17 Religious Comfort	.200**	.212	.083	-.064	.089	-.067	.036	.061	.062	.004	.106	.137*	-.077	.028	-.018	.119	1

*Note.* \*\* p<0.01 two tailed, \* p<0.05 two tailed

Table 7

*Correlation Matrix among Puerto Rican-born Latina women*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2 Psychological D.	.237*	1															
3 Content with Decision to move to U.S.	-.119	-.174	1														
4 Household Decision	.087	-.267*	-.105	1													
5 Age at immigration	.322**	.098	-.050	-.078	1												
6 Visiting Family Abroad Difficulties	.458**	.277**	-.160	-.020	.328**	1											
7 Education	-.041	-.184*	.073	.004	-.040	-.185*	1										
8 Employment	.236	.364**	.017	.209	.207	.347**	-.582**	1									
9 Financial Constraints	.160	.434**	.64	.003	.119	.321**	-.255**	.378**	1								
10 Years in U.S.	-.078	.060	-.127	-.014	-.368**	-.083	-.115	-.043	.174	1							
11 9-11 impact	.030	.054	-.079	.113	-.057	-.099	.095	-.082	.214*	.037	1						
12 Age	.095	.121	-.114	.038	.464**	.066	-.153	.130	.221*	.393**	-.001	1					
13 English Skills	-.418**	-.222*	-.150	.160	-.444**	-.338**	.465**	-.455**	-.244**	.152	.160	-.184*	1				
14 Racial D.	.401**	.331**	-.141	-.125	.030	.213*	.066	.023	.116	-.120	.002	-.193*	.040	1			
15 Family Cul-Conflict	.205	.289**	-.113	.154	-.075	.106	-.063	.051	.271**	.084	.388**	-.064	.097	.284**	1		
16 Familism	-.110	-.238*	-.012	-.077	.087	-.092	.100	-.173	-.294**	-.103	-.317**	.011	.035	-.123	-.588**	1	
17 Religious Comfort	.043	.001	-.139	.020	-.046	.113	.123	-.210	.034	.125	-.170	.182	.167	-.099	-.003	.135	1

Table 8  
*Direct and Indirect Standardized Parameter Estimates of Path Analyses Models where Acculturative Stress is Associated with Psychological Distress (N=636)*

Models	1	2	3
<b>Psychological Distress</b>	B (Error)	B (Error)	B (Error)
Acculturative Stress	0.12(0.06) *	0.09(0.04)*	0.11(0.05)*
Daily Discrimination.	0.21(0.06)**	0.21(0.05)**	
Age	0.22(0.04)**	0.22(0.04)**	0.21(0.04)**
Income	-0.15 (0.05)**		
Familism	-0.13 (0.05)*		-0.18 (0.05)**
Family Conflict		0.21(0.05)**	
Education		-0.09 (0.03)**	
Financial Constraints			0.19 (0.05)**
Content with the decision to move to U.S.	-0.10 (0.05)*		
<b>Acculturative Stress</b>			
Content with decision to move to U.S.	-0.08 (0.03)*	-0.09(0.04)*	
Visiting Family Abroad			
Difficulties	0.22(0.04)**	0.21(0.03)**	
Family Conflict	0.12(0.04)**	0.13(0.03)	0.11(0.06)*
Racial Discrimination	0.22(0.04)**	0.26(0.03)**	0.32(0.04)**
Years in the U.S.	-0.15(0.06)*	-0.15(0.04)**	-0.22(0.04)**
Age	-0.12(0.04)**	-0.09(0.04)*	
Years U.S. * Racial Disc.	-0.13(0.04)**	-0.14(0.04)*	
Religious comfort	0.11( 0.04)*		
English skills	-0.32(0.03)**	-0.31(0.03)**	-0.32(0.04)**
Familism			
Years U.S. *Familism			0.09(0.04)*
Financial Constraints			0.08(0.04)*
9-11 impact			0.03(0.01)**
<b>Indirect Effects</b>			
Visiting family abroad			
difficulties	0.03(0.01)**	0.01(0.00)*	
Racial Discrimination	0.03(0.01)**	0.01(0.00)*	0.04(0.02)*
English Skills	-0.04(0.02)*		

Note: P<0.01\*\* . P<0.05\*

Model 1:  $\chi^2 = 17.31$  DF=11 p=0.10 CFI/TLI=0.98/0.96 RMSEA=0.03 (0.01; 0.05)

Model 2:  $\chi^2 = 8.156$  DF=8 p=0.42 CFI/TLI=1.00/0.99 RMSEA=0.00(0.0; 0.04)

Model 3:  $\chi^2 = 13.21$  DF=7 p=0.65 CFI/TLI =0.98/0.95 RMSEA= 0.03 (0.0; 0.08)

Table 9

*Direct and Indirect Standardized Parameter Estimates of Path Models Where Acculturative Stress Is Not Associated with Psychological Distress (N=636)*

Model	1	2
<b><i>Psychological Distress</i></b>	B (Error)	B (Error)
Daily Discrimination	0.18(0.06)**	0.05(0.02)*
Financial Constraints	0.12(0.06)*	0.05(0.02)*
Age	0.22(0.05)**	0.08 (0.03)*
Family-cultural conflict	0.16(0.07)*	
Decision-making	-0.12(0.05)*	-0.06(0.03)*
<b><i>Acculturative Stress</i></b>		
English Skills	- 0.41(0.12)**	-0.35(0.11)**
Racial Discrimination	0.30(0.04)**	0.25(0.04)**
Years in U.S	-0.23(0.05)**	-0.39(0.08)**
Years in U.S		
* Racial Discrimination	-0.12(0.05)*	-0.38(0.18)*
Family-cultural conflict	0.15(0.05)**	
Financial Constraints	0.07(0.04)*	
Content with decision to move		
To U.S.	-0.10(0.04)*	-0.31(0.12)*
Religious comfort	0.23(0.07)**	

Note.  $p < 0.01$ \*\*,  $p < 0.05$ \*

Model 1:  $\chi^2 = 7.88$  DF=8  $p = 0.44$  CFI/TLI 1.00/1.14 RMSEA: 0.00 (0.00;0.05)

Model 2:  $\chi^2 = 12.19$  DF=10  $p = 0.29$  CFI/TLI 0.99/0.98 RMSEA: 0.00 (0.00;0.05)

Table 10

*Synopsis of**Goodness of Fit Statistics Tests of Invariance Moderator: Assimilation*

	$\chi^2$	df	p	$\chi^2/df$	pvalue	RMSEA	TLI CFI
<b>Model 1</b>							
Unconstrained Model	29.05	22	0.14			0.03 (0.00;0.07)	0.97/0.95
Fully constrained Model	51.90	36	0.04	22.89/14	0.062	0.04 (0.01; 0.05)	0.94/0.93
<b>Model 2</b>							
Unconstrained Model	13.65	16	0.62			0.00 (0.00-0.04)	1.00/1.02
Fully constrained Model	31.29	29	0.35	17.65/13	0.17	0.01 (0.00-0.05)	0.99/0.99
<b>Model 3</b>							
Unconstrained Model	18.84	14	0.17			0.03(0.00/0.07)	0.99/0.95
Fully constrained Model	41.70	26	0.03	22.92/12	0.03	0.05 (0.03/0.07)	0.92/0.90
Partially constrained	23.43	24	0.56	5.30 /10	0.87	0.00 (0.00/0.04)	1.00/1.02

Table 11

*Synopsis of Goodness of Fit Statistics for Tests of Invariance Moderator: Biculturalism*

	$\chi^2$	df	p	$\chi^2/df$	pvalue	RMSEA	TLI CFI
<b>Model 1</b>							
Unconstrained Model	29.13	22	0.14			0.03 (0.00;0.07)	0.97/0.95
Fully constrained Model	52.08	36	0.05	22.98/14	0.061	0.04 (0.01;0.05)	0.94/0.92
<b>Model 2</b>							
Unconstrained Model	13.37	16	0.64			0.00 (0.00-0.04)	1.00/1.02
Fully constrained Model	31.17	29	0.35	17.65/13	0.17	0.01 (0.00-0.05)	0.99/0.99
<b>Model 3</b>							
Unconstrained Model	16.47	14	0.28			0.02(0.00/0.07)	0.99/0.98
Fully constrained Model	44.86	26	0.01	22.92/12	0.03	0.05 (0.02/0.07)	0.91/0.90
Partially constrained	20.18	23	0.63	4.15/ 09	0.89	0.00 (0.00/0.03)	1.00/1.02

