Acculturation Patterns and Depressive Symptoms among Low-income Pregnant Latina Women

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Abstract

This article examined the relationship between levels of acculturation and depression among pregnant Latina women. Among child bearing Latinas, higher acculturation has been found to be significantly associated with increased mental health problems (Acevado, 2000). The purpose of this study is to assess the relationship between acculturation levels and the prevalence of elevated depressive symptoms among pregnant Puerto Rican women. Methods A secondary data analysis was conducted using a sample of 138 pregnant participants who were screened utilizing the Center for Epidemiologic Studies Depression (CES-D) Scale. Acculturation indicators used were sociodemographic data such as language preference, language of interview and country of birth. Results Women who scored ≥ 21 (on CES-D) were classified as having moderate to high depressive symptoms. The overall findings suggest that Latina pregnant women who identified themselves as Puerto Rican were more likely to report elevated levels of depression than other Latinas.

Key words: Latinos, Hispanics, pregnancy, acculturation, depression, CES-D.

Introduction

According to the 2010 U.S. Census Bureau there are 50.5 million Latinos in the United States who comprise16 percent of the total population. The Latino population "grew by 43 percent from 2000 to 2010, accounting for over half of the 27.3 million increase in the total population of the United States" (Humes, 2010, p.3). In Connecticut, Latinos account for 13.4 percent of the population with an increase of 49.6 percent of Hispanics\Latinos from 2000 to 2010 (U.S. Census, 2010).

Social workers have always stood out as professionals within the helping profession because they focus on the "person-in-environment" interaction as a starting point. As the rate of Latino population growth increases in the United States there is a potential for a corresponding increase for mental health treatment. The increasing numbers of Latinos in the population make it is imperative that social workers become more culturally competent. Estimates are that by the year 2050, nearly one-quarter of the U.S. population or 102.6 million individuals, will be of Latino origin (U.S. Census Bureau, 2006). Latinos are at risk for various psychological maladies including poverty (Prelow & Loukas, 2003), and low educational attainment (Prelow & Loukas, 2003). Latinos make up the largest percentage of what is considered the "working poor" in the United States (Acevedo, 2005). Latinos in particular seek mental health less because of limited English language proficiency, foreign born status, and fewer years in the U.S. (Berdahl & Torres, 2009).

One study found, Spanish speaking Latinos were significantly less likely than their non-Latino counterparts to have had a physician visit, mental health visit, mammogram, or influenza vaccination even after adjusting for predisposing need and enabling factors (Fiscella et al. 2002). Spanish-only speakers with poor mental health had much lower odds of receiving needed services compared to English-only Latino speakers (Sentell et al. 2007). As the rate of Latinos in the U.S. continues to increase rapidly, psychological difficulties and the demands for mental health treatment are likely to increase as Latinos with different levels of acculturation experience the host.

Puerto Ricans share some common characteristics with other Latino subgroups; however, they are very different in ancestry, race, history and immigration status. Puerto Ricans have significantly higher rates of serious mental illness, mental disorder symptoms, self-reported unmet needs, and higher rates of utilization compared to Mexicans (Harris et. al. 2005). Social workers need to be conscientious of the similarities and differences among Latino subgroups particularly Puerto Ricans and the effects their acculturation experiences may have on their mental well-being. The purpose of this study is to conduct a secondary quantitative data analysis to examine the relationship between elevated depressive symptoms and levels of acculturation among Puerto Rican pregnant women.

Acculturation

There is a wealth of literature on acculturation stages and their direct relationship to mental health. Berry(1980) and Padilla (1980) described acculturation as a process of culture learning and behavioral adaptation that takes place with exposure to a nonnative culture that influences Latinos at the individual and familial levels (Miranda, 2006, p.269). The literature suggests that acculturation impinges on psychological well-being regardless of levels of acculturation. These acculturation levels are low acculturation (marginalization), highly acculturated (Americanized) and biculturality.

