



Published in final edited form as:

*J Fam Psychol.* 2013 February ; 27(1): 147–158. doi:10.1037/a0031135.

## Household Structure, Family Ties, and Psychological Distress among US-born and Immigrant Latino Women

Kristine M. Molina, Ph.D. and

Department of Psychology, Behavioral Medicine Research Center, University of Miami

Carmela Alcántara, Ph.D.

Columbia University Medical Center, Department of Medicine

### Abstract

Latino women endorse the highest rates of past-month depressive symptoms relative to Latino men and to non-Latino White men and women. Yet, research into the specific domains of family life that reduce or engender psychological distress among Latinas is sparse. We examine the hypothesis that indicators of household structure and family ties will relate to psychological distress among Latinas in the USA, and that these associations will vary by nativity status. We employed nationally representative data of Latina adults ( $N = 1,427$ ) from the National Latino and Asian American Study. Nativity-stratified regression analyses revealed that strained family ties (i.e., family burden, family cultural conflict) were associated with greater levels of past-month psychological distress for both US-born and immigrant Latinas. Yet, the effect of household structures on psychological distress differed by nativity status. Adjusting for sociodemographic factors, lower levels of household income were associated with *greater* psychological distress; and having children/adolescents in the household was associated with *lower* levels of psychological distress among US-born Latinas. In contrast, for immigrant Latinas, being out of the labor force was associated with greater levels of psychological distress. Results suggest that dynamics of both the household and family context predict differential as well as similar mental health outcomes across segments of the Latina population in the USA. These findings underscore the need to understand the pathways by which different facets of family life—structural and social domains—relate to mental health status among subgroups of Latinas. Our results also have implications for the development of tailored interventions to meet the specific needs of Latinas.

### Keywords

psychological distress; Hispanic; nativity; socioeconomic status; cultural values

---

Latino women endorse the highest rates of past-month sadness, hopelessness, and worthlessness relative to Latino men and to non-Latino White U.S. American men and women (Centers for Disease Control and Prevention, 2007; Mendelson et al., 2008). Research into the specific domains of family life that reduce or engender psychological distress among Latinas is sparse, although the empirical research with non-Latinos points to the role of intra- and extra-familial contextual factors in shaping adult mental health outcomes (Carr & Springer, 2010). Despite long-standing efforts to document and understand variation in Latino mental health by nativity status (i.e., whether born in U.S.

---

Correspondence concerning this article should be addressed to Kristine M. Molina, Ph.D., Behavioral Medicine Research Center, Clinical Research Building, University of Miami Miller School of Medicine, 1120 N.W. 14<sup>th</sup> Street, Room 1516, Miami, FL 33136; Phone: 305-243-2048; Fax: 305-243-2055; kmolina@psy.miami.edu.

Portions of this manuscript were presented at the American Public Health Association annual meeting, Washington, DC 2011.

mainland or foreign-born) or gender (Alegría et al., 2004), less focus has been placed on examining how nativity moderates the mental health of Latinas. Moreover, most of the research on family and health among Latinos assumes that the structure of the family household and family dynamics operate uniformly among different segments of the Latina population, without considering the role of nativity as a site through which Latinas structure and negotiate their structural and social realities in the U.S. mainland (Hondagneu-Sotelo, 1999). Thus, empirical research into whether and how nativity patterns the associations between indicators of family context, familial ties, and Latina mental health is critically needed, and represents the focus of this article.

## Models of Family Context and Latina Mental Health: Considering Nativity

Ecological and psychosocial models of family health emphasize the inextricable links between external environmental influences (e.g., schools, neighborhoods), structural factors (e.g., parental employment, socioeconomic status), intra-familial factors (e.g., social networks) and child health (Bronfenbrenner, 1986; Szapocznik & Kurtines, 1993). Yet, adults remain embedded within particular familial, ecological, and cultural networks (Umberson, Crosnoe, & Reczek, 2010). Contextualist models can thus be used to understand variation in adult health.

Accordingly, an integrated ecological and psychosocial model of family health (Bronfenbrenner, 1986; Szapocznik & Kurtines, 1993) is well suited to investigate the association between structural factors, familial context and Latino well-being, because it treats family and individual health as embedded within environments, contexts, cultures, values, and social identities. Drawing from this integrated model, family and individual-level Latino health are intricately related, which is consonant with research suggesting that the family is the most important social institution in Latino culture (Menjívar, 2000) and that cultural values about the family such as *familismo* (familism) play an important role in structuring appraisals and responses to psychosocial stressors (Gaines et al., 1997; Knight & Sayegh, 2010; Zambrana, 1995). *Familismo* refers to a multidimensional cultural value that prizes interconnectedness among members of the family unit, and privileges family priorities above individual priorities in decision-making (Laria & Lewis-Fernández, 2006; Sabogal, Marín, Otero-Sabogal, & Marín, 1987). Greater adherence to *familismo* is theorized to buffer Latinos from poor mental health because of the emphasis on positive social connections with the family unit including family cohesion and family support (Gallo, Penedo, de los Monteros, & Arguelles, 2009; Hovey, 2000)

Most research on Latinas has tended to homogenize Latino women, despite notable differences on a number of socioeconomic indicators across segments of this population (e.g., education, income, marital status). Indeed, singularity among this group is not the case. We conjecture that differences in nativity status are likely to pattern access to risks and resources, as well as cultural attitudes about the family, which in turn might affect the configuration of the household and familial factors, and their associations to Latina mental health. For example, prior research shows that a perceived sense of familial obligation and the extent to which the family is perceived as central for decision-making varies by acculturation status or duration in U.S. (Sabogal et al., 1987), with greater perceived familial obligation and family centrality observed among less acculturated respondents. Immigrant Latinas might also hold more traditional gender-specific cultural ideologies about marriage and the family (Hondagneu-Sotelo, 1999; Mahalingam, Balan, & Molina, 2009) than their US-born counterparts who maintain weaker transnational and local family networks (Sabogal et al., 1987). For example, less acculturated Latinos (e.g., Spanish-language dominant) are more likely to believe in the traditional division of labor (e.g., expecting minimal domestic involvement from husbands; Guendelman, Herr-Harthon, & Vargas,

2001), that the husband should have the final say within a marriage, and that adult children should live with their parents until they marry (Suro, 2007). Thus, differences in nativity-patterned familial risks, resources, and cultural ideologies might generate variation in the relationship between household and familial factors and mental health among Latinas.

## Household Factors

### Structural factors

Research on the association between women's health and features of the household structure such as marital status, employment, and social status finds that marriage and co-habitation in a marital-like relationship, participation in the labor market relative to unemployment, and higher levels of socioeconomic status (e.g. educational attainment, household income, and earnings) confer social, economic, and psychological benefits for women throughout the lifespan (Bromberger & Matthews, 1994; Kawachi et al., 1999; Williams et al., 2010). For example, married persons experience lower levels of financial strain and material deprivation through the economic benefits that result partly from dual earnings, and also report higher levels of social integration and support than non-married persons (Ross, Mirowsky, & Goldstein, 1990). In addition, in a national sample of Latinos, Alegría and colleagues (2007) found that being divorced/separated/ or widowed was associated with increased risk for depressive disorders. Together, increased access to material and interpersonal resources combine to facilitate psychosocial adjustment (Bromberger & Matthews, 1994; Johnson & Wu, 2002; Kawachi et al., 1999; Williams et al., 2010). Likewise, strong empirical evidence supports the beneficial health effects of participation in the labor market and income, such that employment and higher income provide greater access to health insurance coverage and health care, and less exposure to distress-provoking environments, such as neighborhoods with higher levels of social disorganization (Kessler, 1979; Ross et al., 1990).

