

## FAMILY FUNCTIONING AND DEPRESSION IN LOW-INCOME LATINO COUPLES

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*Although extensive research has found a strong relationship between poor family functioning and depression, previous research has not examined this relationship among low-income Latinos. In this study, we examined how family functioning may be associated with depression in a sample of low-income Latino couples. In addition, we examined how acculturative stress moderates the relationship between family functioning and depression. Our results indicate that the relationship between family functioning and depression is stronger in women and that acculturative stress moderates this relationship in women. Probing this interaction indicates that women who reported high acculturative stress coupled with poor family functioning experienced more depression. Clinical implications are discussed.*

### FAMILY FUNCTIONING AND DEPRESSION IN LOW-INCOME LATINO COUPLES

Depression is a disorder that affects individuals from all racial, ethnic, and socioeconomic backgrounds. Recent estimates suggest that up to 16% of the general population will experience a major depressive episode at some point in their lives (Breslau & Kendler, 2005; Kessler, Birnbaum, & Demler, 2005; Wang & Kessler, 2005). In addition to individual suffering, the consequences of major depression can be rather significant. For example, depression accounts for productivity loss of over \$44 billion a year in the United States (Wang, Simon, & Kessler, 2003). Depression is also associated with elevated rates of suicide and has been associated with over 30,000 deaths each year in the United States (Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System, 2006). Taken as a whole, the consequences of depression are such that the World Health Organization has declared depression to be the second leading cause of disability among all health problems (World Health Organization, 2004).

Despite the significant progress that researchers have made in understanding the causes and correlates of depression, little of this research has focused on understanding depression among individuals from low-income and racial/ethnic minority groups. One population that has remained relatively understudied is Latinos, a fact that has significant public health implications given the rapidly increasing population of Latinos in the United States (U.S. Bureau of the Census, 2000). This dearth of racial/ethnic minority research has resulted in an unclear understanding of depression among Latinos. For example, several early epidemiological studies found that compared with non-Hispanic White Americans, Latinos were at increased risk for

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depression (Bassuk, Perloff, & Coll, 1998; Karno et al., 1987; Kessler, 1994). However, data from the recently completed National Comorbidity Survey Replication study (NCS-R; Kessler et al., 2005) suggest that Latinos as a whole may be at relatively lower risk for depression. Nevertheless, data from this same study indicated that the course of depression is more persistent among Latinos than among Whites (Breslau & Aguilar-Gaxiola, 2006; Breslau & Kendler, 2005). Specifically, Latinos were more than twice as likely to report experiencing a depressive episode that lasted at least 12 months. In addition, other research that has focused on particular subgroups of Latinos (e.g., Puerto Ricans, elders) has found elevated levels of depression (Alegría et al., 2007; Black, Markides, & Miller, 1998; González, Haan, & Hinton, 2001).

The findings on persistence of depression and elevated rates of depression in particular subgroups are concerning since researchers have consistently noted significant mental healthcare disparities among Latinos (Alegría & Canino, 2002; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999). For instance, Latinos appear to be less likely to utilize formal mental health services than Whites (López, 2002; Vega et al., 1999). Moreover, when Latinos do seek mental health services, they are more likely to receive inadequate care (Vega & Lopez, 2001) and prematurely terminate treatment (Organista, Muñoz, & González, 1994). While there are likely a variety of instrumental and service reasons that explain the pervasive healthcare disparities among Latinos (e.g., lack of insurance, language barriers), it is also possible that our limited understanding of depression in Latinos has led to the application of treatments that may not be culturally relevant (López, 1997; Sue, 1998). Thus, depression research that focuses on Latinos has the potential to not only further our understanding of the phenomenon itself but also produce significant public health benefits.