Table 12

*Direct Standardized Parameter Estimates of Path Models-Contextual Factors, Acculturative Stress and Psychological Distress Moderated by Assimilation and Biculturalism (N=636)*

Model 3	Assimilation		Biculturalism	
<i>Psychological Distress</i>	<i>Group 1</i>	<i>Group 2</i>	<i>Group 1</i>	<i>Group 2</i>
Acculturative Stress	0.07(0.03)*	0.06( 0.04)ns	0.08(0.05)ns	0.07( 0.04)ns
Financial Constraints	0.19(0.04)**	0.22(0.05)**	0.18( 0.04)**	0.22( 0.05)**
Content with decision to move to U.S.	-0.09( 0.05)*	-0.13(0.06)*	-0.09(0.05)*	-0.12( 0.06)*
Age	0.17(0.04)**	0.06(0.07)ns	0.27(0.05)**	0.06(0.07)ns
Familism	-0.17(0.04)**	-0.25(0.06)**	-0.17(0.04)**	-0.26(0.06)**
<i>Acculturative Stress</i>				
English skills	-0.16(0.03)**	-0.26(0.06)**	-0.15(0.04)**	-0.26(0.06)**
Racial Discrimination	0.42(0.05)**	0.27(0.06)**	0.43(0.05)**	0.25(0.06)**
Years in the U.S.	-0.20(0.03)**	-0.23(0.04)**	-0.19(0.04)*	0.23(0.05)**
Years U.S. *Familism	0.06(0.03)*	0.07(0.04)*	0.12(0.05)*	0.02(0.03)ns
Financial Constraints	0.05(0.03)ns	0.07(0.05)ns	0.04(0.03)ns	0.06(0.05) ns
Content with decision to move to U.S.	-0.08(0.03)*	-0.14(0.05)*	-0 08(0.03)*	-0.14(0.05)*
9-11 Impact	0.08(0.07)ns	0.11(0.05)*	0.09(0.07)ns	0.12(0.05)*

Note.  $p < 0.01^{**}$ ,  $p < 0.05^{*}$

Model 1: Biculturalism:  $\chi^2 = 23.43$  DF=24  $p = 0.50$  CFI/TLI=1.00/1.00 RMSEA=0.00 (0.0; 0.05)

Model 2: Assimilation:  $\chi^2 = 8.156$  DF=8  $p = 0.42$  CFI/TLI=1.00/0.99 RMSEA=0.00 (0.0; 0.04)

Table 14

*Synopsis of Goodness of Fit Statistics for Tests of Invariance -Moderator Country of Birth*

	$\chi^2$	$df$	$p$	$\chi^2/df$	$p$ value	RMSEA	TLI CFI
<b>Model 1</b>							
Unconstrained Model	47.87	33	0.05			0.05 (0.05; 0.07)	0.96/0.92
Fully constrained Model	92.33	61	0.05	44.49/28	0.02	0.05 (0.03; 0.07)	0.91/0.90
Partially constrained	51.96	40	0.12	4/8.00	0.84	0.04 (0.00; 0.04)	0.97/0.95
<b>Model 2</b>							
Unconstrained Model	32.39	24	0.12			0.04 (0.00-0.06)	0.98/0.94
Fully constrained Model	63.79	50	0.09	31.39/26	0.21	0.04 (0.00-0.04)	0.96/0.95
<b>Model 3</b>							
Unconstrained Model	35.24	21	0.03			0.06(0.02-0.10)	0.95/0.87
Fully constrained Model	67.27	45	0.02	31.28/24	0.12	0.05 (0.02/0.07)	0.92/0.90

Table 15 *Direct and Indirect Standardized Parameter Estimates of Path Model-Contextual Factors, Acculturative Stress and Psychological Distress Moderated by Country of Birth (N=636)*

	Cuba	Puerto Rico	Mexico
<b>Psychological distress</b> B(error)	B(Error)	B(Error)	
Acculturative Stress	0.11(0.04)*	0.11(0.04)*	0.18(0.06)**
Daily Discrimination	0.05(0.01)**	0.60 (0.10)**	0.14(0.07)*
Age	0.30(0.12)**	0.32(0.13)*	0.37(0.14)*
Income	-0.48(0.11)**	-0.64(0.21)**	-0.02(0.14)ns
Familism	-0.02(0.03)ns	-0.01(0.02)ns	-0.06(0.02)**
<b>Acculturative Stress</b>			
Content with decision to move to U.S. -0.18(0.09)*	-0.06(0.11)ns	-0.14(0.06)*	
Visiting Family Abroad			
Difficulties	0.21(0.04)**	0.22(0.05)**	0.15(0.02)**
Family Cul. Conflict	0.71(0.71)ns	0.65(0.88)ns	0.44(0.04)**
Racial Discrimination	0.55(0.14)**	0.74(0.18)**	0.56(0.11)**
Years in the U.S.	-0.13(0.06)*	-0.06(0.08)ns	-0.24(0.06)**
Age	-0.52(0.06)*	0.17(0.28)ns	0.11(0.22)ns
Years U.S. * Racial Disc.	-0.26(0.11)**	-0.19(0.18)ns	-0.16(0.12)ns
Religious comfort 0.10(0.03)**	0.10(0.03)**	0.07(0.02)*	
English Skills	-0.36(0.05)**	-0.36(0.05)**	-0.23(0.03)**
<b>Indirect Effects</b>			
Visiting Family Abroad			
Difficulties	0.27(0.01)**	0.03(0.01)**	0.03(0.01)**
Racial Discrimination	0.02(0.01)*	0.03(0.01)*	0.04(0.02)*
English Skills	-0.04(0.01)*	- 0.03(0.01)*	-0.04(0.01)**
Years in U.S			-0.04(0.02)*
Religious comfort . 0.11(0.01)**	0.01(0.00)*	0.08(0.02)**	
Family-cultural conflict			0.03(0.01)**

Note. P<0.01\*\*, P<0.05\*

Model:  $\chi^2=51.96$  DF=40 p=0.12 CFI/TLI=0.97/0.95 RMSEA=0.04 (0.00; 0.04)

Table 16

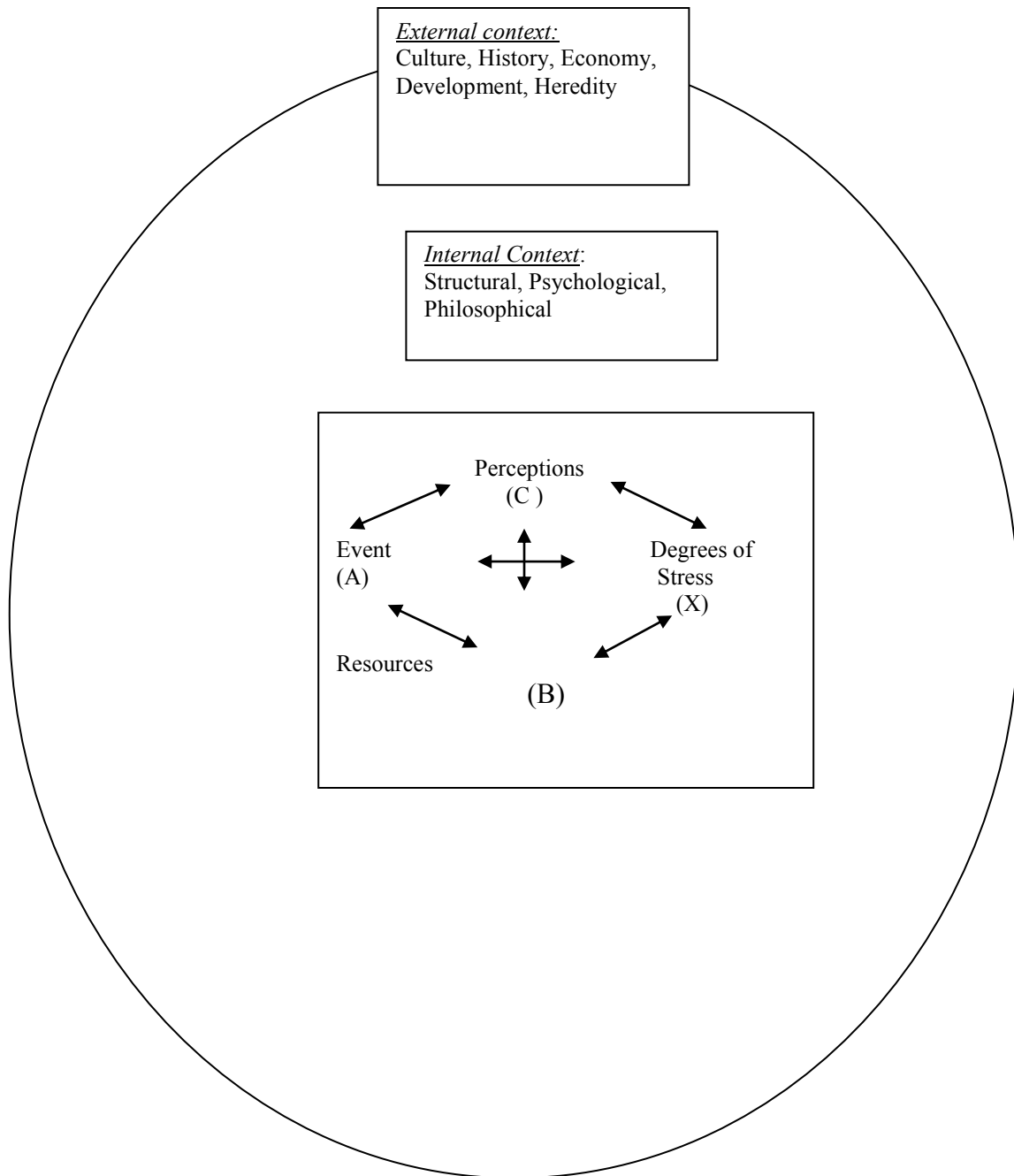
*Direct and Indirect Standardized Parameter Estimates of Path Models-Contextual Factors, Acculturative Stress and Psychological Distress- Cuba-, Puerto-Rico, and Mexican-born Latina women*