Differences between US-born and immigrant Latinas in the configuration of the family household structure may emerge in the context of different social and historical experiences (Hondagneu-Sotelo, 1999). To illustrate, Latina immigrants are significantly less likely to have advanced levels of educational attainment, have lower labor force participation rates, yet when employed, earn lower wages and are more likely to be concentrated in agricultural, manufacturing and service-oriented industries than their US-born Latina counterparts (Gonzales, 2008). Not surprisingly, Latina immigrants are thus more likely to live in poverty and in lower income households compared to US-born Latinas, who are more likely to live in middle and upper income households. On the other hand, Latina immigrants are more likely to be married and have higher fertility rates than their US-born Latina counterparts. Yet, US-born Latinas who bear children are more likely than their immigrant counterparts to be unmarried (Gonzales, 2008). Furthermore, US-born Latinas may benefit from greater access to opportunities and resources, such as higher participation in the labor force and higher education (Marotta & Garcia, 2003), which may result in different configurations of the family household and associations to mental health by nativity.

### Parental factors

Unlike findings of marital status and socioeconomic status, parenthood does not seem to confer uniform benefits on mental health (Evenson & Simon, 2005). Findings from work in this area remain inconsistent, with some studies showing parents of minor children fare worse on psychological outcomes than do parents of adult children or childless parents (Evenson & Simon, 2005), whereas others find parenthood is associated with reduced risk of past-year psychiatric morbidity (Helbig, 2006). Some suggest the adverse effects of parenthood on mental health may be particularly pronounced among mothers as a result of

greater exposure to multiple role strains, including caregiving demands and work-family conflict, and from interpersonal conflict between parents likely arising from decreased social support (Evenson & Simon, 2005; Umberson et al., 2010; Ross et al., 1990). Yet, others suggest that parenthood may provide greater opportunity for parental bonding and expression of positive emotions such as love/warmth, which may in turn be beneficial for the mother's own mental health (Fredrickson et al., 2008; Sabogal et al., 1987).

The association between parenthood and mental health among Latinas is understudied, with most of the work focused on understanding between-group racial/ethnic differences in infant and maternal health outcomes. For example, prior research shows that US-born and immigrant Latinas relative to African American women have more positive attitudes towards pregnancy, which partly explains variation in infant and maternal health outcomes (Zambrana et al. 1999). Further, one study examining within-group differences among Mexican immigrant women shows that positive attitudes towards pregnancy and the infant are associated with lower levels of postnatal anxiety after adjustment for relevant psychological factors, social support, and acculturation (Engle et al., 1990). Still, other studies with Latinos find that parenthood is not associated with depressive symptoms (Vega et al., 1986). Thus, it remains to be seen whether parenthood is uniformly associated with distress among Latino women and whether differences exist by nativity status.

## Familial Factors

Research on the relationship between intra-familial factors such as social ties and Latino adult health shows that family support is associated with lower levels of psychological distress and depressive symptoms, and with higher levels of psychological well-being (Aranda et al., 2001; Rodriguez, Mira, Paez, & Myers, 2007). Indeed, interpersonal supports or social ties can serve as resources or as tangible and intangible personal and social assets to manage stress and thus, may facilitate psychosocial adjustment (Gallo et al., 2009; Umberson et al., 2010). Yet, the same emphasis on interconnectedness and family cohesion among Latinos can serve as a source of distress in the absence of family resources such as family support and in the presence of family risk factors such as inter- and intra-generational family conflict and caregiver burden (Laria & Lewis-Fernández, 2006; Menjívar, 2000). For example, research on indicators of family risk and Latino health shows that perceptions of family burden and family conflict are associated with increased psychological distress and risk for past-year psychiatric disorder among Latina/os (Alegría et al., 2007; Rodriguez et al., 2007).

Although much of the research on Latina/os suggests that within the immigrant context family support systems are central for positive adaptation and integration into the host society, and that these support systems facilitate the degree to which immigrants are able to navigate their social worlds (Zambrana, 1995), given the loss of social ties from their country of origins, strong familial ties abroad may leave immigrants vulnerable to experience distress (Vega et al., 1991). However, less is known about the function and mental health consequences of the family context for US-born Latinas, who necessarily do not need to adapt to a host society, and who may therefore draw different benefits from their family networks (Menjívar, 2000).

Prior research on the role of the familial context on Latino women's mental health is hampered by two major limitations. First, most of the published literature has relied on non-random convenience samples of specific sub-ethnic groups of Latinas or focused on Latina/os in general. Second, although a few articles examined family-level correlates of depressive symptomatology among immigrant Latinas (Vega et al., 1986; Vega et al., 1991), to the best of our knowledge, no other article employing nationally-representative data has examined

family-level predictors of psychological distress among immigrant and US-born Latinas of diverse ethnic backgrounds. Thus, we sought to draw from a population-based sample of Latinas to explore how various domains of household structure and family ties may be differentially related to past-month psychological distress among Latina immigrant and US-born women.

## The Present Study

Herein, we focus on four key aspects of household structure that may generate or reduce psychological distress: marital status, motherhood, work status, and household income. Consistent with prior literature (Bromberger & Matthews, 1994; Kawachi et al., 1999; Williams et al, 2010), we hypothesized that indices of household structure such as marriage, employment, and high household income would be associated with lower levels of psychological distress. In contrast, we hypothesized that being the mother of minors (i.e., children and adolescents) would be associated with increased psychological distress. Next, we expand the focus to include exploration of indicators of family ties by examining the association between family risks (i.e., family cultural conflict, family burden), family resources (i.e., family cohesion, family support), and psychological distress. We hypothesized that family cultural conflict and family burden would be positively associated with psychological distress. In contrast, family cohesion and family support would be inversely associated with psychological distress. Last, we adopted an exploratory approach to examine whether nativity moderated the relationship between familial factors and past-month psychological distress among Latino women. Although the aforementioned literature suggests nativity differences may exist, we note that the limited research in this area prevented us from rendering concrete hypotheses of specific differential effects of nativity on the association between family-level correlates and psychological distress.

## Method

### Sample and Procedure

Data were drawn from the National Latino and Asian American Study (NLAAS), a cross-sectional, national probability psychiatric epidemiologic survey of Asian and Latino adults 18 years of age and older residing in the U.S. The Latino sample consisted of 2,554 respondents. The present study focuses on the Latina subsample ( $n = 1,427$ ). We stratified the Latina subsample by nativity status: US-born ( $n = 521$ , 43%) and immigrants ( $n = 906$ , 57%).

Data collection for the NLAAS took place between 2002 and 2003. The sample design is only briefly described in this paper (see Alegría et al., 2004 for more details). To obtain a nationally representative sample of Latino subgroups regardless of geographic residential patterns, the sampling design included three components: (1) core sampling of primary and secondary sampling units; (2) high-density supplemental samplings of census block groups in order to over sample geographic areas made up of more than 5% of the targeted ethnic group; and (3) secondary respondent sampling to recruit participants from households where a primary respondent was already interviewed (Heeringa et al., 2004). The final weighted response rate for the Latino sample was 77.6%. Interviews were conducted in either English or Spanish. The institutional review boards of the Cambridge Health Alliance, Harvard School of Medicine, the University of Michigan, and the University of Washington approved all study procedures.

## Measures

**Psychological Distress**—Non-specific psychological distress was measured with the Kessler Psychological Distress Scale (K-10; Kessler et al., 2002), a 10-item inventory that assesses the prevalence of negative feelings, including depressive and anxious symptoms, over the past month. Respondents reported frequency of each item on a 5-point scale (1= *all of the time* to 5= *none of the time*). Responses to raw values were reverse coded and summed, with higher values reflected greater levels of psychological distress. The K-10 is routinely included in population health surveys and its reliability and validity is well established (Kessler et al., 2002).

