Depression in Latino Adolescents: A Cultural Discrepancy Perspective

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Latino adolescents report high levels of depression compared to other youth, yet little is known about how culture-specific factors contribute to risk (Blazer, Kessler, McGonagle, & Swartz, 1994; Roberts, Roberts, & Chen, 1997; Roberts & Sobhan, 1992; Twenge & Nolen-Hoeksema, 2002). In this study we evaluated the link between cultural discrepancy (i.e., perceived acculturation and gender role disparity between children and their parents) and depression among children of Latino immigrants. Compared to boys, Latina adolescents reported greater differences in traditional gender role beliefs between themselves and their parents and higher levels of depression. Gender role discrepancy was associated with higher youth depression, with this relationship mediated by increases in family dysfunction. Moreover, a moderator analysis suggested that gender role discrepancy effects may be most pronounced for Latina adolescents. Gender role discrepancy was associated with poorer family functioning for girls but not for boys, although the interaction effect was only marginally significant. These preliminary results point to the importance of considering cultural discrepancy as a contributing factor to youth depression.

Keywords: adolescent, depression, Latino, discrepancy, acculturation, gender roles, marianismo, machismo

Latino adolescents report high levels of depression compared to youth from other ethnic backgrounds (Blazer, Kessler, McGonagle, & Swartz, 1994; Roberts, Roberts, & Chen, 1997; Roberts & Sobhan, 1992; Twenge & Nolen-Hoeksema, 2002). Despite this well-documented disparity, little is known about *why* Latino youth are particularly susceptible to depression. Some argue that the discrepancy in acculturation between parents and children has negative mental health consequences for Latino youth from immigrant households (Szapocznik et al., 1989; Zayas & Dyche, 1995; Zayas, Kaplan, Turner, Romano, & Gonzalez-Ramos, 2000). Acculturating youth may actively challenge the traditional attitudes and beliefs of their immigrant parents, leading to greater family conflict and lower family cohesion. Such deterioration in family functioning may precipitate emotional distress (Gonzales, Deardorff, Formoso, Barr, & Barrera, 2006).

In this article, we tested one component of this model, focusing on family dysfunction as a mediator of cultural discrepancy effects. We argue that cultural discrepancy may indirectly contribute to depressive symptomatology among children of Latino immigrants by disrupting family functioning. Cultural discrepancy refers both to the acculturation disparity between Latino youth and their immigrant parents as well as parent–child disparities in gender role ideologies such as marianismo and machismo. Given

that acculturating Latinas may have a particularly difficult time navigating the tension between the gender-typed expectations of their culture of origin and the broader roles accorded by the host American culture (Zayas & Dyche, 1995; Zayas et al., 2000), we speculate that parent–child discrepancy in this domain may have greater familial and mental health consequences for girls than for boys.

Although the processes explored here likely unfold over time, a cross-sectional design was used as an initial test of this theoretical framework. Also, some research suggests that youth *perceptions* of parental values and behaviors are more influential than observable parental activity (Rohner, 2004; Rohner, Khaleque, & Cournoyer, 2005). Thus, to evaluate cultural discrepancy between youth and caregiver, we used adolescent reports of caregiver beliefs and behaviors.

Method

Participants were 130 ninth through twelfth grade Latino students enrolled in a Los Angeles high school. Approximately 77% of the students enrolled in this high school identified as Latino, with 33% of these students listing Spanish as their primary language. Thirty percent of eligible students participated in the study.

Participants ranged in age from 13 to 18 years ($M = 14.92$, $SD = 1.18$), with 70% of the sample being female. Forty-eight percent of youth self-identified as Central American (primarily Salvadoran and Guatemalan), 43% as Mexican American, and 7% as both Central and Mexican American. The remaining youth (2%) self-identified as "Other Latino." Approximately 96% of youth reported that both parents were immigrants to the United States, with another 3% of youth reporting one immigrant parent. Of youth born outside the United States ($n = 29$), age of arrival ranged from 4 months to 12 years ($M = 4.34$ years, $SD = 3.67$).

A questionnaire packet was administered to the participants in a group setting at the youths' school. All measures were adminis-

tered to youth only. Information about caregiver values and behaviors was also obtained through youth report.

Measures

Acculturation. Acculturation status was evaluated through self-report on the Acculturation Rating Scale for Mexican Americans–II (ARSMA–II; Cuéllar, Arnold, & Maldonado, 1995). This measure assesses the extent to which an individual is oriented to either "Anglo" or "Latino" culture. Although the ARSMA–II was initially designed to assess adult acculturation levels, it has been used with adolescent populations as well (Edwards & Lopez, 2006; Segura, Page, Neighbors, Nichols-Anderson, & Gillaspy, 2003).

