

## Familism and Latino adolescent depressive symptoms: The role of maternal warmth and support and school support

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### **Abstract:**

**Objectives:** This study examined the relationship between familism and depressive symptoms across relational contexts in adolescence, and whether maternal warmth and support, and school support moderated the relationship between familism and depressive symptoms.

**Method:** A total of 180 Latino adolescents (53% female) in 7th through 10th grades (average age = 14 years) participated in this cross-sectional study. The adolescents lived in an emerging Latino community in a rural area in the U.S. South. Most of the adolescents were Mexican-origin (78%) and born in the United States (60%), while the vast majority of their parents were foreign born (95%).

**Results:** Overall, familism was associated with fewer adolescent depressive symptoms. School support moderated the relationship between familism and adolescent depressive symptoms such that familism's protective effect was only evident when adolescents reported low levels of school support. In the context of average to high school support, adolescents reported low depressive symptoms regardless of familism. However, maternal warmth and support failed to moderate the relationship.

**Conclusions:** Familism may be most protective for adolescents not feeling supported at school, suggesting that these values may offset the risk of a risky school environment.

**Keywords:** familism | Latino | adolescents | depressive symptoms | social support

### **Article:**

Latino adolescents experience higher rates of depressive symptoms than do other ethnic groups (Twenge & Nolen-Hoeksema, 2002). It is important to not only evaluate why Latino adolescents are more likely to develop depressive symptoms compared with other ethnicities, but also why many Latino adolescents are resilient despite their heightened risk. Research on resiliency in Latino adolescents has focused on the protective role of familial cultural values because Latinos place a high value on their family and rely more on their family for support compared with other ethnic groups (Calzada, Tamis-LeMonda, & Yoshikawa, 2012).

The familial cultural value that has received the most attention in the literature is familism. Familism is defined as a strong attachment to family, reciprocated loyalty and obligation, a subjugation of self to one's family, and maintenance of respect for parental desires and expectations (Lugo Steidel & Contreras, 2003). Familism may be particularly salient for adolescents as they are beginning to define their own belief systems. At this developmental stage, the ability to think abstractly emerges, and adolescents begin to think critically about the values socialized by their parents and either internalize or reject them (Deci & Ryan, 1985). Thus, adolescents are able to more fully express their own beliefs regarding their current and future roles in their family.

Although there is a fairly large literature on the role of familism in the lives of Latinos, the majority of this research has failed to examine contextual influences. While the majority of previous research on familism does find that it confers protective effects across outcomes, this research has focused primarily on the main effects of familism paying less attention to the contextual factors that may influence its effects (see Stein et al., 2014 for a review). With regard to depressive symptoms, both concurrent and longitudinal studies emphasize the protective role familism plays against depressive symptoms (Ayón, Marsiglia, & Bermudez-Parsai, 2010; Smokowski & Bacallao, 2007; Smokowski, Bacallao, & Buchanan, 2009; Smokowski, Rose, & Bacallao, 2010). However, the protective effect of these values may depend on the specific relational contextual factors in the adolescent's life.

## **Theoretical Framework**

Informed by Bronfenbrenner's ecological theory, the current study examines how multiple relationship contexts in adolescents' lives are embedded and interact to influence a specific developmental outcome. Ecological theory posits that the individual interacts with five environmental systems: microsystem (i.e., immediately impacts the child), mesosystem (i.e., interconnections between microsystems), exosystems (i.e., links between a social setting), macrosystem (i.e., cultural context), and chronosystem (i.e., timing and patterning of environmental events; Bronfenbrenner, 1994). Individual characteristics can interact within these systems to impact developmental outcomes, referred to as proximal processes. In particular, ecological theory highlights the salience of understanding the interconnection between microsystems as evident in the mesosystem (i.e., home and school). For Latino immigrant adolescents, especially in an emerging Latino community, the intersection of home and school serves as a critical developmental context because both microsystems may be culturally distinct and, at times, may foster opposing cultural values (García Coll et al., 1996). However, few studies have examined how the proximal processes between a culturally based resiliency factor (i.e., adolescents' familism values) and distinct relationship contexts (i.e., home and school)

