GRANDMOTHER SOCIAL SUPPORT AND PSYCHOLOGICAL ADJUSTMENT IN
LATINA ADOLESCENT MOTHERS: CLARIFYING THE ROLES OF
ACCULTURATION AND CONFLICT

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by

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CHAPTER 1

Introduction

Latina adolescent mothers are a special population at particularly high risk for maladaptive outcomes. Latinos, in general, have the highest teen pregnancy rate of any group in the U.S. (77.4 per 1,000, 15-19 year olds), and comprise the fastest growing population segment in the U.S. (Hamilton, Martin, & Ventura, 2010; U.S. Census Bureau, 2000). They also hold a disproportionately low economic status as compared to other ethnic groups; more than one in four poor families in America are of Latino origin (Dalaker, 1999). It is projected that by the year 2020 Latinos will account for one in five U.S. children (Federal Interagency Forum on Child and Family Statistics, 2002). Despite this increasing representation in the U.S. population and the at-risk status of Latina adolescent mothers, there is currently a relative lack of empirical literature addressing and investigating the needs and vulnerabilities of this at-risk group.

Being a mother during adolescence places one at a significant degree of risk for a host of maladaptive outcomes. As a group, adolescent mothers are overrepresented on low socioeconomic status (Klerman, 1993) and are more likely to live in poverty or otherwise experience economic strain and reduced availability of adequate housing and healthcare with which it is associated. Additionally, adolescent mothers are at higher risk for dropping out of school than non-parenting adolescents (Klepinge, Lundberg, and
Plotnick, 1995). Moreover, they score higher on indices of psychological maladjustment such as depression (Reis, 1988) than adult mothers.

Despite the lack of research incorporating exclusively Latina adolescent mother samples, there is evidence indicating that adult Latina mothers as well as non-parenting Latino adolescents are at higher risk for maladaptive outcomes than their European counterparts. Bassuk and colleagues (1998) compared a sample of Puerto Rican and European American single mothers (15-58 years of age) on a number of demographic and psychological indices, and reported that the Puerto Rican mothers had more children, less education, fewer work experiences, fewer social supports, and more English language problems. Additionally, the Puerto Rican mothers reported more major depressive symptoms and were less likely to use traditional health services than the European American mothers (Bassuk et al., 1998). Latino adolescents themselves are at increased risk for lower levels of reading and mathematics achievement (Eamon, 2005), and experience the highest school dropout rates of all major ethnic groups (23.8%, as compared with 11.8% for African American and 6.8% for Caucasians) (U.S. Department of Education, 2006). These relations suggest that Latina adolescent mothers suffer a high-risk status for such maladjustment.

Given the level of risk faced by Latina adolescent mothers and, through extension, their families, it is important to determine what prevention and intervention measures may be implemented to reduce the risks for negative outcomes. Examining the role of naturally existing protective factors that may increase psychological resiliency is preferred. Naturally existing factors might prove easier to employ for protective
purposes, and would likely introduce less artificiality to a family system that might be resistant to or wary of intervention from outside sources (Barnett and Carey, 1993). The influence of social support as a protective factor has been an area of interest to investigators, and has been found to moderate the relation between a number of stressors and one’s individual adjustment (for a meta-analytic review, see Cohen and Wills, 1985). Social support will now be discussed in greater detail.

**Social Support**

Social support is an umbrella term for assistance or aid provided by, or perceived to be provided by, one or more individuals to another individual or group of individuals. This aid may vary by type, a number of which are described here (e.g., Cohen and Wills, 1985; Barrera, 1981). For example, emotional support refers to information indicating that a person is cared for or accepted (Dubow, Tisak, Causey, Hryshko, and Read, 1991). Tangible support refers to assistance such as transportation-related, financial, or other concrete aid such as food, clothing, or shelter. Cognitive guidance refers to informational assistance or advice. Positive feedback/social reinforcement refers to information indicating that one is esteemed and has done something that is liked by others. Social participation refers to engaging in relaxing or entertaining activities with others. Childcare assistance, a type of support unique to parenting individuals, refers to assistance in the day to day activities involved in child-rearing, such as babysitting, feeding, diaper changing, etc (Cabrera, Tamis-LeMonda, Bradley, Hofferth, and Lamb, 2000). The differences between these types of support serve to highlight the complexity involved in the social support construct.
Additional facets of social support include variations of the context in which the support is provided and who provides the support. Moreover, the perception of support by the recipient, and how valuable he or she views the support, is conceptually salient as well. In general, regardless of type, provider, and context, social support as a whole is largely considered throughout the literature as protective to the recipient (Cohen and Wills, 1985). Several recent studies, however, have reported findings that call into question the notion of the categorical adaptiveness of social support, especially with regard to adolescent parents and those from diverse backgrounds (Way & Leadbeater, 1999; Oyserman, Radin, & Saltz, 1994). The types and providers of social support vary by one’s nationality, ethnic identity, and generational standing, as well as subscription to cultural traditions and values (Hyun, Lee, Yoo, Cho, Yoo, et al., 2002). In addition, parenting adolescents are likely to possess unique, and sometimes opposing, support needs given their status as both parents and adolescents. These caveats underscore the importance of investigating aspects of social support and its correlates that are unique to Latina adolescent mothers, one of which involves the unique attributes of Latino support systems, which are discussed in greater detail below.

**Latino Support Networks**

Latino support networks differ notably in composition from those of European Americans in that Latinos tend to rely more heavily on family members for support than friends or acquaintances. European Americans, meanwhile, exhibit the opposite trend, seeking assistance from friends rather than family (Keefe, Padilla, & Carlos, 1979). In addition, and congruently, pregnant and parenting Puerto Rican adolescents report higher
levels of family support and closer family ties than do African American adolescents (Dore & Dumois, 1990).

Though Latinos tend to have large, close-knit social networks, they have a smaller number of people who provide them with emotional support (MacPhee, Fritz, & Miller-Heyl, 1996). For example, one study reported that 64% of a sample of Mexican Americans reported only seeking assistance from one relative (Keefe, Padilla, & Carlos, 1979). Regarding specific support sources, Mexican American women have a strong tendency to confide in other women, whether a mother, close sister, or a sister-in-law (Keefe, Padilla, & Carlos, 1979). Similarly, in contrast with European American adolescent mothers, Mexican American adolescent mothers report more daily contact with extended family members and perceive their own mothers as providing the most support (Becerra & de Anda, 1984; de Anda & Becerra, 1984). Congruently, grandmothers tend to be the largest providers of support to adolescent mothers (Voight, Hans, & Bernstein, 1996; Gee and Rhodes, 2003, Nitz, Ketterlinus, & Brandt, 1995). Grandmothers are influential on parenting quality (Chase-Lansdale, Brooks-Gunn, & Zamsky, 1994; Unger & Wandersman, 1988), specific adaptive parenting behaviors such as deciding whether to breastfeed (Hannon, Willis, Bishop-Townsend, Martinez, and Scrimshaw, 2000), and the mother’s individual well-being (Leadbeater & Linares, 1992; Spieker & Bensley, 1994). Given the associations with indices of both behavioral and psychological outcomes in adolescent mothers, grandmother support is a central variable of interest in the current study. Additional research concerning the relations between
parental support and adolescent outcomes is reviewed below, both for parenting and non-parenting adolescents.

**Support, Non-Parenting Adolescents, and Parenting Adolescents**

As mentioned previously, there is a general consensus as to the adaptive nature of social support on adjustment outcomes (Cohen & Wills, 1985). For example, Davalos, Chavez, and Guardiola (2005) interviewed 576 Mexican American and White non-Hispanic non-parenting adolescents (mean age = 16yrs). Results indicated that higher ratings of adolescent perception of parental school support (i.e., how often parents attended scholastic and athletic events, and perceived parental interest in the school environment) was associated with a lower likelihood of externalizing behaviors, such as the adolescent committing acts of vandalism and theft, and a lower likelihood of being convicted of a crime. Fraunglass and colleagues (1997) reported similar findings from a study of 236 predominantly Hispanic 8th grade students. The authors investigated the relations of family emotional support and peer modeling on adolescent illicit substance use and gang involvement. Findings indicated that emotional support from family members was associated with less influence of deviant peers on rates of tobacco and marijuana use. Additionally, Crean (2004) reported that emotional support from parents, peers, and school was negatively associated with internalizing and externalizing symptoms and positively associated with school competencies in 304 inner-city Latino 6th and 7th graders. Thus, higher levels of family support and involvement appear related to lower levels of maladaptive behaviors among non-parenting Latino adolescents.
The majority of the studies that have incorporated adolescent samples, however, including those reviewed above, rely on non-parenting adolescents. Parenting adolescents are likely to differ from non-parenting adolescents given their unique and sometimes conflicting roles as both parents and adolescents. As mentioned above, however, few related studies have been conducted utilizing Latina adolescent mother samples. As such, some generalization of findings from non-parenting adolescents, non-Latina adolescent mothers, and adult Latina mothers is necessary for the current study, despite the limitations thereof.

When reviewing research on adolescent parents, results are mixed as to the categorical adaptiveness of social support. For example, Nadeem, Whaley, and Anthony (2006) reported on the living arrangements and psychological adjustment of 304 low-income Latina adolescent mothers participating in a Women, Infant, and Children program. Living with the grandmother was associated with higher self-esteem for the adolescent mother, and lower depression scores for the English-speaking and bilingual adolescents, suggesting that grandmother residential support is adaptive. Leadbeater and Linares (1992) reported that low levels of family support predicted mother depressive symptoms in a sample of 120 poor, African American and Puerto Rican adolescent mothers. Gee and Rhodes (2003) reported that grandmother support appeared to buffer strain from negative partner interactions in a sample of 218 African American (95%) and Latina (5%) students attending a school for pregnant and parenting adolescents.

In contrast, Oyserman, Radin, and Saltz (1994) reported from their investigation of 107 adolescent mothers (62% White, 38% African American) that the degree of
grandmother support perceived by the adolescent mother was negatively associated with her own nurturing scores toward her child. Contreras (2004) reported similar results with a sample of Puerto Rican adolescent mothers. Increased grandmother involvement was related to greater negative affect displayed by the adolescent mother to her young child during a teaching task, when the adolescent mother lived with the grandmother. In addition, Way and Leadbeater (1999) reported findings from a sample of 93 African American and Puerto Rican adolescent mothers. The authors examined the effects of emotional, childcare, and tangible support (i.e., coresidence with the grandmother) provided by her family on the educational attainment of the mother 6 years postpartum. The authors reported that residence with the grandmother and higher levels of emotional support from family members were associated with less educational attainment for the adolescent mother. This family support, however, was also associated with lower levels of maternal life stress and depressive symptoms.

Thus, there is some indication that grandmother support is associated with both negative and positive adjustment in adolescent mother populations, though few studies have utilized Latina samples. A few studies have explored the influence of third variables that might moderate such an association. Contreras and colleagues (1999) reported results from an investigation of grandmother and partner support in the lives of 61 Puerto Rican adolescent mothers. Results indicated that greater grandmother involvement (including social support) was associated with less psychological symptomatology (i.e., Depression, Anxiety, Somatic, Hostility scales of the SCL-90) and parenting stress for mothers when mother acculturation was low, but more
symptomatology and parenting stress when acculturation scores were high. Given these results that suggest grandmother support may be more or less beneficial for an adolescent mother depending on her level of acculturation, acculturation therefore becomes a variable of interest of the current study as a potential moderator. Acculturation, its counterpart enculturation, and issues of conceptualization and measurement are discussed in greater detail below.

**Acculturation**

Acculturation refers to the cultural changes that occur at both the group level and the individual psychological level from sustained contact between two or more distinct cultures (Berry, Trimble, & Olmedo, 1986). When applied to investigations of minority cultural groups, it generally refers to the degree to which an individual or group internalizes characteristics of the dominant or adoptive culture, including values, beliefs, and behaviors (e.g., becoming “Americanized,” in the case of the current study). The term enculturation refers to the degree to which these and other characteristics of the heritage-culture are retained and internalized by a group or individual.

Historically, the construct of acculturation/enculturation has been conceptualized as a unidimensional continuum with heritage-culture specific characteristics on one end and those of the adoptive culture on the opposite end of the continuum (Gonzales, Fabrett, & Knight, 2009). This unidimensional view appears reasonable when one considers, for example, the largely dichotomized nature of historically primary constructs of interest in literature involving immigrant groups and ethnic/cultural minorities (e.g., collectivism and individualism). Recently immigrated Latino families, for example, are
likely to endorse relatively high levels of enculturation and low levels of acculturation, identifying with values and traditions of their home country, which for most Latinos are more collectivistic, traditional, conservative, and family-oriented than those of mainstream European American society (Quinones-Mayo & Dempsey, 2005). By nature of its unidimensional conceptualization, this model of acculturation/enculturation regards cultural facets as opposed and exclusive, as internalization of adoptive cultural elements requires abandonment of the origin-culture counterparts. This very issue, it has been argued (Berry, 2005), is a notable weakness of the model, as investigations have revealed the presence of individuals who score highly on indices of both acculturation and enculturation, reflecting internalization of features important to both heritage and adoptive cultures, and calling into question the accuracy of a unidimensional conceptualization.

In light of these findings, subsequent conceptual evolution of the construct, largely a result of Berry’s (e.g, 1980; 1986) writings, led to a broader perspective that viewed heritage-culture and adoptive-culture characteristics as potentially co-existing, and thus belonging on separate dimensions. Such an evolution provided a method by which to address those individuals who both internalized cultural elements of the adoptive culture and retained much of the heritage culture’s characteristics, as well as those who endorsed low levels of both. Additionally, it accounted for other cultural elements (e.g., food and media preferences, ethnic identity, observed holidays, friendships with both Anglos and Latinos) that may not be as easily, or appropriately, conceptualized within a mutually exclusive single dimension.
By conceptualizing acculturation/enculturation as a bidimensional construct, it becomes possible to add greater fidelity to research on the topic, particularly when investigating associations with adjustment outcomes. Though Berry and others subsequently developed high/low cutoffs for each dimension for purposes of creating combined acculturation/enculturation categories (i.e., bicultural/integrated, assimilation, separation, and alienation), a number of criticisms (that are beyond the scope of this paper) have been raised regarding the statistical and conceptual appropriateness of employing such a categorical model (e.g., Rudmin, 2003; Unger, Ritt-Olson, Wagner, Soto, and Baezconde-Garbanati, 2007). As such, it appears prudent to consider acculturation and enculturation as variables distinct from one another, and to examine separately the influence of each. Additional issues regarding acculturation research are presented below that illustrate the complex and evolving nature of the construct and its assessment.

**Additional issues in acculturation research.** As the state of the literature has progressed, there remains significant disagreement as to the most appropriate method by which to measure acculturation and enculturation (hereafter collectively referred to as Acculturation, for simplicity). Increasingly, studies have broadened the type and number of assessed facets of Acculturation (i.e., cultural facts, ethnic identity, language spoken, beliefs, values, communication styles, identity, cognitive styles, etc.) in attempt to more comprehensively assess the construct. Depending on the specific dimensions studied, the manner by which they are assessed, and the outcomes targeted, however, results of studies investigating the effects of Acculturation vary substantially (Gonzales, Fabrett, &
Knight, 2009), and correlations between the instruments themselves have been found to be wanting (Unger et al., 2007). As such, while the use of more comprehensive acculturation measures may better capture the complexity inherent within the construct, consideration should be placed in the generalization of results, taking into account the content of the scale items, the unidimensional versus bidimensional makeup of the utilized scales, and the dimensions of Acculturation they purport to measure. Related and additional issues in Acculturation research are discussed below.

**Proxy measures.** In efforts to most efficiently determine an individual’s level of Acculturation, brief proxy measures have been developed and utilized that consist of one to several items highly correlated with existing Acculturation measures, with two of the more commonly used being 1: primary language spoken and 2: generation/number of years spent in the U.S. Conceptually, both of these variables would be presumed to relate to Acculturation level, as absence of the ability to speak English would preclude involvement with, and subsequent internalization of, many mainstream U.S. cultural elements. Though there is evidence of these proxy variables accounting for a significant portion of variance in measures of Acculturation (Serrano & Anderson, 2003), it has been argued that they fail to capture other important cultural aspects such as appreciation of cultural material from the origin culture and adoptive culture (e.g., history, art, music, foods, holidays), identification as a member of one or both cultures, and socialization preferences with individuals from one or both cultures (Unger et al., 2007). Additionally, it has been asserted that certain facets of Acculturation, such as ethnic/cultural identity and values, may change relatively slowly, whereas aspects of language acquisition are
more rapid (Phinney, 2006; Knight, Jacobson, Gonzales, Roosa, & Saenz, 2009), encouraging further caution in relying solely upon proxy variables. Nonetheless, much of the existing literature incorporates the two proxy variables mentioned above as indices of Acculturation (Gonzales, Fabrett, & Knight, 2009; Guilamo-Ramos, Jaccard, Johansson, & Turrisi, 2004).

**Group heterogeneity.** Significant heterogeneity exists both within and across cultural subgroups (in the case of this study, Latino subgroups). Latinos endorse cultural beliefs, values, and behavioral practices that vary (sometimes significantly) both across nation of origin (i.e., Mexico, Cuba, Puerto Rico, etc.), as well as between and within regions of the same nation. As such, it is ill-advised to generalize cultural descriptions of one Latino subgroup to another without qualification, and participant characteristics should be taken into careful consideration prior to attempts to do so. Congruently, the majority of Acculturation research neglects to account for similar heterogeneity within the adoptive culture, which has led to charges of tacit implication that the adoptive culture is viewed in the literature as “composed of a single, monolithic culture” (Unger et al., 2007), when in fact it is multicultural itself, with individuals frequently exposed to influence from a variety of cultures.