Low acculturation also known as "marginalization" creates a range of psychological difficulties. Rogler et al. (1991) suggested that the reason for the relationship between low acculturation and high indices of psychological dysfunction may be explained by the loss of traditional supportive interpersonal networks, social isolation experienced in an unfamiliar cultural environment, and the lack of instrumental skills to deal with an unfamiliar world (Miranda, 2000, p.342). The adherence to native cultural practices is caused by the perception of the new sociocultural environment as unfamiliar, confusing and overwhelming. Consequently, low acculturated individuals withdraw from participation in the host culture's practices (Miranda & Umhoefer, 1998, p.159). Low acculturation is also linked to "clinical levels of depression accompanied by low social interest" (Miranda & Umhoefer, 1998, p.161) because they "regard their functional skills as ineffective to meet the requirements of the new environment" (Miranda & Umhoefer, 1998, p.159). Inclan (1983) found higher scores on negative measures of hostility and anxiety in a sample of women from Puerto Rico who were low in acculturation. Rogler and Cooney (1984) found that less acculturated Puerto Rican participants showed higher levels of distrust than more highly acculturated participants (Miranda & Umhoefer, 1998, p.160).

Bujaki (1989) suggests that high acculturation, synonymous with cultural assimilation, demands a transformation in which the native cultural practices, cognitions, and behaviors are abandoned in favor of those of a nonnative or host culture (Miranda 2000). Empirical evidence also shows that assimilation has negative effects on Latino's mental health. Rogler and colleagues (1991) suggested that increased acculturation to mainstream values may lead to interpersonal conflict and alienation from traditional supports, as well as to the internalization of the host society's prejudicial attitudes (Ramos 2005). There are several researchers that link high acculturation to negative mental health outcomes. High acculturation has been linked to high quantity and frequency of alcohol consumption (Graves, 1967); increased family disputes (Ramirez, 1969); increased feelings of helplessness (Melville, 1978); high incidence of psychological stressors, chronic and acute diseases, abnormal findings for health evaluations, and negative ethno medical data (Dressier & Bernal, 1982) (Miranda, 1998). Caetano's (1987) research concluded that women who were highly acculturated had nine times more chances of being frequent high maximum or frequent heavy drinkers than women that had low acculturation (Rodler, 1991 p.590).

A final stage of acculturation described in the literature appears to be the least detrimental to Latinos mental health is referred to as "biculturality". Weaver (1993) conceptualized biculturality as the ability of individuals in cultural transition to retain components of their native culture and incorporate practices, beliefs, behaviors and attitudes of the host culture. Essentially, individuals would keep their own cultural identity while acquiring the host culture's traits to mediate within the new social context as well as their own.

Lang et al. (1982) found that bicultural Latinos reported higher rates of psychological adjustments when compared to Latinos in low-high acculturation stages. Specifically, bicultural Latinos obtained higher scores on measure of quality of life, affect balance and psychological adjustment (Miranda & Umhoefer, 1998, p.161). In addition, Miranda and Umhoefer (1998) used a measure of depression and a measure of social interest, an Adlerian construct of mental health, finding that biculturality was associated with the absence of depressive symptoms and increased social interest. Optimal mental health requires a good combination of retaining the supportive ego-reinforcing traditional cultural norms and elements as well as learning the host society's cultural norms and elements. The literature on acculturation has been extensive when it comes to Latinos in the United States. However, most of the literature is concerned with one Latino subgroup (i.e. Mexicans) and given each group type of immigration (voluntary, forced to acculturate, or colonization of territories) immigration status, political history, limits generalization to other Latino groups.