**Household Structure**—Measures used to assess family household structure included the following variables. *Marital status* was coded as, married/cohabiting (reference group), divorced/widowed/or separated, and never married. *Number of children/adolescents in household* was assessed by asking respondents to report on the number of biological/step-children (age 17 years or younger) currently residing in their household. Responses to this question were categorized into three categories: no children/adolescents (reference group), one to two children/adolescents, and three or more children/adolescents. *Work status* was coded as, employed (reference group), unemployed, and out of the labor force. *Household income* was coded as, \$0-14,999; \$15,000-34,999; \$35,000-74,999; and \$75,000 and over (reference group).

**Family Ties**—We assessed four indicators of family ties, including family risks (i.e., family cultural conflict, family burden) and family resources (i.e., family cohesion, family support).

**Family Risks:** *Family cultural conflict* was measured with five items from a subscale of the Hispanic Stress Inventory (HSI; Cervantes et al., 1991) that tap into a respondent's frequency of cultural and intergenerational conflict with family over values and goals. Sample items include: "Your personal goals have been in conflict with your family" and "Because you have different customs, you have had arguments with other members of your family." Responses to items were scored on a 3-point range (1= *hardly ever or never* to 3= *often*). Items were summed, with higher scores reflecting greater family cultural conflict. *Family burden* was measured with two items developed by Kessler and colleagues (Pennell et al., 2004) that assess frequency of demands and arguments with relatives and children. Items were: "How often do your relatives or children make too many demands on you?" and "How often do your family or relatives argue with you?" Responses ranged from 1= *hardly ever* to 3= *often*. Items were summed, with higher scores reflecting greater family burden.

**Family Resources:** *Family cohesion* was measured with three items assessing family closeness, adopted from the Family Adaptability and Cohesion Evaluation Scale (Olson, 1986). Items were: "family members like to spend free time with each other", "family members feel very close to each other", and "family togetherness is very important." Responses to items ranged from 1= *strongly agree* to 4= *strongly disagree*. Responses were reverse coded and summed, with higher scores reflecting greater family cohesion. *Family support* was assessed with the following three items: "How often do you talk on the phone or get together with family or relatives who do not live with you?", "How much can you rely on relatives who do not live with you for help if you have a serious problem?", and "How much can you open up to relatives who do not live with you if you need to talk about your worries?" Response categories for the first item ranged from 1= *most every day* thru 5= *less than a month*, whereas responses to the last two items ranged from 1= *a lot* to 4= *not at all*. Given response options to the first item were on a different range, responses to all three

items were standardized. Raw items were reverse coded and z-scores summed, with higher scores reflecting greater family support.

**Covariates**—We included the following covariates in all of our multivariable models: age, Latino ethnic subgroup, education, number of adults currently residing in the respondent's household, and language of interview. We also adjusted for self-rated physical health and self-reported everyday discrimination, given prior studies have found these measures to be robustly associated with psychological distress (Farmer & Ferraro, 1997; Molina, Alegría, & Mahalingam, 2012). Self-rated physical health was measured with a single item: "How would you rate your overall physical health?" (1 = *poor* to 5 = *excellent*). Everyday discrimination was measured using a 9-item scale adopted from the Detroit Area Study (DAS; Williams et al., 1997) assessing routine unfair treatment. Respondents reported frequency of each item on a 6-point scale ranging from 6 = *never* to 1 = *daily*. Raw variables were reverse coded and summed, with higher scores reflecting greater reports of discrimination.

Moreover, we adjusted for acculturative stress in supplemental analyses with immigrant Latinas on account of the observed relationship between acculturative stress and generalized psychological distress among immigrant Latinas (Salgado de Snyder et al., 1990). We do not control for acculturative stress among US-born Latinas because it was only measured among immigrant respondents. Acculturative stress was measured with a 9-item scale adapted from the Mexican American Prevalence and Services Survey (Vega et al., 1998). Items tapped into concerns, unfair treatment and fears related to leaving behind family and friends in their country of origin, maltreatment because of English language proficiency, difficulties finding work because of English language proficiency; being questioned about legal status; concerns of being deported; and avoidance of seeking health services due to fear of immigrant officials, to name a few. Items were summed, with higher values indicating greater acculturative stress.

## Analytic Procedures

We examined the percentage of missing data on all study variables. There were less than 1% of missing data on predictor and dependent variables. Given missing values represented less than the recommended 5% for imputation (Tabachnick & Fidell, 2007), none of the variables with missing values were imputed; thus we allowed for listwise deletion in all analyses. To describe our sample, we conducted cross-tabulations of sociodemographic characteristics for the overall sample and by nativity. We estimated means for all continuous measures and cross-tabulations for categorical variables for the total sample and by nativity.

To make sure there were no extreme interrelations between independent variables, a formal test of multicollinearity was performed. The Variance Inflation Factor (VIF) for each of the predictors was well below 10 (range = 1.14 – 2.78). We thus proceeded with analyses including all of our independent variables in multivariable models. First, we determined whether nativity was a modifier of psychological distress among the total sample by examining the statistical significance of the regression coefficients for each of the main study variables  $\times$  nativity cross-product terms. We found significant interactions between nativity  $\times$  number of children/adolescents in household and nativity  $\times$  household income.

In accord with findings of moderation, we conducted separate multivariable linear regression models of psychological distress for US-born and immigrant Latinas. Three models were sequentially built. Model 1 included household structures (i.e., marital status, number of children ages 17 years or younger residing in respondent's household, work status, and household income); Model 2 included family risk factors (family cultural conflict and family burden) in addition to household structures; Model 3 included family resources

(family cohesion and family support) in addition to household structures and family risk factors. All models adjusted for aforementioned covariates. Additionally, as a sensitivity check, we compared linear regression models that included and excluded acculturative stress as a covariate among the immigrant Latina subsample. These analyses revealed significant survey-adjusted *F*-tests for the full model, indicating a difference between the full and reduced models. Accordingly, we report on estimates from models that included acculturative stress as a covariate for immigrant Latinas. Stata 11 was used to carry out all statistical analyses in order to account for the complex sample design and estimate standard errors in the presence of stratification and clustering.

## Results

### Descriptive Statistics

Table 1 shows the distribution of sociodemographic characteristics for the total sample and by nativity status. Significant differences were found between US-born and immigrant Latinas on most sociodemographic characteristics. US-born Latina respondents had a younger age composition and a greater proportion with higher levels of education compared to their immigrant Latina counterparts. US-born Latinas also reported greater levels of discrimination compared to immigrant Latinas. A significantly greater proportion of immigrant Latinas took the survey interview in Spanish than in English. We found a marginally significant difference between US-born and immigrant Latinas on number of adults currently residing in respondent's household ( $p = 0.057$ ). No significant differences were noted for self-rated physical health.

Table 2 reports descriptive statistics for all main variables for the total sample and by nativity. US-born Latinas reported significantly higher levels of family cultural conflict, family burden and family support, whereas immigrant Latinas reported significantly higher levels of family cohesion. Significant differences between US-born and immigrant Latinas were noted for proportions of all household structure variables, except for number of children/adolescents in the household ( $p = .604$ ).

### Multivariable Models by Nativity

**US-born Latinas**—Table 3 shows the three multivariable linear regression models built predicting past-month psychological distress among US-born Latinas. In Model 1 (household structure model), significant associations were found for number of children/adolescents residing in respondent's household and psychological distress, such that having 3 or more children/adolescents currently living in respondent's home compared to having no children/adolescents living in the household was associated with significantly lower levels of psychological distress ( $B = -2.41, p < .01$ ), adjusting for covariates. Moreover, respondents with household incomes below \$75,000 were predicted to have significantly higher psychological distress compared to respondents with household incomes of \$75,000 and over.

Model 2 added family risk factors (family cultural conflict and family burden). Results for this model revealed that greater family cultural conflict and family burden were associated with higher levels of psychological distress ( $B = 0.52, p < .01$  and  $B = 0.64, p < .01$ , respectively). We also found that 1 to 2 children/adolescents in the household ( $B = -1.36, p < .05$ ), and 3 or more children/adolescents in the household ( $B = -2.24, p < .01$ ) relative to no children/adolescents was negatively associated with psychological distress among US-born Latinas. Model 3 further added indicators of protective family ties (family cohesion and family support), and revealed non-significant associations with psychological distress. All other estimates in this model remained virtually the same.