Model	Cuba	Puerto Rico	Mexico
<b><i>Psychological Distress</i></b>			
Acculturative Stress	0.15(0.03) *	0.11(0.12) ns	0.40(0.05)**
Age	0.17(0.02) **		
Family-cultural conflict	0.28(0.34)**		
Racial Discrimination		0.35(0.08)**	
Financial Constraints		0.26(0.09)**	
Familism		-0.31(0.08)**	
<b><i>Acculturative Stress</i></b>			
Content with decision to move to U.S. -0.15(0.13)**	-0.49(0.05)**		
Racial Discrimination	0.26(0.04)**	0.36(0.09)**	0.29(0.05)**
English skills	-0.33(0.03)**	-0.30(0.09)**	-0.16(0.04)**
Visiting Family Abroad			
Difficulties	0.28(0.06)**	0.26(0.11)*	0.49(0.10)**
Age at immigration	0.18(0.65)**	0.19(0.08)*	0.67(0.28)**
Religious comfort	0.38(0.10)**		
<b><i>Indirect Effects</i></b>			
Racial Discrimination	0.06(0.02)**		0.16(0.08)*
English Skills	-0.04(0.02)*		
Visiting Family Abroad			
Difficulties	0.05(0.02)*		

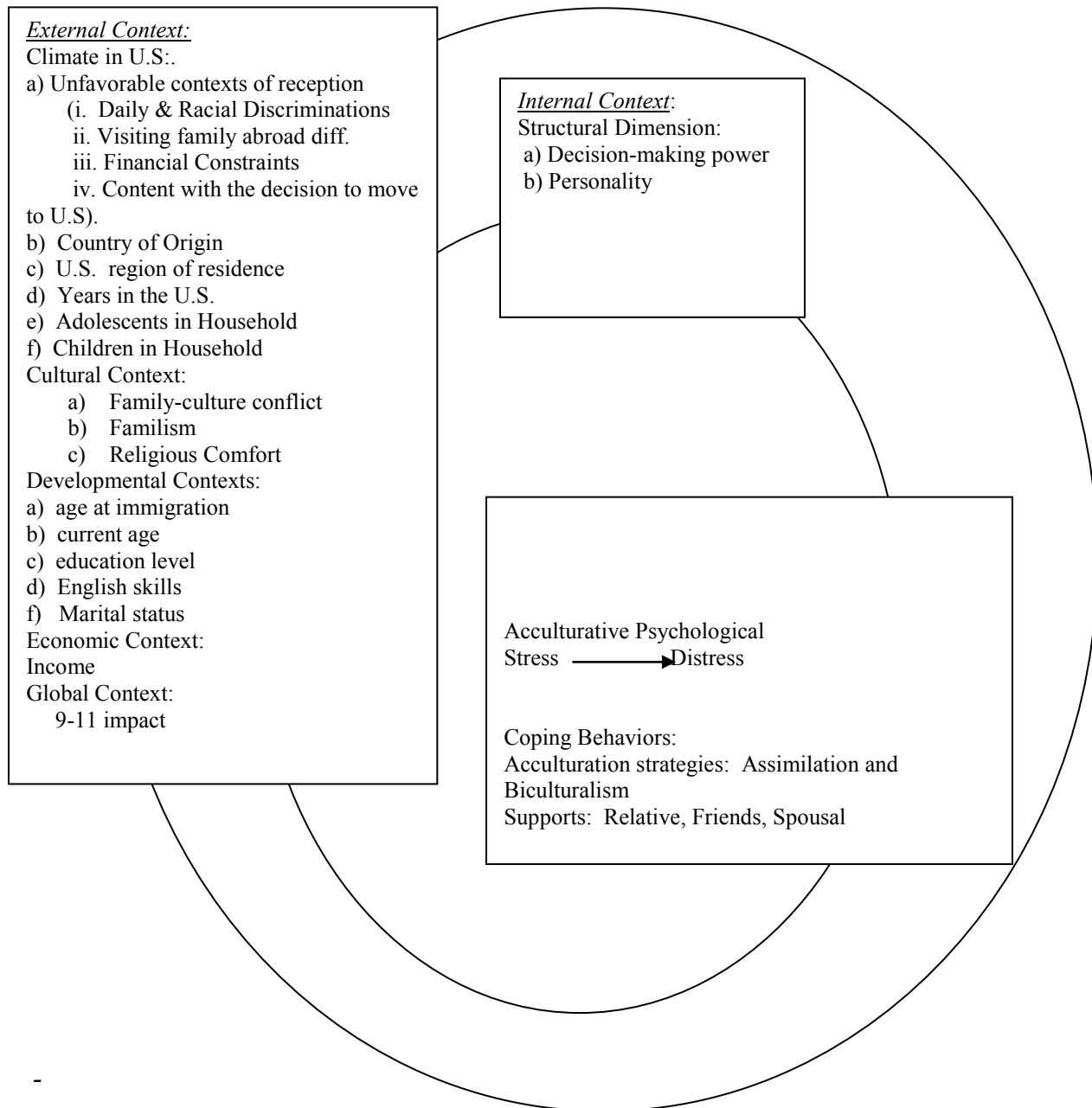
Note. \*\* p<0.01, \*p<0.05

Puerto Rico:  $\chi^2 = 1.66$  DF= 4 p=0.90 RMSEA=0.00(0.00/0.00) CFI/TLI= 1.00/1.62  
 Mexico:  $\chi^2 = 4.33$  DF=7 p=0.74 RMSEA=0.00 (0.00/0.62) CFI/TLI=1.00/1.048  
 Cuba:  $\chi^2 = 9.44$  DF=7 p=0.22 RMSEA=0.04 (0.00/0.05) CFI/TLI=0.98/0.96

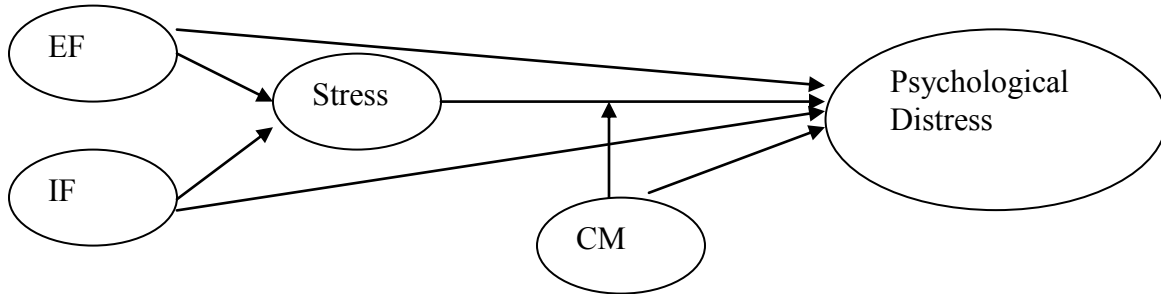
**Figure 1.** The Contextual Model of Family Stress (Boss, 2002, p. 40)