Depression

Depression is a mood disorder that is prevalent among women of childbearing age. Depression affects from 10% to 15% of new mothers (Wisner & Wheeler, 1994). Latinas have the highest birth rate of all racial and ethnic minority groups in the United States (U.S. Census Bureau, 2004). In addition, Latinas have been found to be at higher risk of developing depressive symptomalogy postnatally (Howell, Mora, Horrowitz & Leventhal, 2005). According to Bansil (2010) depression has clinical implications for the health status of the mother during pregnancy that might influence the occurrence of adverse maternal and fetal outcomes. Depression among women is associated with functional impairment and harmful health behaviors, such as self-medication, alcohol and substance abuse, cigarette use, poor nutrition and inadequate weight gain, suicide, and delayed or inadequate use of prenatal care (Bansil, 2010 p.329). The strongest risk factors for post-partum depression are past history of psychopathology, especially mood disturbance during pregnancy (C.T. Beck, 2001; O'Hara & Swain, 1996).

Low income post-partum women, however, are known to have rates of depression twice those of middle-income women (Yonkers et. al., 2001). However, low income Latinas of childbearing age are seldom included in studies that profile the mental health of pregnant women despite empirical evidence that Latinas show more severe depression than do their non-Hispanic peers (Myers et. al. 2002). It is evident that the body of research on Latinas particularly depression during pregnancy and post partum is limited. Given that Latinos is the fastest growing group in the U.S., this study examined depressive symptoms during pregnancy and its relationship to acculturation with Latinas in order to expand the knowledge gap.

The purpose of this study is to conduct a secondary quantitative data analysis to examine the relationship between elevated depressive symptoms and levels of acculturation among Puerto Rican pregnant women. Acculturation was measured via language of interview, length of time in the U. S., generations in the U.S. and language preference. Depressive symptoms were measured utilizing the CES-D Scale with a score ≥ 21 indicating elevated levels. It is hypothesized that both high-levels of acculturation (Americanized) and low-levels of acculturation (marginalized) have a negative psychological impact on individuals. Research shows that although both groups present differently clinically, acculturation impinges on their psychological well being, and adaptation.

Methods

Participants

Data for this study were collected between September 2005 and May 2007 by the Hispanic Heath Council in Hartford, CT. The aim of the original study, PRENAT, was to evaluate food insecurity, food intake and pregnancy outcomes for low-income Latina women. 138 low-income pregnant Latina were recruited in Hartford, CT, through local agencies and programs (16.3%), community activities (13.2%), Supplemental Nutrition Program for Women and Children (WIC) (47.3%), area hospitals (2.3%) as well as supermarkets and restaurants (3.9%), street and phone outreach (8.5%), friend and family referral (5.4%) and elementary school (1.6%). Women were eligible to participate in the study if they were (1) self-identified as Latina, (2) 4-8 months pregnant, (3) 18 year of age or older, (4) residing in the Hartford area (5) planning to deliver at one of two area hospitals, (6) were not living in temporary housing during the study, and (7) participating in WIC or eligible for WIC (household income $\leq$185% of the poverty level). Participants on average were 24 years old, had lived in the United States for an average of 14 years, and had at least 2 children. The majority of the sample was Puerto Rican (n=88). This study will focus on Puerto Ricans vs. other Latinas given that the majority of Latinas that reside in Hartford, CT are Puerto Ricans.

Measures

Center for Epidemiologic Studies-Depression. The Center for Epidemiologic Studies-Depression Scale (CES-D) is a 20-item instrument designed to measure frequency of depressive symptoms of respondents. Scores range 0 to 60, with greater scores indicating higher risk for depression. The CES-D was not "designed for clinical diagnosis but is based on symptoms of depression present in clinical cases, making it sensitive to levels of severity" (Torres & Rollock, p.12). Reliability test conducted during field trial data testing for the CES-D have reported coefficient alphas of .84, .85 and .90 (Radloff, 1977). The twenty questions assess the frequency with which depressive symptoms have occurred during the previous week using a four-point scale: "Rarely or None of the time"(Less than 1 day), Some or a Little of the Time" (1-2 days);"Occasionally or a Moderate of the Time" (3-4 days); and "Most of the Time" (5-7days). The CES-D has also been used with pregnant and post-partum women. A study conducted among pregnant and post-partum Mexican-American women reported the alpha coefficient to be .87 (antenatal), and .88 (postnatal) (Martinez-Schallmoser, et. al, 2003). The CES-D has "become the most popular and commonly used instrument for assessing depressive symptomalogy among the Hispanic population partly because the scale has been reported to reduce the contaminating effects of physical health symptom items that are found in other measures" (Torres & Rollock, p.12).