**Immigrant Latinas**—Table 4 reports results of the three multivariable linear regression models for immigrant Latinas. Model 1 showed that number of children/adolescents living in the respondent's household was significantly associated with psychological distress ( $B = 2.17, p < .05$ ), but in the opposite direction to that found for US-born Latinas. Likewise, unlike US-born Latinas, being out of the labor force (compared to being employed) was associated with greater levels of psychological distress for immigrant Latinas ( $B = 1.88, p < .05$ ). In Model 2, similar to US-born Latinas, higher levels of family cultural conflict ( $B = .69, p < .01$ ) were associated with greater levels of psychological distress, independent of household structure and covariates. In Model 3, no significant associations were found between family resources and psychological distress, or for the association between number of children/adolescents in the household and psychological distress. Yet, higher levels of family burden and cultural conflict, and being out of the labor force were associated with greater levels of psychological distress.

## Discussion

We sought to explore the hypothesis that nativity differences would exist in the associations between domains of household structure, family ties, and psychological distress among Latino women. Our study produced three main findings. First, different features of the household structure (i.e., household income, work status) had variable associations to psychological distress among US-born and immigrant Latino women. Second, parenthood was protective for US-born Latinas, but not for immigrant Latinas. Third, compromised family ties such as family cultural conflict and family burden were better predictors of past-month psychological distress than the presence of viable family resources such as family support or family cohesion across both groups of Latino women.

## Structural Factors

We did not find support for our hypothesis that marital status would be associated with psychological distress for either nativity group. One possible explanation for these findings could be that since Latinos tend to live in larger family households than the general population (Gonzales, 2008), it is possible that even when Latinas are single or have experienced marital disruption, other family members in the household rather than a spouse may provide emotional or tangible resources that reduce the adverse mental health effects generally seen among those who have experienced union dissolution (Bostean, 2010). Future studies should examine the specific economic, social, and psychological characteristics and contexts that differentiate persons who are married/cohabitating from those who have never been married or who have experienced some type of marital disruption, as well variation in the characteristics and quality of the interpersonal relationship by marital status.

Consistent with prior studies, being out of the labor force was a significant predictor of psychological distress, although this association was evident only among immigrant Latinas. This effect may be more pronounced for Latina immigrants because of failed expectations of upward social mobility associated with migrating to the US. In fact, nearly 83% of immigrant Latinas in our sample reported that migrating to the US for better opportunities was very important to them, and almost 64% agreed that migrating to find a job was also very important to them. Previous research has found that difficulty in finding work leads some immigrant Latinas to feel like “*un estorbo*” (an annoyance) to those that help support them financially, and this is associated with greater familial conflict and tension (Menjívar, 2000). Significantly, nearly 28% of immigrant Latinas in our sample reported fears due to being questioned about their legal status, and among this group, 14% of them were either unemployed or out of the labor force. It is likely that being out of the labor force for some immigrant women may be partly tied to legal instability and lack of legal work documents.

Altogether, higher rates of being out of the labor force and lack of employment opportunities in concert with familial conflict and immigration-related concerns might place Latinas immigrants at greater risk of experiencing psychological distress (Segura, 1994).

On the other hand, we found that reporting lower household incomes was associated with greater levels of psychological distress among US-born Latinas, corroborating prior studies that note socioeconomic disadvantage is associated with worse mental health among women of color (Belle & Doucet, 2003). Paradoxically, low household income was not associated with psychological distress for immigrant Latinas. Two interrelated possible explanations could be that household income is not associated with psychological distress among immigrant Latinas, because in this group, (a) even modest household income levels in the US may be higher than those from their home countries, and (b) *perceptions* of socioeconomic status may be better predictors of mental health (Leu et al., 2008), such that subjective social status allows individuals to evaluate their past and current social circumstances irrespective of their actual socioeconomic status (Franzini & Esquer, 2006). It is plausible that jointly, this shields immigrant Latinas from adverse mental health outcomes. At the same time, factors associated with immigrant adaptation (e.g., acculturative stress) may better predict psychological distress for immigrant women (Alcántara, Abelson, & Gone, 2012).

### Parenthood

Number of minors in the household had differential associations to psychological distress across Latina subgroups. First, our findings for US-born Latinas are consistent with those of other studies (Helbig, 2006), such that having minors in the household was associated with lower levels of past-month distress. In fact, previous research suggests that Mexican American women have a positive orientation towards motherhood and do not necessarily believe it conflicts with their non-domestic goals (e.g., working outside the home; Guendelman et al., 2001). In this context, perhaps having minors in the household is not perceived as burdensome for US-born Latino women in general. On the other hand, no significant effect was found for immigrant Latinas once we adjusted for family-level variables and covariates. These findings are consistent with those of Vega and colleagues' (1986). At the same time, despite prior work showing Mexican-origin Latinas report higher levels of positive attitudes toward motherhood than US-born women (Zambrana et al., 1999), immigrant women (who in our study reported lower levels of family support and of which about 35% send money to relatives in their country of origin) have also been shown to feel overburdened and emotionally drained with filial obligations such as providing assistance and caring for adult family members in the US and in their countries of origin (Menjívar, 2000). It is possible that emotional and financial strain counterbalance and diminish any salutary effects that motherhood may have for Latina immigrants.

### Family Ties

In line with studies that find strained family relationships increase the risk of mental health disorders (Alegría et al., 2007), our results show that family conflict and burden are consistently associated with higher levels of psychological distress among both US-born and immigrant Latinas. Prior studies with Latinos (in the aggregate) have also found that a family context that is both perceived to be functioning poorly (i.e., having more family problems, generational discord) and characterized by high levels of obligations and demands is associated with heightened level of distress (Rivera et al., 2008). Although speculative, these factors may be particularly salient for Latinas, who may be socialized to place family needs and concerns first before their own, and for whom maintaining traditional cultural values related to *familismo* are central to their identities (Hondagneu-Sotelo, 1999). Thus, the extent to which Latinas internalize or feel pressure to uphold idealized cultural identities

may possibly serve as conduits of stress (Mahalingam et al., 2009), which may in turn contribute adversely to their mental health.

Albeit non-significant, we note that when included in the final model, family support and family cohesion slightly reduced the harmful effects of family conflict for US-born Latinas, a finding consistent with prior studies (Alegría et al., 2007). On the other hand, these same resources slightly increased the effects of both family burden and conflict for immigrant Latinas. These findings parallel other studies that find social relationships may serve to increase, rather than decrease stress for immigrant women, who often rely on their social networks to facilitate integration to the US mainland (Vega et al., 1991; Viruell-Fuentes & Schulz, 2009) and may become overly indebted to their network members, but may likely have limited resources to repay favors, thus possibly resulting in added stress (cf. Kawachi & Berkman, 2001; Menjívar, 2000). More generally, the discrepant findings might be explained by significant methodological differences across studies. For example, other studies have included multidimensional measures of Latino family dynamics, whereas our study was limited by the use of more “crude” measures of family support and cohesion. Likewise, most other studies of immigrant Latinas have primarily been comprised of Mexican women, whereas our sample consisted of a population-based sample of diverse groups of Latinas. We speculate that perhaps the buffering effects typically found for family protective factors on mental health may be more salient for specific groups of Latinas compared to others. Nonetheless, together our findings suggest that the cumulative negative effects of familial conflict and familial burden may supersede the potential gains of perceived family support and cohesion.

### Limitations and Future Directions

As with any other study, ours is not without caveats. First, the data are cross-sectional, which limits our ability to make causal inferences or establish the direction of any of our observed associations. It may be that individuals who experience psychological distress are more likely to be out of the labor force or to perceive the quality of their family relationships and level of support as poor rather than the converse. Prospective studies may help us better understand how individuals, their circumstances, and social networks change and influence each other in a reciprocal manner over time. Further, given the feminization of migration, future research should examine the manifold ways in which transnational contexts reconfigure structural, cultural and family processes and how these changes may in turn impact the psychological well-being of family members (Mahalingam et al., 2009).