operate in tandem to support development. Ecological theory would suggest that the promotive value of familism is dependent on how these values operate and are supported within these contexts. Therefore, this study aimed to better characterize how contextual processes surrounding this familial cultural value influenced its protective effect on depressive symptoms. This study evaluated two salient relational contexts in Latino adolescents' lives (e.g., school support and maternal warmth and support) to examine possible moderating effect these environments have on the relationship between familism and depressive symptoms.

### **Familism and School Support**

Adolescence is a period in which there is an expansion of peer networks; close friendships as well as peer crowd affiliation become more important aspects of peer relations (Kuttler, LA Greca & Prinstein, 1999). In addition to parents and peers, teachers also play an important role in adolescents' lives because they can often serve as confidants, mentors, and friends (Lynch & Cicchetti, 1992). Latino adolescents are faced with negotiating these close relationships with peers, as well as maintaining close social ties with their parents and families. Thus, adolescents play an active role in the interactions between the microsystems of school and family.

Previous research has neglected to examine the relationship between familism and support from others outside the family, but studies have examined the role of school support in the development of depressive symptoms. Multiple studies have found that positive teacher relationships and supportive peer relationships are associated with high self-esteem and less depressive symptoms (Roeser & Eccles, 1998; Potochnick & Perreira, 2010; Young, Berenson, Cohen, & Garcia, 2005). Other research has focused on the differential influences of family versus peer support on European American adolescents' outcomes, but this research has yielded mixed results. For example, past studies have found that parent, teacher, and peer support each significantly predicted fewer depressive symptoms (Colarossi & Eccles, 2003; Rueger, Malecki, & Demaray, 2010), while other studies failed to find parent and peer support to be related to depression (Auerbach et al., 2011; Stice, Ragan, & Randall, 2004). Yet, these studies did not examine how school support interacts with values about family. Because support from peers and teachers has generally been shown to be associated with fewer depressive symptoms, these relational contexts may synergistically serve to lessen the risk for depressive symptoms.

Consistent with Bronfenbrenner's ecological theory, we argue that the proximal process of an adolescent's familism values interacting with school support would serve to enhance the protective effect of the adolescent's values. Young et al. (2005) found a significant interaction between the two support variables (i.e., parent support moderates the relationship between anticipated peer support and depressive symptoms). Given that Latino adolescents must navigate the increasing importance of relationships at school while maintaining close relationships with their families, it is critical to better understand the relationship between familism, school support, and depressive symptoms. Adolescents who are able to form positive school relationships and valued parent relationships simultaneously seem to benefit the most psychologically, while adolescents with low school support may be protected from depressive symptoms by having strong family values. We hypothesize that familism would buffer against depressive symptoms at low levels of school support, and strengthen the protective effect at high levels of school support.

## **Maternal Warmth and Support**

Familism values dictate one's behavior within the family (Stein et al., 2014), and not surprisingly, these values are fostered within the mother–child relationship (Perez-Brena, Updegraff, & Umaña-Taylor, 2014). Thus, it is critical to understand how the maternal relationship context influences the protective effect of these values. The protective effect of familism may only be evident when an adolescent has a positive relationship with her/his mother. In this study, a positive mother–adolescent relationship will be conceptualized by the adolescents' perception of maternal warmth and support because maternal warmth and support are central to positive mother–adolescent relationships (Rueter & Conger, 1995).