One area of research that holds particular promise for understanding the development of depression among Latinos is that of family functioning. Extensive research has documented a strong relationship between poor family functioning and the development, course, and recurrence of depression among the general population (Beach, Sandeen, & O'Leary, 1990; Keitner & Miller, 1990; Keitner, Ryan, & Miller, 1996). However, to date, almost no published research has directly examined the relationship between family functioning and depression in Latinos. Yet, there is good reason to believe that family functioning might be a very relevant variable to consider with regard to depression in Latinos given the importance and centrality of family among Latinos and Latinos' sense of self that many scholars have documented (Arredondo & Perez, 2003; Miranda, Frevert, & Kern, 1998).

In this article, we describe a study in which we examine the relationship between family functioning and depression in Latino couples. In addition, we explore whether or not the relationship between family functioning and depression might be moderated by acculturative stress. By way of background, we briefly review the literature on family functioning and depression and acculturative stress.

### *Depression and Family Functioning*

Considerable research has documented the important role that family functioning plays in relation to the development, course, and recurrence of depression (Beach et al., 1990; Hooley, Orley, & Teasdale, 1986; Keitner et al., 1995). For example, researchers have found that marital distress can lead to depression (Beach et al., 1990) and may contribute to some difficulties in parenting that may account for the increased risk of depression in children (Downey & Coyne, 1990). In addition, several studies have documented significant impairments in various areas of family functioning and marital discord during an acute depressive episode (Keitner, Miller, Epstein, Bishop, & Fruzzetti, 1987; Keitner et al., 1995). Similarly, numerous studies have found that depressed men and women report greater marital distress and cope more destructively with marital conflicts (Coyne & Benazon, 2001; Coyne, Thompson, & Palmer, 2002). Moreover, family functioning has also been found to contribute to the recurrence of depression. For example, Hooley et al. (1986) found that higher levels of expressed

emotion, or the extent to which family members express criticism and hostility toward depressed patients, was associated with an increased likelihood of relapse in patients with unipolar depression.

Taken together, these studies highlight the important role that family functioning plays in relation to depression. Given the aforementioned importance placed on family among Latinos, there is good reason to believe that this may be a fruitful area in which to study depression in Latino adults. And yet, the vast majority of studies that have focused on the relationship between family and psychopathology in Latinos have been conducted with children and adolescents. In general, these studies have tended to find that good family functioning, as measured through the parent-child relationship as well as a variety of parenting behaviors, is associated with better child and adolescent adjustment (e.g., Davalos, Chavez, & Guardiola, 2005; Szapocznik & Kurtines, 1993).

Although there have been numerous studies documenting the important role of the family environment on child and adolescent adjustment in Latinos, we could find only one published empirical article that directly examined marital functioning and its relationship to depression in Latino adults (Treviño, Wooten, & Scott, 2007). These authors examined the relationship between depression and marital adjustment in Latino couples and found that husbands' and wives' depression scores were significantly correlated with each other. In addition, they found that when one of the members of the couple was depressed, the wives reported better marital adjustment than the husbands.

The Treviño et al. (2007) study is an excellent first effort to understanding dyadic perspectives in relation to depression, but one important limitation of this study is that it did not take into consideration the extent to which cultural factors might affect the relationship between marital adjustment and depression. There exists considerable heterogeneity among Latinos; variability can be found in immigration and acculturation experiences, as well as adherence to a variety of Latino cultural values. Thus, as some scholars have noted (e.g., López, 2002; Vega & Lopez, 2001), it is important that research take into consideration the within-group heterogeneity among Latinos; in this particular case, it is plausible that cultural factors might affect the relationship between family and depression. Thus, in this article, in addition to examining the relationship between family functioning and depression, we are also exploring how acculturative stress might affect the relationship between family functioning and depression. We now briefly review the literature on acculturative stress and discuss its plausible relevance to family functioning and depression.