These heritage and adoptive cultural variations mentioned above may impact the degree and ease to which an immigrating Latino group adapts to mainstream culture, and thus impact the degree and ease to which acculturation occurs. In receiving states and gateway cities in which larger numbers of Latino immigrants first take up residence in the U.S., as well as in areas of the U.S. that have a higher percentage of Latinos, the regional
adoptive culture may be significantly more similar to the heritage culture, or more receptive to immigrant groups, than in other “less Latino” areas of the U.S. This may result in variations in the political and social capital developed in the adoptive culture, and subsequent agency held within the community, by Latino groups (Portes & Zady, 2002). These issues further complicate Acculturation research, in that instruments developed in one area of the country may not produce comparable results when administered to individuals in another area of the country.

Despite acknowledging the heterogeneity of Latino groups from differing national backgrounds, and the caveats of generalizing results between these groups, significant pragmatic difficulties exist given the compositional limitations of the extant literature. Put simply, there is insufficient research using Latina adolescent mother samples, let alone samples by separated by national subgroup, on which to rely for the current study. As such, the author has taken liberties by generalizing results from arguably disparate samples to inform the current study, though with transparency regarding the methodological limitations of this practice.

**Parent-adolescent acculturation discrepancy.** Several Acculturation studies, particularly those involving child and adolescent participants, have taken interest in what influence differing levels of Acculturation between parent and adolescent may have on adolescent outcomes. For example, as immigrant parents raise children who grow and develop immersed in the U.S., discrepancies between parent and child acculturative levels are likely to be present, with parents more likely to retain greater enculturated (and lower acculturated) status, and children displaying higher levels of acculturation (Romero
& Roberts, 2003; Quinones-Mayo & Dempsey, 2005). “Acculturation gap” theorists posit that the larger the discrepancy between parent and adolescent Acculturation levels, the greater the risk for adolescent maladjustment. In a study of Latino adolescents, for example, increases in parent-child acculturation discrepancy (with adolescents perceiving that their parents wanted them to be more Latino than they actually were) were associated with an increased risk of substance use (Unger, Ritt-Olson, Wagner, Soto, & Baezonde-Garbanati, 2009). One line of reasoning suggests that a large discrepancy may reflect the presence of a parent who may have a reduced ability to navigate aspects of the adoptive culture (e.g., due to a reduced English language ability), and thus the ability to guide and monitor the child outside of the home (i.e., to interact with school/teachers, monitor a child’s associations with English-speaking peers, etc.), which may increase risk for poor school performance, substance use involvement, and other negative outcomes (e.g., Smokowski, Buchanan, & Bacailao, 2009; Eamon, M. K. & Mulder, C., 2005). A second theorized pathway suggests that Acculturation gaps may reflect differences in core beliefs and values between parents and adolescents (e.g., respect toward parent directives and family obligation versus adolescent independence and autonomy) that may foster intergenerational relationship strain that leads to adolescent maladjustment (Szapocznik & Kurtines, 1993). This social strain-related pathway is of particular interest to the current study, given existing associations with psychological maldadjustment. However, despite the conceptual rationale for the influence of a parent-child acculturation gap in predicting adolescent adjustment outcomes, empirical findings have been mixed as to whether an acculturation gap is the most appropriate explanation. In an investigation of
non-parenting Latino adolescents, Pasch and colleagues (2006) reported that greater frequency of one facet of relationship strain, that of parent-adolescent conflict (i.e., unpleasant disagreements), was highly related to maladaptive adolescent outcomes, including higher levels of anxiety, anger, depression, school misconduct, and substance use. The greatest degree of conflict, however, was found among parent-teen dyads in which both individuals scored highly on acculturation, suggesting that acculturation gap, per se, may not be as important as adolescent acculturation status alone in predicting conflict and subsequent maladjustment. As the acculturation measure utilized in this study was a language-based, unidimensional measure, however, further examination of these proposed associations are warranted, particularly among parenting Latina adolescents.

Conceptually, the greater the acculturation level of an adolescent, the more independence and autonomy she is likely to seek and expect. This need, though a developmentally appropriate transition for adolescents in mainstream U.S. culture (Arnett, 1999), may lead to reductions in expressed obedience and respect toward parents (Gonzales-Ramos et al., 1998), both traditional Latino values. Considering that Latino American parents generally exert greater control over their older children and adolescents and expect more obedience from them (Bulcroft et al., 1996; Fuligini, 1998) than European American parents, this may result in conflict with or resentment held toward the mother, especially if the adolescent is dependent on the mother for support. Moreover, this association may be stronger among parenting adolescents, who require additional supports related to their parenting role (e.g., such as child care provision).
Such relationship strain potential is conceptually less likely to occur among adolescent mothers who are relatively less acculturated (and more enculturated), as they are likely to place less importance on obtaining levels of autonomy similar to their Anglo peers, and greater value on family interdependence and mutual support provision (Contreras et al., 2002).

Given these described issues, both adolescent mother Acculturation and intergenerational relationship strain are considered potential moderators in the relation between social support and Latina adolescent mother psychological adjustment. The relationship strain construct is discussed in greater detail below.

**Grandmother-Mother Relationship Strain**

Though positive aspects of social support, as described above, are reported to be protective against maladaptive outcomes (Cohen & Wills, 1985), negative aspects of relationships can be a source of strain that are positively related to maladaptive psychological outcomes (Kiecolt-Glaser, Dyer, & Shuttleworth, 1988; Rhodes & Woods, 1995), and indeed may be more strongly related to well-being than positive social interactions (Rook, 1984; Fiore, Becker, & Coppel, 1983). Relationship strain is an umbrella term that, as a construct, has historically included related elements including conflict, unmet expectations/disappointment, intrusiveness/dominance, and criticism (Rook, 1984; Rhodes & Woods, 1995).

A number of investigations of grandmother involvement and adolescent mother functioning have examined elements of the grandmother-adolescent mother relationship, in that grandmother support may be adaptive only in the context of a healthy relationship
with the adolescent mother. Indices of grandmother-adolescent mother relationship strain, as mentioned above, have included conflict (Pasch et al., 2006; Hess, Papas, & Black, 2002) and levels of individuation and autonomy (e.g., lower levels of grandmother intrusiveness and dominance) present in the relationship (Wakschlag, Chase-Lansdale, & Brooks-Gunn, 1996). Generally, the more relationship strain (characterized by conflict, criticism, absence of independence, etc.) that exists in adolescent mothers’ lives, the less positive their adjustment (e.g., lower levels of adaptive parenting behaviors; Nitz, Ketterlinus, & Brandt, 1995). Grandmothers, being the most frequent provider of support (Nitz, Ketterlinus, & Brandt, 1995), are also likely to be frequent sources of strain given their proximity to, and the frequency of contact with, the adolescent mother, who is likely to rely on the grandmother for aid. White investigations involving Latina adolescent mother samples do not exist, several studies have provided evidence supporting the existence of such an association samples of adult and adolescent African American parents.

Using a sample of 96 multigenerational African American families, Wakschlag, Chase-Lansdale, and Brooks-Gunn (1996) analyzed several facets of the quality of mother-grandmother relationships, from which four factors emerged; Emotional Closeness, Positive Affect, Grandmother Directness, and Individuation. The authors noted that these factors, in particular Individuation, which was defined as a balance of autonomy and mutuality, were consistently and positively related to the mother’s parenting behavior, especially among mothers younger than 19 at the birth of the first child. Additional studies have reported complementary findings. Hess, Papas, and Black
(2002) reported that adolescent mother age, school grade, positive self-esteem, and positive adolescent mother-grandmother relationships (characterized by autonomy and mutuality), were associated with better parenting satisfaction and parenting efficacy.

In addition to parenting outcomes, elements of the grandmother-adolescent mother relationship are associated with indices of adolescent mother psychological adjustment. For example, results from a study of 194 predominantly low-income adolescent mothers from various ethnic backgrounds indicated that aspects of relationship quality (measured by a ‘family cohesion’ composite of degree of closeness in the relationship, degree of being respected by the family member, and viewing the family member as a confidant) coupled with grandmother coresidence, but not coresidence alone, was negatively associated with depressive symptoms (Kalil, Spencer, Spieker, & Gilchrist, 1998). Additionally, Gee and Rhodes (2003) reported results of an investigation of 218 African American (95%) and Latina (5%) students attending a school for pregnant and parenting adolescents. Reported findings indicated that grandmother support may serve as a buffer against negative psychological effects of strain in adolescent mothers’ relationship with their children’s fathers, though noted that conflictual grandmother-adolescent mother relationships did not serve such a protective role. Further support for the impact of facets of relationship strain on adolescent mother psychological adjustment comes from Caldwell and Antonucci (1997), who reported results of an investigation of 48 African American and Caucasian adolescent mothers (mean age 17.4 years) concerning the relations between adolescent mother depressive symptoms, self-esteem, and adolescent mother/grandmother relationship strain (i.e., level of grandmother-
adolescent mother conflict). Results indicated that parental relationships with lower levels of conflict were associated with lower depressive symptom ratings by the adolescent mothers.

These studies provide support suggesting that healthy grandmother-adolescent mother relationships (i.e., with less relationship strain) are associated with greater adolescent mother adjustment, both in psychological and parenting-related domains. The studies reviewed above, however, primarily involve African American adolescent mothers. Though the few studies incorporating Latina adolescents consist primarily of non-parenting samples, they provide similar results that highlight the adaptive nature of reduced intergenerational relationship strain. For example, an investigation of non-parenting Latina adolescents reported that those who attempted suicide were significantly more likely to describe relationships with their mothers as having less mutuality (i.e., reciprocity of bidirectional feelings, thoughts, and activities) and communication than those who had no attempt history (Zayas, Bright, Alvarez-Sanchez, & Cabassa, 2009). Additionally, in a study of Mexican immigrant families, mother-adolescent daughter conflict was associated with greater daughter depressive symptoms, problem behavior (e.g., skipping school, smoking), deviant peer affiliation, and lower GPA (Updegraff et al., 2009). A goal for the current study is to examine how facets of relationship strain, including disappointment, intrusiveness, criticism, conflict, and dominance, relate to parenting Latina adolescents and their own mothers. And, given the findings described in this section, it is possible that relationship strain may be responsible for any observed
moderating effect of Acculturation. This possibility is an additional question that was addressed in the current study.

Summary

The current state of the literature regarding the associations between grandmother social support and adolescent mother adjustment is sparse, and results are somewhat mixed, depending on outcome observed, as to the direction and degree of adaptiveness of the support. In addition, there is significant difficulty in aggregating existing results for generalization to Latina adolescent mother populations. For example, the types of support measured differ from study to study. Global versus type-specific social support, as well as differing combinations of tangible, emotional, cognitive, and other types of support make it difficult to draw comparisons between results of separate studies.

Additionally, few studies have utilized exclusively Latina adolescent mother samples (as in Contreras et al., 1999). The available studies reviewed above have largely used Latino adolescents (e.g., Davalos, Chavez, and Guardiola, 2005), African American adolescent mothers (e.g., Way and Leadbeater, 1999), or adult Latina mothers (e.g., La Roche, Turner, & Kalick, 1995). Despite these caveats, however, there is a growing body of literature suggesting that there can be negative associations between grandmother support and adolescent mother adjustment. Given the barriers to generalizing results to other populations, it is important to determine whether these findings exist among Latina parenting adolescents and their mothers, and what variables might influence these associations.
A third limitation of the extant literature involves clarifying associations between grandmother support and adjustment outcomes. Specifically, it is important to distinguish between behavioral and psychological adjustment outcomes. Previous investigations have demonstrated that psychological adjustment, for example, is not always associated with adjustment in other domains (e.g., educational attainment; Way and Leadbeater, 1999). The adolescent mothers in the Way and Leadbeater (1999) study endorsed high levels of emotional support from their mothers, though perhaps to the exclusion of higher academic expectations and demands that would motivate the adolescent to seek continued education. Moreover, though support has been associated with other positive adolescent mother outcomes such as increased self-esteem and reduced depression (Nadeem et al., 2006; Leadbeater & Linares, 1992), as well as partner relationship strain (Gee & Rhodes, 2003), it is also associated with poorer parenting behaviors (Oyserman et al., 1994; Contreras, 2004). These mixed nature of the adaptiveness of these findings highlights the possibility that social support may have positive influences in one domain, yet serve to foster negative outcomes, or prevent adaptive development, in a second domain.

A fourth limitation with the existing literature involves the assessment of acculturation and enculturation. As mentioned above, there is conceptual and methodological variation in how best to measure this complex construct. Though much of the literature has relied upon unidimensional or proxy measures of acculturation/enculturation, recent criticisms of these methods call into question the appropriateness of such methodology. In order to clarify potentially distinct and differential relations with support and adjustment outcomes, it is recommended that
acculturation and enculturation be considered separate entities and examined as such. Additionally, though there exists some evidence suggesting acculturation and enculturation may influence associations between support and adjustment outcomes through related intergenerational relationship strain, there has yet to be an investigation examining this possibility, and certainly none involving Latina adolescent mothers.

The Current Study

The current study examined the relation of grandmother social support with adolescent mother psychological adjustment. Psychological adjustment was chosen as the preferred outcome variable, as opposed to employing a more global mix of behavioral and psychological adjustment indicators, due to previously mentioned findings in which the adaptiveness of social support differed as a function of type of outcome assessed.

Second, the current investigation examined the influence of acculturation and enculturation on adolescent mother psychological adjustment, in an attempt to further clarify the associations between the constructs and outcome. In addition, indirect influences of acculturation and enculturation on the relation between grandmother support and adolescent mother psychological adjustment were examined in an attempt to replicate findings by Contreras (1999), in which greater grandmother support was related to poorer adolescent mother adjustment when Acculturation was high, and greater adjustment when Acculturation was low.

To expand on the existing literature, mother-grandmother relationship strain was also examined, specifically regarding both the direct association with psychological maladjustment (Pasch et al., 2006) and indirect influence on the association between
grandmother support and psychological adjustment. Regarding this possible indirect
effect, it was predicted that a presumed negative association between grandmother
support and psychological adjustment would be attenuated or reversed if the adolescent
mother described her relationship with the grandmother to have higher levels of strain
(Kalil, Spencer, & Gilchrist, 1998; Pasch et al., 2006). Mothers who reported a more
amicable relationship with the grandmother were predicted to indicate negative
associations between support and psychological symptomatology (Pasch et al., 2006).
Moreover, it was predicted that this relationship strain would account for any previously
indicated moderating influence of acculturation/enculturation on the association between
support and adjustment. As discussed previously, mothers who score highly on
acculturation are likely to seek greater independence and autonomy from their parents, as
is developmentally appropriate for mainstream U.S. adolescents (Contreras et al., 2002).
However, their status as young mothers is likely to prevent the obtainment of this when
compared to non-parenting adolescents, especially if they are reliant on the grandmothers
for significant support provision (Contreras et al., 2002), thus potentially contributing to
relationship strain and subsequent adolescent mother psychological adjustment
difficulties.

**Hypotheses**

The following hypotheses are presented (refer to Figure 1):

**Hypothesis 1.** In attempt to replicate existing findings (Contreras, 1999), it is
predicted that a) acculturation and b) enculturation will moderate the association between
grandmother support and adolescent mother psychological maladjustment. Specifically, it
is predicted that the association between grandmother social support and adolescent mother psychological symptomatology will be increasingly positive (i.e., reflecting poorer adjustment) when mothers endorse greater levels of acculturation, and increasingly negative (i.e., reflecting greater adjustment) when mothers endorse greater levels of enculturation.

**Hypothesis 2.** In attempt to extend existing findings (e.g., Kalil, Spencer, Spieker, & Gilchrist, 1998) to Latina adolescent mothers, it is predicted that the presumed negative association between grandmother support and adolescent mother psychological symptoms (i.e., reflecting greater adjustment) will be attenuated or directionally reversed when greater relationship strain is present. That is, when the relationship is strained, grandmother support will be associated with greater adolescent mother maladjustment.

**Hypothesis 3.** In attempt to consolidate existing findings (i.e., Hypotheses 1 and 2), it is predicted that, with the direct influence of relationship strain controlled for, a) acculturation and b) enculturation will demonstrate reduction in the strength of any observed moderating effects on the association between grandmother support and adolescent mother psychological maladjustment. Moreover, c) relationship strain will continue to moderate the association between grandmother support and adolescent mother psychological maladjustment after controlling for the direct influence of acculturation and d) enculturation.
CHAPTER 2

Methods

The primary goal of this study was to investigate the relation between grandmother social support and Latina adolescent mother psychological adjustment, as well as potential direct and moderating influences of relationship strain, acculturation, and enculturation.

Participants

The data used in the current study was collected as part of a larger, multi-wave NICHD-funded investigation of Latina adolescent mothers and their young children (Maternal Behavior Among Puerto Rican Adolescent Mothers; NICHD R01, 2006-2011). The addition of measures specific to the current study were approved by the Kent State University Institutional Review Board on February 2, 2007 (IRB log# 04-048). Overall participant inclusion criteria consisted of the following: a mother who self-identified as being of Latina origin and who was parenting a child whom she delivered while an adolescent (13 to 19 years of age). The child was required to have no current major physical or medical disabilities, no major medical problems at birth, a gestational age of not less than 35 weeks, and a birth weight of no less than 2400 grams. The overall resulting sample size was 150 participants.