Although few studies have been done with Latino adolescents, studies across cultures have found perceived parental support to be protective against psychological distress, as well as depressive symptoms more specifically (Auerbach, Bigda-Peyton, Eberhart, Webb, & Ho, 2011; Boutelle, Eisenberg, Gregory, & Neumark-Sztainer, 2009; Needham, 2008; Sheeber, Hops, Alpert, Davis, & Andrews, 1997). In a sample of Latina adolescents, maternal support was negatively associated with mother–daughter conflict and depressive symptoms for both early and middle, Mexican-origin, female adolescents (Bámaca-Colbert, Umaña-Taylor, & Gayles, 2012). In addition to a lack of parental support being problematic, low levels of parental warmth were also associated with higher psychological distress across diverse samples of adolescents (Chiu, Feldman, & Rosenthal, 1992; Gorman-Smith, Tolan, Henry, & Florsheim, 2000). In a study specific to Latino adolescents, greater levels of parental affection and warmth were associated with fewer depressive symptoms (Behnke, Plunkett, Sands, & Bámaca-Colbert, 2011). Consistently, Zayas, Bright, Álvarez-Sánchez, and Cabassa (2009) found that adolescents that had attempted suicide in the past reported significantly less maternal warmth compared with adolescents with no previous suicide attempts. Because multiple studies have found a negative association between maternal warmth and support and depressive symptoms across various ethnic groups, we expect a similar relationship in Latino adolescents.

Although much research has found maternal warmth and support to be protective against depressive symptoms (Auerbach et al., 2011; Boutelle et al., 2009; Needham, 2008; Sheeber et al., 1997), previous research has failed to look at whether maternal warmth and support enhances the relationship between familism and depressive symptoms. For example, in the context of a warm and supportive mother–adolescent relationship, adolescents may perceive family obligations and subjugation of self to the family, two main components of familism, as a way to help their mother with their family. An adolescent that has such a relationship, would be more likely to view the sacrifices they make for their family in a positive way (e.g., making them feel important and needed), and these would serve to provide meaning to the adolescents thereby leading to fewer depressive symptoms (Kiang, 2012). Contrarily, an adolescent that does not have a warm, supportive relationship with their mother may view these sacrifices as burdensome (Kuperminc, Jurkovic, & Casey, 2009), and this burden may attenuate familism's protective effect.

## Goals and Hypotheses

To our knowledge, not only have no previous studies examined maternal warmth and support and school support as moderators of familism and depressive symptoms, no previous research has examined the relationship of each of these contexts with familism. The goal of this study was to examine the relationship of familism and depressive symptoms in these relational contexts in adolescence. Informed by previous research, we hypothesized that (1) higher levels of familism values would be associated with fewer adolescent depressive symptoms; (2) school support would moderate the relationship between familism and depressive symptoms (i.e., at low levels school support familism would be protective); and (3) maternal warmth and support would also moderate the relationship between familism and depressive symptoms (i.e., at low maternal warmth and support, familism would fail to be significantly negatively associated with depressive symptoms).

## Method

### Participants

A total of 180 Latino adolescents (53% females) in 7th through 10th grades participated in this school-based study. The mean age of the participants was 14 years. The sample consisted of adolescents from Mexican (78%), Latino mixed (parents from different countries of origin; 8%), Nicaraguan (2%), Dominican (2%), and Salvadorian (2%) backgrounds. Other individuals identified being from Guatemalan, Colombian, Costa Rican, and Cuban backgrounds. The community from which the sample was drawn is an emerging Latino community (Kiang, Ferreira, & Fuligni, 2011). Seventy-five of the participants were not born in the United States (40%) and of those foreign born, 67% immigrated before age 5. About 95% of the participant's parents were born in countries other than the United States.

### Procedure

All Latino youth in 7th, 8th, 9th, and 10th grade classrooms from three schools in North Carolina (two middle schools and one high school) were recruited. About 30% of the students in each of the schools were Latino. We recruited participants in three ways: (1) approaching parents at an open-house event at the high school; (2) collecting phone numbers from the school and calling each family (most of the conversations done in Spanish); and (3) sending bilingual recruitment letters and consent forms to each child in school that were returned to the front office and collected by the research team. In total, 191 students (68% of those reached; 43% of total) assented and participated in the present study. Ten of the adolescents' surveys were missing a significant portion of the data on some of the predictor variables, therefore these surveys were dropped from the analyses. In addition, one adolescent's survey was determined to be invalid because of inconsistent responses throughout the survey.