#### *Acculturative Stress*

Acculturative stress is a concept that is closely related to the general process of acculturation. Acculturation has been defined as the process of adjustment and cultural change that takes place as an individual adapts to a host society (Organista, Organista, & Kurasaki, 2003), and acculturative stress refers to the stress associated with the psychological demands of adapting to a new culture (Berry & Kim, 1988). Some of these demands include learning a new language, different customs, social norms, and unfamiliar laws (Organista et al., 2003). In addition to adapting to new cultural elements, there can be a significant sense of loss experienced by many individuals during the acculturation process (Rogler, Cortes, & Malgady, 1991). For example, Smart and Smart (1995) argued that acculturative stress results from the loss of social support from family and friends. While most commonly conceptualized as a stressor that affects recent immigrants who are adapting to a new culture, some researchers have suggested that acculturative stress could also affect individuals of later generations who are struggling to integrate different and sometimes conflicting cultural values and ideals (Rodriguez, Myers, Bingham-Mira, Flores, & Garcia-Hernandez, 2002).

Whether it affects recent immigrants or individuals of later generations, acculturative stress has been theorized to lead to feelings of marginality and alienation, as well as increased

psychological distress, including depression, anxiety, and psychosomatic symptoms (Williams & Berry, 1991). Unfortunately, the literature examining the psychological consequences of acculturative stress has many limitations, including methodological inconsistencies across studies and a tendency to use *acculturation* and *acculturative stress* as interchangeable constructs.

Despite the methodological limitations of the research that has studied acculturative stress and depression, there are good reasons to believe that acculturative stress is a relevant cultural variable that might affect the relationship between family functioning and depression. First, as indicated earlier, some researchers have speculated that the loss of family relationships might be one important cause of acculturative stress (Smart & Smart, 1995). Second, one study found that good family relationships might buffer the psychological effects of acculturative stress (Saldaña, 1994). However, because the empirical research in this area is limited, further exploration of the relationship between family functioning and acculturative stress is warranted.

### *Current Study*

In this study, we examined the relationship between family functioning and depression in a sample of low-income Latino couples. In order to take into consideration the cultural context of the couples in our sample, we also examined the extent to which acculturative stress might moderate the relationship between family functioning and depression. Thus, this study had two primary aims. The first aim was to examine the extent to which the relationship between family functioning and depression in our sample mirrored that reported in the literature with Caucasians (e.g., Keitner & Miller, 1990; Keitner et al., 1987, 1995). We hypothesized that consistent with the literature on Caucasians, poor family functioning would be associated with higher levels of depressive symptoms. Our second aim was to examine whether the relationship between depression and family functioning would be moderated by acculturative stress. Thus, we hypothesized that individuals who experienced the combination of poor family functioning and high acculturative stress would report higher levels of depressive symptoms.

## METHOD

### *Participants*

The participants in this study were 40 Latino heterosexual couples who were living in Massachusetts. The participants were all first-generation immigrants and came from 11 different Latin American countries. More specifically, the majority of participants were from Puerto Rico (31.25%), Santo Domingo (16.25%), and Colombia (11.25%). A total of 80% of the participants reported being married, while the remaining 20% reported living with their partners. The time the couples reported living together ranged from 1 to 47 years ( $M = 13.22$ ,  $SD = 11.38$ ). The age of the participants ranged between 18 and 65 for the women ( $M = 39.4$ ,  $SD = 11.2$ ) and between 21 and 72 for the men ( $M = 41.9$ ,  $SD = 12.8$ ). With regard to years of education, 8% of the men completed college, 43% completed high school, and 18% completed elementary school, only. Similarly, 13% of the women completed college, 44% completed high school, and 8% completed elementary school. In terms of annual income, 37.5% of both men and women reported earning <\$10,000 a year. With regard to employment, 67.5% of the men reported currently being employed whereas only 27.5% of the women were currently employed. The number of years living in the United States ranged from 8 months to 29 years ( $M = 7.69$ ,  $SD = 6.45$ ) for the men and 3 months to 26 years ( $M = 6.21$ ,  $SD = 5.43$ ) for the women (Table 1).