Most participants (79.4%) in the overall participant sample were recruited in the waiting rooms of pediatric clinics serving the Latino neighborhoods in a large
Midwestern city. The remaining participants were referred either by friends/relatives or self (14.7%) or by professionals or others in the community (6%). Out of 246 eligible individuals, 11 did not agree to be enrolled in the study on first contact. The remaining 235 enrolled to participate in the study. Of those enrolled, 63 individuals were lost because they moved away (20.6%), could not be located after first contact (28.6%), refused to participate when contacted (7.9%), or had scheduling problems that prevented them from participating while their children met the age criteria for study inclusion (42.9%). Of the remaining 172 enrolled participants, data had been collected from 150 at the time of the present analyses; the remaining 22 remain had enrolled but their respective children had not yet met the age criteria and were scheduled for inclusion once the child reached 18 months of age.

Additional inclusion criteria specific for the current study was the requirement that an adolescent mother endorse both currently having a mother figure (who may or may not be her biological mother) in her life, and nominated that person as a social support source. Both Spanish and English speaking mothers were accepted into the sample. Although any Latino background was acceptable for the current study, the resulting majority of participants were expected to be of Puerto Rican background, given the demographic makeup of the Latino community of the region. The addition of these additional inclusion criteria resulted in a final sample size of 129. All analyses were conducted using this final sample.

**Procedure**

Participants were visited in their homes by two bilingual, female experimenters.
The visits were scheduled at the convenience of the mothers. Participants were asked to make the appointment for the visit at a time when it was possible to conduct the interview and videotaping in private and when it was unlikely that someone would be present with whom they would feel uncomfortable overhearing the interview or witnessing videotaping.

At the home visit, signed consent from the participants and their parent/guardian (if the participant was younger than 18 years old) was secured prior to data collection. After an initial period for the child and the mother to become comfortable with the experimenters, and the administration of several instruments and videotaped tasks not included in the current study, one of the researchers administered the measures of the current study to the mother using a computer-assisted interview format in the language of the participant’s choice. In the final sample, nearly sixty-nine percent (68.2%) of mothers completed the questionnaires in English, and the remaining 31.8% in Spanish. The second experimenter monitored and cared for the child, as needed, to facilitate the mother’s engagement in the interview. Completion of the entire interview took approximately 45 minutes. Questions were read aloud in the preferred language to control for participant reading ability. Participants had the choice of responding either aloud or by pointing to the response options that were printed on a set of response cards.
Researchers were trained to detect potential conflicts or adverse events and to address them sensitively in order to prevent adverse consequences for the adolescent (e.g., being criticized by a partner for her responses). The entire home visit lasted approximately three hours per participant. For her participation, each participant received $70, a copy of
the video footage obtained during the home visit, and a small toy for her child after completion of the assessments.

**Measures**

To obtain a sample representative of a wide range of acculturation/enculturation levels, all measures and recruitment materials were translated into Spanish so that all Latinas who were not proficient in English, and hence more likely to be relatively less acculturated and more enculturated, could participate. Prior to initiation of data collection, a bilingual translator translated the measures into Spanish. The linguistic equivalency of the Spanish version was then examined and ensured by a team of Latina researchers from Puerto Rico and other Central and South American countries of origin (Brislin, 1970). Several of the measures used in the current study were subjected to this process as part of earlier investigations. All measures were self-report and completed by the adolescent mothers. The measures are detailed in the Appendix.

**Demographic variables.** A set of fixed-format questions were used to gather the following demographic information: 1) child variables: age, gender, and birth order; 2) mother variables: age, school status, work status, country of cultural origin, country of birth, number of years lived in the U.S., immigration generational status, use of daycare services, educational level, whether she was currently pregnant, and receipt of federal financial assistance.

**Economic strain.** A nine-item self-report index of economic strain (Pearlin, Menaghan, Lieberman, & Mullan, 1981) was administered to all participants. Due to established associations between economic strain, a facet of socioeconomic status, and
adjustment outcomes (e.g. Wadsworth & Compas, 2002), it is important to ensure that observed associations between substantive study variables are not due to economic strain. Item content included, for example, difficulty paying bills; not having enough money for food, housing, medical care; etc. Items were rated on a 4-point scale reflecting the frequency with which they are experienced (never to always). Test-retest reliability of the measure has previously been reported to be adequate (mean coefficient $r=.79$) (Pearlin et al., 1981), and good internal consistency has been previously reported ($\alpha=.82$; $n=54$) in a separate sample of Latina adolescent mothers (Rhodes, Contreras, & Mangelsdorf, 1994). For the current sample, the internal consistency of scale items was also adequate ($\alpha=.82$ for total sample; $\alpha=.84$ for English speakers; $\alpha=.77$ for Spanish speakers).

**Negative Life Events.** Due to the potential effects on psychological symptomatology, negative life events were measured using a modified version of the Life Events Survey (Sarason, Johnson, & Siegel, 1978) that was adapted for use with young minority mothers using a focus group (Rhodes, Ebert, & Fisher, 1992). The scale is composed of a series of questions regarding the occurrence of specified stressful events within the last year (e.g., got divorced; experienced serious injury or illness, gave birth to a child). Participants rated the nature of the events they endorsed on a five-point Likert scale ranging from 1 (extremely negative) to 5 (extremely positive). Scores for events that were rated as negative were summed and weighted such that extremely negative events carried more weight than those rated as merely negative. Adequate reliability has been found for this questionnaire (Sarason, Johnson, & Siegel, 1978). Weighted scores obtained in the current sample ($M = 3.92$; $SD = 3.35$) were lower than, but similar to,
scores obtained in another sample of Latina adolescent mothers (M = 5.4; SD = 4.06; Contreras, 2004).

**Support from grandmothers.** The Social Support Network Questionnaire (SSNQ), a modified version of the Arizona Social Support Interview Schedule (Barrera, 1981; Gee & Rhodes, 2007), was used to assess support from the participants’ mothers (i.e., referred to as grandmothers in the current study). Participants were asked to nominate persons who they perceived as available to provide each of six types of support: emotional support, tangible assistance, cognitive guidance, positive feedback/social reinforcement, childcare assistance, and social participation. For each type of support, perceived availability of support from grandmothers was recorded. To derive a summary variable reflecting extent of social support perceived from grandmothers, the number of types of support for which she was perceived to be available was totaled. Thus, the extent of social support variable ranged from 0 (the individual was not available to provide support) to 6 (the individual was available to provide all six types of support).

Adequate reliability and validity have been demonstrated for this instrument (Gee & Rhodes, 2007), which has been previously used with samples of Latina adolescent mothers (Contreras, et al., 1999). These variables have also shown conceptually meaningful associations with both parenting adjustment and psychological functioning among young Latina mothers (Contreras, Lopez, et al., 1999; Contreras, Mangelsdorf, et al., 1999). For the current study, evaluation of internal consistency of the scale indicated somewhat poorer values than would typically be desired, though its structure as a global measure of availability of distinct support types lends it sufficient conceptual flexibility
to retain inclusion in the current study. Cronbach’s alphas were calculated for the total sample (α = .66; n = 129), as well as for English (α = .65; n = 88) and Spanish-speaking participants (α = .70; n = 41).

**Support from partner/child’s father.** The same perception of available support items from the SSNQ that were used to assess grandmother support were also used to assess for perception of available support from the adolescent mother’s current partner and/or the child’s father. It is conceptualized that additional support received from the partner or child’s father may impact associations between grandmother support and mother psychological adjustment. As such, partner/child father support was assessed for possible inclusion as a control variable. Previous studies using the same composite from the SSNQ in samples of Latina adolescent mothers have found good reliabilities (Contreras, Mangelsdorf, et al., 1999). As with the grandmother support variables, internal consistencies were calculated using data provided by mothers if they endorsed either their current partner or the child’s father as a source of support (n = 100). It should be noted that no mother endorsed perceiving support as available from both individuals. Cronbach’s alphas were calculated for the resulting 100 mothers in the final sample (α = .84), as well as for English (α = .86; n = 65) and Spanish-speaking participants (α = .78; n = 35).

**Acculturation.** An adapted version of the Acculturation Rating Scale for Mexican Americans –II (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995) was used to assess the Acculturation construct. The ARSMA-II is a 30-item Likert-type bidimensional scale that separately measures acculturation and enculturation along 3
primary factors: language, ethnic identity, and ethnic interaction. The ARSMA-II has been adapted for use with all Latino groups (Cuellar, Arnold, & Maldonado, 1995). The version used in the current study replaces the original term “Mexican” with “Latino” or “Latina.” The ARSMA-II measures orientation toward the Latino culture and the Anglo culture independently using two subscales: a 17-item Latino Orientation Subscale (LOS) and a 13-item Anglo Orientation Subscale (AOS). Previous psychometric data indicated that the LOS has a Cronbach’s alpha of .88 while the AOS is .83. Though the two subscales are commonly combined into an overall acculturation score, due to the conceptual weaknesses of unidimensional approaches to Acculturation research, the LOS and AOS were retained as separate scales. The current study revealed good internal consistency for both English ($\alpha = .86; n = 88$) and Spanish ($\alpha = .88; n = 41$) administrations of the LOS ($\alpha = .87; n = 129$) as well as the AOS (English $\alpha = .82, n = 88$; Spanish $\alpha = .89, n = 41$; Total sample $\alpha = .93, n = 129$).

**Grandmother-adolescent mother relationship strain.** The following scales were administered to study participants in an effort to assess strain in the grandmother-adolescent mother relationship. As discussed previously, relationship strain is a complex construct composed of numerous facets that may each provide unique contributions to an overall strain level. The current study aimed to measure strain from a broad perspective, and incorporated scales assessing dimensions empirically and conceptually linked to adjustment outcomes.

**Problematic social ties – SSNQ.** The Problematic Social Ties (PST) scale of the SSNQ was administered to assess various facets of strain in the grandmother-adolescent
mother relationship. Using a 5-point scale (1 = never, 3 = sometimes, 5 = always), the measure assesses the frequency with which the respondent experiences Disappointment (e.g., broken promises, not coming through when most needed), Intrusiveness (e.g., butts into your business, bosses you around), Criticism (e.g., puts you down, criticizes you), and Conflict (e.g., fights, strong disagreements) in each relationship. Previously, when combined, these scale items have shown adequate internal consistency among Puerto Rican adolescent mothers (alpha = .81). They have also demonstrated significant relations with maternal characteristics (e.g., psychological distress, acculturation) and maternal behavior (Contreras et al., unpublished data). The current study revealed adequate intercorrelations between scale components (correlations ranging from .32 to .54; p’s < .001) and adequate internal consistency for the composite English (α = .72; n = 88) and Spanish (α = .73; n = 41) administrations (Total sample α = .72; n = 129). Given possible conceptual arguments that the PST scale components may be measuring unique, but related facets of relationship strain, the distribution of the comprising elements (i.e., Disappointment, Intrusiveness, Criticism, Conflict) were examined and ensured prior to scale construction through mean calculation. The Criticism item was subjected to a corrective square-root transformation due to non-normal distribution.

**Relationship satisfaction question.** A single item explicitly assessing the adolescent mother’s global satisfaction with the grandmother figure in her life was administered. Responses ranged from 1 (Very satisfied) to 4 (Very dissatisfied).

**Network of Relationship Inventory – Dominance scale.** An adapted version of the Dominance subscale from the Network of Relationship Inventory – Revised (NRI-R;
Furman and Buhrmeister, 1985) was administered to the mothers. The Dominance scale consists of three items that assess how frequently (e.g., 1: Never or almost never, to 5: Always) the grandmother (or nominated maternal figure) “gets her own way” or otherwise dominates the adolescent mother. The scale items were adapted by the author to refer specifically to childcare decision-making, as opposed to a more global assessment of dominance (e.g., “With regard to making decisions about how to parent your child, how often does your mother get her own way when you two do not agree?”). The inclusion of this parenting-related facet is salient given the unique circumstances of parenting adolescents that traditional indices of social strain might overlook. The NRI-R has been adequately validated (Furman, 1996), and has previously demonstrated high levels of internal consistency with Latina adolescents (Cronbach’s α ranged from .83 -.95; Kuttler & La Greca, 2004). The current study revealed good internal consistency for both English (α = .82; n = 88) and Spanish (α = .81; n = 41) administrations (Total sample α = 0.82; n = 129). The scale was subsequently subjected to a corrective square-root transformation due to non-normal distribution.

**Derivation of relationship strain composite.** To create an overall composite for grandmother-adolescent mother relationship strain, the scores from the Problematic Social Ties scale of the SSNQ, the Dominance scale from the NRI-R, and the Relationship Satisfaction Question (reversed) were examined. The single-item relationship satisfaction item demonstrated a notably skewed distribution, with many mothers reporting being “very satisfied” with their relationship with the grandmother figure, that could not be corrected via logarithmic or square-root transformation attempts.
Upon further consideration the item was judged as possessing strong demand characteristics that likely influenced mothers’ responses in this direction. Generally, children of Latino families are discouraged from voicing blanket dislike or dissatisfaction toward a matriarch figure. Given the possible influence of these demand characteristics, as well as the poor score distribution, the single-item relationship satisfaction question was discarded from substantive analyses.

The remaining NRI-Dominance scale and PST scale demonstrated a good intercorrelation ($r = .47; p < .001$) and were combined into an overall Relationship Strain composite through calculation of a weighted mean that prevented overemphasis of Dominance on the resulting composite. As this procedure mirrors the effect of adding a single NRI-Dominance item to the existing PST scale, the internal consistency of the standardized composite components was examined. Observed Cronbach’s alphas were acceptable for the total sample ($\alpha = .76; n = 129$), as well as English ($\alpha = .74; n = 88$) and Spanish speakers ($\alpha = .79; n = 41$).

**Psychological adjustment.**

*Symptom Checklist-90-R.* The Depression, Anxiety, Somatic Complaints, and Hostility scales of the Symptom Checklist-90-R (SCL-90-R; Derogatis, 1994) were used to measure psychological adjustment. The SCL-90-R is a self-report symptom inventory with questions regarding symptoms experienced in the last two weeks (e.g., “in the past two weeks, how much were you distressed by feelings of hopelessness about the future?”). Scores range from 0 (not at all) to 4 (extremely). Good reliability has been reported for these scales (Derogatis, 1994; Contreras, Lopez, et al., 1999), and validity.
with college-aged Latinos has been established (Martinez, Stillerman, & Waldo, 2005). In prior work (Contreras, Lopez, et al., 1999), these scales have demonstrated high intercorrelations, and a composite of the four scales showed adequate internal consistency: .82 for the entire sample; .73 for English respondents; .85 for Spanish respondents. This composite relates in conceptually meaningful ways with social support and stress variables. For example, symptomatology was negatively related to extent of partner social support and positively related to greater levels of life stress and parenting stress (Contreras, Lopez, et al., 1999).

In the current study, the Somatic Complaints scale was excluded from analyses due to 16 of the mothers being pregnant at the time of data collection, potentially influencing item endorsements on this scale. Internal consistency coefficients among the remaining Depression, Anxiety, and Hostility scales were acceptable with both English ($\alpha = .84, .75, .73$, respectively; $n = 88$) and Spanish ($\alpha = .89, .83, .85$, respectively; $n = 41$) administrations (Total sample $\alpha = .85, .79, .78$, respectively; $n = 129$). Distributions of the Anxiety and Hostility scales were nonnormal, and were subjected successfully to corrective square root transformations to satisfy the normal distribution assumption.

**Derivation of composite scale.** The intercorrelations of the Depression scale and transformed Anxiety and Hostility scales from the SCL-90 were examined and found to be adequate for the construction of a composite scale (see Table 1 below). The three scales were subsequently averaged into an overall composite of Psychological Adjustment, the distribution of which was found to be acceptable. This composite was used in substantive analyses.
Table 1

_Bivariate Correlations Among SCL-90-R Anxiety, Hostility, and Depression Scales_  

(*n=129*)

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<td>2. SCL-90-R Hostility</td>
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<td>3. SCL-90-R Depression</td>
<td>0.70***</td>
<td>0.66***</td>
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***p < .001

**Missing Data and Analyses**

Isolated instances of missing data were discovered at the item level on two scales. Two participants failed to endorse one item on the 17-item Latino Orientation Scale for the ARSMA-II, as they did not know whether their father self-identified as Latino. One of the nine Economic Strain item fields was blank for another subject (i.e., “how much difficulty does your household have paying bills?”). In each of these instances, the missing item was replaced with the overall mean for that item. All were low base rate (0.7 – 1.6% of total cases) and each involved one item in part of a larger scale. Due to these factors, the weaknesses of mean-replacement are viewed minimal, and the method is viewed as a reasonable strategy for managing the missing data.

As part of determining the equivalency of the two language versions of all measures, the internal consistency of the scales were reported above separately for English and Spanish respondents, as well as for the total sample. Additionally,
associations between language spoken and all demographic and substantive variables were calculated and reported in table form. Descriptive statistics were calculated and reported for included participants (n=129), excluded (n = 21), and for the total sample pool (n=150). Additionally, mean differences were calculated between groups on all demographic and study variables, and were tested for significance. Note that all analyses for the current study were conducted using PASW for Mac, Release Version 18.0 (© SPSS, Inc., 2009, Chicago, IL., www.spss.com).

All variables were standardized before analysis to reduce collinearity. Bivariate correlations were subsequently calculated between all demographic, predictor, and outcome variables. Partial correlations controlling for significant demographic covariates of psychological adjustment were then performed. Subsequent substantive analyses controlled for significant demographic covariates.