Second, we were unable to explore within-group differences among US-born and immigrant Latinas due to sample size limitations, although it is plausible that the observed associations may differ as a function of other social status categories, and that different social locations of families can result in divergent outcomes for its members. Third, our study provides only a partial picture of factors that may affect the mental health of Latinas. For example, we were unable to account for cultural beliefs about gender ideologies, work-family conflict, multiple-role involvement, and how these factors moderate or mediate the relationship between household structures, family ties, and psychological distress. Additionally, neighborhood context, institutional forces, and affiliation with community groups (e.g., churches, social organizations) may also influence household arrangements, social ties, and mental health. Further, all of our measures were based on self-report and from a single informant. Observational studies and those with multiple informants could provide further insight into family dynamics and the ways in which different family members experience, negotiate, and are shaped by varying household structures and familial ties. Finally, despite the strength of employing a large nationally representative sample, complementing our quantitative research with qualitative methods may prove valuable as it can allow us to

capture experiential depth while facilitating a deeper and more contextualized analysis of Latino women's lives.

## Implications

Limitations notwithstanding, there are several implications of this study. The chief implication regards the importance of attending to different types of social relationships, including positive and strained family networks, as well as parenthood. Indeed, although the family unit has been typically regarded as a protective source for Latinas, our results suggest strained family relations, not solid family ties, appear to be the most salient factors associated with mental health for both immigrant and US-born Latinas. Mental health practitioners serving Latinas may need to focus on resolution of familial cultural conflict and adaptive navigation of family demands. Likewise, implementing prevention programs that focus on coping with strained familial ties may be more viable for psychological health than increasing the number of familial supports (cf. Szapocznik & Kurtines, 1993). On the other hand, results for parenthood point to the need for considering nativity-patterned differences in the type of expressive-emotional support that children residing in the household may provide. This may help explain why the mother-child relationship is related to decreased levels of psychological distress among US-born Latinas and not for Latina immigrants, and further, may guide the development of family-based programs that focus on the positive aspects of parent-child relations (cf. Szapocznik & Kurtines, 1993).

Finally, the protective (yet differential) role of workforce participation and higher income for the mental health of immigrant and US-born Latinas, respectively, highlight the importance of assessing the role that different markers of socioeconomic position may have on the mental health of Latinas. Likewise, the greater susceptibility of Latinas to poverty and/or lack of labor force participation points to the importance of considering financial strain among this group. From a structural perspective, programs designed to facilitate entry or return to the labor market and/or that offer wage supplementation may represent practical population-level interventions, given prior research has found employment interventions (e.g., employment workshops) and anti-poverty programs that offer wage supplementation are effective at preventing and reducing psychological distress (Gotlieb, Watzkin, & Miranda, 2011).

## Conclusion

Whereas prior studies have either documented the role of structural or family-level factors on the mental health of specific sub-ethnic groups of Latinas or in the aggregate, a crucially important message to derive from our study is that dynamics of both the household and family context predict both differential as well as similar mental health outcomes across different segments of the Latina population in the U.S. Thus, for family and Latino health scholars, our findings underscore the need for understanding the pathways by which different facets of family life—structural and social domains—relate to mental health status, and how mechanistic factors may account for differential mental health profiles by nativity status. In light of the growing number and diversity of Latinas and Latino families (Gonzales, 2008), research and prevention efforts aimed at improving the mental health of Latinas could prove beneficial to the welfare of individual families as well as to our nation's long-term health outlook and economic viability.

## Acknowledgments

Kristine Molina, Ph.D. was supported by a postdoctoral fellowship through Training Grant #T32HL007426 from the National Heart, Lung and Blood Institute and by the NIH Loan Repayment Award (National Institute on Minority Health and Health Disparities Grant # L60MD007288). Carmela Alcántara, Ph.D. was supported by the

W.K. Kellogg Health Scholars Program while at the Harvard School of Public Health. The NLAAS data were provided through the University of Michigan's Inter-Consortium for Political and Social Research. The authors gratefully acknowledge Maria-A-Corporan and Silvia Molina for their invaluable insight. We are also thankful for the helpful comments and suggestions of the anonymous reviewers and the Associate Editor, Anmarie Cano. Any errors or omissions are the responsibility of the authors alone.

## References

- Alcántara C, Abelson JL, Gone JP. Beyond anxious predisposition: *Do padecer de nervios* and *ataque de nervios* add incremental validity to predictions of current distress among Mexican mothers? *Depression and Anxiety*. 2012; 29(1):23–31.10.1002/da.20855 [PubMed: 21769996]
- Alegria M, Shrout PE, Woo M, Guarnaccia P, Sribney W, Vila D, Canino G, et al. Understanding differences in past-year psychiatric disorders for Latinos living in the U.S. *Social Science & Medicine*. 2007; 65(2):214–230.10.1016/j.socscimed.2007.03.026 [PubMed: 17499899]
- Alegria M, Takeuchi D, Canino G, Duan H, Shrout P, Meng X, Vega W, Gong F, et al. Considering context, place and culture: the National Latino and Asian American Study. *International Journal of Methods in Psychiatric Research*. 2004; 13(4):208–220.10.1002/mpr.178 [PubMed: 15719529]
- Aranda MP, Castaneda I, Lee P-J, Sobel E. Stress, social support, and coping as predictors of depressive symptoms: Gender differences among Mexican Americans. *Social Work Research*. 2001; 25(1):37–48.10.1093/swr/25.1.37
- Belle D, Doucet J. Poverty, inequality, and discrimination as sources of depression among U.S. women. *Psychology of Women Quarterly*. 2003; 27:101–113.10.1111/1471-6402.00090
- Bostean, G. An examination of the relationship between family and U.S. Latinos' physical health. *Field Actions Science Report*. 2010. Accessed at <http://factreports.reveues.org/473>
- Bromberger JT, Matthews KA. Employment status and depressive symptoms in middle-aged women: a longitudinal investigation. *American Journal of Public Health*. 1994; 84(2):202–206. [PubMed: 8296940]
- Bronfenbrenner U. Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*. 1986; 22(6):723–742.10.1037/0012-1649.22.6.723
- Carr D, Springer KW. Advances in families and health research in the 21<sup>st</sup> century. *Journal of Marriage and Family*. 2010; 72(3):743–761.10.1111/j.1741-3737.2010.00728.x
- Centers for Disease Control and Prevention. Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2006. *Vital and Health Statistics*. Dec.2007 Series 10(235) Table 14 and 20.
- Cervantes RC, Padilla AM, Salgado de Snyder N. The Hispanic Stress Inventory: A culturally relevant approach to psychosocial assessment. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*. 1991; 3(3):438–447.10.1037/1040-3590.3.3.438
- Engle PL, Scrimshaw SCM, Zambrana RE, Dunkel-Schetter C. Prenatal and postnatal anxiety in Mexican American women giving birth in Los Angeles. *Health Psychology*. 1990; 9:285–299.10.1037/0278-6133.9.3.285 [PubMed: 2340819]
- Evenson RJ, Simon RW. Clarifying the relationship between parenthood and depression. *Journal of Health and Social Behavior*. 2005; 46:341–358. [PubMed: 16433280]
- Farmer MM, Ferraro KF. Distress and perceived health: Mechanisms of health decline. *Journal of Health and Social Behavior*. 1997; 39:298–311.10.1177/002214650504600403 [PubMed: 9343966]
- Franzini L, Fernandez-Esquer ME. The association of subjective social status and health in low-income Mexican-origin individuals in Texas. *Social Science & Medicine*. 2006; 63:788–804.10.1016/j.socscimed.2006.01.009 [PubMed: 16580107]
- Fredrickson BL, Cohn MA, Coffey KA, Pek J, Finkel SM. Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality & Social Psychology*. 2008; 95(5):1045–1062.10.1037/a0013262 [PubMed: 18954193]
- Gaines SO Jr, Marelich WD, Bledsoe KL, Steers WN, Henderson MC, Granrose CS, Page MS, et al. Links between race/ethnicity and cultural values as mediated by racial/ethnic identity and