### *Measures*

*Depression.* All participants completed the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). This is a 21-item scale used to assess depressive symptoms within the past week. Cronbach's alpha for the BDI was 0.88 for all participants. In

Table 1  
*Demographic Characteristics of Study Participants by Gender*

Variable	Women		Men	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age	39.36	11.23	41.86	12.75
Years in the United States	6.21	5.43	7.69	6.45
Years of education	11.43	3.22	10.98	3.98
	Percent		Percent	
Annual income < \$10,000	37.5		37.5	
Currently employed	27.5		67.5	

addition, the first author individually administered to all of the participants the 17-item Modified Hamilton Rating Scale for Depression (MHRSD; Miller, Bishop, Norman, & Maddever, 1985). Cronbach's alpha for the MHRSD was 0.84 for all participants. Both the MHRSD and the BDI have been used extensively among Latino populations (e.g., Baca-García et al., 2001; Bonicatto, Dew, & Soria, 1998).

*Family functioning.* All participants completed the General Functioning subscale of the Family Assessment Device (FAD; Epstein, Baldwin, & Bishop, 1983). This is a 12-item scale that assesses general family functioning in which higher scores indicate worse family functioning. The Spanish version of the FAD has been used extensively with Latino populations and has been shown to have good psychometric properties (Walrath, Franco, Liao, & Holden, 2004). Cronbach's alpha for this scale was 0.79.

*Acculturative stress.* Each participant completed the Multidimensional Acculturative Stress Inventory (MASI; Rodriguez et al., 2002). This is a 36-item scale that assesses acculturative stress, which is defined as a potentially distressing process that impacts both recent immigrants and individuals of later generations. More specifically, this measure includes items that assess difficulties with language, differences in cultural values and traditions, and changes in cultural identities. This measure was specifically designed to be used among Latino populations. Cronbach's alpha for this scale was 0.89.

#### *Procedure*

Couples were recruited from various community organizations, including churches, food pantries, health clinics, ESL programs, and nonprofit organizations. Participants were eligible if they were born outside the United States, if they were currently in a relationship (married or living together), and if at least one member of the couple had been in the United States for less than 10 years. The first author approached all potential participants, explained the purpose of the study, and obtained their contact information if they were interested in participating. Participants were given the option of completing the questionnaires and interview in our lab or in their homes; most participants chose to be interviewed in their homes. Each member of the couple was provided with a set of questionnaires to be completed individually and privately. Upon completion of the questionnaires, each was privately administered the MHRSD. In the event that participants reported current symptoms of depression, they were given some basic information on depression (*Depression*; Public Information and Communications Branch, National Institute of Mental Health, 2004) and were also provided with a list of potential referrals for psychological services. Although study materials were available in English and

Spanish, all but one of the participants completed the questionnaires in Spanish. The entire assessment took approximately 1 hr to complete.

### *Statistical Procedures*

In order to account for the fact that we collected data from individuals nested within couples, we conducted the majority of our analyses using hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002). As others have noted, HLM accounts for the nonindependence of data that emerges when data are collected within units such as couples (Raudenbush, Brennan, & Barnett, 1995). All analyses were conducted using the Proc Mixed module of SAS and examined the relationships among depression, family functioning, and acculturative stress. Our analytic strategy consisted of first identifying and evaluating a basic model of the relationship between depression and family functioning and then evaluating incrementally more complex models that included acculturative stress. Thus, for our first model, variation in depression within couples was modeled at Level 1, which can be represented by equation (1):

$$\begin{aligned} \text{Depressive symptoms} = & (\text{Female})_{ij}[\beta_{f0i} + \beta_{f1i}(\text{family functioning})_{ij}] \\ & + (\text{Male})_{ij}[\beta_{m0i} + \beta_{m1i}(\text{family functioning})_{ij}] + e_{ij} \end{aligned} \quad (1)$$

This equation indicates that depressive symptoms for a female *i* and/or male *i* in couple *j* is a function of the intercept for each person ( $\beta_{f0i}$  or  $\beta_{m0i}$ ) and the linear relationship between family functioning and depression for each person ( $\beta_{f1i}$  or  $\beta_{m1i}$ ). Although we did not use any Level 2 variables to predict variation in Level 1, the Level 2 equations provide opportunities in which to allow Level 1 variables to vary randomly. These would be represented by the following Level 2 equations:

$$\beta_{f0i} = \gamma_{f00} + r_{f0i}; \beta_{f1i} = \gamma_{f10} + r_{f1i}; \beta_{m0i} = \gamma_{m00} + r_{m0i}; \text{ and } \beta_{m1i} = \gamma_{m10} + r_{m1i}$$