All survey administration was completed in the participating schools' cafeterias in the fall of 2010, during class periods determined by the principal and the teachers. The participants had the option to have an English or Spanish version of the survey. Only one student chose to take the survey in Spanish. Measures not available in Spanish were translated and back-translated, and

then the research team resolved discrepancies jointly. The team also encouraged participants to ask for assistance at any point during the survey and checked each questionnaire to ensure the quality of the data. The participants received a \$5 gift card for participating in the study.

## Measures

*Depressive symptoms.* The Mood and Feelings Questionnaire (Angold, Costello, Pickles, Winder, & Silver, 1987) was used to assess the adolescents' depressive symptoms. The 33-item Likert-type scale measures the extent to which students experience depressive symptoms in the past two weeks. The measure included items such as "I didn't enjoy anything at all" and "I felt I was no good anymore," and students reported whether the statement was *not true* (0), *sometimes true* (1) or *mostly true* (2). This measure has demonstrated adequate psychometric properties (Daviss et al., 2006) and good reliability in this sample ( $\alpha = .94$ ). The items were summed to compute to represent total depressive symptoms. The cut-off score for clinically significant depressive symptoms was scores above 27 (Daviss et al., 2006).

*Familism.* The 18-item Attitudinal Familism Scale (Lugo Steidel & Contreras, 2003) was used to assess the adolescents' beliefs and attitudes toward the family. The responses are on a 10-point Likert-type scale, ranging from *strongly disagree* (1) to *strongly agree* (10) and grouped into four subscales. The first subscale is *familial support*, which includes six items such as, "Aging parents should live with their relatives." *Family interconnectedness*, a second subscale, is composed of five items. A sample item is, "A person should cherish time spent with his or her relatives." A third scale, *family honor*, is made up of four items such as, "A person should feel ashamed if something he or she does dishonors the family name." Fourth, *subjugation of self* for the family consists of three items. For example, "A person should be a good person for the sake of his or her family." The internal consistency reliability for the overall scale was high in our sample ( $\alpha = .90$ ). Validity of the scale was good as indicated by the correlations of familism factors with acculturation, generational status, and exposure to the United States (Lugo Steidel & Contreras, 2003). The items were averaged to represent total reported familism.

*Maternal warmth and support.* Maternal warmth and support was assessed by measuring the adolescents' perception of these constructs using the Network of Relationships Inventory (NRI) (Furman & Buhrmester, 2009). The relationship features assessed are behavioral and observable in nature and are rated on a "how often" scale ranging from 1 (*never or seldom*) to 5 (*always*). The three parental affection items assessed warmth (e.g., "How much does this person really care about you?"). Examining stability over a one year period, comparison of different reporters, and observed interactions with mothers were used as validation evidence and all suggest adequate validity (Furman & Buhrmester, 2009). The Cronbach's alpha was .88 for the affection items and .95 for warmth items in previous research with a diverse sample (Furman & Buhrmester, 2009). The six items were averaged in the current study to represent warmth and support. Cronbach's alpha for the combined items in our sample was .87.