**Figure 2.** The Contextual Model of Acculturative Stress for Latina women. Adopted from Family Stress management, Boss (2002)

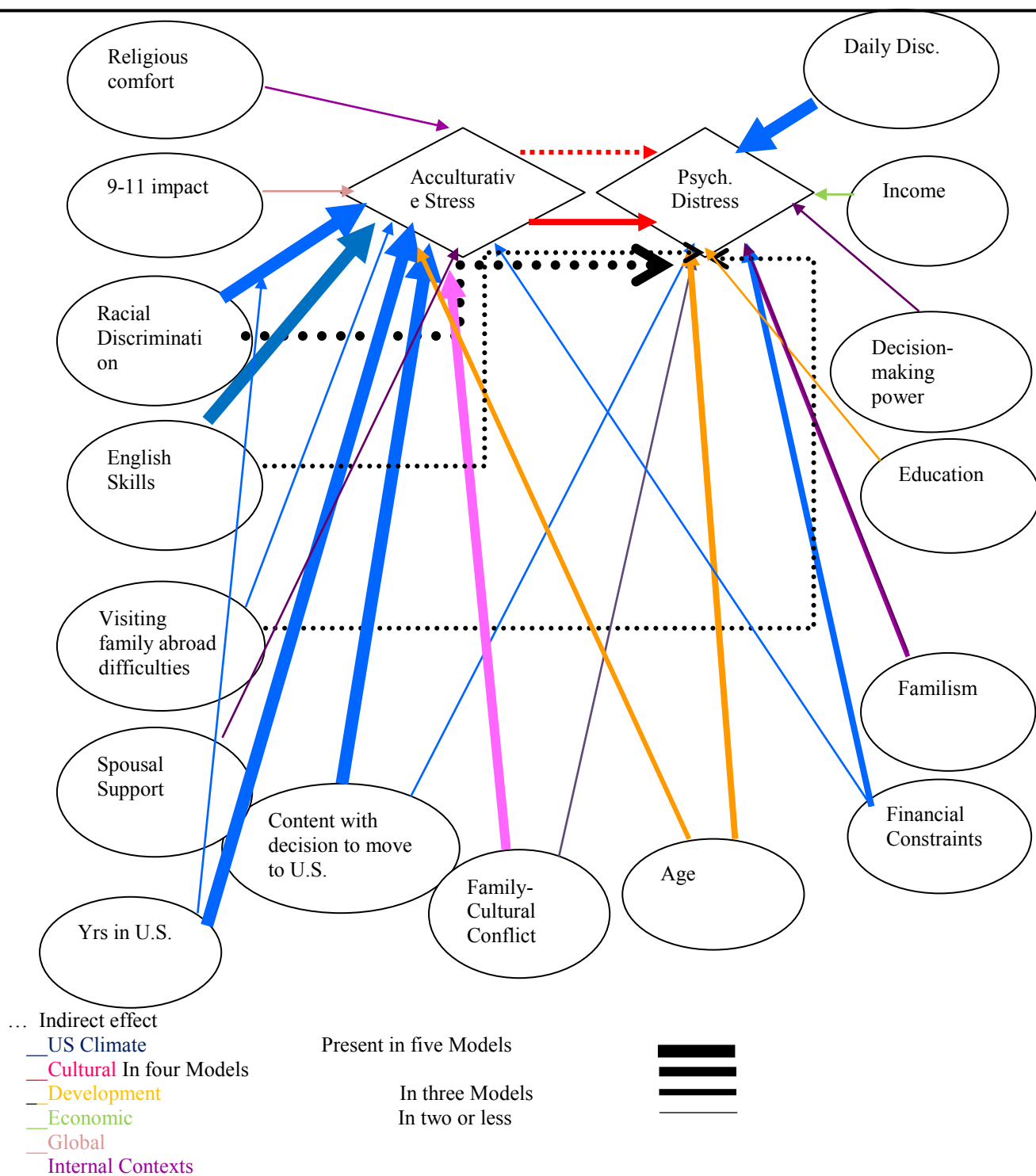


**Figure 3.** A simplified version of the conceptual model

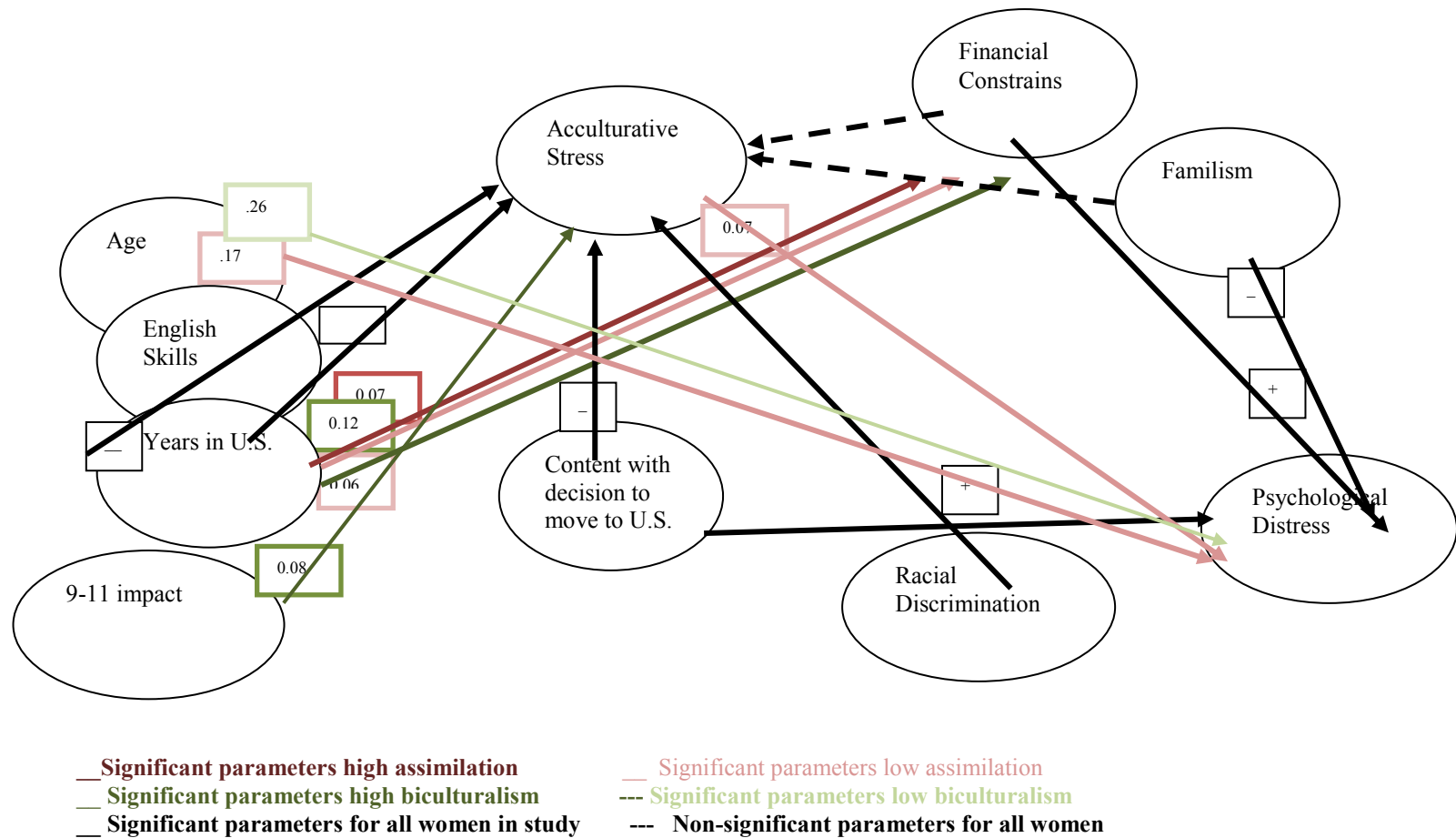


EF: external contextual factors; IF: internal contextual factors; CM: coping mechanism