Subsequent models, which added acculturative stress along with the respective interactions among the various predictors at Level 1, were then compared each with the previous models to determine if the additional complexity resulted in an improved goodness-of-fit. In order to make these comparisons, all models were created using FIML estimation. Within two nested models, the difference between the  $-2$  Res Log Likelihood provides a chi-square test of improvement of the model fit, distributed on degrees-of-freedom defined by the difference in free parameters between the two models (Raudenbush & Bryk, 2002). In all models, we centered all predictor variables around the grand mean prior to including them in the model.

## RESULTS

### *Preliminary Analyses*

Prior to conducting our model building, we first examined preliminary relations among the variables separately by sex. We present the means and correlations of the different measures in Table 2. Higher scores on the BDI were significantly associated with worse scores on the FAD for both men ( $r = .41, p < .01$ ) and women ( $r = .46, p < .01$ ). For the women, higher scores on the MHRSD were also associated with worse scores on the FAD ( $r = .46, p < .05$ ); this relationship did not hold for the men. In addition, MHRSD scores were associated with higher scores on the MASI for both the men ( $r = .32, p < .05$ ) and the women ( $r = .55, p < .01$ ). Also, women who reported high scores on the MASI also reported worse scores on the FAD ( $r = .43, p < .05$ ).

In addition, of the demographic variables, the only one that was significantly associated with any of the variables of interest was employment status. Specifically, men and women who

Table 2  
Means, SD, and Correlations of All Measures for Women and Men

Measure	Women						Men					
	<i>M</i>	<i>SD</i>	1	2	3	4	<i>M</i>	<i>SD</i>	1	2	3	4
1. MHRSD	5.96	5.87	—	0.81**	0.46*	0.55**	3.35	4.09	—	0.59**	0.17	0.32*
2. BDI	8.33	8.18		—	0.46**	0.16	4.38	5.33		—	0.41**	0.21
3. FAD	1.87	0.48			—	0.43*	1.87	0.48			—	0.25
4. MASI	33.18	18.30				—	27.58	21.94				—

\**p* < .05, \*\**p* < .01.

were unemployed reported higher scores on the MHRSD than men and women who were employed. Thus, we included employment status as a covariate in all subsequent analyses.

#### Family Functioning and Depression

We next conducted several HLM analyses in order to more accurately examine the relationship between family functioning and depression. In our first model, family functioning was entered as the sole predictor of depression scores (after covarying employment status). Our results indicated that worse family functioning was significantly associated with higher scores on the MHRSD for the women ( $\gamma_{30} = 5.16, t(33) = 4.60, p < .0001$ , effect size  $r = .63$ )<sup>1</sup> but not for the men ( $\gamma_{40} = 1.78, t(33) = 1.73, p = \text{n.s.}$ , effect size  $r = .29$ ). Within this model, allowing both the intercept and the FAD for women to vary randomly provided the best fit [ $\chi^2(1, N = 80) = 18.94, p < .01$ ] when compared with the null model [ $\chi^2(1, N = 80) = 9.24, p < .01$ ].

We obtained similar results when we used BDI scores as the dependent variable. Specifically, worse family functioning was significantly related to higher BDI scores for the women ( $\gamma_{30} = 7.22, t(33) = 4.00, p < .0001$ , effect size  $r = .57$ ) but not for the men ( $\gamma_{40} = 2.84, t(33) = 1.65, p = \text{n.s.}$ , effect size  $r = .28$ ). Again, allowing both the intercept and the FAD for women to vary randomly provided the best fit when compared with the null model [ $\chi^2(1, N = 80) = 6.86, p = .01$ ].