Previous studies have shown a cutoff point of 16 to distinguish between high and low levels of symptoms (Radloff, 1977). Since some symptoms of depression are also characteristics of pregnancy such as changes in appetite, sleep patterns and fatigue a higher cut off score would be most accurate when assessing for depressive symptoms. As a result, investigators have utilized a higher cut off score of 21 with pregnant and post-partum women (Davila, 2009). This study will use the 21 cutoff points to indicate the presence of moderate to high levels of depressive symptoms. Le and colleagues (2004) concluded that Latinos scoring 24 or higher on the CES-D were considered in extreme risk for a future diagnosis of major depressive disorder.

Demographic Variables Including Acculturation

Besides the CES-D instruments, other questions were designed to enhance the estimate of various demographic resources for each participant including education, employment, household income, status of a partner, living situation, and number of members in the household. In addition, whether the family participated in the WIC program and received any state assistance including food stamps were also considered estimates of resources. Indicators of acculturation such as participants' language proficiency, length of time in the U.S., place of birth (U.S. vs. non-U.S.*), immigration status, and years of generations living in the United States will be used to determine levels of acculturation. English fluency has been a "commonly referenced indicator of acculturation, as it is readily observable and likely to have a direct impact on interactions with the mainstream culture" (Torres, 2007, p.10). Escobar et al. (2000) found language use and place of birth to be the key factors in determining acculturation level. Recent methodological critiques have recommended the use of individual indicators, such as place of birth, age of immigration to the U.S., years residing in the U.S., and primary language use, in lieu of acculturation scales, because they are commonly included in studies conducted by the U.S. Census Bureau and other major health surveys (Escobar, 2000). Behavioral factors of acculturation, such as language use, have been distinguished from values as the latter may represent a more profound level of adaptation (Zea, et al., 2003).

Procedure

Each participant was interviewed during the three phases (second trimester, third trimester and post-partum). After a brief description of the study, participants were asked for a convenient time and place to meet where they can be read the consent form in their preferred language (English or Spanish) and sign the consent form. During the baseline survey, participants were scheduled for the second interview one month following initial interview. Finally, women were contacted upon delivery of newborns to complete post-partum interview. Confidentiality was maintained for all participants, who were compensated with $30 ($10 per visit) and nutrition and education materials. Human Subjects Committees from the University of Connecticut, Hartford Hospital, Saint Francis Hospital and the Hispanic Health Council approved this study.

Data Analysis

Data were entered and analyzed using SPSS (Statistical Package for the Social Sciences for Windows version 15). A prevalence rate of elevated depressive symptoms for the sample of Latinas (Puerto Ricans and other Latinas) was established using a cutoff score of 21 to indicate the presence of moderate to high levels of depressive symptoms.

To test for internal reliability for CES-D Scale on the data a Cronbachs alpha was computed resulting in a reliability outcome of .86. In addition, frequencies and descriptive statistics were run to report participants demographic characteristics, and depression symptoms categories (low/normal level (<21), moderate to high level of symptoms (≥21). Participants with more than one question unanswered on the CES-D were excluded from the analysis. Out of 138 participants, three where excluded from the analysis on the CES-D Scale.