- moderated by gender. *Journal of Personality and Social Psychology*. 1997; 72(6):1460–1476.10.1037/0022-3514.72.6.1460 [PubMed: 9177025]
- Gallo LC, Penedo FJ, de los Monteros KE, Arguelles W. Resiliency in the face of disadvantage: Do Hispanic cultural characteristics protect health outcomes? *Journal of Personality*. 2009; 77(6): 1707–1746.10.1111/j.1467-6494.2009.00598.x [PubMed: 19796063]
- Gonzales, F. Hispanic women in the United States, 2007. Pew Hispanic Center Fact Sheet; 2008. Accessed from <http://pewhispanic.org/files/factsheets/42.pdf>
- Gotlieb L, Waitzkin H, Miranda J. Depressive symptoms and their social contexts: A qualitative systematic literature review of contextual interventions. *International Journal of Social Psychiatry*. 2011; 57(4):402–417.10.1177/0020764010362863 [PubMed: 20354067]
- Guendelman S, Malin C, Herr-Harthorn B, Vargas PN. Orientations to motherhood and male partner support among women in Mexico and Mexican-origin women in the United States. *Social Science & Medicine*. 2001; 52(12):1805–1813.10.1016/S0277-9536(00)00296-3 [PubMed: 11352407]
- Helbig S, Lampert T, Klose M, Jacobi F. Is parenthood associated with mental health? *Social Psychiatry and Psychiatric Epidemiology*. 2006; 41:889–896.10.1007/s00127-006-0113-8 [PubMed: 16951919]
- Heeringa SG, Wagner J, Torres M, Duan N, Adams T, Berglund P. Sample designs and sampling methods for the Collaborative Psychiatric Epidemiology Studies (CPES). *International Journal of Methods in Psychiatric Research*. 2004; 13:221–240.10.1002/mpr.179 [PubMed: 15719530]
- Hondagneu-Sotelo P. Introduction: Gender and contemporary U.S. immigration. *American Behavioral Scientist*. 1999; 42(4):565–576.10.1177/00027649921954363
- Hovey JD. Psychosocial predictors of acculturative stress in Mexican immigrants. *Journal of Psychology: Interdisciplinary and Applied*. 2000; 134(5):490–502. [PubMed: 11034130]
- Johnson DR, Wu J. An empirical test of crisis, social selection, and role explanations of the relationship between marital disruption and psychological distress: A pooled time-series analysis of four-wave panel data. *Journal of Marriage and Family*. 2002; 64(1):211–224.10.1111/j.1741-3737.2002.00211.x
- Kawachi I, Berkman LF. Social ties and mental health. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 2001; 78(3):458–467.10.1093/urban/78.3.458 [PubMed: 11564849]
- Kawachi I, Kennedy BP, Gupta V, Prothrow-Stith D. Women's status and the health of women and men: a view from the States. *Social Science & Medicine*. 1999; 48(1):21–32.10.1016/S0277-9536(98)00286-X [PubMed: 10048835]
- Kessler RC. Stress, social status, and psychological distress. *Journal of Health and Social Behavior*. 1979; 20(3):259–272. [PubMed: 479536]
- Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand SL, Zaslavsky AM, et al. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*. 2002; 32:959–976.10.1017/S0033291702006074 [PubMed: 12214795]
- Knight BG, Sayegh P. Cultural values and caregiving: The updated sociocultural stress and coping model. *The Journals of Gerontology Series B*. 2010; 65B(1):5–13.10.1093/geronb/gbp096
- Laria, AJ.; Lewis-Fernández, R. Latino Patients. In: Lim, RF., editor. *Clinical manual of cultural psychiatry*. Arlington, VA: American Psychiatric Publishing, Inc; 2006. p. 119-173.
- Leu J, Yen IH, Gansky SA, Walton E, Adler NE, Takeuchi DT. The association between subjective social status and mental health among Asian immigrants: Investigating the influence of age at immigration. *Social Science & Medicine*. 2008; 66:1152–1164.10.1016/j.socscimed.2007.11.028 [PubMed: 18191317]
- Mahalingam, R.; Balan, S.; Molina, KM. Transnational intersectionality: A critical framework for theorizing motherhood. In: Lloyd, SA.; Few, AL.; Allen, KR., editors. *Handbook of Feminist Family Studies*. Sage Publications; 2009. p. 69-80.
- Marotta SA, Garcia JG. Latinos in the United States in 2000. *Hispanic Journal of Behavioral Sciences*. 2003; 25:13–34.10.1177/0739986303251693
- Mendelson T, Rehkopf DH, Kubzansky LD. Depression among Latinos in the United States: A meta-analytic review. *Journal of Consulting and Clinical Psychology*. 2008; 76(3):355–366.10.1037/0022-006X.76.3.355 [PubMed: 18540730]

- Menjívar, C. *Fragmented ties: Salvadoran immigrant networks in America*. Berkeley, CA: University of California Press; 2000.
- Molina KM, Alegría M, Mahalingam R. A multiple-group path analysis of the role of everyday discrimination on self-rated physical health among Latina/os in the USA. *Annals of Behavioral Medicine*. 2012;10.1007/s12160-012-9421-2
- Olson DH. Circumplex Model VII: Validation Studies and FACES III. *Family Process*. 1986; 25(3): 337–351.10.1111/j.1545-5300.1986.00337.x [PubMed: 3758310]
- Pennell B, Bowers A, Carr D, Chardoul S, Cheung G, Dinkelmann K, Torres M, et al. The development and implementation of the National Comorbidity Survey Replication, the National Survey of American Life, and the National Latino and Asian American Survey. *International Journal of Methods in Psychiatric Research*. 2004; 13(4):241–269.10.1002/mpr.180 [PubMed: 15719531]
- Rivera FI, Guarnaccia PJ, Mulvaney-Day N, Lin JY, Torres M, Alegría M. Family cohesion and its relationship to psychological distress among Latino groups. *Hispanic Journal of Behavioral Sciences*. 2008; 30(3):357–378.10.1177/0739986308318713 [PubMed: 19444326]
- Rodriguez N, Mira CB, Paez ND, Myers HF. Exploring the complexities of familism and acculturation: Central constructs for people of Mexican origin. *American Journal of Community Psychology*. 2007; 39(1-2):61–77.10.1007/s10464-007-9090-7 [PubMed: 17437189]
- Ross C, Mirowsky J, Goldsteen K. The impact of the family on health: The decade in review. *Journal of Marriage and Family*. 1990; 52(4):1059–1078.
- Sabogal F, Marin G, Otero-Sabogal R, Marin BV, Perez-Stable EJ. Hispanic familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences*. 1987; 9(4):397–412.10.1177/07399863870094003
- Salgado de Snyder VN, Cervantes RC, Padilla AM. Gender and ethnic differences in psychosocial stress and generalized distress among Hispanics. *Sex Roles*. 1990; 22:441–453.10.1007/BF00288163
- Segura, DA. Working at motherhood: Chicana and Mexican immigrant mothers and employment. In: Glenn, EN.; Chang, G.; Forcey, LR., editors. *Mothering: Ideology, experience, and agency*. New York: Routledge; 1994. p. 211–234.
- Suro, R. *The Hispanic family in flux*. Center on Children and Families Working Paper in Collaboration with The Annie E. Casey Foundation. The Brookings Institution; 2007.
- Szapocznik J, Kurtines WM. Family psychology and cultural diversity. *American Psychologist*. 1993; 48(4):400–407.10.1037/0003-066X.48.4.400
- Tabachnick, BG.; Fidell, LS. *Using multivariate statistics*. 5. Allyn and Bacon; Boston, MA: 2007.
- Umberson D, Crosnoe R, Reczek C. Social relationships and health behavior across the life course. *Annual Review of Sociology*. 2010; 36:139–159.10.1146/annurev-soc-070308-120011
- Vega WA, Kolody B, Valle R, Hough R. Depressive symptoms and their correlates among immigrant Mexican women in the United States. *Social Science & Medicine*. 1986; 22(6):645–652.10.1016/0277-9536(86)90037-7 [PubMed: 3715504]
- Vega WA, Kolody B, Valle R, Weir J. Social networks, social support, and their relationship to depression among immigrant Mexican women. *Human Organization*. 1991; 50(2):154–162.
- Viruell-Fuentes EA, Schulz AJ. Toward a dynamic conceptualization of social ties and context: Implications for understanding immigrant and Latino health. *American Journal of Public Health*. 2009; 99(12):2167–2175.10.2105/AJPH.2008.158956 [PubMed: 19833986]
- Williams D, Mohammed SA, Leavell J, Collins C. Race, socioeconomic status, and health: Complexities, ongoing challenges, and research opportunities. *Annals of the New York Academy of Sciences*. 2010; 1186:69–101.10.1111/j.1749-6632.2009.05339.x [PubMed: 20201869]
- Williams DR, Yu Y, Jackson J, Anderson N. Racial differences in physical and mental health: Socioeconomic status, stress, and discrimination. *Journal of Health Psychology*. 1997; 2:335–351.10.1177/135910539700200305 [PubMed: 22013026]
- Zambrana, RE., editor. *Understanding Latino families: Scholarship, policy, and practice*. Thousand Oaks, CA: Sage Publications; 1995.