#### Moderating Effect of Acculturative Stress

In order to examine whether acculturative stress moderated the relationship between family functioning and depression, we first examined a subsequent model in which we added acculturative stress as a main effect and examined whether this addition improved the fit over the previous model, which only had family functioning as a predictor (Model 2). As shown in Table 3, our results indicated that this model only marginally improved the goodness-of-fit over the first model [ $\chi^2(2, N = 80) = 6.00, p = .01$ ]. When we examined the fit of a subsequent model that included the main effects of family functioning, acculturative stress, and the interaction between family functioning and acculturative stress, we found a significantly improved fit [as compared with Model 2:  $\chi^2(2, N = 80) = 7.8, p < .05$ ; as compared with Model 1:  $\chi^2(4, N = 80) = 13.8, p < .05$ ]. Within this model (Model 3), allowing the intercept, FAD for women and MASI for the women to vary randomly provided the best fit [ $\chi^2(5, N = 80) = 28.68, p < .0001$ ] when compared with the original model where the intercept varied randomly [ $\chi^2(1, N = 80) = 11.91, p < .001$ ]. In addition, our results indicated that the interaction between family functioning and acculturative stress was significantly related to higher scores on the

Table 3  
*HLM Estimated Coefficients of Depression According to the MHRSD and BDI (N = 40) Model 3: Interaction Between Family Functioning and Acculturative Stress as Predictors of Depression*

	MHRSD						BDI							
	Fixed effects			Random effects			Fixed effects			Random effects				
	$\beta$	SE	t	Effect size r	Estimate	SE	Z value	$\beta$	SE	t	Effect size r	Estimate	SE	Z value
Intercept $\gamma_{00}$	-0.08	2.60	-0.03	0.00	7.24	1.87	3.88***	0.24	4.81	0.05	0.01	20.72	7.04	2.94**
Sex $F \gamma_{10}$	5.93	3.29	1.80	0.32				5.20	6.04	0.86	0.16			
Sex $M \gamma_{20}$	0.00	—	—	—				0.00	—	—	—			
FAD $F \gamma_{30}$	1.83	1.23	1.50	0.27	12.22	5.52	2.21	2.52	2.37	1.06	0.19			
FAD $M \gamma_{40}$	1.07	1.13	0.95	0.17				0.35	1.39	0.25	0.05	2.41	3.16	0.76
MASI $F \gamma_{70}$	-0.11	0.05	2.38	0.30	0.16	0.02	1.00	-0.28	0.11	-2.51	0.42			
MASI $M \gamma_{80}$	0.11	0.05	3.36*	0.40				-0.09	0.07	-1.33	0.24			
FAD $F^*$	0.19	0.06	3.36**	0.53				0.32	0.09	3.24**	0.52			
MASI $F \gamma_{70}$														
FAD $M^*$	-0.05	0.04	-1.12	0.20				0.14	0.06	2.26	0.39			
MASI $M \gamma_{80}$														

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ ;  $F$  = female,  $M$  = male.