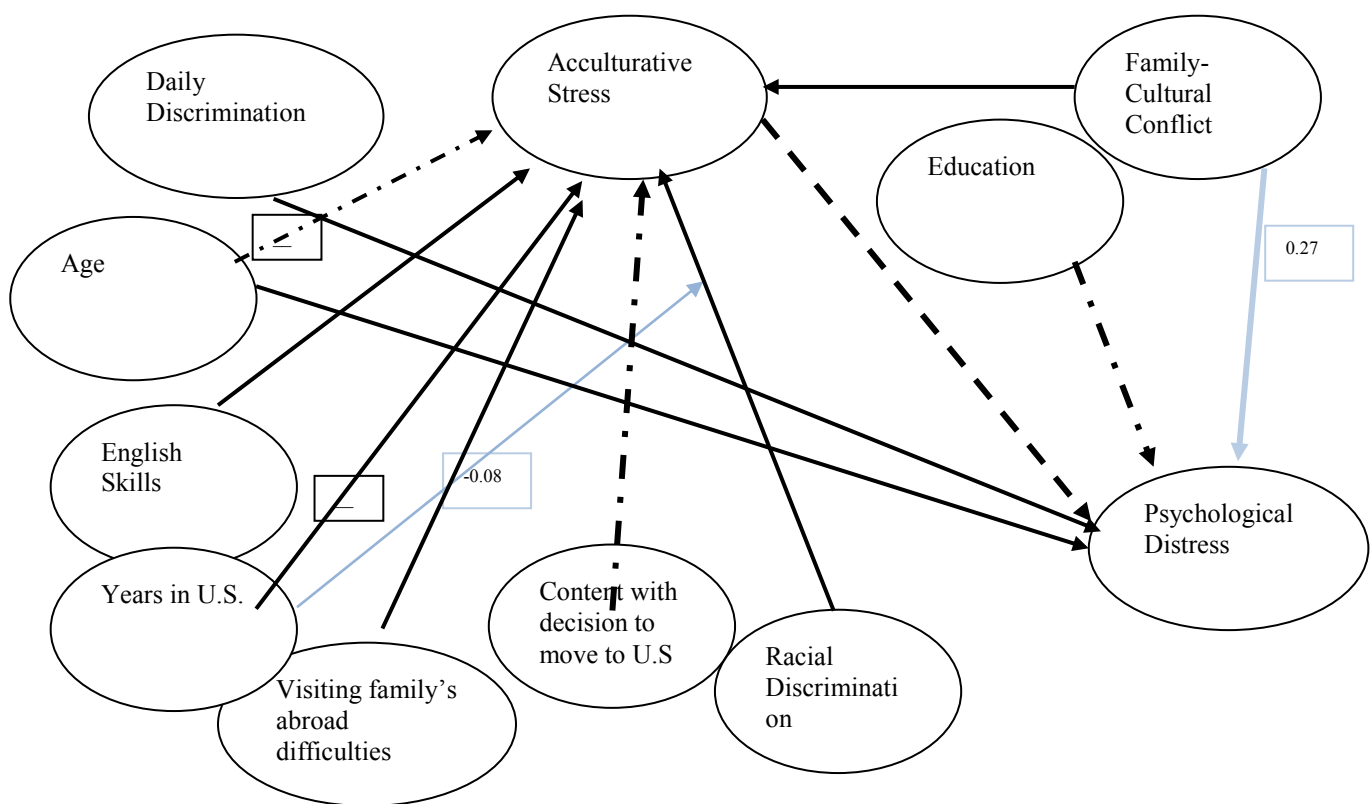
**Figure 4.** Contextual Factors, Acculturative Stress and Psychological Distress among Combined Group of Latina women



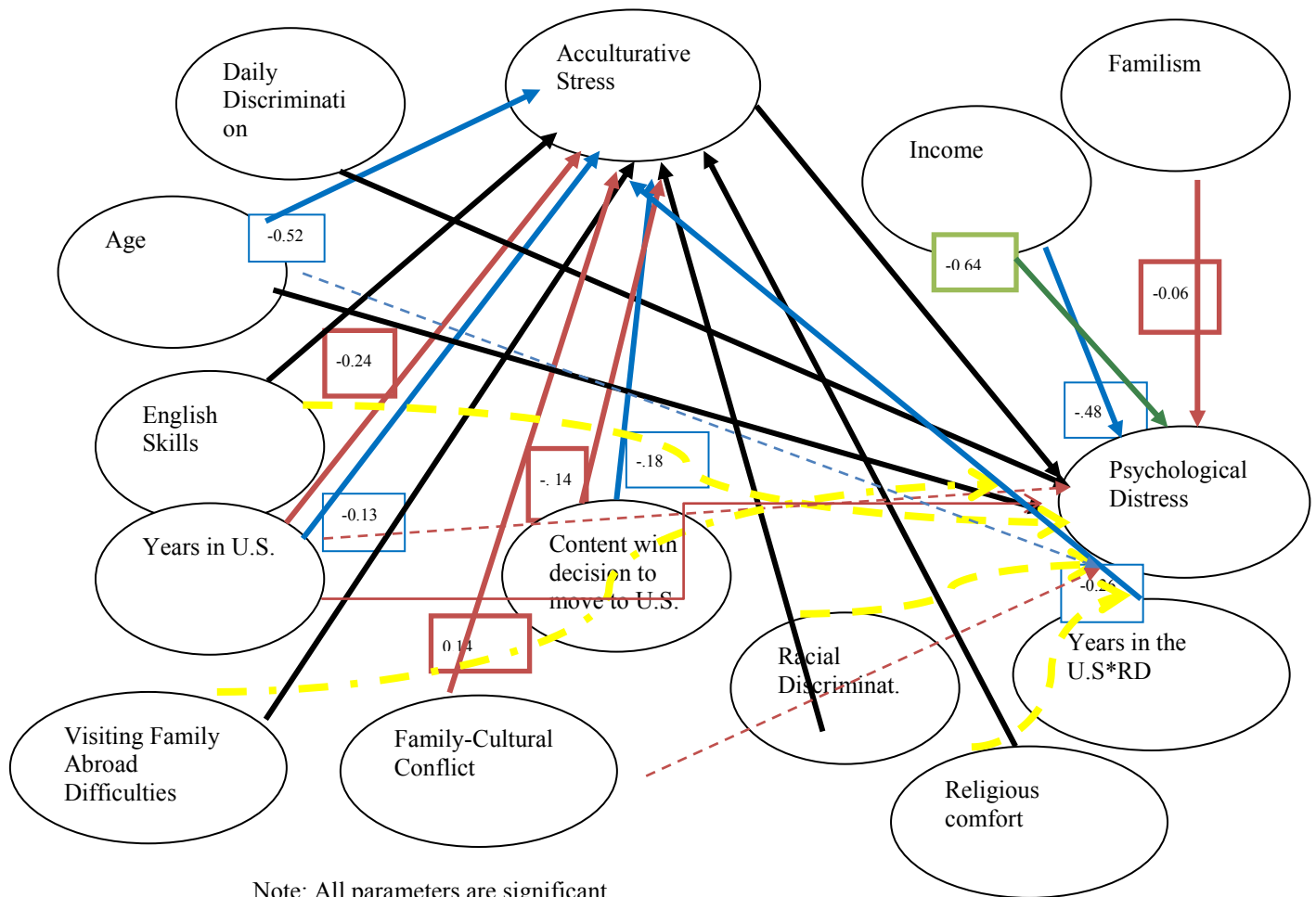
**Figure 5.** Contextual Factors, Acculturative Stress and Psychological Distress. Moderators: Biculturalism & Assimilation.



**Figure 6.** Internal and External Contextual Factors, Acculturative Stress and Psychological Distress: Spousal Support Moderator.