*School support.* These 23 items were taken from the Child and Adolescent Social Support Scale (CASSS) Version 2 (designed for children from 6th to 12th grade) to measure adolescents' perceived social support from classmates and teachers (Malecki & Demaray, 2002; Malecki, Demaray, Elliot, & Nolton, 1999). Twelve of the items measured classmate support examining

whether participants felt their classmates were nice, helpful, attentive, and so forth. An example item is, “My classmates tell me I did a good job when I’ve done something well.” Eleven items measured aspects of teacher support such as whether participants felt their teachers are helpful and treat them nicely and fairly. An example item is, “My teacher(s) spend time with me when I need help.” Adolescents respond by rating each item based on frequency of the events occurring. Frequency ratings consist a 6-point Likert scale from 1 (*never*) to 6 (*always*). Previous research with a diverse sample of students in the 6th through 12th grades indicates good psychometric properties (i.e., Cronbach’s alpha was .92 for teacher and .94 for classmates and adequate construct validity). Cronbach’s alpha was .99 in our sample. These items were averaged to represent total social support at school.

## Results

An examination of the means suggest Latino adolescents reported high levels of familism ( $M = 7.26$  out of 10), maternal warmth and support ( $M = 3.97$  out of 5), and school support ( $M = 4.79$  out of 6). The total level of adolescent self-reported depressive symptoms on the MFQ was 9.40, and 21 adolescents (13.6%) reported clinically significant levels of depressive symptoms on the MFQ (i.e., scores above 27; Angold et al., 1987). Means and correlations are presented in Table 1. Familism was associated with fewer depressive symptoms ( $r = -.22, p < .01$ ). Maternal warmth and support was positively associated with familism,  $r = .46, p < .001$ . School support was significantly, positively related to familism, as well as maternal warmth and support (Table 1).

**Table 1.** Correlations and Descriptive Statistics

Variables	1	2	3	4	5	6
1. Adolescent depressive symptoms	—					
2. Familism	-.22**	—				
3. Maternal warmth and support	-.26**	.46***	—			
4. School support	-.27***	.23**	.24**	—		
5. Gender	-.14	-.16*	-.14	-.12	—	
6. Age	.06	-.21**	-.15	-.15*	.18*	—
<i>M</i>	9.40	7.26	3.97	4.79	.46	14.05
<i>SD</i>	10.29	1.54	.93	.87	.50	1.33

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Preliminary analyses examining potential covariates revealed that age ( $r = -.21, p < .01$ ) and gender ( $t = 2.17, p < .05$ ) were related to familism, so they were retained as covariates. Gender was coded (0 = *female*; 1 = *male*). Nativity status (foreign or native born) was not significantly related to any of the variables, so it was not included in the analyses ( $t$  range =  $-.12$  to  $.14$ , nonsignificant [*ns*]).

Consistent with past research on the moderating role of familism (Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011), a series of three-step hierarchical regression analyses were estimated to examine the main effects of familism, maternal warmth and support, and school support on adolescent depressive symptoms. After estimating the main effects, the interaction of each

relational context with familism was entered in the model. All models controlled for age and gender. Per Aiken and West (1991), all predictors were centered and product terms were created between familism and each predictor variable. Little Missing Completely at Random's test was used to replace missing data with expectation maximization (Little, 1988).