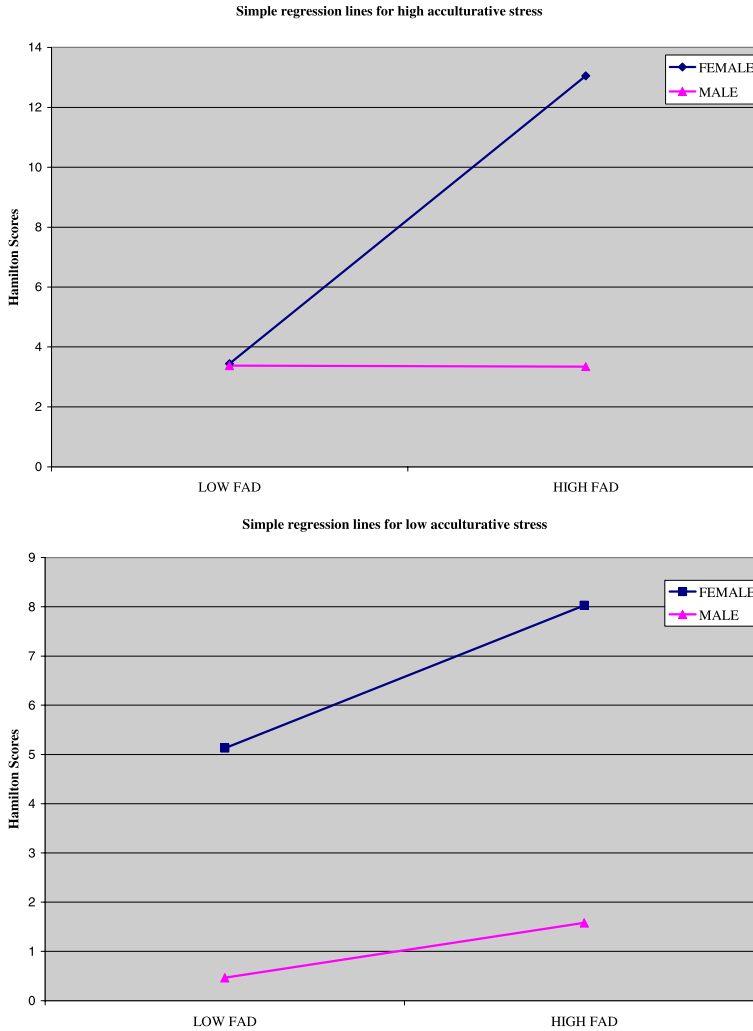


Figure 1. Model 3: Interaction between family functioning and acculturative stress as predictors of depression.

MHRSD in women ( $\gamma_{70} = .19, t(29) = 3.36, p < .01$ , effect size  $r = .53$ ) but not for the men ( $\gamma_{80} = -0.05, t(29) = -1.12, p = \text{n.s.}$ , effect size  $r = .20$ ). Probing this interaction indicated that women who reported poor family functioning and high acculturative stress had particularly higher scores of depression than the men (Figure 1).

We obtained similar results when we examined depression as measured by the BDI. Specifically, the best-fitting model was the one that included family functioning, acculturative stress, and the interaction between family functioning and acculturative stress [as compared with Model 2:  $\chi^2(2, N = 80) = 10.7, p < .01$ ; as compared with Model 1:  $\chi^2(4, N = 80) = 12.6, p < .05$ ]. Within this model, allowing the intercept and FAD for men to vary randomly provided the best fit model [ $\chi^2(3, N = 80) = 22.29, p < .001$ ] when compared with the model in which the intercept varied randomly [ $\chi^2(1, N = 80) = 11.59, p < .001$ ] (see Table 2). Moreover, our results from this model indicated that the interaction between MASI and FAD was significantly related to depression for women ( $\gamma_{70} = 0.30, t(29) = 3.33, p < .01$ , effect

size  $r = .53$ ) but not for the men ( $\gamma_{80} = 0.14$ ,  $t(29) = 1.81$ ,  $p = \text{n.s.}$ , effect size  $r = .32$ ). Probing this interaction further indicated that women who reported poor family functioning and high acculturative stress had higher scores of depression than the men.

## DISCUSSION

This study examined the relationship between family functioning and depression in a sample of low-income Latino couples. In addition, we also examined the extent to which acculturative stress might influence the relationship between family functioning and depression. Several findings emerged from this study that highlight the important role that family functioning plays in the understanding of depression among Latinos.

### *Family Functioning and Depression*

The main aim of this study was to examine the relationship between family functioning and depression among low-income Latinos. Our results suggest that the relationship between family functioning and depression is stronger in the women than in the men. This finding is consistent with prior research that indicates that women's depression may be closely related to family-related factors, whereas men's depression may stem more from other factors, including employment and financial stressors (Hovey & Magaña, 2000). Cultural values like *marianismo* and *machismo* support this gender difference. For many Latina women, the cultural value of *marianismo* raises the expectation that they be caring, nurturing, and self-sacrificing while always prioritizing the needs of the family (much like the image of the Virgin Mary). As a result, Latina women who adhere to cultural values like *marianismo* may be more susceptible to the effects of greater family conflict, thus experiencing higher levels of depression than men when family conflict exists (Chiriboga, Black, Aranda, & Markides, 2002). In contrast to *marianismo*, *machismo* is a Latino male cultural value that is based on the belief that men should protect and provide financial support for their families. Perhaps the absence of a strong relationship between family functioning and depression in men stems from a greater focus on providing financial support for the family, rather than the functioning of the family itself. However, because we did not measure adherence to these gender roles, these ideas remain speculative. Nevertheless, the present study underscores the importance of the relationship between family functioning and depression among Latinos. These findings suggest that family-focused assessments and interventions have the potential to be of great utility in the treatment of depression in Latinos, especially for Latina women. Thus, clinicians would do well to incorporate a careful assessment of family functioning when treating Latinos.