In order to establish moderation, a series of hierarchical regression analyses were conducted (Baron & Kenny, 1986) for each hypothesis. As mentioned previously, all variables were standardized prior to analysis; additionally, all variables comprising the cross-product terms were centered prior to cross-product term construction to minimize problems of multicollinearity (Aiken & West, 1991). Prior to interpreting substantive analyses, the regression residuals were screened to ensure normality and linearity. Mahalanobis distances were calculated to assess for multivariate non-normality; significantly outlying cases, determined via comparison with chi-square critical values, have the potential to influence the generalizability of regression results. As such, they were excluded from the model and the regression was conducted a second time with the
remaining sample.

Homoscedasticity of residuals in the resulting model was subsequently assessed via employment of the Breush-Pagan test for heteroscedasticity (Breush and Pagan, 1979). If found heteroscedastic (i.e., with non-normally distributed variance) models were submitted to an HC3 correction technique to produce normally distributed standard errors and corrected probability values (MacKinnon and White, 1985; Long and Ervin, 2000; Hayes and Cai, 2007). HC3 is a preferred heteroscedasticity correction technique with sample sizes of less than 250 participants (Long and Ervin, 2000).

Hypothesis testing. To address Hypothesis 1a (i.e., testing the moderating influence of acculturation on the association between grandmother support and adolescent mother psychological symptoms), significant covariates were entered in Step 1. Grandmother social support and acculturation variables were entered in Step 2 to examine the direct role of the variables on psychological symptoms. A two-way interaction term of grandmother support and acculturation was entered into Step 3 to assess the moderating influence of acculturation on the association between grandmother support and adolescent mother psychological symptoms.

To address Hypothesis 1b (i.e., testing the moderating influence of enculturation on the association between grandmother support and adolescent mother psychological symptoms), the process for Hypothesis 1a above was repeated, with enculturation substituted for acculturation in all relevant steps.

For Hypothesis 2 (i.e., testing the moderating effect of relationship strain on the association between grandmother support and adolescent mother psychological
symptoms), significant covariates were entered in Step 1. Grandmother support and relationship strain variables were entered in Step 2 to examine the direct role of the variables on psychological dysfunction. A two-way interaction term of grandmother support and relationship strain were entered into Step 3 to assess the moderating influence of relationship strain on the relation between grandmother social support and adolescent mother psychological symptoms.

For Hypotheses 3a and 3c (i.e., testing whether relationship strain accounts for any moderating effect of acculturation), significant covariates were entered into Step 1. Grandmother support, relationship strain, and acculturation were entered in Step 2. A two-way interaction term of (3a) grandmother support and acculturation and (3c) grandmother support and relationship strain were entered into Step 3 to assess whether (3a) controlling for relationship strain attenuates any moderating effect of acculturation, and (3c) whether relationship strain continues to moderate when controlling for acculturation. Hypotheses 3b and 3d (i.e., testing whether relationship strain accounts for any moderating effect of enculturation) were investigated through use of identical analyses, substituting enculturation for acculturation where relevant.
CHAPTER 3

Results

Descriptive statistics for all variables are provided separately for included and excluded participants, as well as for the total participant pool, (see Table 2). Significance testing indicated that included and excluded participants produced significant differences only on the index of psychological symptoms, on which excluded participants demonstrated significantly greater maladjustment (p < .05). Note that comparisons with grandmother support and relationship strain variables were not possible, as these scales were, as a consequence of study design, missing entirely from the excluded participants.

Characteristics of Study Participants

Participants were 129 young Latina mothers of predominantly (83.7%) Puerto Rican background. At the time of the interview, the mothers’ mean age was 19.45 years (S.D. = 1.40 years; range = 15.76 – 21.54 years); their children (57% male) ranged in age from 16.17 to 20.79 months (Mean = 18.28; S.D. = .92). Most mothers (84.5%) had a single child, and 72.9% of the participating children were first-born. Twenty-three percent (i.e., 23.3%) of the participants (n = 30) were attending school. In all, 31.8% had a high school diploma and 43.9% of these mothers had also obtained some post-high school education. Most mothers (87.6%) received some form of public aid and 41.1% were employed. Forty-four percent (44.2%) of participants were first-generation immigrants. Nearly fifty-six percent (55.8%) of participants were born in the U.S.
**Descriptive associations.** Bivariate correlations were conducted among demographic and test variables (refer to Tables 3 and 4), and are reported below by study variable of interest.

**Social support.** Grandmother social support demonstrated several significant associations between mother variables. Mothers were more likely to endorse greater availability of support when they were older ($r = .18; p < .05$), spoke Spanish ($r = .18; p < .05$), were not born in the U.S. ($r = -.17; p < .05$), and had female children ($r = -.18; p < .05$). They also reported experiencing fewer negative events in their lives ($r = -.19; p < .05$), less grandmother relationship strain ($r = -.29; p < .01$), and marginally less psychological maladjustment ($r = -.16; p < .10$) than mothers who perceived lower levels of available grandmother support.

**Psychological symptoms.** Mothers who endorsed greater psychological symptomatology were likely to be younger ($r = -.23; p < .01$), to have experienced more negative life events ($r = .34; p < .001$), and to report greater economic strain in the household ($r = .19; p < .05$). They were marginally more likely to report lower available support from their romantic partners or the child’s father ($r = -.17; p < .10$). Additionally, they were likely to report greater grandmother relationship strain ($r = .41; p < .001$), and marginally less available grandmother support ($r = -.16; p < .10$) than mothers who endorsed fewer psychological symptoms.

**Acculturation.** Mothers who endorsed higher levels of acculturation were less likely to speak Spanish ($r = -.78; p < .001$), more likely to be Puerto Rican rather than non-Puerto Rican ($r = .24; p < .01$), more likely to be born in the U.S. mainland ($r = .59;$
p < .001), more likely to have lived longer in the U.S. than less-acculturated mothers (r = .78; p < .001), and more likely to endorse greater educational attainment (r = .25; p < .01). They were also more likely to endorse lower levels of enculturation (r = -.28; p < .01), and to endorse marginally greater grandmother relationship strain (r = .16; p < .10) than mothers who endorsed lower levels of acculturation.

**Enculturation.** Mothers who endorsed higher levels of enculturation were likely to have lived in the U.S. for a shorter period of time (r = -.49; p < .001), were less likely to be currently enrolled in school (r = .18; p < .05), were less likely to have been born in the U.S. (r = -.49; p < .001), reported lower levels of acculturation (r = -.28; p < .01), and were more likely to speak Spanish (r = .44; p < .001). They were marginally more likely to endorse greater availability of partner/child father support (r = .15; p < .10), and were marginally less likely to be receiving federal aid (r = -.15; p < .10) than mothers who endorsed lower levels of enculturation.

**Relationship strain.** Mothers who endorsed greater relationship strain with the grandmother were typically younger (r = -.23; p < .01), less likely to be pregnant at the time of the study (r = -.19; p < .05), reported experiencing more negative events in their lifetime (r = .33; p < .001), endorsed perceiving less available grandmother support (r = -.29; p < .01), and reported higher levels of psychological symptomatology (r = .41; p < .001). They were marginally more likely to have lived longer in the U.S. (r = .17; p < .10), less likely to speak Spanish (r = -.15; p < .10), and more likely to endorse greater acculturation (r = .16; p < .10) than mothers who reported less relationship strain.

**Identification of control variables.** Three variables emerged as significant
covariates with psychological adjustment: mother’s age ($r = -0.23; p < .01$), negative life events ($r = 0.34; p < .001$), and economic strain ($r = 0.19; p < .05$). Variance accounted for by the three variables was removed in a subsequent partial correlation matrix consisting of substantive variables and remaining demographic variables. No other significant correlations between dependent and demographic variables remained (see Table 5).

**Associations between test variables, controlling for negative life events, mother age, and economic strain.** Associations between the acculturation, enculturation, grandmother relationship strain, grandmother support, and psychological adjustment variables were examined, controlling for the three significant covariates mentioned above. Several significant associations emerged, with mothers who indicated experiencing greater levels of relationship strain with the grandmother also perceiving the grandmother as less available to provide support ($r = -0.22; p < .05$), as well as endorsing greater psychological maladjustment ($r = 0.31; p < .001$). The AOS and LOS demonstrated a significant association that was in the expected direction ($r = -0.29; p < .01$). Grandmother support was unrelated to psychological maladjustment, acculturation, or enculturation.

**Examination of Study Hypotheses**

Hierarchical regression analyses were conducted to further assess the associations between the substantive variables, with models constructed as previously outlined. All models were initially run to calculate Mahalonobis distances and identify multivariate outliers, and then run a second time with those outlying cases removed. Next, a Breusch-Pagan analysis was conducted for each final regression model to test for
heteroscedasticity. If found heteroscedastic, a corrective HC3 procedure was subsequently conducted to produce corrected standard error and probability values.

**Hypothesis 1a: Acculturation as a moderator of the relation between grandmother support and psychological symptoms.** Mother age, economic strain, and negative life events variables were entered into the first step of the analysis as control variables, with step two consisting of grandmother support and acculturation variables. The cross-product term of grandmother support X acculturation was entered into the third step. Grandmother support was unrelated to acculturation (r = -.12; ns). Initial regression results indicated that mother age demonstrated a significant negative direct effect (final B = -.22; p < .01) and both economic strain and negative life events significant positive (final B = .19 and .31; p < .05 and .001, respectively) associations with psychological symptomatology. Acculturation failed to predict psychological symptoms. No significant indirect effect of acculturation on the association between grandmother support and psychological symptoms was detected. Following exclusion of multivariate outliers (chi square (6) = 12.59 for p < .05) the model was re-run with a final sample size of 121. A Breusch-Pagan analysis revealed significant heteroscedasticity in the model, and a corrective HC3 procedure was run in response (see Table 6 for final model results).

Final model results indicated no direct influences of grandmother support (final B = -.08; ns) or acculturation (final B = -.10; ns) on psychological symptomatology, and no moderating influence of acculturation (final B = .10; ns). Negative life events directly accounted for a significant portion of model variance, with mothers who experienced higher levels of negative life events reporting greater psychological maladjustment (final
B = .32; p < .001). Mother age and economic strain direct effects approached significance (final B = -.17 and .17, respectively; p < .10 for both).

**Hypothesis 1b: Enculturation as a moderator of the relation between grandmother support and psychological symptoms.** The regression model from 1a was run a second time, with enculturation replacing acculturation, and the previous cross-product term replaced with that of grandmother support X enculturation. Grandmother support was unrelated to enculturation (r = .07; ns). Significant direct effects of mother age, economic strain and negative life events were detected at levels consistent with regression 1a. Enculturation failed to predict psychological symptomatology. Additionally, no moderating effect of enculturation on the association between grandmother support and psychological symptomatology was detected. Following exclusion of multivariate outliers (chi squares (6) = 12.59 for p < .05) the model was re-run with a final sample size of 120. A subsequent Breusch-Pagan analysis indicated sufficient homoscedasticity in the model (see Table 7 for final model results).

Final model results indicated no direct associations between substantive variables and psychological symptomatology, and enculturation demonstrated no moderating influence (final B = -.06; ns). Mother age demonstrated a marginally significant negative association with psychological symptomatology (final B = -.16; p < .10). Additionally, economic strain (final B = .21; p < .05) and negative life events (final B = .30; p < .01) demonstrated significant direct effects, with greater economic strain and negative life events predicting greater psychological symptomatology.

**Hypothesis 2: Relationship strain as a moderator of the relation between**
**grandmother support and psychological symptoms.** Mother age, economic strain, and negative life events variables were entered into the first step of the analysis as control variables, with step two consisting of grandmother support and relationship strain. The cross-product term of grandmother support X relationship strain was entered into the third step. Grandmother support was significantly related to relationship strain ($r = -0.22; p < .05$). Initial model results indicated significant direct associations between relationship strain and psychological symptomatology (final $B = 0.31; p < .01$). Mother age demonstrated marginally significant positive (final $B = 0.15; p < .10$), and economic strain and negative life events significant negative, relations with psychological adjustment (final $B = 0.20$ and $0.21; p < .05$ and $.05$, respectively). No significant interaction between grandmother support and relationship strain was detected.

Following exclusion of multivariate outliers (chi squares $(6) = 12.59$ for $p < .05$) the model was re-run with a final sample size of 120. Subsequent Breusch-Pagan analysis indicated sufficient homoscedasticity in the model (see Table 8 for model results).

Final model results indicated no moderating influence of relationship strain on the association between grandmother support and psychological symptomatology (final $B = 0.11; ns$). Additionally, relationship strain (final $B = 0.13; ns$) and grandmother support (final $B = -0.03; ns$) failed to demonstrate direct associations with psychological symptomatology. Mother age (final $B = -0.18; p < .05$), economic strain (final $B = 0.26; p < .01$), and negative life events (final $B = 0.32; p < .001$) were significantly related to psychological symptomatology.

**Hypothesis 3a: Acculturation no longer moderates the relation between**
grandmother support and psychological symptoms after controlling for relationship strain. Mother age, economic strain, and negative life events variables were entered into the first step of the analysis as control variables, with step two consisting of grandmother support, relationship strain, and acculturation. The cross-product term of grandmother support X acculturation was entered into the third step. Grandmother support was not significantly related to acculturation (r = -.06; ns). Initial model results indicated a significant direct association between relationship strain (final B = .34; p < .001) and marginally significant association between acculturation (final B = -.14 p < .10) on psychological symptomatology. Mother age, economic strain, and negative life events continued to demonstrate significant direct associations with psychological maladjustment (final B = -.18, .17, .22; p < .05, .05, .01, respectively).

Following exclusion of multivariate outliers (chi-square (7) = 14.07 for p < .05) the model was re-run with a final sample size of 120. Subsequent Breusch-Pagan analysis indicated sufficient homoscedasticity in the model (see Table 9 for model results).

Final model results indicated no significant direct effects between substantive variables and psychological symptoms. Control variables maintained significant associations with psychological symptoms. The grandmother support and acculturation interaction term failed to demonstrate significant association with psychological symptoms (final B = .02; ns), and thus no moderating effect of acculturation was detected.

Hypothesis 3b: Enculturation no longer moderates the relation between grandmother support and psychological symptoms after controlling for relationship strain.
The regression model from 3a was run a second time, with enculturation replacing acculturation where appropriate. Initial model results indicated a significant direct association between relationship strain (final B = .29; p < .01) and psychological symptomatology. Mother age demonstrated a marginally significant direct association (final B = -.15; p < .10), and economic strain and negative life events significant direct associations, with psychological maladjustment (final B = .17, .24; p < .05, .05, respectively).

Following exclusion of multivariate outliers (chi-square (7) = 14.07 for p < .05) the model was re-run with a final sample size of 119. Subsequent Breusich-Pagan analysis indicated sufficient homoscedasticity in the model (see Table 10 for model results).

Final model results indicated no significant direct effects between substantive variables and psychological symptoms. Economic strain and negative life events maintained significant positive direct effects on psychological symptoms (final B = .26, .26; p < .01, .01, respectively). The grandmother support and enculturation interaction term failed to demonstrate a significant association with psychological maladjustment (final B = -.05; ns).

**Hypothesis 3c: Relationship strain continues to moderate the relation between grandmother support and psychological symptoms after controlling for acculturation.** The regression model from 3a was run a second time, with the previous cross-product term replaced with that of grandmother support X relationship strain. Initial model results indicated a significant direct association between relationship strain (final B = .31; p < .01), and marginally significant association between acculturation (-.13 p <
and psychological symptoms. Mother age, economic strain, and negative life events continued to demonstrate significant direct associations with psychological symptoms (final B = -.16, .19, .23; p < .05, .05, .01, respectively).

Following exclusion of multivariate outliers (chi-square (7) = 14.07 for p < .05) the model was re-run with a final sample size of 121. Subsequent Breusch-Pagan analysis indicated sufficient homoscedasticity in the model (see Table 11 for model results).

Final model results indicated no significant direct effects between substantive variables and psychological symptoms. Mother age, economic strain, and negative life events variables maintained significant positive direct effects on psychological symptoms (final B = -.18, .26, .33; p < .05, .01, .001, respectively). The grandmother support and relationship strain interaction term failed to demonstrate a significant association with psychological symptoms (final B = .12; ns).

**Hypothesis 3d: Relationship strain continues to moderate the relation between grandmother support and psychological symptoms after controlling for enculturation.** The regression model from 3c was run a second time, with the replacement of acculturation with enculturation where relevant. Initial model results indicated a significant direct association between relationship strain (final B = .30; p < .05) and psychological symptoms. Mother age demonstrated a marginally significant direct effect (final B = -.15; p < .10), while economic strain and negative life events variables demonstrated significant direct effects on psychological symptoms (final B = .19 and .21; p < .05 and .05, respectively).

Following exclusion of multivariate outliers (chi-square (7) = 14.0 for p < .05) the
model was re-run with a final sample size of 119. Subsequent Breusch-Pagan analysis indicated sufficient homoscedasticity in the model (see Table 12 for model results).

Final model results indicated no significant direct effects between substantive variables and psychological symptoms. Mother age (final $B = -.17$; $p < .05$), economic strain (final $B = .25$; $p < .01$), and negative life events (final $B = .34$; $p < .001$) variables demonstrated significant direct effects. The grandmother support and relationship strain interaction term failed to demonstrate a significant association with psychological symptoms (final $B = .08$; ns).
CHAPTER 4

Discussion

This study examined relations between perceived grandmother social support, relationship strain between adolescent mother and grandmother, adolescent mother acculturation and enculturation level, and psychological symptomatology in a sample of 129 Latina adolescent mothers. The specific goals of the study were to investigate potential moderating roles of acculturation, enculturation, and relationship strain in the relation between grandmother support and adolescent mother psychological symptomatology, as well as direct associations with psychological symptoms.