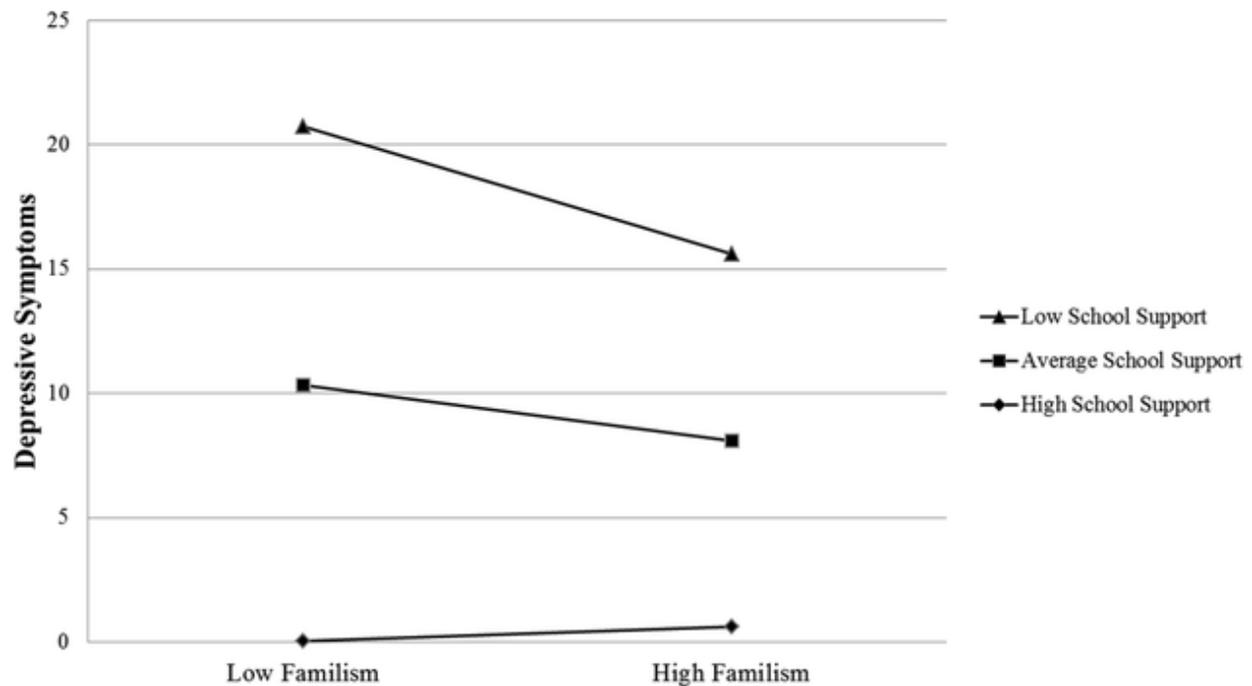
Controlling for age and gender, the main effects model with familism and adolescent depressive symptoms explained 6.2% of the variance, and familism was significantly associated with fewer adolescent depressive symptoms ( $\beta = -0.23, p < .01$ ). In the second step of the second regression model, maternal warmth and support and school support were added to the model accounting for an additional 7.8% of the model. Maternal warmth and support and school support were both associated with fewer adolescent depressive symptoms ( $\beta = -0.18, p < .01$ ;  $\beta = -0.22, p < .05$ ), and familism was no longer associated with depressive symptoms ( $\beta = -0.11, ns$ ).

In the third step, introduction of the product term representing the interaction between familism and school support ( $\beta = .69, p < .05$ ) was significant and accounted for an additional 2.4% of the variance (Table 2). Simple slope values were calculated by treating school support as the moderator variable (Preacher, Curran, & Bauer, 2006). The simple slope 1 *SD* below the mean of school support was significant ( $b = -1.68, p < .05$ ). However, the mean of school support ( $b = -.73, ns$ ) and 1 *SD* above the mean were not significant ( $b = .22, ns$ ). See Figure 1 for a depiction of the interaction. At low levels of school support, familism had a protective effect leading to fewer depressive symptoms. Whereas at average and high levels of school support, depressive symptoms were low regardless of familism values. However, the interaction term for maternal warmth and support was not significant ( $\beta = -.07, ns$ ), but maternal warmth and support continued to have a negative main effect ( $\beta = -.23, p < .01$ ; i.e., was associated with fewer adolescent depressive symptoms).

**Table 2.** Hierarchical Linear Regression Models Evaluating Maternal Warmth and Support and School Support as Moderators of the Association Between Familism and Adolescent Depressive Symptoms

Variable	Step 1 $\beta$	Step 2 $\beta$	Step 3 $\beta$
Age	.05	.02	.02
Gender	-.18*	-.20**	-.20**
Familism	-.23**	-.11	-.11
Maternal warmth and support		-.18*	-.23**
School support		-.22**	-.87**
Maternal warmth and support * Familism			-.07
School support * Familism			.69*
Model summary	Adjusted $R^2 = .06^{**}$ $F(3, 176) = 4.937^{**}$	Change in $R^2 = .08^{**}$ $F(2, 174) = 8.01^{***}$	Change in $R^2 = .02$ $F(2, 172) = 2.55$

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .