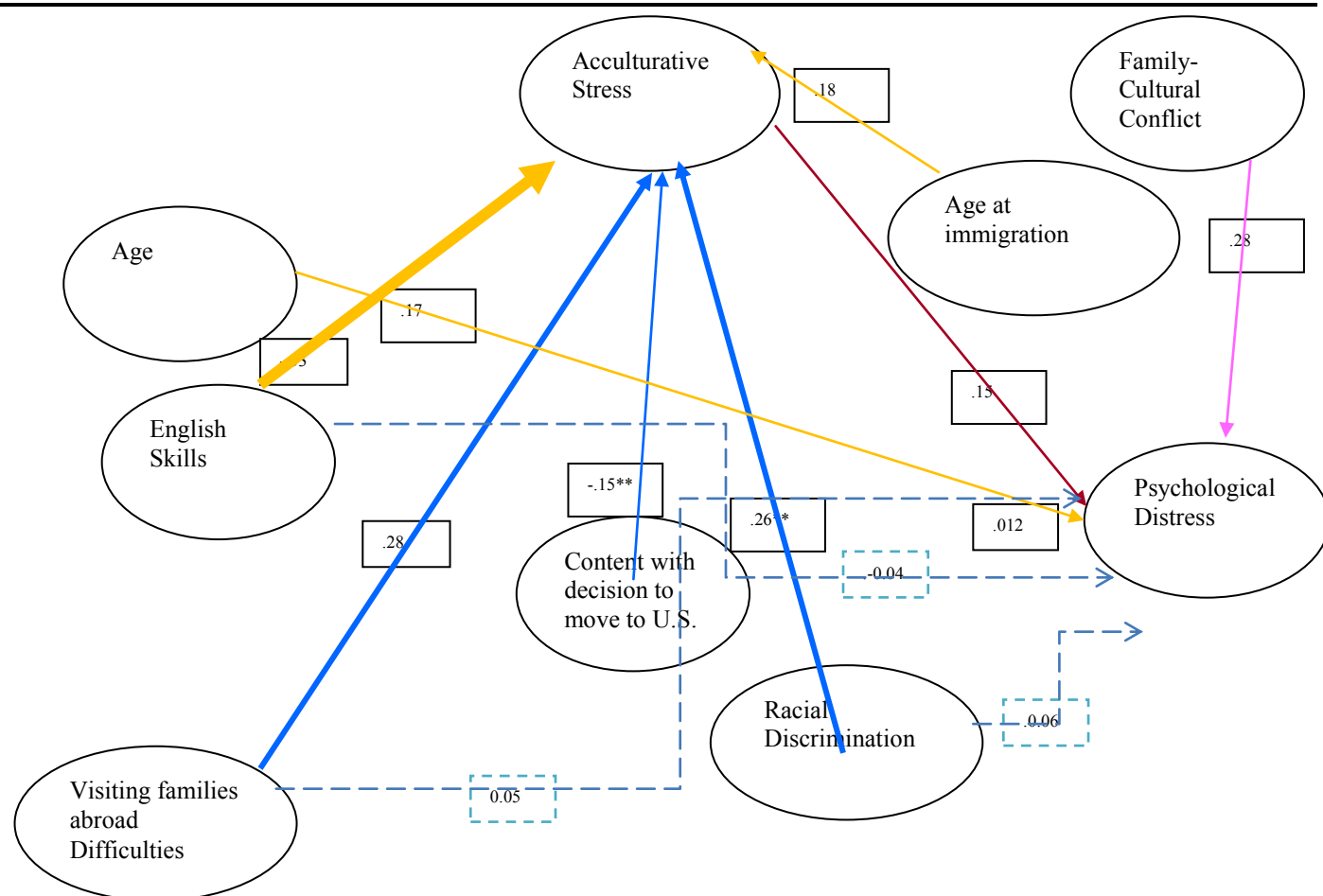


**Figure 7.** Internal & External Contextual Factors, Acculturative Stress and Psychological Distress:  
Country of Birth Moderator.



— Significant for all women in the group    ---- signifies indirect impact of all in the group  
 --- Indirect impact for women born in Mexico.    — Significant for Women born in Mexico  
 — Significant for Women born in Cuba    — Significant for Women born in Puerto Rico  
 --- Indirect impact for women born in Cuba

**Figure 8.** Internal & External Contextual Factors, Acculturative Stress and Psychological Distress among Cuban-born women



Note: All parameters are significant

----- signifies indirect impact

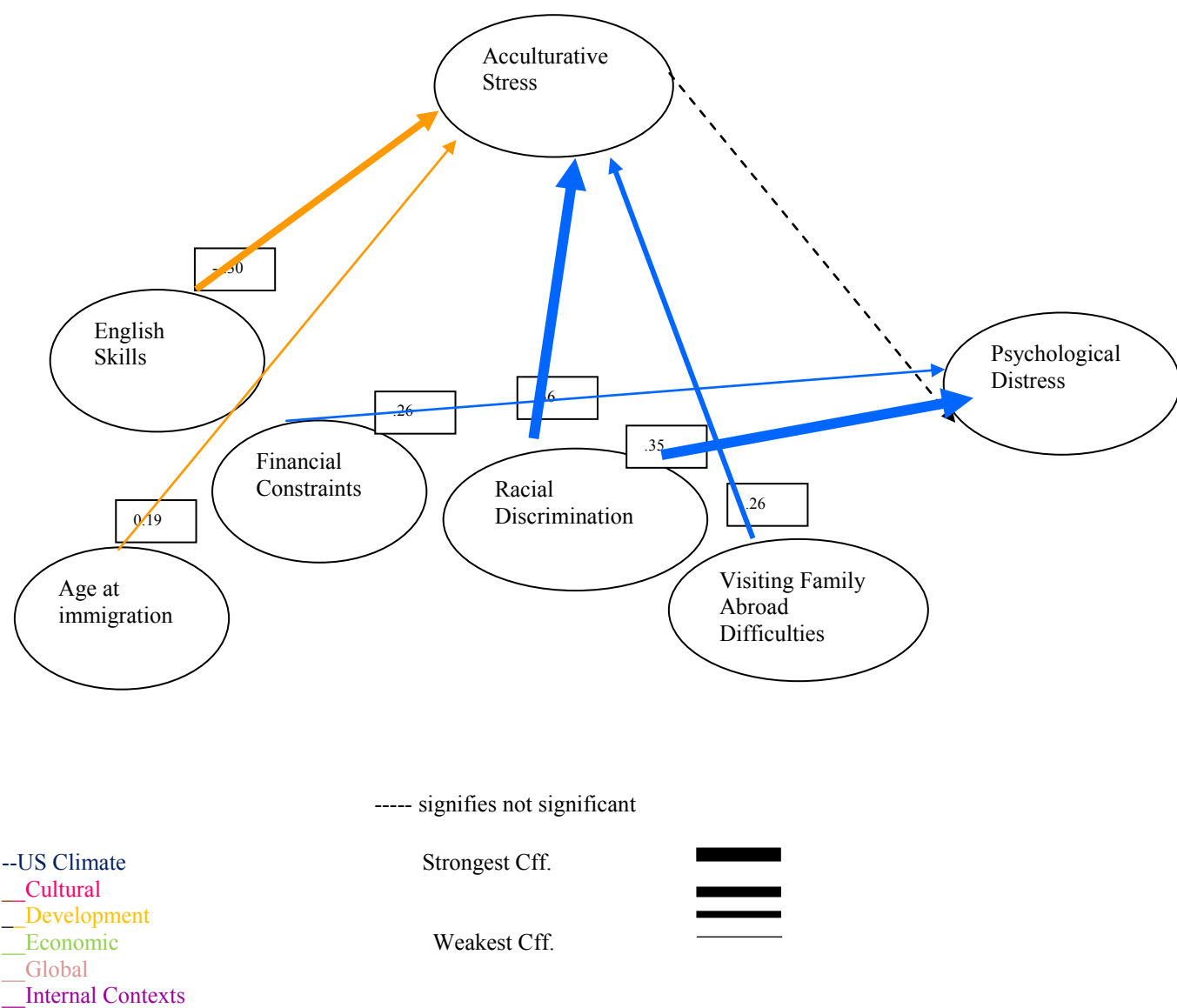
-----US Climate  
 ---Cultural  
 ---Development  
 ---Economic  
 ---Global  
 ---Internal Contexts

Strongest Cff.