Overall, hierarchical linear regression results failed to indicate significant direct effects of grandmother support, acculturation, enculturation, or relationship strain on predicting psychological symptoms, after controlling for significant covariates. Additionally, all tested moderating effects of acculturation, enculturation, and relationship strain on the association between grandmother support and adolescent mother psychological adjustment were non-significant. These results were generally unsurprising, given the lack of significant associations between test variables and psychological adjustment following removal of significant covariates, but nonetheless were inconsistent with existing literature that indicates that social support, especially family support, is associated with reduced negative outcomes in adolescents and adolescent mothers (e.g., Fraunglas et al., 1997; Davalos et al., 2005). Additionally,
strain in the mother-grandmother relationship was not associated with mother psychological adjustment, as was expected (e.g., Leadbeater & Lineares, 1992; Kalil et al., 1998; Updegraff et al., 2009). Acculturation and enculturation also failed to demonstrate expected direct and moderating effects (e.g., Contrearas et al., 1999) with psychological adjustment.

It is important to view these findings in the appropriate context, and potential reasons for the lack of expected findings are presented. Additionally, while regression models did not perform as expected, the current study nonetheless did produce results from bivariate correlation analyses that were consistent with existing literature, and which are also discussed. Finally, some additional study limitations are discussed, and recommendations for future investigations are provided.

**Explanations for Lack of Expected Findings**

An initial possible explanation for the absence of significant regression results concerns the inclusion criteria for the current study. It is possible that the exclusion of adolescent mothers who did not endorse the presence of a mother figure (i.e., grandmother) in their support network inadvertently restricted the range of obtained data on grandmother support variable by removing a sizeable portion of grandmothers who provided no support. Excluded mothers were also found to have reported significantly greater psychological symptomatology than mothers who had grandmothers in their support network, and who thus met inclusion criteria. That is, adolescent mothers with a grandmother in their support network reported significantly lower levels of psychological symptoms, a finding that is consistent with the widely-supported view that social support
is adaptive. The inclusion criteria of the current study, however, obscured this finding, and possibly others, through restriction of range.

The use of composite variables for the assessment of complex constructs. In an effort to broadly assess social support, acculturation, enculturation, psychological functioning, and relationship strain constructs, multifaceted instruments and composite variables composed of distinct, but related, construct elements were used. A drawback of this strategy is the potential for unintentional concealment of associations among specific construct facets. For example, highly enculturated mothers may perceive greater emotional and socializing support from the grandmother, given their cultural similarities. Conversely, highly acculturated mothers may perceive greater tangible and childcare support, given their increased likelihood of being enrolled in school and reduced availability to parent her child. Associations such as these may have been obscured from utilization of the global support scale.

Similarly, differential relations with distinct indicators of psychological adjustment (e.g., anxiety vs. depressive symptoms) may also have been obscured. Though a composite measure of the SCL-90 scales of Depression, Anxiety, and Hostility has been utilized in previous research (i.e., Contreras, 1999), there are conceptual drawbacks to this method. Depression and anxiety-related disorders are considered internalizing disorders, for example, and are distinct from externalizing symptoms assessed by the Hostility scale. It is possible that there are differential relations among these adjustment symptoms and specific stressors (i.e., negative life events), acculturation, enculturation, and types of grandmother support received.
Additionally, the use of the relationship strain composite introduces further opportunity for differential associations, in that while conflict, for example, may be strongly related to mother psychological symptoms for both acculturated and enculturated mothers, dominance may not necessarily be, as there is evidence indicating that Latino parents typically exert more control over their children and older adolescents (Bulcroft et al., 1996; Fuligini, 1998). Enculturated mothers may not perceive grandmother dominance as negative; as such, its inclusion in an overall relationship strain composite may not be appropriate. Given this and above discussed issues, it is recommended that future research explore the potentially differential and intricate associations among these facets.

**Confounding control variables.** An additional potential cause of the current study findings involves the control variables used. Despite the absence of support for study hypotheses, regression results indicated notably consistent direct effects of the three control variables (mother age, economic strain, and negative life events) on psychological functioning, even after inclusion of proposed test variables of grandmother support, relationship strain, enculturation, acculturation, and varying interaction terms. The consistency of these significant associations warrants consideration of the mechanisms through which they may impact psychological adjustment, and raises the likelihood of a confounding effect of each on central study variables. Each is discussed as it may relate to test and outcome variables.

**Mother age.** Mother age consistently predicted psychological symptoms, both in bivariate correlations and through inclusion as a control variable in all hierarchical linear
regressions. Results indicated that older mothers reported better psychological functioning. Older mothers also reported less grandmother relationship strain, and greater availability of grandmother support. Older mothers may also be more likely to live outside of the home, and therefore be at lower risk for sustained relationship strain with the grandmother due to residential proximity. Additionally, an older mother may be more likely to be viewed as an adult by the grandmother, especially if she is married and residing with her husband, and subsequently be granted additional autonomy and independence than if she were younger, single, and living at home. Moreover, in the current sample, older mothers are more likely to be out of school and working, and thus removed from a more “Americanized” peer environmental influence that may lead to strain with the grandmother, and subsequent maladjustment (Arnett, 1999).

**Economic strain.** Economic strain is the second control variable that demonstrated notably consistent, positive associations with psychological maladjustment. Economic strain has been previously associated with psychological adjustment difficulties in ethnic minority youth (Mistry, Vandewater, Huston, & McLoyd, 2002), and some evidence suggests that family relationship strain and adolescent masteryagency may mediate this relation (Wadsworth & Compas, 2002; Conger, Conger, Matthews & Elder, 1999). Certainly, given the overrepresentation of Latino families on indices of low socioeconomic status, this construct warrants further investigation in future studies, particularly with regard to associations with relationship strain and psychological adjustment.

**Negative Life Events.** The Negative Life Events scale is the third control variable
that demonstrated consistent, significant associations with adolescent mother psychological symptomatology. This association is consistent with existing literature incorporating adolescent samples (Kraaij, Garnefski, de Wilde, Dijkstra, Gebhardt, et al., 2003), including a recent meta-analysis indicating that this association is stronger among adolescent women than adult women or adolescent male samples (Davis, Matthews, Twamley, 2008). Additionally, mothers who reported a greater level of negative life events in the current study also reported more grandmother relationship strain (r = .33; p < .001), less available grandmother support (r = -.19; p < .05), and greater acculturation level (r = .22; p < .05) than mothers who reported fewer negative life events. These associations suggest that further examination of the construct and its associations among Latina adolescent mother outcomes is warranted.

Additionally, it is suspected that the Negative Life Events scale, as used in the current study, introduced a significant confound into the assessment of support, conflict, acculturation, and adjustment test variables. The scale was significantly associated with these four of the five test variables (r’s ranging from -.19 to .34; p’s < .05 to < .001). Further examination into the scale at the item level (see Appendix A) revealed pathways through which it could account for variance shared between grandmother support, relationship strain, acculturation, and psychological adjustment. Relationship strain, in particular, between mother and grandmother may have resulted from (e.g., “began a relationship” or “had major problems in school/vocational training”) or contributed directly to (e.g., “you moved in or out of household”) the negative events reported. Additionally, by definition of the scoring method for the current study, mothers were
included who endorsed experienced life events that they perceived as “somewhat bad” or “extremely bad.” In a sense, this measure therefore assessed not simply the type and number of events experienced but the mother’s ability to cope with them. It is presumed that this factor is highly related to mother psychological symptoms, as depressive, anxious, and hostile symptoms are marked by an impaired ability to regulate one’s affect. Moreover, given that social support buffers the deleterious effects of stressful events (Cohen and Wills, 1985), controlling for the Negative Life Events scale likely removes meaningful variance shared between psychological adjustment and grandmother support.

Implications

While hierarchical linear regression equations did not produce expected results, exploratory bivariate correlation results nonetheless are informative for related literature in that they provide a descriptive picture of the makeup of this sample of young Latina mothers that is consistent with the constellation of characteristics predicted in study hypotheses and extant literature. It should be noted that the ability to make meaningful interpretations from bivariate correlations is limited, and directionality of observed associations cannot be determined. In an effort to integrate current findings with existing literature, however, descriptive findings are reviewed below, drawing from bivariate correlations (see Table 4) and potential mechanisms of influence are speculated for investigation in future research.

Grandmother support. Mothers who were older, who preferred conducting the interview in Spanish, who were born outside of the U.S., and who had a female target child were more likely to endorse greater levels of available grandmother support.
Additionally, greater grandmother support was related to fewer distressing negative events in the mother’s life, less grandmother relationship strain, and marginally less psychological maladjustment. These associations prompt the consideration of the mechanisms that underlie them. These significant, though small in magnitude, associations are consistent with suggestions that greater adolescent mother enculturation (as language and generational status are frequently used as acculturation proxy variables), is related to more, or better quality, support, better relationship quality, and improved psychological adjustment associated with it. Increased mother age is developmentally consistent with these associations, as older mothers likely enjoy greater independence from the grandmothers, and thus reduced associated relationship strain.

Additional conceptual explanations include grandmother support serving a protective buffer against psychological maladjustment following negative life events (Cohen and Wills, 1985), as well as an increased supportive presence in the mother’s life possibly preventing exposure to negative life events through monitoring (Eamon & Mulder, 2005) of the adolescent mother’s extra-familial activities. Conceptually, associations of Spanish language endorsement and first-generational immigrant status (both used as acculturation/enculturation proxy variables in other studies) with grandmother support and psychological adjustment are consistent with study expectations. However, the fact that acculturation and enculturation, as measured by the current study, failed to demonstrate meaningful associations with grandmother support suggests that the assessed constructs may contain complexities that were obscured through use of composite measures of social support, a topic that will be discussed later.
Psychological symptomatology. Mothers who endorsed greater psychological symptomatology were likely to be younger, to have experienced more negative life events, and were likely to report greater economic strain in the household. They were marginally more likely to report lower available support from their romantic partners and/or the child’s father. Additionally, they were likely to report greater grandmother relationship strain, and marginally less available grandmother support.

It is speculated that psychological maladjustment is related to a global absence of social support, as both grandmother and partner/child’s father support is lacking in mothers with higher levels of psychological symptoms. The association with negative life events may be bidirectional in that 1) repeated exposure to negative/traumatic events produces increasingly problematic adjustment difficulties among adolescent females (Davis, Matthews, & Twamley, 2008) and 2) existing psychological maladjustment would interfere with one’s ability to cope with subsequent negative events. Economic strain would further reduce the mother’s coping resiliency, and could potentially act also through deleterious effects on the grandmother’s coping and parenting abilities.

Acculturation. Mothers who endorsed higher levels of acculturation were more likely to speak English, to be Puerto Rican, to be born in the U.S. mainland, to have lived longer in the U.S. than less-acculturated mothers, and to endorse greater educational achievement. They were also more likely to endorse lower levels of enculturation (i.e., Latino orientation), and endorse marginally greater grandmother relationship strain than mothers who endorsed lower levels of acculturation. This mother profile illustrates
possible concurrent positive and negative outcome associations with acculturation level. Greater educational attainment, for example, that is associated with acculturation is marginally associated with better psychological adjustment. However, and consistent with study hypothesis, in the context of the grandmother relationship, more acculturated mothers endorse marginally more strain, itself associated with poorer psychological adjustment. It is proposed then, that acculturation may have differential effects on adjustment outcomes depending on context. If the mother resides with the grandmother, for example, greater acculturation could demonstrate detrimental effects, while promoting adaptive outcomes in settings in which the mother was more independent (i.e., living outside the home). Grandmother coresidence was not assessed in the current study, though utilization of this variable in future studies would be advisable given the above reasoning.

**Enculturation.** Mothers who endorsed higher levels of enculturation were likely to have lived in the U.S. for a shorter period of time, were less likely to be currently enrolled in school, were less likely to have been born in the U.S., reported lower levels of acculturation, and were more likely to speak Spanish. This profile is conceptually consistent with expected descriptors of more recently immigrated Latinas. Additionally, these mothers were marginally more likely to endorse greater availability of partner/child father support, and were marginally less likely to be receiving federal aid, also consistent with previous research (Sansone, 1998). However, enculturation fails to demonstrate noted adaptive or maladaptive associations with support, strain, and adjustment variables. It is presumed that use of composite support and adjustment outcome variables may have
obscured other significant associations with enculturation. For example, greater mother
enculturation may be associated with increased grandmother emotional and socializing
support, due to enculturation similarities between grandmother and mother, and with
lower levels of childcare support if the mother is not currently in school, or perhaps is
residing with her romantic partner or her child’s father. Deconstructing test variable
composites into their respective components, and testing them individually, may reveal
associations otherwise obscured through composite use.

**Relationship strain.** Mothers who endorsed greater relationship strain with the
grandmother were typically younger, less likely to be pregnant at the time of the study,
reported experiencing more negative events in their lifetime, endorsed perceiving less
available grandmother support, and reported poorer psychological adjustment. They were
marginally more likely to have lived longer in the U.S., to speak English, and to score
higher on the acculturation index than mothers who reported less relationship strain.
Conceptually, a younger mother may be more likely to reside with the grandmother, and
have an increased risk of experiencing relationship strain in concert with both a
developmentally appropriate need for independence and autonomy and a higher
acculturation status. Absence of pregnancy is also conceptually consistent, in that
grandmothers would be presumed to provide greater support in the context of having a
pregnant daughter. Associations between strain, psychological symptomatology, and
negative life events also makes conceptual sense, as they suggest global reduction in
resiliency to stressors and absence of buffering support (Cohen & Wills, 1985), and
though causal attributions cannot be made (i.e., whether due to negative life events,
psychopathology, or grandmother relationship strain), it is presumed that the associations are likely due to interactive effects of the three.

**Limitations and Recommendations**

Additional study limitations are discussed below. Related recommendations, in addition to those discussed above, are provided for future research efforts.

**Sample characteristics.** Sample composition for the current study is neither nationally representative nor demographically homogeneous. Due to use of a convenience sampling recruitment method, and regional demographic features of Latinos, the current sample is primarily Puerto Rican in background, and is largely composed of individuals from the same neighborhood in a Mid-Western city. Given this, as well as study inclusion criteria (i.e., having a mother figure who is part of the adolescent mother’s support network), current study results may be artificially attenuated, and are generalizable only to other Latina adolescent mother groups of similar backgrounds and characteristics.

**Non-participants.** Out of the 246 eligible Latina adolescent mothers, 235 enrolled for the overall study. Of these, data were collected for 150 individuals, and only 129 of these met full inclusion criteria for the current study. Though data for included (n=129) and excluded (n=21) participants were subjected to procedures testing for mean differences between the groups on demographic and some test variables, it is impossible to determine whether those individuals who initially declined to participate, or those who enrolled but ultimately failed to participate due to one of a number of reasons, differed significantly from the final sample. As such, caution should be taken in generalizing
current findings to all Latina adolescent mothers who would have been eligible for the overall or current studies.

**Self-report.** Given the nature of data collection for the current study (i.e., adolescent mother self-report), there exists the possibility of intentional or unintentional distortion of scores by the adolescent mothers. However, given that the current study involved variables of which the preferred assessment modality is self-report (e.g., mother perception of available grandmother support, mother perception of relationship strain, mother psychological functioning, mother acculturation/enculturation), and the existing evidence supporting the use of self-report of social support when predicting psychological adjustment (Cauce, Mason, Gonzales, Hiraga, & Liu, 1996; Turner, Grindstaff, & Phillips, 1990), this method is viewed appropriate for the current study. However, inclusion of corroborating grandmother reports, for example, is recommended for future research in effort to examine possible adolescent mother report biases.

An additional limitation involves the use of self-report acculturation and enculturation instruments among individuals with differing generational status. The limitation lies in the reliance on mother self-report on whether she identifies as Latina or Anglo in a number of domains. It is important to acknowledge that the idea of “Latino values” may differ from family to family, in particular those of differing generation levels, as well as those in communities of different regional areas of the U.S. that may have differing degrees of Latino culture within the majority culture. These and other acculturation assessment issues discussed in the introduction section of this paper warrant consideration when generalizing results, although corrective assessment methodology has
yet to be agreed upon in the literature.

**Demand characteristics of scales as a function of culture.** As a generalization, Latino culture, through the construct of familism, referring to a strong identification with and attachment to the family (Gonzales, Fabrett, & Knight, 2009), stresses that individual family members should behave in ways that reflect well upon the family as a whole. As such, there exists the possibility that mothers, especially those who endorsed greater enculturation, may have reported artificially reduced levels of relationship strain with the grandmother, increasing the possibility of detecting an association between enculturation and relationship strain that does not exist. It is recommended that current study results be interpreted with this caveat in mind.

**Stimulus characteristics and setting.** All data collection was conducted within the homes of the participants. These home environments contained differing elements that may have influenced the responses of the participants. For example, while some home settings may have been fairly quiet, others may have included the presence of others in the household at the time of data collection who may have indirectly influence the mothers’ responses to questionnaire items. In addition, the rooms in which the data were collected differed: while some were fairly bare, others including a variety of potentially distracting items, including other toys, radios, ringing phones, and windows outside of which existed distracting activity. The decision to collect the data within the homes of the participants provided a benefit, however, in that mothers may have been more comfortable and relaxed in the familiarity of their home setting, and thus be more apt to provide accurate responses than they might in a foreign laboratory setting, and thus
increasing external validity. Additionally, other data gathered as part of the overall study included the assessment of mother-child behaviors and interactions that were presumed to have been more natural when assessed in the comfort of their own homes. Thus, the decision to collect data within the home was made despite possible threats to internal validity.