Participants' ethnicity, language preference, country of birth, length of stay in the United States, was collected to examine differences in demographic characteristics and depressive symptoms categories. Chi-square cross tabulation ($\chi 2$) analysis was used to compare categorical variables, socio-economic and demographic characteristics (ethnicity, marital status, generation levels, language of interview, pregnancy stage) and depression symptoms categories listed above**.** One way ANOVAs were run to determine differences in the means for participants' age, number of years in the U.S.A. and number of children <17 by ethnicity.

Results

Demographic Characteristics

Bivariate Analysis Bivariate analysis using chi-square was use to compare Puerto Rican participants with other Latino participants on various demographics characteristics as shown on Table 1. When comparisons were made between Puerto Ricans and other Latinas, statistically significant differences were found in the amount of time living in the **U.S. (Chi-Square= , df= , p=.) age (Chi-square= ,df=1, p=.027), and number of children** less than 17 (Chi-Square= 3.83, df =1, p=.039). Puerto Ricans were more likely to have lived in the U.S. longer, were more likely to be younger, and have more children under the age of 17 than other sampled Latinas. Puerto Rican women also lived in the United States on average of 15 as compared to 5.4 years for other Latinas. The average age for Puerto Rican participants was 24.4 compared to the other sampled Latinas (M=26.6 years of age) and Puerto Rican participants had an average of 1.98 children under the age of 17 compared to their Latina counterparts who had 1.57 children under the age of 17. The language preferences of Puerto Rican participants were more likely to report having a bilingual language preference compared to the other sampled Latinas whose language preference was monolingual Spanish.

Puerto Ricans were also more likely to have 3 or more generations (63.1%) living in the United States as compared to one generation (60%) for other Latinas (Chi-square=64.89, df = 4, p=.000). Puerto Rican women language of interview was English (54%) as compared to other Latinas language interview was Spanish (91.8%) (Chi-square=28.12, df = 1, p=.000). In addition, when looking at language spoken in the home, Puerto Rican women were more likely to be bilingual or monolingual English (58.6%) as compared to other Latinas whose preferred language was Spanish (89.8%)(Chi-square=30.95, df =2 , p=.000). While there were no statistically significant differences in the pregnancy stage of Puerto Rican and Latina participants, the majority (66%) were recruited during second trimester. The majority of the sample reported being low income (<2,000).

Participants Demographic Characteristics, Acculturation and Depression Symptoms

Table 2 reports the prevalence of elevated depressive symptoms and selected variables. When observing a cut off score of 21 and above on the CES-D, 31.1% of the total sample had moderate to high levels of depressive symptoms. Comparisons were made between the depression symptoms of the two groups (Puerto Rican and other Latina participants). No statistically significant differences were found in the parity, language preference, language spoken at home and number of years in the country of Puerto Rican and other Latino sample members. Women who were primiparous (first child) who identified as of Puerto Rican decent (42.5%), were more likely to report depressive symptoms than other Latinas (29.4%) (Chi-square= 3.44, df =1, p= 0.064). Puerto Ricans (76.2%) were more likely than other Latinas (23.8%) to meet the cut off score for identity (Chi-square =3.25, df =1, p= .071) to 23.8%, respectively). Although statistically non-significant, the analysis shows that women whose country of birth was not the U.S. were more likely to express depressive symptoms than those who were born in the U.S. (Chi-square= 3.052, df=1 , p=.081). Finally, the number of generations participants' family lived in the U.S. was marginally statistically significant with depression symptom severity (Chi-square=9.21, df= 4, p= .056). Those with two or more generations in the U.S. were more likely to report moderate and high depressive symptoms.

Discussion

This study examined the relationship between elevated depressive symptoms and acculturation among pregnant Latina women with the focus on Puerto Rican women.