**Figure 1.** School support moderating the relationship between familism and adolescent depressive symptoms.

## Discussion

Latino youth are at a heightened risk for developing depressive symptoms compared with other ethnicities, yet how contextual factors interact with cultural values to influence the development of depressive symptoms has not been previously examined. The present study extends past research by exploring the relationship of familism to depressive symptoms in novel relational contexts: maternal warmth and support and school support. Consistent with the majority of previous research, familism was protective against depressive symptoms (Ayón, Marsiglia, & Bermudez-Parsai, 2010; Smokowski & Bacallao, 2007; Smokowski et al., 2009; Smokowski et al., 2010), but our study finds that this effect is present only for children that did not feel supported in their school context.

Our findings suggest that familism did not confer additional protective effects when Latino youth felt supported in their school contexts. In fact, adolescents with high levels of school support showed low levels of depressive symptoms regardless of their endorsement of familism values. Thus, a positive school context may be psychologically beneficial for Latino adolescents with low familism, who may be lacking the potential cultural protection associated with the value (García Coll et al., 1996). Using an ecological approach, this suggests that the peer and school contexts may provide daily supportive experiences that generally serve to promote positive affect and feelings of connection that are sufficient to increase daily mood thereby lessening the risk of depressive symptoms. Thus, schools should make efforts to engage with Latino student bodies to ensure that they feel connected.

Nevertheless, familism values did serve as protective for youth who report low levels of school support, which raises the possibility that familism may offset the risk of having negative school experiences. Adolescents in the context of low school support and low familism were experiencing the most depressive symptoms. It appears that these youth at the highest risk were isolated from both their school and home cultural contexts. One explanation is that these youth may have difficulty forming close relationships in general and this may put them at risk for psychological distress. Alternately, these youth may be having struggles within either their family environment or their school environment leading them to become more detached in general and exacerbating depressive symptoms. Finally, perhaps these are youth who are described as marginalized in the acculturation literature, who are neither connected to U.S. or Latino culture (Berry, 1997). Because this study is not longitudinal, it is also possible depressive symptoms are inhibiting these youth from forming positive relationships, and future work should examine this possibility. Given Latino adolescents with low school support and low familism values are at the greatest risk for developing depressive symptoms, it is important for prevention efforts to target this population especially in an emerging immigrant community. High levels familism may be particularly effective at preventing depressive symptoms in this population.

Contrary to hypotheses, maternal warmth and support did not moderate the relationship between familism and adolescent depressive symptoms. In other words, once maternal warmth and support and school support are accounted for, familism is no longer predictive. Statistical limitations may have led to the null results. For example, familism and maternal warmth and support are moderately correlated ( $r = .46, p < .05$ ). We centered the predictor variables to reduce multicollinearity, and the multicollinearity statistics were all in the acceptable range (e.g., Variance Inflation Factors  $< 1.5$ ). Although it is unlikely that multicollinearity led to the null results, it is possible there may have not been sufficient variance in maternal warmth and support to accurately account for differences in the interaction. Maternal warmth and support showed an independent main effect over and above the effects of familism and school support. Maternal warmth and support may be the behavioral manifestation of familism. The value of familism may lead to a more reciprocally supportive relationship. Thus, it may be the enactment of the familism value rather than the value itself that exhibits the protective effect (Stein et al., 2014). Future research should examine if perceptions of maternal warmth and support mediate the relationship between adolescent familism values and depressive symptoms. Taken together, these findings suggest proximal processes (i.e., support at school and at home) are most protective against depressive symptoms for Latino adolescents (García Coll et al., 1996). Familism values appear to only be salient when support at school was not sufficient. Thus, interventions and preventions either helping to improve the family relationship or relationship with peers and teachers are likely to be successful at decreasing Latino adolescent depressive symptoms. Familism values likely serve as a “cultural lens” influencing how adolescents interpret behaviors across various contexts. For example, although students may not feel supported socially at school, they may view their purpose at school to do well academically for their families. The majority of the adolescents in the study have parents that immigrated to the United States seeking a better life for their children. The adolescents with strong familism values likely view it as their obligation to their family to succeed academically and seek to do so out of respect for their parents. One of the mechanisms through which familism is protective is through creating a meaningful role for family members (Stein et al., 2014). This role that adolescents may fill at school, in turn, may protect them from depressive symptoms. Familism may also interact with