Zambrana RE, Dunkel-Schetter C, Collins NL, Scrimshaw SCM. Mediators of ethnic-associated differences in infant birth weight. *Journal of Urban Health*. 1999; 76:102–116.10.1007/BF02344465 [PubMed: 10091194]



**Table 1**  
Sociodemographic Characteristics in NLAAS Subsample of Latinas, by Nativity (Weighted)

Characteristic	Total Sample (N = 1,427)		U.S.-born (n = 521)		Immigrant (n = 906)		<i>p</i> <sup>a</sup>
	% or <i>M</i>	<i>SE</i>	% or <i>M</i>	<i>SE</i>	% or <i>M</i>	<i>SE</i>	
Ethnic group							.003
Cuban	4.63	.01	2.61	.01	6.14	.01	
Puerto Rican	10.05	.01	14.27	.02	6.88	.01	
Mexican	56.63	.04	58.62	.03	55.14	.06	
Other Latina	28.69	.03	24.49	.03	31.84	.05	
Age, years							.003
18 to 24	19.27	.02	26.06	.03	14.18	.01	
25 to 34	27.08	.01	23.48	.02	29.78	.02	
35 to 44	21.93	.01	19.46	.02	23.78	.01	
45 to 54	15.57	.01	15.98	.01	15.26	.02	
55 to 64	7.11	.01	5.57	.01	8.26	.01	
65 and over	9.04	.01	9.44	.02	8.74	.01	
Number of adults in HH <sup>b</sup>							.057
1	32.18	.02	37.95	.03	27.86	.02	
2	40.60	.02	37.01	.03	43.29	.02	
3 or more	27.22	.02	25.04	.04	28.85	.02	
Education, years							<.001
11	44.87	.02	29.90	.02	56.08	.02	
12	23.22	.01	28.76	.02	19.07	.01	
13-15	21.37	.02	28.39	.03	16.11	.02	
16	10.55	.01	12.95	.02	8.74	.02	
Years in the U.S.							n/a
U.S.-born	42.98	.03	100.00				
Less than 5 years	9.95	.02			17.45	.02	
5-10 years	8.45	.01			14.82	.02	
11-20 years	17.65	.01			30.95	.02	
20 years or more	20.97	.01			36.78	.02	

Characteristic	Total Sample (N = 1, 427)		U.S.-born (n = 521)		Immigrant (n = 906)		p <sup>a</sup>
	% or M	SE	% or M	SE	% or M	SE	
Language of Interview							< .001
English	45.94	0.04	83.97	0.03	17.47	0.02	
Spanish	54.06	0.04	16.03	0.03	82.53	0.02	
Everyday discrimination	15.41	(7.58)	17.48	(7.68)	13.85	(6.84)	< .001
Self-rated physical health	3.10	(1.17)	3.15	(1.07)	3.06	(1.24)	.391
Acculturative Stress					2.49	(2.25)	n/a

Note. n/a = not applicable. Values in parentheses are standard deviations.

<sup>a</sup>Rao-Scott statistic for the Pearson chi-square test for contingency tables were computed for categorical variables. Adjusted Wald tests of differences were computed for continuous variables.

<sup>b</sup>Includes adults currently living in respondent's household.

**Table 2**  
Descriptive Statistics of Main Study Variables for Total Sample and by Nativity (Weighted)

Measures	Total Sample (N= 1,427)				US-Born (n= 521)				Immigrant (n= 906)				p <sup>a</sup>
	% or M	SE	α	Range	% or M	SE	α	Range	% or M	SE	α	Range	
Psychological Distress	12.78	7.82	0.93	7-50	12.55	6.53	0.89	7-40	12.95	8.78	0.94	7-50	0.362
<b>Household Structure</b>													
<i>Marital Status</i>													0.000
Married/Cohabiting	59.17%	0.02			50.98%	0.02			65.30%	0.02			
W/D/S	21.14%	0.01			21.11%	0.02			21.16%	0.01			
Never Married	19.69%	0.02			27.91%	0.03			13.54%	0.01			
<i>No. of Children in HH<sup>b</sup></i>													0.604
0	48.59%	0.03			49.67%	0.04			47.78%	0.03			
1-2	34.59%	0.03			34.88%	0.03			34.37%	0.03			
3 or more	16.83%	0.01			15.45%	0.02			17.85%	0.02			
<i>Work Status</i>													0.009
Employed	50.49%	0.02			54.69%	0.02			47.35%	0.03			
Unemployed	7.49%	0.01			9.67%	0.02			5.87%	0.01			
Out of Labor Force	42.01%	0.02			35.64%	0.03			46.78%	0.03			
<i>Household Income</i>													0.000
\$0-14,999	31.93%	0.03			27.59%	0.03			35.18%	0.03			
\$15,000-34,999	29.68%	0.01			25.69%	0.02			32.66%	0.02			
\$35,000-74,999	24.18%	0.02			28.86%	0.02			20.68%	0.02			
\$75,000 and over	14.21%	0.01			17.86%	0.02			11.47%	0.02			
<b>Family Ties</b>													
FCC	6.57	(2.22)	0.80	4-15	6.73	(2.15)	0.80	5-15	6.45	(2.23)	0.80	4-15	0.045
FB	3.98	(1.82)	0.61	2-8	4.44	(1.67)	0.55	2-8	3.64	(1.84)	0.62	2-8	0.000
FC	10.82	(1.89)	0.83	3 - 12	10.62	(1.95)	0.86	3-12	10.97	(0.10)	0.80	3-12	0.012
FS (z-scores)	0.07	(2.63)	0.73	-6.08- 2.79	0.46	(2.26)	0.73	-6.08- 2.79	-0.21	(2.87)	0.73	-6.08- 2.79	0.021

**Note.** W/D/S= Widowed/Divorced/or Separated. FCC= Family Cultural Conflict; FB= Family Burden; FC= Family Cohesion; FS= Family Support.

<sup>a</sup> Rao-Scott statistic for the Pearson chi-square test for contingency tables were computed for categorical variables. Adjusted Wald tests of differences were computed for continuous variables. Values in parentheses are standard deviations.