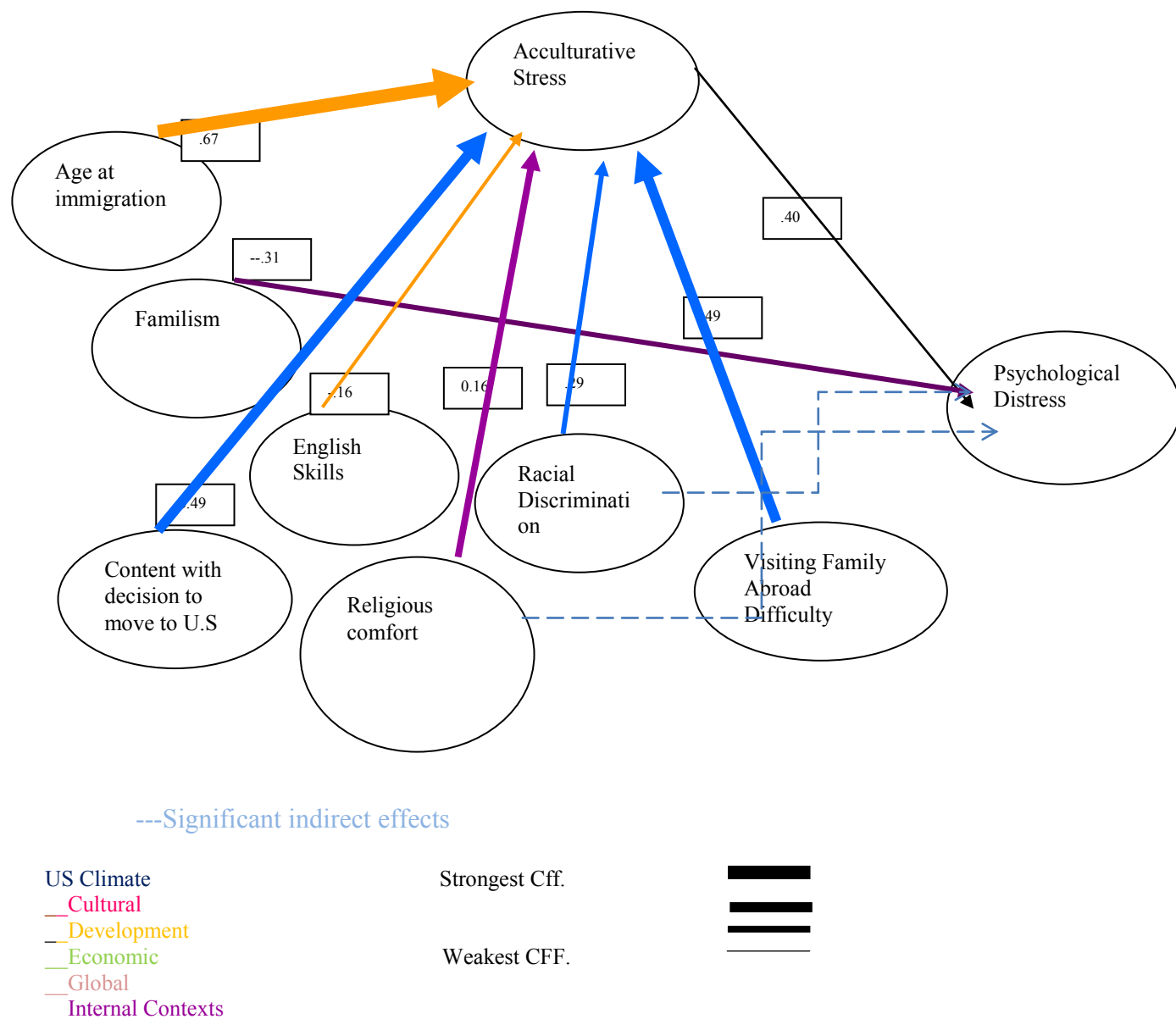
Weakest CFF.



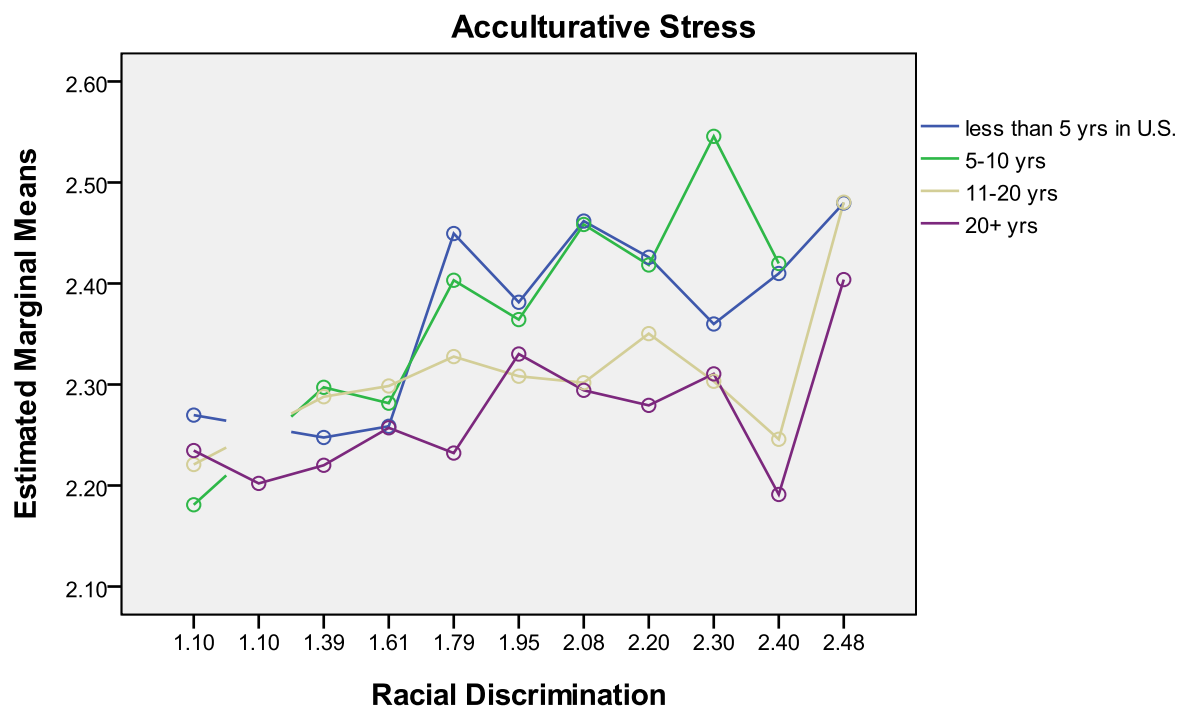
**Figure 9.** Internal & External Contextual Factors, Acculturative Stress and Psychological Distress among Puerto Rican-born Women



**Figure 10.** Internal & External Contextual Factors, Acculturative Stress and Psychological Distress among Mexican-born Women