**Grandmother acculturation, enculturation, and psychological symptomatology.** Though it was not the aim of the current study to assess grandmother acculturation and enculturation for the purpose of testing an acculturation gap hypothesis, as previously mentioned, grandmother acculturation and enculturation level nonetheless has the potential to influence associations among study variables. For example, a highly acculturated grandmother may provide different types and degrees of support than a grandmother who is more enculturated. Additionally, grandmother psychological functioning may influence mother psychological functioning through failure to socialize effective coping strategies, independent of assessed study variables. The inclusion of the above data would have allowed for further elucidation of variable associations, and is recommended for future research.

**Mother post-partum depression.** Given their status as relatively new mothers, there exists the possibility that post-partum depression may have influenced ratings of psychological adjustment, as well as grandmother relationship strain and negative life events. Given the similarity of post-partum depressive symptoms with symptoms of a depressive disorder caused by exogenous factors, it is impossible to effectively control for the occurrence of postpartum depression in the current study, and its potential
influence on study variables.

**Grandmother/Partner co-residence.** As mentioned previously, mother residence with the grandmother or romantic partner has the potential of influencing associations between study variables, for example, through amplification or buffering of relationship strain symptoms due to residential proximity, and thus degree of contact. It is recommended that future research take into account mother residential status.

**Conclusion**

The current study incorporated a participant sample of 129 Latina adolescent mothers, a group that is under-researched and at higher risk for maladaptive outcomes when compared to European American, middle-class families. Study aims included examining the relations between perceived grandmother social support, relationship strain between adolescent mother and grandmother, adolescent mother acculturation and enculturation level, and adolescent mother psychological symptomatology. Inconsistent with existing literature, hierarchical linear regression results failed to indicate significant direct effects of grandmother support, acculturation, enculturation, and relationship strain on adolescent mother psychological symptomatology, when controlling for significant covariates. Additionally, the current study failed to detect proposed moderating influences of acculturation, enculturation, and relationship strain on the association between grandmother support and adolescent mother psychological symptomatology. Reasons for the null findings were discussed in detail, are followed by methodological recommendations for future studies that are likely to prevent the obscuring of intricate relations among construct elements. Despite the absence of expected regression results,
however, patterns of bivariate associations between test and demographic variables provided a rich, descriptive picture of participant characteristics that is consistent with existing literature and study predictions, and which illustrated the complexity of the assessed constructs and their interrelations, while adding to the existing body of literature.


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U.S. Census Bureau. (2000). *Projections of the resident population by race, Hispanic*


Figure 1. Graphical representation of study hypotheses

(a) Hypothesis #1a:

Grandmother Social Support → Mother’s Psychological Symptoms

(b) Hypothesis #1b:

Enculturation

(c) Hypothesis #2:

Relationship Strain

(d) Hypothesis #3a:

Acculturation (Controlling for Relationship Strain)

(e) Hypothesis #3b:

Enculturation (Controlling for Relationship Strain)

(f) Hypothesis #3c:

Relationship Strain (Controlling for Acculturation)

(g) Hypothesis #3d:

Relationship Strain (Controlling for Enculturation)

Note: All models control for the following variables: Mother age, Economic strain, Negative life events.
Table 2

*Descriptive Statistics of Study Variables (N=129)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
</tr>
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<tbody>
<tr>
<td><strong>Child Demographic Variables</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Child Age in Months</td>
<td>18.28</td>
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<td>Child Gender – Male (%)</td>
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<tr>
<td>Child as Only Offspring (%)</td>
<td>72.90</td>
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<tr>
<td><strong>Mother Demographic Variables</strong></td>
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<td></td>
</tr>
<tr>
<td>Mother Age in Years</td>
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<td>1.40</td>
<td>15.76</td>
<td>21.54</td>
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<tr>
<td>Currently Using Day Care (%)</td>
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<tr>
<td>Currently Pregnant (%)</td>
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<td></td>
<td></td>
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<td>Mother Years in US</td>
<td>13.26</td>
<td>6.68</td>
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<td>Generational Status (%)</td>
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<td>First</td>
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<td>Second</td>
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<td>Third or more</td>
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<td>Non-Immigrant (%)</td>
<td>55.80</td>
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<td>Puerto Rican Ethnicity (%)</td>
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<td>English used in Study Administration (%)</td>
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<td>Currently Working (%)</td>
<td>41.10</td>
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<tr>
<td>Currently Receiving Welfare (%)</td>
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Table 2. (continued)

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<td>Currently in School (%)</td>
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<td>Highest Educational Level (%)</td>
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<td>Less than 8th grade</td>
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<tr>
<td>12th grade</td>
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<td>HS diploma</td>
<td>17.80</td>
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<tr>
<td>Any Post-HS Education</td>
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<td>Negative Life Events</td>
<td>3.92</td>
<td>3.35</td>
<td>0.00</td>
<td>14.00</td>
</tr>
<tr>
<td>Social Support from Partner or Child’s Father</td>
<td>3.16</td>
<td>2.47</td>
<td>0.00</td>
<td>6.00</td>
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</table>

*Central Test Variables*

| Social Support from Grandmother         | 4.34 | 1.58 | 0.00 | 6.00 |
| Acculturation                          | 3.44 | 1.00 | 1.31 | 5.00 |
| Enculturation                          | 3.89 | 0.66 | 2.12 | 5.00 |
| Relationship Strain                    |      |      |      |      |
| Disappointment                         | 1.86 | 0.99 | 1.00 | 5.00 |
| Intrusiveness                          | 2.43 | 1.37 | 1.00 | 5.00 |
Table 2. (continued)

<table>
<thead>
<tr>
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<th>Max.</th>
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<tr>
<td>Criticism</td>
<td>1.35</td>
<td>0.77</td>
<td>1.00</td>
<td>4.00</td>
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<td>Conflict</td>
<td>2.05</td>
<td>1.08</td>
<td>1.00</td>
<td>5.00</td>
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<tr>
<td>Childcare-Related Dominance</td>
<td>1.86</td>
<td>0.93</td>
<td>1.00</td>
<td>5.00</td>
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<tr>
<td>Psychological Symptoms (SCL-90 R)</td>
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<td>Depression</td>
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<td>0.57</td>
<td>0.00</td>
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<tr>
<td>Anxiety</td>
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<td>0.41</td>
<td>0.00</td>
<td>1.90</td>
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<tr>
<td>Hostility</td>
<td>0.49</td>
<td>0.58</td>
<td>0.00</td>
<td>3.83</td>
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</table>

**Participant Recruitment Information**

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<thead>
<tr>
<th>Recruitment Site (%)</th>
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<td>McCafferty</td>
<td>28.70</td>
</tr>
<tr>
<td>Metro Health Center</td>
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<tr>
<td>Other</td>
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</tr>
<tr>
<td>Referred by Prof./Community Agency</td>
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</tr>
<tr>
<td>Referred by Friend</td>
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</tr>
<tr>
<td>Self-Referred</td>
<td>8.00</td>
</tr>
</tbody>
</table>
Table 3.

*Bivariate Correlations Among Demographic Variables*

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
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<td>1. Child Age in Months</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. Child Gender (F/M)</td>
<td>.09</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. Child Birth Order</td>
<td>.11</td>
<td>.16*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Number of Children</td>
<td>.08</td>
<td>.17*</td>
<td>.93**</td>
<td>1.00</td>
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<td></td>
</tr>
<tr>
<td>5. Mother Age in Years</td>
<td>.15*</td>
<td>-.02</td>
<td>.24**</td>
<td>.23*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6. Day Care Use (n/y)</td>
<td>.30**</td>
<td>.04</td>
<td>.23**</td>
<td>.21*</td>
<td>.29**</td>
<td>1.00</td>
</tr>
<tr>
<td>7. Currently Pregnant (n/y)</td>
<td>.09</td>
<td>.13</td>
<td>-.02</td>
<td>-.01</td>
<td>.02</td>
<td>-.03</td>
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<tr>
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<td>.08</td>
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<td>-.05</td>
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<td>-.04</td>
<td>-.05</td>
<td>.03</td>
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<td>12. Language (Eng/Span)</td>
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<td>-.10</td>
<td>.24**</td>
<td>.33**</td>
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<td>-.01</td>
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<td>.34**</td>
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</table>

Note: °p < .10, * p < .05, ** p < .01.
Table 3. (continued)

_Bivariate Correlations Among Demographic Variables_

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<td>1. Child Age in Months</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>2. Child Gender (F/M)</td>
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<tr>
<td>3. Child Birth Order</td>
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<tr>
<td>4. Number of Children</td>
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<tr>
<td>5. Mother Age in Years</td>
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<td>6. Day Care Use (n/y)</td>
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<td>8. Mother Years in US</td>
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Note: ° p < .10, * p < .05, ** p < .01.
Table 3. (continued)

*Bivariate Correlations Among Demographic Variables*

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Note: \(^o\) p < .10, * p < .05, ** p < .01.
Table 4

*Bivariate Correlations Between and Among Substantive Variables (N=129)*

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Table 4 (continued)

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(b) Among Substantive Variables

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<td>-.14</td>
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Note: GM Support = Grandmother Support; Accult = Acculturation; Encult = Enculturation; Rel Strain = Relationship Strain; Psych Symp = Psychological Symptoms; °p<.10, *p<.05, **p <.01.
Table 5

Partial Correlations Controlling for Negative Life Events, Mother Age, and Economic Strain (N=129)

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<td>-.01</td>
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<td>-.04</td>
<td>.04</td>
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<td>-.03</td>
<td>.06</td>
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<td>1.00</td>
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<td>-.12</td>
<td>-.07</td>
<td>.31**</td>
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Note: GM Support = Grandmother Support; Accult = Acculturation; Encult = Enculturation; Rel Strain = Relationship Strain; Psych Symp = Psychological Symptoms;

*p<.10, *p<.05, **p <.01.
**Table 6**

*Hierarchical Regression Analyses for Hypothesis 1a, “Does Acculturation Moderate the Relationship between Grandmother Support and Psychological Symptoms?” (n =119)*

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<td>SE B</td>
<td>Beta</td>
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<td>-.17°</td>
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<td>.08</td>
<td>.18*</td>
<td>.15</td>
<td>.08</td>
<td>.18*</td>
<td>.15</td>
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<tr>
<td>Negative Life Events</td>
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<td>.08</td>
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Note: 10 cases of multivariate outliers were excluded from analyses, and the final model’s standard errors were corrected for heteroscedasticity. ° p < .10, * p < .05, ** p < .01.
Table 7

Hierarchical Regression Analyses for Hypothesis 1b, “Does Enculturation Moderate the Relationship between Grandmother Support and Psychological Symptoms?” (n =120)

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<td>.29</td>
<td>.08</td>
<td>.30**</td>
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Note: 9 cases of multivariate outliers were excluded from analyses. ° p < .10, * p < .05, ** p < .01.
Table 8

Hierarchical Regression Analyses for Hypothesis 2, “Does Relationship Strain Moderate the Relationship between Grandmother Support and Psychological Symptoms?” (n=120)

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<td>.07</td>
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<tr>
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<td>.07</td>
<td>.35**</td>
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Note: 9 cases of multivariate outliers were excluded from analyses. ° p < .10, * p < .05, ** p < .01.
Table 9  

*Hierarchical Regression Analyses for Hypothesis 3a, “Does Acculturation Moderate the Relationship between Grandmother Support and Psychological Symptoms After Controlling for Relationship Strain?” (n =120)*

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<td>Beta</td>
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<td>SE B</td>
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<tr>
<td>Mother’s Age</td>
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<td>.07</td>
<td>-.19*</td>
<td>-.14</td>
<td>.07</td>
<td>-.18*</td>
<td>-.14</td>
<td>.07</td>
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<td>.07</td>
<td>.27**</td>
<td>.20</td>
<td>.07</td>
<td>.25**</td>
<td>.20</td>
<td>.07</td>
</tr>
<tr>
<td>Negative Life Events</td>
<td>.27</td>
<td>.07</td>
<td>.33**</td>
<td>.24</td>
<td>.07</td>
<td>.29**</td>
<td>.24</td>
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<tr>
<td>Grandmother support</td>
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<td>.02</td>
<td>.07</td>
<td>.02</td>
<td>.01</td>
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<tr>
<td>Anglo Orientation Scale (AOS)</td>
<td>.01</td>
<td>.08</td>
<td>.02</td>
<td>.00</td>
<td>.08</td>
<td>.01</td>
<td>.08</td>
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<tr>
<td>Relationship Strain (RS)</td>
<td>.10</td>
<td>.08</td>
<td>.12</td>
<td>.11</td>
<td>.08</td>
<td>.12</td>
<td>.08</td>
<td>.12</td>
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<tr>
<td>Grandmother support x AOS</td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
<td>.09</td>
<td>.02</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.23</td>
<td></td>
<td></td>
<td>.24</td>
<td></td>
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<td>.24</td>
<td></td>
</tr>
<tr>
<td>F for change in $R^2$</td>
<td>11.37**</td>
<td></td>
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</tbody>
</table>

Note: 9 cases of multivariate outliers were excluded from analyses. ° p < .10, * p < .05, ** p < .01.
Table 10

Hierarchical Regression Analyses for Hypothesis 3b, “Does Enculturation Moderate the Relationship between Grandmother Support and Psychological Symptoms After Controlling for Relationship Strain?” (n =119)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>Beta</td>
<td>B</td>
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<tr>
<td>Mother’s Age</td>
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<td>-.16°</td>
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<td>-.13</td>
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<td>Economic Strain</td>
<td>.24</td>
<td>.07</td>
<td>.28**</td>
<td>.23</td>
<td>.07</td>
<td>.27**</td>
</tr>
<tr>
<td>Negative Life Events</td>
<td>.28</td>
<td>.08</td>
<td>.31**</td>
<td>.24</td>
<td>.08</td>
<td>.26**</td>
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<td>-.05</td>
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<td>-.05</td>
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<tr>
<td>Latino Orientation Scale (LOS)</td>
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<td>.08</td>
<td>-.11</td>
<td>-.09</td>
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<td>-.10</td>
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<tr>
<td>Relationship Strain (RS)</td>
<td>.13</td>
<td>.08</td>
<td>.14</td>
<td>.13</td>
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<td>.14</td>
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<tr>
<td>Grandmother support x LOS</td>
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<td></td>
<td></td>
<td>-.05</td>
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<tr>
<td>$R^2$</td>
<td>.20</td>
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<td>.25</td>
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<tr>
<td>$F$ for change in $R^2$</td>
<td>9.83**</td>
<td></td>
<td>2.08</td>
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<td>.31</td>
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Note: 10 cases of multivariate outliers were excluded from analyses. ° p < .10, * p < .05, ** p < .01.
Table 11

Hierarchical Regression Analyses for Hypothesis 3c, “Does Relationship Strain Moderate the Association Between Grandmother Support and Adolescent Mother Psychological Symptoms After Controlling for Acculturation?” (n = 121)

<table>
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<tr>
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<tr>
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<tr>
<td>Economic Strain</td>
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<td>.28**</td>
</tr>
<tr>
<td>Negative Life Events</td>
<td>.32</td>
<td>.07</td>
<td>.35**</td>
</tr>
<tr>
<td>Grandmother support</td>
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<td>.07</td>
<td>-.03</td>
</tr>
<tr>
<td>Anglo Orientation Scale (AOS)</td>
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<td>-.06</td>
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<td>Grandmother support x RS</td>
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<td>F for change in $R^2$</td>
<td>12.62**</td>
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Note: 8 cases of multivariate outliers were excluded from analyses. ° p < .10, * p < .05, ** p < .01.
Table 12

*Hierarchical Regression Analyses for Hypothesis 3c, “Does Relationship Strain Moderate the Association Between Grandmother Support and Adolescent Mother Psychological Symptoms After Controlling for Enculturation?” (n = 119)*

<table>
<thead>
<tr>
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</thead>
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<td>Beta</td>
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<td>Negative Life Events</td>
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<td>-.08</td>
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<tr>
<td>Relationship Strain (RS)</td>
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<td>.09</td>
</tr>
<tr>
<td>Grandmother support x RS</td>
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<tr>
<td>F for change in R²</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 10 cases of multivariate outliers were excluded from analyses. * p < .10, * p < .05, ** p < .01.
CONSENT FORMS

METROHEALTH MEDICAL CENTER

Human Investigation Consent Form

Project Title: Latina Adolescent Parenting Project
Investigator: Dr. Josefina Grau, Kent State University

Dear Participants and Parents:

Kent State University in collaboration with MetroHealth Medical Center is conducting a study of the factors influencing the well being of young Latina mothers and their children. We would like you to take part in this study. If you decide to participate, you will be asked to complete two home visits, one in the near future when your child is approximately 1 and ½ years old, and the other, six months later. The home visits will be scheduled at a time that is convenient to you and will be conducted by two female researchers. During each of the visits, one of the researchers will videotape your child while he/she is administered a developmental test. The researcher will then videotape you while you play with and teach your child. Finally, you will be interviewed individually about your own functioning (e.g., social and personal adjustment, relationships with family members) and your child’s behavior. The visit will take approximately 2 and ½ hours to complete. For your participation, you will receive $70.00, a copy of the videotape, and a small toy for your child at the end of each of the home visits.