Findings show that Puerto Ricans were more likely to be more highly acculturated than other Latinas. As previously discussed, there are several researchers that link high acculturation to negative mental health outcomes. Rogler and colleagues (1991) suggested that increased acculturation to mainstream values may lead to interpersonal conflict and alienation from traditional supports, as well as to the internalization of society's prejudicial attitudes (Ramos 2005). Comparing CES-D scores by ethnicity (Puerto Rican vs. other Latinas) Puerto Rican women were more likely to report higher levels of depressive symptoms as compared to other Latinas. This study also found that women born outside the U.S. reported higher levels of depressive symptoms, contrary to other studies, that reported that "Latinas who were U.S.-born reported higher CES-D scores than Latinas born in Mexico (Davila 2009, p 323). This difference in findings may be attributed to the majority of the participants in this sample was born in Puerto Rico or are of Puerto Rican decent. Puerto Ricans are very different in political status (i.e. they are American citizen's at birth), and have very different cultural identities than other Latinos. Therefore, this study illustrates how acculturation should be treated with caution among Latino subgroups. In addition, these findings are consistent with the literature that high acculturation is linked to negative mental health outcomes.

It has been documented that pregnant women are at higher risk for suffering from elevated depressive symptoms. Among Latinas, higher depressive symptoms have been found during pregnancy (Zayas et al., 2003). Given that the strongest risk factors for post-partum depression are past history and psychopathology, especially mood disturbance during pregnancy (C.T. Beck, 2001; O'Hara & Swain, 1996), screening should be conducted during pregnancy to reduce or prevent depressive symptoms beginning at pregnancy thus reducing the detrimental effects depression has on their children.

Although the results of this study offer some contribution to understanding acculturation levels in relation to depressive symptoms among pregnant Latina women, particularly Puerto Ricans, limitations must be recognized. First, generalizability of the findings to other Latinas (e.g. those with different SES) whom may vary from those sampled must be made cautiously. Second, a larger sample size may have yielded a more significant relationship between acculturation indicators and elevated depressive symptoms as well as other factors that may have been significant but not detected due to small sample size. The next step to follow this preliminary analysis is to conduct multivariate regression analysis to examine the predictors of depression, taking into account the acculturation variables that were found to be significant.

Implications for policy, practice, education and research

Social workers are able to provide clinical treatment in a variety of agencies but particularly in community mental health agencies that can service a large number of Latino clients. For some Latino cultures the direct expression of feelings is unacceptable so they may express their psychopathology through somatic complaints. Consequently, Latino clients tend to first seek mental health services by consulting with primary care providers and their support system. For Latina pregnant women, this may be seen while obtaining prenatal care. Latinos will usually seek clinical treatment when their symptoms are severe and beyond the grasp of their support system. For Latinos, navigating through the mental health system is challenging and possibly intimidating due to linguistic and cultural differences between mainstream therapists and Latino clients. This cultural and linguistic disparity could potentially lead to significant miscommunication and misdiagnosis. Many Latinos may approach social service agencies cautiously and with mistrust, prolonging the therapeutic alliance with the therapist. According to Norris & Alegria (2005) "competent mental health services for Latinos and other minority groups consequently need to be easily accessible, have more flexible hours, address co-morbidities, be perceived as credible, provide realistic referrals to other services, combine physical care with mental care, elicit feedback from clients and support systems, and be staffed with bilingual and compassionate professionals" (Furman, et al. 2009, p170).

Culturally competent practice is key to effective treatment delivery to the Latino population. According to Colon (1996) culturally competent practice focuses on the need for a general sensitivity to cultural factors that may influence clients. Being sensitive to cultural variables can be conceptualized as holding a cultural lens to human behavior and making allowances for the possibility of cultural influence. It is imperative for the clinician to be culturally sensitive and be able to differentiate within Latino sub-groups to avoid stereotyping and decreasing any mistrust that the patient may be arriving with to treatment. The continuous training of clinical social workers in cultural sensitivity, would influence cultural competence and allow for effective practice.