Students completed the acculturation measure twice during the assessment—the first time from their own perspective and the second time from the perspective of their primary caregiver. The primary caregiver was operationally defined as the parent or guardian with whom the youth spends the most time at home (based on youth report). Sixty-one percent of youth reported mothers as their primary caregivers, 26% fathers, 2% sisters, and 1% grandfathers. The remaining 10% of youth did not specify the relation of the primary caregiver. Instructions to youth read: "Think about how your primary caregiver would answer the following questions. Answer these questions the way you think your caregiver would answer them." By having adolescents complete this measure for themselves and for their caregivers, we were able to construct measures of *perceived* discrepancy between parent and child (see below for details). Reliability analyses produced Cronbach's alphas of .56 and .81 for the youth Anglo- and Latino-Orientation scales, respectively, and alphas of .88 and .70 for the caregiver Anglo- and Latino-Orientation scales, respectively.

Gender role beliefs. Gender role beliefs were evaluated through self-report on the Attitudes Toward Women Scale (AWS; Spence, Helmreich, & Stapp, 1973) and the Machismo Scale (Cuéllar, Arnold, & González, 1995). These measures assess the extent to which an individual holds traditional views of the female and male roles.

As with the acculturation measure, students completed the gender role belief measures twice—once from their own perspective and again from the perspective of their primary caregiver. A reliability analysis produced Cronbach's alphas of .74 for the youth version and .75 for the caregiver version of the AWS. Alphas of .82 for the youth version and .85 for the caregiver version were obtained for the Machismo Scale.

Cultural discrepancy. To calculate perceived parent–child discrepancy, a standardized difference approach was used (C. R. Reynolds, 1985). This method involves subtracting the standardized youth score from the standardized parent score reported by the youth. This difference is then divided by the standard error of the difference, resulting in a standardized discrepancy score.[1] Using this method, four parent–child discrepancy scales were calculated for each youth: Anglo-Orientation, Latino-Orientation, AWS, and Machismo.

Family functioning. Family functioning was evaluated through self-report on the Conflict subscale of the Family Environment Scale (FES; Moos & Moos, 1981) and the Cohesion subscale of the Family Adaptability and Cohesion Evaluation Scale (FACES–III; Olson, Portner, & Lavee, 1985). Both measures have been previously administered to Latino adolescents (Choi, Meininger, & Roberts, 2006; Christenson, Zabriskie, Eggett, & Freeman, 2006). Cronbach's alphas for the cohesion and conflict subscales were .84 and .68, respectively.

Depression. Depression was evaluated through self-report on the Reynolds Adolescent Depression Scale–2 (RADS–2; W. M. Reynolds, 2002) and Columbia Suicide Screen (CSS; Shaffer et al., 2004). The RADS–2 assesses multiple dimensions of depressive symptomatology. A reliability analysis produced a Cronbach's alpha of .93. The CSS is a school-based screening instrument designed to identify youth who are at high risk for suicide. Three items, rated on a 5-point Likert scale, were used to create a depression index ($\alpha = .81$). The original RADS measure and the CSS have both been used with Latino adolescents (Hovey & King, 1996; Shaffer, 2004).

Results

Table 1 shows the means and standard deviations of the key variables for the full sample and for boys and girls separately. One-way analyses of variance showed gender differences for four of the eight variables. For both AWS and Machismo, girls perceived themselves as significantly more discrepant from their parents as did boys. Girls also reported significantly higher levels of RADS and CSS depression than boys. No gender differences were found for family conflict or family cohesion. Also, there were no significant differences between Central American and Mexican American youth for any of the key variables.

Table 2 shows the bivariate correlations between the key study variables. AWS and Machismo discrepancy were positively associated with family conflict, low family cohesion, RADS depression, and CSS depression. Also, family conflict and low family cohesion were positively associated with both indices of depression. Curiously, Anglo-Orientation discrepancy and Latino-Orientation discrepancy were generally not associated with the mediator or criterion variables. Thus, acculturation outcomes were not tested in subsequent mediation analyses.

Next, to simplify analyses, composite scores representing gender role discrepancy, depression, and family dysfunction were created by standardizing and averaging the component variables. AWS discrepancy and Machismo discrepancy were combined to form a *gender role discrepancy* composite. Family conflict and low family cohesion comprised the *family dysfunction* composite. Finally, RADS depression and CSS depression were combined to form a *depression* composite. Exploratory factor analyses provided evidence that the component variables did indeed comprise a single factor and justified the formation of our composites. These composites were used in subsequent mediator and moderator analyses.

Next, four regression equations were used to test whether family dysfunction mediated the effect of gender role discrepancy on youth depression (Holmbeck, 1997). Given the significant differences between boys and girls for gender role discrepancy and depression, the hypothesized model was tested with gender as a covariate. Results showed that gender role discrepancy was significantly associated with depression, $\beta = .21$, $p < .05$, and family

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[1] The formula for calculating parent–child discrepancy is: Discrepancy $= [(Z_{parent} - Z_{youth})/((1 - \alpha_{parent}) + (1 - \alpha_{youth}))^{1/2}]$.