All the information gathered through this study will remain strictly confidential within the limits of the law. This means that we are required by law to break confidentiality and report to local authorities if we find evidence of child (including you, if you are less than 18 years old) or elder abuse, or if we learn that you have suicidal or homicidal feelings. To maintain confidentiality, the information you provide to us will be identified only by a participant number (not your name) and will be examined only by Dr. Grau and qualified members of her research team at Kent State University. We will schedule the home visit at a time that is convenient to you, so that you can be videotaped and interviewed privately. Also, you will have the choice of responding to interview questions either aloud or by pointing to response options that will be printed in response cards. However, if you have confidentiality concerns because of the presence of a family member or someone else in your home while you are being videotaped or interviewed, we can interrupt the procedures or reschedule the home visit.
Personnel at MetroHealth Medical Center will not have access to the information you provide us. Similarly, Dr. Grau and her research team will not have access to medical or any other information that MetroHealth Medical Center may have about you.

You may experience some discomfort when asked to answer personal questions, but our experience is that this discomfort is, at most, slight and short lived. If you experience more than mild discomfort, we encourage you to contact the Center for Behavioral Health, Child and Adolescent Services at MetroHealth Medical Center (216 - 778-3745). Alternatively, if you prefer, the interviewer can assist you with the referral.

You are under no obligation to complete this study even if you sign this consent form.

You may skip questions or discontinue your participation at any time. You will be presented with another consent form for the second home visit. Participation is completely voluntary and refusing to participate will not affect in any way the services you receive at MetroHealth Medical Center.

If you have any questions regarding the study, please feel free to call Dr. Josefina Grau at (330) 672 3106 or (216) 212-9188. This project has been approved by Kent State University and MetroHealth Medical Center. If you have any questions about Kent State University's rules for research, please call Dr. John L. West at (330) 672-3012. If you have any questions about your rights as a research participant, contact the MetroHealth Medical Center’s Institutional Review Board (which is a group of people who review the research to protect your rights) at (216) 778-2077.

By signing this form I acknowledge that I have read and understand this form, and have had any questions regarding this study satisfactorily answered, and I am voluntarily consenting to participate in this study.

________________________________________________
Participant's signature Date

Parent/Guardian Consent: I give my daughter permission to participate in this study.

________________________________________________
Parent or Guardian's Signature Date

________________________________________________
Researcher Signature Date

(Person obtaining consent)

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Latina Adolescent Parenting Project – IRB #: IRB06-00047/CR00002903
Consent Form Protocol Approval Date: 4/5/2006
Page 103 of [2] Protocol Expiration Date: 2/19/2010

HUMAN INVESTIGATION CONSENT FORM
CONSENT FOR PHOTOGRAPHY,

AUDIO OR VIDEOTAPING (medical)

Request Type: ☐ Photography ☐ Audiotape ☑ Videotape ☐ Other: ____________

Photographs of the subjects(s) will be: ☑ Clothed ☐ Partially clothed ☐ Undressed

Permission is hereby given to photograph, audiotape, or videotape the following named person(s) ___________________________________ with the understanding that such photographs, audiotapes or videotapes may be used for the following stated purposes:

☐ Medical Necessity/Diagnostic Purposes: Explain:____________________________

☐ Education: Explain intended purpose:_____________________________________

☐ Publication in medical and/or scientific journals: __________________________

☐ Inclusion in Research Paper(s): Latina Adolescent Parenting Project

☐ Other:  ____________________________________________________________

Please Specify

The department requesting photos, videos, etc will be responsible for proper storage of the media as established by The MetroHealth System medical record retention requirements. Photographs, etc are not to be placed in the patient medical record. The department requesting photographs, video, etc is Research: __________________

Description of media requested: Videotaping of 1) mother while she teaches and plays with her child; 2) child while he/she is administered a developmental test.

Purpose of Request (describe how photographs, audiovisual or videotaped will be used): Learn about factors influencing the well being of young Latina mothers and their children.

I, the undersigned, understand that this authorization is valid for a period of 60 days from the date of completion of this authorization, and may be revoked by me or my legal representative in writing at any time. However, I understand that if I do so, it will not have any effect on any actions that were taken before the revocation was received. I understand that for the revocation to be effective, I must do so in writing and send it to department who originally requested the photographs, etc. The revocation notices will be filed in the patient medical record after review by the originating department.
I further understand that once the media has been released, re-disclosure of my information by the recipient which may include protected health information may no longer be protected by law.

<table>
<thead>
<tr>
<th>Signature of Participant</th>
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</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of parent/guardian</th>
<th>Date/Time</th>
</tr>
</thead>
<tbody>
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</table>

<table>
<thead>
<tr>
<th>Name of Photographer</th>
<th>Date/Time</th>
<th>Witness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For non-medical photographs, videotapes or audiotapes for non-medical purposes for use by The MetroHealth Foundation, Marketing or Media Relations, please refer to the form in Attachment B.

MHS FORM 031047901

4/05
METROHEALTH MEDICAL CENTER
Human Investigation Consent Form
CONSENTIMIENTO

Título del Proyecto: Latina Adolescent Parenting Project

Investigadora: Dra. Josefina Grau, Kent State University

Estimadas Participantes y Padres:

En colaboración con MetroHealth Medical Center, Kent State University está conduciendo un estudio acerca de los factores que influyen en el bienestar de madres Latinas jóvenes y sus hijos/as. Nos gustaría que participes en este estudio. Si decides participar, te visitaremos en tu casa dos veces, una vez en el futuro cercano cuando tu hijo/a tenga aproximadamente 1 año y medio, y la otra vez, seis meses más tarde. Las visitas serán fijadas para el día y la hora que a ti te convenga, y serán conducidas por dos investigadoras mujeres. Durante cada una de las visitas, una de las investigadoras filmará a tu hijo/a mientras le administra una prueba de su desarrollo. Después de eso, la investigadora te filmará mientras le enseñas y juegos con tu hijo/a. Finalmente, te entrevistaremos individualmente acerca de tu propio bienestar (por ejemplo, tu adaptación social y personal, tus relaciones con tu familia y amigos) y acerca del comportamiento de tu hijo/hija. La visita tomará aproximadamente 2 horas y 1/2. Al terminar cada visita, recibirás $70.00, una copia del video, y un juguete pequeño para tu hijo/a.

Toda la información que obtengamos a través de este estudio se mantendrá confidencial dentro de los límites de la ley. Esto significa que no podremos mantener confidencialidad y tendremos que reportar a las autoridades si encontramos evidencia de abuso de menores (incluyendo a ti, si es que eres menor de 18 años) o de ancianos, o si notamos que tienes deseos de cometer suicidio u homicidio. Para mantener la confidencialidad, la información que nos des será identificada solamente mediante un número (no tu nombre) y será examinada solo por la Dra. Grau y miembros calificados de su grupo de investigación en Kent State University. Para que seas filmada y entrevistada privadamente, las visitas serán fijadas para el día y la hora que sean convenientes para ti. También tendrás la opción de responder a las preguntas de la entrevista en voz alta o señalando las respuestas que estarán escritas en tarjetas al frente de ti. De todos modos, si cuando estás siendo filmada o entrevistada, hay alguien en tu casa que prefieres que no te escuche o vea, podemos interrumpir la filmación o entrevista por un rato, o hacer una cita para continuar la visita en otro momento.

El personal de MetroHealth no tendrá acceso a la información que nos des. Tampoco
tendrá la Dra. Grau y su grupo de investigación acceso a cualquier información que MetroHealth Medical Center pueda tener acerca de ti.

Puede que te sientas incomoda cuando te hagamos preguntas acerca de cosas personales, pero nuestra experiencia es que esta incomodidad es, a lo más, leve y breve. Si tu sientes más que incomodidad leve, te recomendamos que llames al Center for Behavioral Health, Child and Adolescent Services en el MetroHealth Medical Center (216 778-3745). Si prefieres, la entrevistadora te puede ayudar a hacer una cita.

Tú no estás obligada a completar el estudio aunque firmes este consentimiento. Puedes saltarte preguntas o dejar de participar en cualquier momento. Te pediremos que firmes otro consentimiento cuando te visitemos la segunda vez. Tu participación es completamente voluntaria y los servicios que puedas estar recibiendo en MetroHealth Medical Center no van a ser afectados si te niegas a participar.

Si tiene preguntas acerca del estudio, por favor llama a la Doctora Josefina Grau al (330) 672-3106 or (216) 212-9188. Este estudio ha sido aprobado por Kent State University y MetroHealth Medical Center. Si tienes preguntas acerca de los reglamentos de investigación de Kent State University, por favor llama al Dr. John L. West al (330) 672 3012. Si tienes preguntas acerca de tus derechos como participante, por favor llama al Institutional Review Board del MetroHealth Medical Center (que es un grupo de personas que revisa las investigaciones para proteger tus derechos) al (216) 778-2077.

Mi firma indica que yo leí y entiendo este formulario, que mis preguntas acerca del estudio han sido contestadas satisfactoriamente, y he decidido participar voluntariamente en este estudio.

____________________________________________________
Firma de la Participante Fecha

Autorización del padre/madre: Le doy permiso a mi hija para participar en el estudio.

_________________________________________ ____________
Firma del Padre/Madre Fecha

_________________________________________ ____________
Firma de la investigadora Fecha

(Individuo que obtuvo el consentimiento)

THIS SIDE — IRB OFFICE USE ONLY

Latina Adolescent Parenting Project
Consent Form
Page 107 of 2

IRB #: 06-00047
Protocol Approval Date: 4/5/2006
Protocol Expiration Date: 2/19/2010
CONSENTIMIENTO DE FILMACION

Tipo: □ Fotografía □ Grabación de voz/sonido ■ Video tape □ Otro: ____________

Las fotografías de las participantes se tomarán: ■ Vestida □ Parcialmente Vestida
□ Desnuda

Doy permiso para que mi hijo/a y yo, ________________________ seamos filmados con el entendimiento que el video tape puede ser usado para los siguientes propósitos

□ Necesidad médica/diagnostico: ____________________________

□ Educación: Explique: ____________________________

□ Publicación en revistas profesionales: ____________________________

■ Para reportes de investigación: Latina Adolescent Parenting Project ____________

□ Otro: ____________________________

Descripción del video que se solicita: Filmación de 1) la madre mientras le enseña y juega con su hijo/a; el/la hijo/a mientras se le administra una prueba de su desarrollo.

Razón para la solicitud: El video será usado para aprender acerca de los factores que influyen en el bienestar de madres Latinas jóvenes y sus hijos/as.
Mi firma indica que yo entiendo que esta autorización es válida por 60 días, y puede ser revocada por mi o mi representante legal por escrito en cualquier momento. Entiendo que si revoco el permiso esto no tendrá ningún efecto en las acciones que se tomaron antes de recibir el pedido de revocación. Entiendo que para que la revocación sea efectiva, yo debo hacerlo por escrito y mandarla al departamento que pidió el video. La nota de revocación será puesta en la ficha médica después de ser evaluada por el departamento.

También entiendo que una vez difundida, puede que nuevas revelaciones de mi información, que puede incluir información médica que es protegida, ya no sea protegida por la ley.

<table>
<thead>
<tr>
<th>Firma de la participante</th>
<th>Fecha</th>
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<tbody>
<tr>
<td>Firma del Padre/Madre de la participante</td>
<td>Fecha</td>
</tr>
<tr>
<td>Nombre de la persona tomando el video</td>
<td>Fecha</td>
</tr>
</tbody>
</table>

MHS FORM 031047901
4/05
APPENDIX B

MEASURES

SOCIAL SUPPORT NETWORK QUESTIONNAIRE (SSNQ)

The Social Support Network Questionnaire

The Social Support Network Questionnaire (SSNQ) is a structured face-to-face interview that has been designed to assess social support and social strain in adolescent mothers’ relationships. The SSNQ is a modification and extension of the Arizona Social Support Interview Schedule (Barrera, 1981) and it is administered with the aid of a lap-top computer. The following document lists instructions to interviewers and questions asked of participants. If you would like a copy of the program files and variable dictionaries, please contact Jean Rhodes (jean.rhodes@umb.edu) or Christina Gee (cgee@gwu.edu).

[READ TO THE PARTICIPANT]
I would like to spend the next 25 to 30 minutes talking with you about the people who are important to you in a number of different ways. To begin with, I am going to ask about the people you turn to for different kinds of help and support. You can give me just their first names or their initials if you wish. These people might be friends, family members, ministers, teachers, doctors, or anyone else you know.

Me gustaría hablar contigo sobre las personas que son importantes para ti. Para empezar voy ha hacerte una serie de preguntas sobre las personas a las cuales tu buscas cuando necesitas ayuda o apoyo moral/emocional. Estas personas pueden ser amigas, miembros de tu familia, maestros, médicos, ministros/curas o cualquier otra persona a quien conozcas. Puedes usar sus nombres o iniciales, no es necesario que menciones sus apellidos.

If you’re not sure you understand the question, please tell me and I will try to make it clearer.
Si no entiendes alguna pregunta, por favor dimelo y tratáre de aclararla.

SSNQ - EMOTIONAL SUPPORT

1a) If you wanted to talk to someone about something personal or private, who would you talk to – for instance, if you had something on your mind that was worrying you or making you feel down?
[PROBE]: Is there anyone else you can think of?
¿Si quisieras hablar con alguien acerca de algo personal o privado, con quién
hablarías? – por ejemplo, si hubiera algo que te estabas preocupando o haciendote sentir mal.

[PROBE]: ¿Se te ocurre alguna otra persona?

1b) During the past month, how often did you actually talk to each of these people about something personal or private?

1b) Durante los últimos 30 días, cuantas veces has hablado sobre algo personal o privado con cada una de estas personas?

0. Never
1. Once or twice this month
2. About once a week
3. More than once a week

1c) How did you feel about the way things went the times you talked about personal concerns this past month?

1c) ¿Cómo te sentiste cuando hablaste sobre preocupaciones y asuntos personales en los últimos 30 días?

1. Bad
2. Not too good
3. Okay
4. Good
5. Very good

1d) During the past month, would you have liked more opportunities to talk to people about your personal feelings and concerns, less opportunities, or was it about right?

1d) Durante los últimos 30 días, ¿te hubiera gustado tener mas, menos o el mismo número de oportunidades para hablar con alguien sobre tus sentimientos y asuntos personales?

3. More
2. Less
1. About right

SSNQ - TANGIBLE ASSISTANCE

2a) Who of the people you know would lend or give you something you needed or pitch in to help you with something you needed to do? These would be people who would run an errand for you, lend you money, food, clothing, or drive you somewhere you needed to go.

[PROBE]: Anyone else?

2a) De las personas a quienes conoces, quiénes estarían dispuestas a prestarte algo que necesitaras o a ayudarte en algo que necesitaras hacer? Estar personas serian las cuales harian una diligencia para ti, te prestarian dinero, comida, ropa, o simplemente te llevarian a algún sitio al cual tengas que ir.
2b) During the past month, how often did each of these people actually loan you something you needed or helped you out with things like providing transportation, running errands, or helping you do a chore you needed to get done?

2b) Durante los últimos 30 días, ¿con qué frecuencia te ayudó CADA una de estas personas? ¿Cuántas veces te prestaron algo, te ayudaron a hacer algo que tenías que hacer o te llevaron a algún sitio o a hacer una diligencia?

0. Never
1. Once or twice this month
2. About once a week
3. More than once a week

2c) Overall, during this past month, how good was the practical help you got from the people you listed—how well did it meet your needs?

2c) En general, durante los últimos 30 días, ¿qué tan útil fue la ayuda práctica que te dieron cada una de estas personas? -- ¿Qué tan bien satisfacieron tus necesidades?

1. Bad
2. Not too good
3. Okay
4. Good
5. Very good

2d) During the past month, would you have liked people to have given you more practical help such as lending you things, providing you with transportation, running errands, or helping you with other things you needed to get done? Less practical help? Or was it about right?

2d) Durante los últimos 30 días, ¿hubieras preferido más, menos o la misma cantidad de ayuda práctica? Como por ejemplo, que alguien te prestara cosas, te llevara a algún sitio, te hiciera una diligencia o te ayudara con algo que necesitas hacer?

3. More
2. Less
1. About right

SSNQ - COGNITIVE GUIDANCE

3a) Who would you go to if you needed advice or information—for example, if you didn’t know where to get something or how to do something you needed to do? Remember, you can name the same people that you mentioned before, or you can name new people.

[PROBE]: Is there anyone else you might go to for advice or information?

3a) ¿A quién buscas cuando necesitas información o consejo?—por ejemplo, si no sabes como conseguir algo o como hacer algo. Recuerda que puedes mencionar a las mismas personas, o a otras que no has incluido en la lista.

[PROBE]: ¿Hay alguien más a quien puedes buscar para recibir información o consejo?
3b) During the past month, how often did each of these people actually give you information or advice?

3b) Durante los últimos 30 días, ¿con cuanta frecuencia te dio consejo o información cada una de estas personas?
   0. Never
   1. Once or twice this month
   2. About once a week
   3. More than once a week

3c) This past month, how did you feel about the advice and information you did get?

3c) Durante los últimos 30 días, ¿como te sentistse acerca de la información o el consejo que recibiste?
   1. Bad
   2. Not too good
   3. Okay
   4. Good
   5. Very good

3d) During this past month, would you have liked more advice, less advice, or was it about right?

3d) Durante los últimos 30 días, ¿te hubiera gustado recibir más, menos o la misma cantidad de información o consejo?
   3. More
   2. Less
   1. About right

SSNQ - POSITIVE FEEDBACK/SOCIAL REINFORCEMENT

4a) Who are the people that you can expect to let you know that they like your ideas or the things that you do? Remember, you might have listed these people before or they can be new people.