<sup>b</sup>Includes children and adolescents age 17 years old or younger currently living in respondent's household.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

**Table 3**  
Multivariable Linear Regressions Predicting Psychological Distress among US-born Latinas (Weighted)

	Model 1			Model 2			Model 3		
	B	SE	95% CI	B	SE	95% CI	B	SE	95% CI
<b>Household Structure</b>									
<i>Marital status</i>									
Married/cohabiting	Ref			Ref			Ref		
W/D/S	2.11 <sup>†</sup>	1.24	[-0.38, 4.60]	1.76	1.24	[-0.74, 4.25]	1.58	1.29	[-1.00, 4.16]
Never married	-0.22	0.61	[-1.43, 1.00]	-0.08	0.51	[-1.11, 0.94]	0.03	0.52	[-1.01, 1.08]
<i>No. of Children in HH<sup>d</sup></i>									
0	Ref			Ref			Ref		
1-2	-1.04	0.64	[-2.33, 0.26]	<b>-1.39<sup>*</sup></b>	0.59	[-2.58, -0.21]	<b>-1.36<sup>*</sup></b>	0.60	[-2.56, -0.16]
3 or more	<b>-2.41<sup>**</sup></b>	0.87	[-4.15, -0.67]	<b>-2.26<sup>**</sup></b>	0.75	[-3.77, -0.74]	<b>-2.24<sup>**</sup></b>	0.74	[-3.72, -0.76]
<i>Household income</i>									
\$0-14,999	<b>1.79<sup>*</sup></b>	0.84	[0.10, 3.48]	<b>1.87<sup>*</sup></b>	0.89	[0.09, 3.66]	<b>1.79<sup>*</sup></b>	0.89	[0.00, 3.57]
\$15,000-34,999	<b>1.65<sup>*</sup></b>	0.71	[0.23, 3.07]	<b>1.49<sup>*</sup></b>	0.72	[0.04, 2.94]	<b>1.47<sup>*</sup></b>	0.73	[0.01, 2.93]
\$35,000-74,999	<b>1.54<sup>*</sup></b>	0.65	[0.24, 2.85]	<b>1.89<sup>**</sup></b>	0.63	[0.63, 3.15]	<b>1.85<sup>**</sup></b>	0.61	[0.62, 3.08]
\$75,000 and over	Ref			Ref			Ref		
<i>Work status</i>									
Employed	Ref			Ref			Ref		
Unemployed	0.08	0.84	[-1.62, 1.78]	0.23	0.89	[-1.56, 2.02]	0.28	0.87	[-1.47, 2.03]
Out of labor force	0.75	0.77	[-0.81, 2.30]	0.77	0.81	[-0.85, 2.39]	0.71	0.79	[-0.88, 2.30]
<b>Family Ties</b>									
<i>Risks</i>									
FCC				<b>0.52<sup>**</sup></b>	0.16	[0.20, 0.84]	<b>0.48<sup>**</sup></b>	0.17	[0.13, 0.82]
FB				<b>0.64<sup>**</sup></b>	0.23	[0.17, 1.11]	<b>0.65<sup>**</sup></b>	0.22	[0.20, 1.09]
<i>Resources</i>									
FC							0.17	0.18	[-0.19, 0.54]
FS							-0.30 <sup>†</sup>	0.16	[-0.62, 0.02]

	Model 1				Model 2				Model 3			
	<i>B</i>	SE	95% CI		<i>B</i>	SE	95% CI		<i>B</i>	SE	95% CI	
Design-based <i>F</i> -test	(21, 31)=17.42 <sup>***</sup>				(23, 29)=20.44 <sup>***</sup>				(25, 27)=23.78 <sup>***</sup>			
R <sup>2</sup>	21.55%				27.21%				28.09%			

*Note.* Ref= Reference group; W/D/S= Widowed/Divorced/or Separated; FCC = Family Cultural Conflict; FB = Family Burden; FC= Family Cohesion; FS= Family Support (z-scores). Beta coefficients represent unstandardized values. All models adjusted for age, ethnicity, education, number of adults in respondent's household, everyday discrimination, self-rated physical health, and language of interview. Models 1-3 (N= 521).

<sup>a</sup>Includes children/adolescents age 17 years old or younger currently living in respondent's household.

<sup>†</sup>  $p < .10$ .

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

**Table 4**  
Multivariable Linear Regressions Predicting Psychological Distress among Immigrant Latinas (Weighted)

	Model 1			Model 2			Model 3		
	B	SE	95% CI	B	SE	95% CI	B	SE	95% CI
<b>Household Structure</b>									
<i>Marital status</i>									
Married/cohabiting	Ref			Ref			Ref		
W/D/S	-0.07	0.83	-1.74 1.60	-0.57	0.85	-2.29 1.14	-0.61	0.85	-2.32 1.10
Never married	0.55	1.09	-1.65 2.75	0.37	1.08	-1.80 2.54	0.37	1.10	-1.84 2.57
<i>No. of Children in HH<sup>a</sup></i>									
0	Ref			Ref			Ref		
1-2	0.19	0.78	-1.38 1.75	0.33	0.81	-1.29 1.96	0.25	0.85	-1.46 1.96
3 or more	<b>2.18*</b>	1.08	0.01 4.34	<b>2.09*</b>	1.00	0.07 4.10	2.02 <sup>†</sup>	1.02	-0.03 4.07
<i>Household income</i>									
\$0-14,999	-0.90	0.97	-2.84 1.05	-0.90	0.93	-2.76 0.97	-0.88	0.92	-2.73 0.96
\$15,000-34,999	-0.31	1.07	-2.46 1.83	-0.45	1.09	-2.65 1.75	-0.47	1.08	-2.63 1.70
\$35,000-74,999	-1.60 <sup>†</sup>	0.91	-3.42 0.22	-1.48 <sup>†</sup>	0.82	-3.13 0.16	-1.44 <sup>†</sup>	0.83	-3.11 0.24
\$75,000 and over	Ref			Ref			Ref		
<i>Work status</i>									
Employed	Ref			Ref			Ref		
Unemployed	1.26	0.94	-0.62 3.14	1.37	0.95	-0.53 3.28	1.31	0.98	-0.65 3.28
Out of labor force	<b>1.88*</b>	0.71	0.45 3.30	<b>2.18*</b>	0.65	0.87 3.49	<b>2.25***</b>	0.65	0.94 3.57
<b>Family Ties</b>									
<i>Risks</i>									
FCC				<b>0.69***</b>	0.16	0.38 1.01	<b>0.73***</b>	0.15	0.42 1.03
FB				0.35 <sup>†</sup>	0.19	-0.02 0.73	<b>0.39*</b>	0.19	0.01 0.77
<i>Resources</i>									
FC							0.22	0.23	-0.25 0.69
FS							-0.10	0.10	-0.30 0.11
Design-based F-test		(22, 29)=9.85***			(24, 27)=13.64***			(26, 25)=11.98***	

	Model 1				Model 2				Model 3			
	<i>B</i>	SE	95% CI		<i>B</i>	SE	95% CI		<i>B</i>	SE	95% CI	
R <sup>2</sup>	18.96%				22.46%				22.64%			

Note. Ref= Reference group; W/D/S= Widowed/Divorced/or Separated. FCC = Family Cultural Conflict; FB = Family Burden; FC= Family Cohesion; FS= Family Support (*z*-scores). Beta coefficients represent unstandardized values. All models adjusted for age, ethnicity, education, number of adults in respondent's household, everyday discrimination, self-rated physical health, language of interview, and acculturative stress. Model 1 (n= 902); Models 2 and 3 (n= 901).

<sup>a</sup> Includes children/adolescents age 17 years old or younger currently living in respondent's household.

- <sup>†</sup> *p* < .10.
- \* *p* < .05.
- \*\* *p* < .01.
- \*\*\* *p* < .001.