Table 1
Means and Standard Deviations for Study Variables by Gender

	Overall		Boys		Girls		
	M	*SD*	*M*	*SD*	*M*	*SD*	*F* Test
Cultural discrepancy							
Anglo-Orientation	0.00	1.73	−0.06	1.73	0.03	1.73	0.06
Latino-Orientation	0.00	1.85	0.31	2.15	−0.13	1.70	1.57
AWS	0.00	1.79	−0.64	1.95	0.26	1.66	7.16**
Machismo	0.00	2.04	−0.70	2.23	0.29	1.90	6.64*
Family functioning							
Family Conflict	0.39	0.25	0.36	0.25	0.41	0.25	1.16
Low Family Cohesion	1.63	0.77	1.57	0.69	1.66	0.80	0.34
Depression							
RADS	2.04	0.52	1.81	0.49	2.13	0.51	10.53**
CSS	2.55	0.97	2.25	1.15	2.67	0.87	5.01*

Note. For variables indicating Cultural Discrepancy, scores represent higher standardized values for parents relative to youth. AWS = Attitudes Toward Women Scale; RADS = Reynold's Adolescent Depression Scale; CSS = Columbia Suicide Screen.
* $p < .05$. ** $p < .01$.

dysfunction, $\beta = .33$, $p < .001$. Also, when depression was simultaneously regressed on both gender role discrepancy and family dysfunction, two effects were apparent. Family dysfunction was significantly associated with depression after controlling for gender role discrepancy, $\beta = .50$, $p < .001$, thus showing a link between the mediator and the criterion variable. Also, the effect of gender role discrepancy on depression was no longer significant, $\beta = .05$, *ns*. Moreover, the Sobel Test (Sobel, 1998) showed that the indirect effect of gender role discrepancy on depression via family dysfunction was significant, $z = 3.23$, $p < .01$, thus indicating full mediation effects (Holmbeck, 1997). Results for the mediation model are shown in Figure 1.

Although results thus far support the role of family dysfunction as a mediator of discrepancy effects, we hypothesized that this relationship might differ as a function of youth gender. Some scholars have argued that traditional gender role expectations may be particularly deleterious for Latina adolescents because acculturating girls more often confront gendered ideologies and restrictions that constrain their autonomy (e.g., Raffaelli & Ontai, 2004; Zayas et al., 2000). Thus, regression analyses were again con- ducted to test for significant interactions between the hypothesized moderator and independent variable (Holmbeck, 1997).

Table 3 shows results from three separate regression analyses predicting family dysfunction and depression. The first regression shows that after controlling for gender role discrepancy and gender, the interaction of discrepancy and gender marginally predicted family dysfunction. Plotting separate regression lines for boys and girls (Holmbeck, 2002) showed that the slope for girls was positive and significant, $\beta = .43$, $p < .001$, whereas the slope for boys was nonsignificant, $\beta = .13$, *ns*. Thus, results indicate that for girls but not boys, family dysfunction tends to increase with higher levels of gender role discrepancy. Neither of the interaction effects predicting depression was significant.

Discussion

In this study we assessed whether cultural and family factors were linked to depression in Latino adolescents from immigrant families. Contrary to expectations, perceived acculturation discrepancy between youth and parents was generally uncorrelated

Table 2
Correlation Matrix for Study Variables

	1	2	3	4	5	6	7	8
Cultural discrepancy								
1. Anglo-Orientation	—							
2. Latino-Orientation	−.22*	—						
3. AWS	−.13	−.03	—					
4. Machismo	−.23**	.00	.71**	—				
Family functioning								
5. Family Conflict	−.08	.06	.26**	.23**	—			
6. Low Family Cohesion	.06	.20*	.26**	.25**	.36**	—		
Depression								
7. RADS	.03	.05	.23**	.23**	.41**	.45**	—	
8. CSS	.07	.13	.22*	.20*	.34**	.41**	.67**	—

Note. For variables indicating Cultural Discrepancy, scores represent higher standardized values for parents relative to youth. AWS = Attitudes Toward Women Scale; RADS = Reynold's Adolescent Depression Scale; CSS = Columbia Suicide Screen.
* $p < .05$. ** $p < .01$.

with depression or family dysfunction. However, consistent with hypotheses, perceived gender role discrepancy was significantly correlated with adolescent depression, and family dysfunction fully mediated this effect. Although moderator analyses suggested that the relationship between gender role discrepancy and family dysfunction might be more robust for girls than for boys, this gender difference was only marginally significant. These findings provide preliminary evidence that divergence in gender role beliefs between immigrant parents and their children may contribute to depression among Latino adolescents. Results also point to the potential importance of family dysfunction in explaining the relationship between gender role discrepancy and adolescent depression, and suggest that maladaptive family interactions may be an important target of intervention when treating depressed youth from immigrant backgrounds.