### *Acculturative Stress*

We found a similar pattern of results with acculturative stress, in that acculturative stress moderated the relationship between family functioning and depression in woman but not men. Specifically, women who reported both poor family functioning and high acculturative stress demonstrated particularly high levels of depression. This gender difference highlights previous research that suggests that acculturative stress can be exacerbated by a loss of close family ties, and perceived level of support between family members (Rogler et al., 1991). In addition, some research suggests that family can serve as an effective buffer against acculturative stress (Saldaña, 1994). Our results indicate that perhaps Latina women are especially likely to experience the effects of acculturative stress when their family is not functioning optimally, since Latina women adhere closely to the cultural value of *marianismo*. Thus, clinicians who work with Latina women would do well to assess acculturative stress and its possible relationship with both family functioning and depression. More broadly, it is important for clinicians to be aware of cultural pressures and the sense of loss that many Latinos experience while adjusting to the U.S. culture. As our results highlight, these effects can be particularly salient for Latina

women who are experiencing familial difficulties. Thus, family therapy in particular offers clinicians an excellent opportunity to directly engage Latinos and their family members around topics of acculturation, acculturative stress, and family functioning.

### *Limitations and Strengths*

This study has some limitations worth noting. First, because our sample size was relatively small, we did not have sufficient power to detect small effects, which may have existed for the relationships among family functioning, acculturative stress, and depression in men. Our results are consistent with the literature on marital satisfaction that found that depressive symptoms and marital dissatisfaction are more prevalent for women than for men (Whisman, 2001), although some conflicting evidence has found an association between marital satisfaction and depression in both men and women (O'Leary, Christian, & Mendell, 1994). Nevertheless, the size of the effects for the women and the men in our sample highlights the fact that these relationships were markedly stronger for the women than for the men. Second, we only collected our data cross-sectionally. Thus, future longitudinal research would be important in helping understand if family functioning and depressive symptoms covary over time in the United States, perhaps as a function of the acculturation process. Finally, although research participants were recruited from various community organizations, compensated for their time, and interviewed within their homes, the sample was not randomly drawn from the population at large, thus limiting our ability to generalize our findings to all low-income Latino populations.

Despite the aforementioned limitations, this study has several notable strengths. First, although there is a growing body of literature that examines the relationship between family functioning and mental health, this is the only empirical study that has conducted this research in a sample of Latino couples. Second, most of the previous research has focused on one family member's viewpoint on family functioning, whereas this study included the perspectives of each member of the couples. Finally, the results of this study do not only rely on self-report measures, but also on interview-based data. The utility of this approach is important because we found that, despite the stigma related to mental health and the possible reluctance to disclose information (La Roche, 1999), participants reported similar symptoms in the BDI as they did in the MHRSD.

In sum, this study is an important contribution to the literature in that it not only describes the relationship between family functioning and depression in Latinos but also highlights the importance of family-focused assessments and interventions in this population. Perhaps by incorporating family members into various prevention and mental health treatment programs, we may indirectly address the underutilization of services among Latinos by making services more appealing to the individual and the family. In addition to more inclusive treatment interventions, prevention and community-based programs that address family systems and promote a healthy adjustment for Latino immigrants in the United States are warranted.

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#### NOTE

<sup>1</sup>Effect size correlation was calculated as  $ry = \sqrt{t^2/(t^2 + df)}$ .