Part of the development of cultural competence is becoming aware of the effects of acculturation on Latino groups and its impact on various mental health illnesses including depression. In addition, intakes for prenatal care at obstetrical offices should include screening for depression during pregnancy (including post-partum) and referral for mental health (as indicated) to prevent or reduce incidence of clinical depression among Latinas thus reducing the detrimental effects depression has on their children.

Future research should be conducted with this population with a larger sample size where acculturation can be measured in terms of low, high and biculturality (and it's relation to mental health) as well as reasons for immigration which can greatly affect Latinos view of the host culture. Moreover, to better assess mental health in addition to a standardized test for mental health (such as CES-D) a clinical interview (when indicated) would present a clearer understanding on participants' mental health status.

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Table 1: Participants Characteristics

Puerto Rican *(n=88)*	Mean (SD)	*n*	Other Latinas *(n=50)*	Mean (SD)	*n*	P-value[a]
Amount of time lived in U.S.	14.9 ± 9.5	87		5.4 ± 5.2	50	.000
Participant Age	24.4 ±5.3	88		26.6 ± 5.8	50	.027
Number of Children <17	1.98 ± 1	63		1.57± 0.7	35	.039

Characteristics	Puerto Rican *(N=88)* *% n*	Other Latinas *(N=50)* *% n*	P-value[b]
Language Preference			
Monolingual English	4.5 (4)	0	.000
Bilingual (both equally)	70.5 (62)	24.5 (12)	
Monolingual Spanish	25.0 (22)	75.5 (37)	
Generations			.000
One	3.4 (3)	60.0 (30)	
Two	33.3 (29)	32.0 (16)	
Three	51.7 (45)	8.0 (4)	
Four	10.3 (9)	0 (0)	
Five or more	1.1 (1)	0 (0)	
Language of Interview			
English	54.0 (47)	8.2 (4)	.000
Spanish	46.0 (40)	91.8 (45)	
Language Spoken at Home			
Monolingual English	29.9 (26)	2.0 (1)	.000
Bilingual (both equally)	28.7 (25)	8.2 (4)	
Monolingual Spanish	41.4 (36)	89.8 (44)	
Marital Status			.000
Partner	31.4 (27)	68.0 (34)	
No Partner	68.6 (59)	32.0 (16)	
Pregnancy Stage			.119
Second trimester	60.2 (53)	73.5 (36)	
Third trimester	39.8 (35)	26.5 (13)	

[a] One way ANOVAS

b Chi-square cross tabulation analysis

Table 2.

Indicators of Acculturation		**Depressive Symptoms Levels**				
		Normal		**Moderate to High**		**P value***
		CES-D <21[1]		**CES-D ≥21[1]**		
		n	**%**	**n**	**%**	
Depression Symptoms		93	68.9	42	31.1	N/A
Parity	Primiparous	23	57.5	17	42.5	.064
	Multiparous	70	73.7	25	26.3	
Identity	Other Latinas	37	39.8	10	23.8	.071
	Puerto Rican	56	60.2	32	76.2	
Language of Preference	English Only	2	2.2	2	4.9	.389
	Spanish & English	49	52.7	25	61	
	Spanish Only	42	45.2	14	34.1	
Language Spoken at Home	English Only	17	18.7	10	23.8	.744
	Spanish and English	21	23.1	8	19	
	Spanish Only	53	58.2	24	57	
Country of Birth	U.S Born	34	79.1	9	20.9	.081
	Not U.S. born	5	64.1	33	35.9	
Number yrs. in U.S.A.	Below the median (9 years)	44	69.8	19	19.3	.917
	At or above the median (9 years	49	69.0	22	31.0	
Number of generations of participants family that have lived in the U.S.	1 generation	26	86.7	4	13.3	.056
	2 generations	26	57.8	19	42.2	
	3 generations	34	69.4	15	30.6	
	4 generations	6	66.7	3	33.3	
	≥ Five generations	0	0	1	100	

[a] Chi-square cross tabulations analysis.
[1] Data only available for 135 participants

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