[PROBE]: Is there anyone else?

4a) ¿Quienes son las personas que puedes esperar que te digan que les gusta tus ideas o las cosas que haces? Recuerda que puedes haber mencionado a estas personas antes, o pueden ser otras nuevas.

[PROBE]: ¿Hay alguien más?

4b) During the past month, how often did each of these people actually let you know that they liked something you did or said?

4b) Durante los últimos 30 días, ¿con cuanta frecuencia cada una de estas personas de hecho te dijeron que les gusto algo que hiciste o dijiste.
   0. Never
   1. Once or twice this month
2. About once a week
3. More than once a week

4c) During the past month, how did you feel about the way things went the times the people you mentioned told you that they liked your ideas or something that you did?

4c) Durante los últimos 30 días, cómo te sentiste cuando las personas que mencionaste te dijeron que les gusto algo que hiciste, o tus ideas?
1. Bad
2. Not too good
3. Okay
4. Good
5. Very good

4d) During the past month, would you have liked people to tell you that they liked your ideas or things that you did more often, less often, or was it about right?

4d) Durante los últimos 30 días, ¿te hubiera gustado que las personas te dijeran más, menos, o la misma cantidad de veces que les gustaron tus ideas o algo que hiciste?
1. More
2. Less
3. About right

SSNQ - SOCIAL PARTICIPATION

5a) Who are the people you get together with to have fun and relax? These could be new names or the ones you listed before.
[PROBE]: Anyone else?

5a) ¿Quienes son las personas con las cuales te diviertes, o relajas? Pueden ser personas nuevas o gente que has mencionado antes.
[PROBE]: ¿Hay alguien más?

5b) During the past month, how often did you actually get together with each of these people?

5b) Durante los últimos 30 días, ¿cuantas veces te reuniste con cada una de estas personas?
0. Never
1. Once or twice this month
2. About once a week
3. More than once a week

5c) During the past month, how good did you feel about your experiences the times that you got together with people to have fun and relax?

5c) Durante los últimos 30 días, ¿como te sentiste cuando que te reuniste para divertirte?
1. Bad
2. Not too good
3. Okay
4. Good
5. Very good

5d) During the past month, would you have liked more opportunities to get together with people to have fun and relax, less opportunities, or was it about right?
5d) Durante los últimos 30 días, ¿te hubiera gustado tener más, menos, o el mismo número de oportunidades para reunirte de reunirte con estas personas para divertirte y relajarte.
3. More
2. Less
1. About right

SSNQ - CHILDCARE ASSISTANCE
7a) Who could you go to for help in taking care of your child/children? For instance, who could you rely on to watch your child/children in an emergency or if you just needed a break?
7a) ¿Con quien podrías contar para que te ayudaran a cuidar a tus hijo/s? Por ejemplo, ¿con quien contarias para cuidar a tus niños en caso de una emergencia o si necesitaras un descanso?

7b) During the past month, how often did each of these people actually help you with your child/children?
7b) Durante los últimos 30 días, ¿cuántas veces te ayudaron cada una de estas personas a cuidar a tus hijo/as?
0. Never
1. Once or twice this month
2. About once a week
3. More than once a week

7c) During this past month, how did you feel about the help with child care you did receive?
7c) Durante los últimos 30 días, ¿qué tan bien te sentiste con la ayuda que recibiste con el cuidado de tus hijo/as?
1. Bad
2. Not too good
3. Okay
4. Good
5. Very good

7d) During this past month would you have liked more help taking care of your child/children, less help, or was it about right?
7d) Durante los últimos 30 días, ¿te hubiera gustado tener más, menos o la misma cantidad de ayuda con el cuidado de tus hijos/as?
We’ve been talking about the ways you help your friends, family, and other people you know and the ways they help you. Although they may not mean to, the people that are the most help to us, sometimes say things that are hurtful. I am not going to ask a few questions about the ways the people in your life cause problems for you.

Aunque no quieren hacerlo, muchas veces las personas que más nos ayudan son las mismas que hacen cosas que nos duelen. Voy a hacerte algunas preguntas sobre las formas en que las personas en tu vida te causan problemas.

SSNQ – DISAPPOINTMENT
First, for each of the people you’ve named, I’d like you to tell me how often you can expect that person to disappoint you—break promises they’ve made, not come through for you when you most need them, or disappoint you in some other way?

Primero, para cada una de las personas que has mencionado, me gustaría que me dijieras ¿con cuanta frecuencia puedes esperar que esta persona te desilusione—no cumpla con alguna promesa, no puedas contar con el/lla, o que no este contigo cuando más la/lo necesitas?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

SSNQ - INTRUSIVENESS
How often does _______ butt into your business—watch over the things you do, boss you around, or act like they know what’s best for you?

¿Con cuanta frecuencia _______ trata de meterse en tus asuntos, vigilarte, mandarte o actuar como si el/ella supiera lo que es mejor para ti?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

SSNQ - CRITICISM
How much does _______ criticize you—put you down, make you feel stupid?

¿Qué tanto te critica o trata de hacerte sentir mal _______?

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

SSNQ - CONFLICT
How often do you have fights or strong disagreements with this person?
¿Cada cuanto tiempo peleas o tienes desacuerdos fuertes con esta persona?
1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

RELATIONSHIP SATISFACTION
In general, how satisfied are you with your relationship with your (mother figure)?
1. Very satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very dissatisfied
5. Refused

En general, que tan satisfecha estás con la relación que tienes con tu (mother figure)?
1. Muy satisfecha
2. Algo satisfecha
3. Algo insatisfecha
4. Muy insatisfecha
5. REHUSO

NETWORK OF RELATIONSHIPS INVENTORY – DOMINANCE SCALE
1. With regard to making decisions about how to parent your child, how often does your (mother figure) get her own way when you two do not agree about what to do?
En relación a tomar decisiones acerca de cómo criar a tu hijo, con que frecuencia tu (mother figure) consigue hacer las cosas a su manera cuando ustedes dos no están de acuerdo acerca de qué hacer?
1. Never or Almost Never
2. Sometimes
3. Many times
4. Almost always
5. Always
6. Refused

2. With regard to making decisions about how to parent your child, how often does your (mother figure) end up being the one who makes the decision for the both of you.
En relación a tomar decisiones acerca de cómo criar a tu hijo, con que frecuencia tu (mother figure) termina siendo la que toma la decisión por ambas (tú y ella)?
1. Never or Almost Never
2. Sometimes
3. Many times
4. Almost always
5. Always
6. Refused

3. With regard to making decisions about how to parent your child, how often does your (mother figure) get you to do things her way?
En relación a tomar decisiones acerca de cómo criar a tu hijo, con que frecuencia tu (mother figure) consigue hacer que te hagas las cosas a su manera?
   1. Never or Almost Never
   2. Sometimes
   3. Many times
   4. Almost always
   5. Always
   6. Refused

ARSMA-II: Acculturation Rating Scale for Mexican Americans-II

Please tell me the response that best describes your personal opinion about each of the following statements. / Por favor dime la respuesta que mejor describe tu opinión personal acerca de cada una de las siguientes afirmaciones.

Note: The following answer options are used for each item.

1. Not at all / Nada
2. Very little or not very often / Un poco o a veces
3. Moderately / Moderado
4. Much or very often / Mucho o muy frecuente
5. Extremely often or almost always / Muchísimo
6. Refused / Reshuso

1. I speak Spanish. / Yo hablo Espanol
2. I speak English. / Yo hablo Ingles
3. I enjoy speaking Spanish. / Me gusta hablar en Espanol
4. I associate with Anglos/Americans. / Me asocio con Anglos/Americanos
5. I associate with Latinos. / Yo me asocio con Latinos o con Estadounidenses de origen Latino
6. I enjoy listening to Spanish language music. / Me gusta la musica en el idioma Espanol
7. I enjoy listening to English language music. / Me gusta la musica en el idioma Ingles
8. I enjoy Spanish language TV. / Me gusta ver programas en la television que sean en Espanol.
9. I enjoy English language TV. / Me gusta ver programas en la television que sean en
Ingles.
10. I enjoy English language movies. / Me gusta ver peliculas en Ingles.
11. I enjoy Spanish language movies. / Me gusta ver peliculas en Espanol.
12. I enjoy reading (for example books) in Spanish. / Me gusta leer (por ejemplo libros) en Espanol.
13. I enjoy reading (for example books) in English. / Me gusta leer (por ejemplo libros) en Ingles.
14. I write (for example letters) in Spanish. / Escribo (por ejemplo cartas) en Espanol.
15. I write (for example letters) in English. / Escribo (por ejemplo cartas) en Ingles.
16. My thinking is done in the English language. / Mis pensamientos ocurren en el idioma Ingles.
17. My thinking is done in the Spanish language. / Mis pensamientos ocurren en el idioma Espanol.
18. My contact with Latinos has been. / Mi contacto con Latinos ha sido
19. My contact with Anglos/Americans has been. / Mi contacto con Anglos/Americanos ha sido
20. My father identifies or identified himself as Latino. / Mi padre se identifica (o se identificaba) como Latino.
21. My mother identifies or identified herself as Latina. / Mi madre se identifica (o se identificaba) como Latina.
22. My friends, while I was growing up, were of Latino origin. / Mis amigos(as) de mi niñez era de origen Latino.
23. My friends, while I was growing up, were of Anglo/American origin. / Mis amigos(as) de mi niñez eran de origen Anglo/Americano.
24. My family cooks Latino food. / Mi familia concina comidas Latinas
25. My friends now are of Anglo/American origin. / Mis amigos recientes son Anglos/Americanos.
26. My friends now are of Latino origin. / Mis amigos recientes son Latinos.
27. I like to identify myself as an Anglo American. / Me gusta identificarme como Anglo-Americano(a).
28. I like to identify myself as an American of Latino origin. / Me gusta identificarme como Estaunidense de origen Latino.
29. I like to identify myself as a Latino. / Me gusta identificarme como Latina.
30. I like to identify myself as an American. / Me gusta identificarme como una American.

SCL-90
Now, I am going to read you a list of problems and complaints that people sometimes have. Please let me know how much discomfort each of these problems has caused you during the last TWO WEEKS.
How much were you distressed by...
Ahora voy a leerte una lista de malestares y problemas que la gente a veces tiene. Dime cuanto te han molestado o afectado cada uno de estos problemas durante las ultimas 2 SEMANAS?
Cuanto te ha molestado o afectado...

SOMATIZATION SCALE

- Headaches?
  Dolores de cabeza?
  1. Not at all
  2. A little
  3. Some
  4. A lot (very)
  5. A huge amount (extremely)
  6. Don’t know
  7. Refused

Note: Subsequent items utilize the rating scale directly above.

(In the past TWO WEEKS how much were you distressed by...)
Faintness or dizziness? / Mareos o desmayos?
Pains in heart or chest? / Dolores en el corazón o pecho?
Pains in lower back? / Dolor en la parte baja de tu espalda?
Nausea or upset stomach? / Sentir nausea o malestar de estómago?
Soreness of your muscles? / Sentir los músculos adoloridos?
Trouble getting your breath? / Sentirse con dificultad en respirar?
Hot or cold spells? / Ataques o episodios de calor o frío?
Numbness or tingling in parts of your body? / Perdida de sensación u hormigueo en partes de tu cuerpo?
  A lump in your throat? / Nudo en la garganta?
Feeling weak in parts of your body? / Sentir debilidad en partes de tu cuerpo?
Heavy feelings in your arms or legs? / Sentirse pesadez en tus brazos o piernas?

DEPRESSION SCALE

- Loss of sexual interest or pleasure? / Perdida del placer o interés sexual?
Feeling low in energy or slowed down? / Sentirse con poca energía o fuerza para hacer las cosas?
Thoughts of ending your life? / Pensamientos de quitarte la vida?
Crying easily? / Llorar fácilmente?
Feelings of being trapped or caught? / Sentirse atrapado o presa?
Blaming yourself for things? / Culparte a ti misma por cosas?
Feeling lonely? / Sentirse sola?
Feeling blue? / Sentirse triste?
Worrying too much about things? / Preocuparte demasiado por cosas?
Feeling no interest in things? / No tener interés en cosas?
Feeling hopeless about the future? / Sentirse sin esperanza en el futuro?
Feeling everything is an effort? / Sentirse que todo toma demasiado esfuerzo?
Feelings of worthlessness? / Sentirte que no vales mucho como persona?

ANXIETY SCALE

- Nervousness or shakiness inside? / Nervios o ansiedad?
- Trembling? / Temblores?
- Suddenly scared for no reason? / Sentirte asustada de repente sin razón?
- Feeling fearful? / Sentirte con miedo?
- Heart pounding or racing? / Sentir el corazón latir rápidamente?
- Feeling tense or keyed up? / Sentirte tensa o alterada?
- Spells or terror or panic? / Sentir períodos de terror o pánico?
- Feeling so restless you couldn’t sit still? / Sentirte tan inquieta que no puedes sentarte, relajarte o estar tranquila?
- The feeling that something bad is going to happen to you? / Sentir que algo malo te va a pasar?
- Thoughts and images of a frightening nature? / Pensamientos e imágenes atemorizantes?

HOSTILITY SCALE

- Feeling easily annoyed or irritated? / Sentirte que te irritas o molestas fácilmente?
- Temper outbursts that you could not control? / Tener arrebatos que no puedes controlar?
- Having urges to beat, injure, or harm someone? / Sentir impulsos fuertes de herir o hacerle daño a alguien?
- Having urges to break or smash things? / Sentir impulsos fuertes de romper o destrozar cosas?
- Getting into frequent arguments? / Tener discusiones frecuentes?
- Shouting or throwing things? / El gritar o tirar cosas?

ECONOMIC STRAIN

For the next few questions, I’d like you to tell me which of these responses comes closest to describing the usual situation of you and the people you live with – your household. If you live alone, you should just answer these questions about yourself.

En las siguientes preguntas me gustaría que me dijeras cuál de estas respuestas se acerca más a describir tu situación y la de la gente que vive contigo – tu hogar/familia. Si tu vives sola, solo responde estas preguntas acerca de ti misma.

[Note: Questions 1-8 use the response options immediately following question 1.]

1. Do you feel your household is able to afford decent housing? ¿Sientes que tu hogar/familia es capaz de pagar una vivienda digna/apropiada?

   1. Never  Nunca
   2. Sometimes  Algunas veces
   3. Most of the time  La mayor parte del tiempo
4. Always Siempre
5. Refused Rehuso

2. Is your household able to afford furniture or household items that need to be replaced? *Tu hogar/familia puede pagar por muebles o artículos para el hogar que necesitan ser reemplazados?*

3. Can your household afford the kind of transportation it needs? *Puede tu hogar/familia pagar por la clase de transporte que necesita?*

4. Do you think your household has enough money for the kind of food you and your household should have? *Piensas que tu hogar/familia tiene suficiente dinero para la clase de comida que tu y tu hogar/familia deberías tener?*

5. Does your household have enough money for the kind of medical care you and your household should have? *Tu hogar/familia tiene suficiente dinero para pagar por la clase de cuidado médico que tu y tu hogar/familia debería tener?*

6. Does your household have enough money to buy decent clothing? *Tu hogar/familia tiene suficiente dinero para comprar ropa adecuada?*

7. Do you feel your household has enough money for the kind of recreations you and your household want? *Sientes que tu hogar/familia tiene suficiente dinero para la clase de recreación que tu y tu hogar/familia desean?*

8. How much difficulty does your household have paying bills? *Que tanta dificultad tiene tu hogar/familia para pagar cuentas (bills)?*

9. At the end of the month, do you have…? *Al final del mes, tu tienes…?*
   1. Not enough money *No suficiente dinero*
   2. Just enough money to make ends meet *No lo suficiente para cubrir los gastos*
   3. Some money left over *Algo de dinero de sobra*
   4. Refused *Rehuso*

**NEGATIVE LIFE EVENTS SCALE**

Next, I'm going to read to you a list of things that sometimes happen to people. FOR EACH OF THE EVENTS ON THIS LIST THAT HAPPENED TO YOU IN THE LAST YEAR, give the response that best describes how it affected you...

[Note: The following answer options are used for all items.]
1. Extremely bad
2. Somewhat bad
3. Neutral
4. Somewhat good
5. Extremely good
6. Did not happen in the last year
7. REFUSED

Got married.
Began a relationship.
Broke-up with someone.
Separated from husband.
Got divorced.
Close friend or family member moved away.
Someone else moved in or out of household.
YOU moved in or out of household.
Robbery or attempted robbery of home
Pregnancy.
Birth of a child.
Miscarriage
Abortion.
YOU experienced a serious illness, injury, or hospitalization?
Your HUSBAND/PARTNER experienced a serious illness, injury, or hospitalization?
One or both of your PARENTS experienced a serious illness, injury, or hospitalization?
Your CHILD experienced a serious illness, injury, or hospitalization in the past year?
Some other CLOSE RELATIVE experienced a serious illness, injury, or hospitalization in the past year?
Death of a: Husband or partner.
Death of a: Parent.
Death of a: Child.
Death of a: Close relative/friend.
Started work.
Quit or was laid off from work.
Change at work (demoted, promoted, etc.).
Change of schools
Started school/vocational training.
Graduated from school/vocational training.
Dropped out of school/vocational training
Had major problems in school/vocational training.
Detention in jail or youth facility
Other problems with the law.
YOU were mugged or robbed.