Although the results of this study have implications for theory and research on the psychosocial functioning of Latino youth, several limitations should be noted. First, all data were obtained via youth self-report, which prevented us from evaluating how parental observations influenced youth outcomes. Lack of parental self-report data also prevented us from determining the accuracy of the youth's report on parental behavior. However, it is argued that the youth's *perception* of parental beliefs and behaviors is important in this context and that perceived cultural discrepancy should impact mental health regardless of the presence of "true" discrepancy (Rohner, 2004). Second, the youth Anglo-Orientation scale produced a low alpha. It may be that the younger age of the study sample accounts for the low reliability of this scale, as others have also reported a lower alpha for Anglo-Orientation compared to Latino-Orientation when using the ARSMA–II with adolescent samples (Edwards & Lopez, 2006; Flores & O'Brien, 2002). Another measurement limitation relates to our assessment of gender role beliefs. Given the item content, our gender role scales appear to focus more on the domineering and patriarchal aspects of machismo rather than qualities such as courage and providing for one's family. Similarly, these scales tend to highlight the submissive and dependent aspects of marianismo over positive dimensions such as generosity and simpatía (i.e., ability to create smooth, friendly, and pleasant relationships that avoid conflict). Thus the AWS and Machismo Scale may inadvertently simplify our underst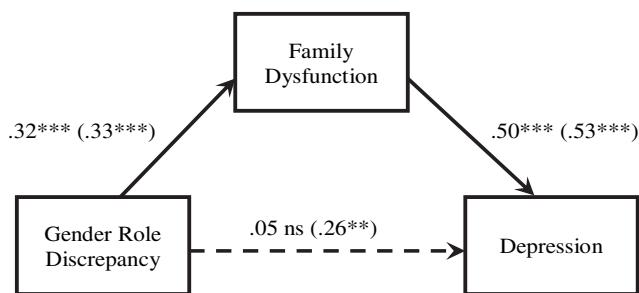anding of machismo and marianismo, and risk portraying traditional sex roles in an overly pejorative manner (Torres, Solberg, & Carlstrom, 2002).

Despite these limitations, our findings point to promising directions for future research. First, given the limited sample size and ethnic homogeneity of our participants, the findings should be replicated with a larger sample that includes greater variability with regard to youth ethnicity and acculturation status. Inclusion of youth from other cultural groups may help discern whether these patterns are unique to Latino families or rather a function of generational differences that emerge regardless of ethnic or immigrant background.

Future research should also consider alternative perspectives on the direction of effect between adolescent depression and potential causal factors. Our model presumes a linear path of influence from discrepancy to family dysfunction to depression. Yet, another possibility is that gender role discrepancy is also a *consequence* of youth depression. For depressed Latino adolescents, the pessimism, irritability, and anhedonia characteristic of clinical depression may contribute to conflictual interactions with parents (Hammen, 2005). As a result, depressed adolescents may begin to devalue the views of their caregiver and ascribe greater salience to the beliefs and behaviors of mainstream peers, which could intensify the existing values discrepancy between Latino adolescents and their parents.

Ultimately, this line of research carries important treatment implications for emotionally distressed, Latino adolescents. The mediation model suggests that an appropriate target for intervention may be the cultural dissonance between immigrant parents and their acculturating children—particularly discrepancy in gender role expectancies. Szapocznik and colleagues (Szapocznik et al., 1986, 1989) developed family based treatments that target maladaptive family interactions resulting from intercultural conflicts, and these interventions have shown some success at reducing externalizing and drug-related problems for Latino adolescents. We argue that interventions targeting gender-related family discord might be equally beneficial for depressed Latino adolescents.

Table 3
Results From Multiple Regression Testing Gender as Moderator

Criterion Variable and Predictor	β	t
Family dysfunction		
GRD	.34**	3.93
Gender	.04	0.41
GRD × Gender	.14+	1.66
Depression		
GRD	.21*	2.46
Gender	.21*	2.42
GRD × Gender	.04	0.43
Depression		
Family dysfunction	.51**	7.00
Gender	.22**	2.93
Family Dysfunction × Gender	.04	0.48

Note. GRD = gender role discrepancy.
$^+ p < .10.$ $^* p < .05.$ $^{**} p < .01.$

Figure 1. Path model showing the associations between gender role discrepancy and depression as mediated through family dysfunction. Values outside parentheses are standardized partial regression coefficients. Values in parentheses are zero-order correlation coefficients. **$p < .01$. ***$p < .001$.

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