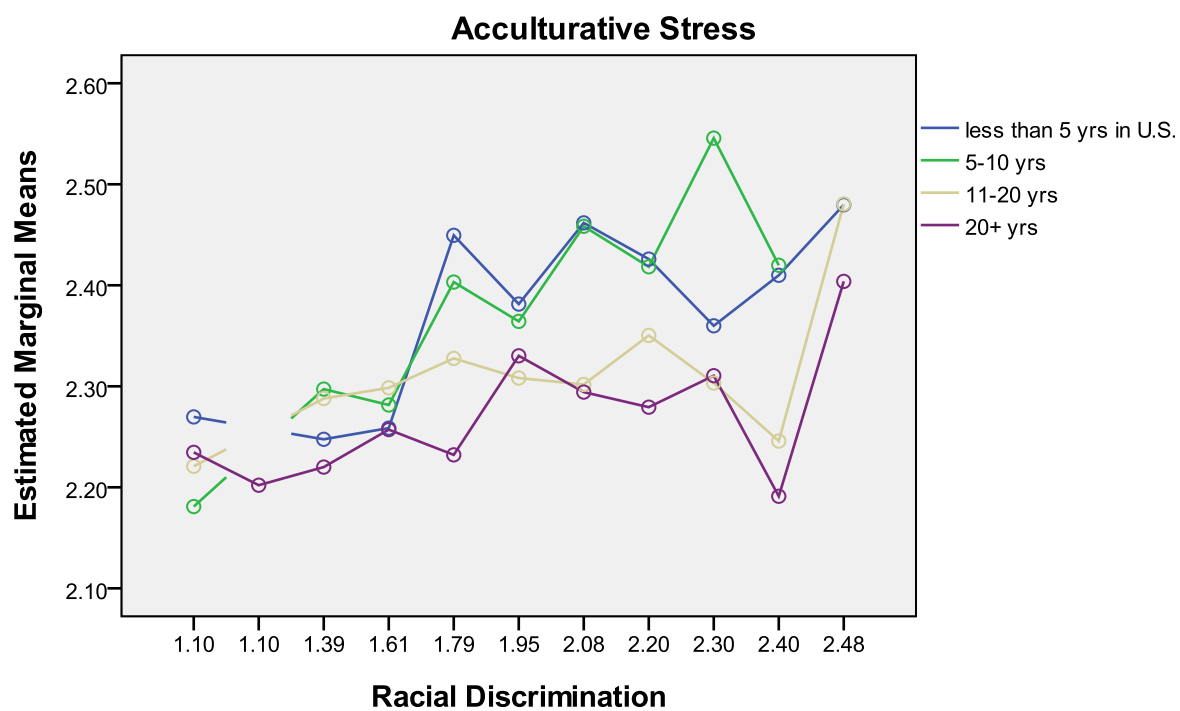


**Figure 11.** Interaction between Racial Discrimination and Years in the U.S. :Model1

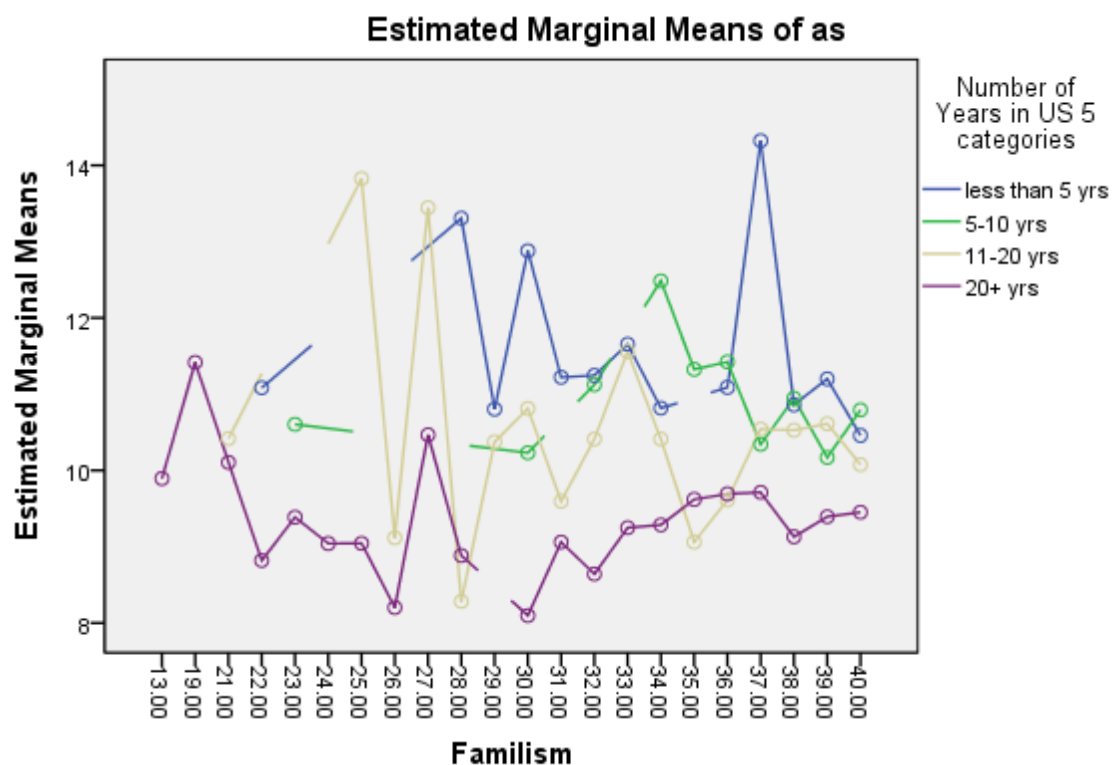


Covariates: English Skills, Happiness with the U.S. move, Family-Cultural Conflict, Difficulties in visiting family home, Age.

**Figure 12.** Interaction between Racial Discrimination and Years in the U.S. :Model2



Covariates: English Skills, Happiness with the U.S. move, Family-Cultural Conflict, Difficulties in visiting family home, Age.

**Figure 13.**Interaction between Familism and Years in the U.S.: Model3

Covariates appearing in the model are evaluated at the following values: If deciding today, would still move to US = 2.17, During difficult times- seek comfort in religion = 2.93, logrd = 1.5716, Amt of difficulty paying monthly bills = 2.62, impact of september 11 your life = .08628

Non-estimable means are not plotted

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### Appendix

Concept	Type	If scale, items Represented. If Categorical, categories represented.
Marital Status	Categorical	Married/Cohabiting Divorced/Separated/Widowed Never Married
Region	Categorical	Northeast Midwest South West
Age at immigration	Categorical	Less than 12 years 13 to 17 years 18 to 34 years Older than 34
Comfort in Religion	Ordinal	Never Rarely Sometimes Often
Education	Ordinal	0-11 years 12 years 13-15 years More than 16 years
Employment Status	Dichotomous	Not Employed Employed
Adolescents in Household	Ordinal	Zero One Two or more
Would decide to move to U.S.	Dichotomous	No Yes
Years in the U.S.	Ordinal	Less than five years Five to ten years Eleven to 20 years More than 20 years

Final Say in Household Decisions	Ordinal	Never Sometimes Always
Financial Constraints/Difficulties in paying monthly bills	Ordinal	Not at all difficult Somewhat difficult Not very difficult Very difficult
Visiting Family Abroad difficulties	Ordinal	No relatives abroad Not at all difficult Somewhat difficult Not very difficult Very difficult
Acculturative Stress	Scale	Felt guilty about leaving family/friends in country of origin Limited contact with family and friends Interaction hard due to difficulty with English language Treated badly due to poor/accented English Questioned about legal status Think might be deported if go to social/gov't agency Avoid health service due to INS
Age	Continuous Variable	18-97 years of age
Family Cultural Conflict	Scale	Being close to family interfered with goals Argue with family over different customs Lonely isolated due to lack of family unity Personal goals conflict with family
Familism (Family Cohesion and Family Pride)	Scale	Family members respect each other Family shares values Things work well s family Family trusts and confides in each other Family loyal to family Proud of family Express feelings with family Family likes to spend free time with each other Family feels close to each other Family togetherness is important
Relative Support	Scale	How often do you talk on the phone or get together with family or relatives who do not live with you How much can you rely on relatives who do not live with you for help if you have a serious problem How much can you open up to relatives who do not live with you if you need to talk about your worries How often you let relatives know about your problems
Social Support	Scale	How often talk on the phone or get together with friends How much can rely on friends when have serious problem How much can you open up to friends and talk about worries

		How often you let someone else know about your problems
Spousal Support	Scale	<p>How much does your (spouse/partner) really care about you – a lot, some, a little, or not at all?</p> <p>How much does your (spouse/partner) understand the way you feel about things?</p> <p>How much can you rely on your (spouse/ partner) for help if you have a serious problem?</p> <p>How much can you open up to your (spouse/ partner) if you need to talk about your worries?</p> <p>Spouse/partner does not make too many demands on you</p> <p>Spouse/partner support you</p> <p>Spouse/partner lets is there when counting on them</p> <p>Spouse/partner does not get on your nerves</p>
Psychological Distress	Scale	<p>Past month depressed</p> <p>Past month feel hopeless</p> <p>Past month restless fidgety</p> <p>Past month tired for no good reason</p> <p>Past month everything was an effort</p> <p>Past month felt worthless</p> <p>Past month everything was nervous</p>
Daily Discrimination	Scale	<p>You are treated with less courtesy than other people.</p> <p>You are treated with less respect than other people.</p> <p>You receive poorer service than other people at restaurants or stores.</p> <p>People act as if they think you are not smart.</p> <p>People act as if they are afraid of you.</p> <p>People act as if they think you are dishonest.</p> <p>People act as if you are not as good as they are.</p> <p>You are called names or insulted.</p> <p>You are threatened or harassed.</p>
Racial Discrimination	Scale	<p>How often do people dislike you because of your race/ethnicity.</p> <p>Have you seen friends treated unfairly because of their race/ethnicity.</p> <p>How often do people treat you unfairly because of your race/ethnicity.</p>
English Skills	Scale	<p>How well do you speak English</p> <p>How well do you read English</p> <p>How well do you write English</p>
Personality	Scale	<p>I never met a person that I didn't like.</p> <p>I always win at games.</p> <p>I have never been bored.</p> <p>I never get annoyed when people cut ahead of me in line.</p> <p>I never get lost, even in unfamiliar places.</p> <p>I have always told the truth.</p> <p>My table manners at home are as good as when I eat out</p>

		<p>I have never lost anything.</p> <p>No matter how hot or cold it gets, I am always quite comfortable.</p> <p>It doesn't bother me if someone takes advantage of me.</p>
9-11 Impact	Scale	<p>Life affected as result of 911-losing my job</p> <p>Life affected as result of 911-reduction in family income</p> <p>Life affected as result of 911-more patriotic</p> <p>Life affected as result of 911-feel less safe</p> <p>Life affected as result of 911-treated unfairly due to race/appear</p> <p>Life affected as result of 911-less optimistic about future</p> <p>Life affected as result of 911-no longer cope with things</p>