school support to predict other academic outcomes (e.g., school motivation) or psychological outcomes (e.g., externalizing symptoms). In addition, future research should explore how these values interact in different contexts beyond the school and family.

### Limitations

The current sample was taken from an emerging Latino community in the Southeastern United States, therefore, most of the adolescents in the sample were either first or second generation. There was little variability in familism and maternal warmth and support scores as the sample endorsed very high levels as a whole (i.e.,  $M = 7.26/10$   $SD = 1.54$ ;  $M = 3.97/5$   $SD = .93$ , respectively). Future studies should examine these questions in a sample including greater variability in generational status, which may capture greater differences in maternal warmth and support and familism. In addition, the moderate correlation ( $r = .46$ ,  $p < .05$ ) between familism and maternal warmth and support may have contributed to the null finding.

Because the study was cross-sectional, directionality of effects was not established. Future research should examine the relationship between maternal warmth and support, school support, familism and depressive symptoms longitudinally. In addition, future longitudinal research should examine whether high familism leads to greater school support. More research is needed to better understand the contextual factors influencing familism as school support as well as maternal warmth and support were salient contexts changing the relationship between familism and outcomes. Also, a better understanding in the mechanisms that make familism protective is needed.

The mean age of the sample was about 14 years old suggesting most of the sample was in the early adolescent stage. These individuals may only be beginning to assert their independence and may be more accepting of their parents' worldview than an older adolescent. Perhaps, if this study was replicated with older adolescents, the contextual influences may operate differently to affect the relationship between familism and depressive symptoms. Another limitation is that the data was collected using a survey. Multiple method data collection (e.g., daily diaries or observational interactions) should be used in future research. A final limitation is that most of the constructs (e.g., familism and maternal warmth and support) were adolescent report only, inhibiting comparisons between parent and adolescent reports. Future research with multiple reporters would allow for a more detailed view of Latino adolescent relationships at home and school.

### Clinical Implications

Clinicians may benefit from engaging adolescent clients in conversations regarding familism and appropriately endorsing the components of the value that may be beneficial in each particular client's situation. This study suggests a greater understanding of how familism operates across contexts in adolescence is imperative for improving interventions. Also, adolescents in the contexts of low school support and low familism are at increased risk for developing depressive symptoms. These populations of youth should be targeted for preventative interventions. Bolstering the family, peer, and/or teacher relationship may be beneficial for such youth.

## References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. London, England: Sage.
- Angold, A., Costello, E., Pickles, A., Winder, F., & Silver, D. (1987). *The development of a questionnaire for use in epidemiological studies of depression in children and adolescents*. Unpublished manuscript.
- Auerbach, R. P., Bigda-Peyton, J. S., Eberhart, N. K., Webb, C. A., & Ho, M. H. (2011). Conceptualizing the prospective relationship between social support, stress, and depressive symptoms among adolescents. *Journal of Abnormal Child Psychology*, *39*, 475–487. 10.1007/s10802-010-9479-x
- Ayón, C., Marsiglia, F. F., & Bermudez-Parsai, M. (2010). Latino family mental health: Exploring the role of discrimination and familismo. *Journal of Community Psychology*, *38*, 742–756. 10.1002/jcop.20392
- Bámaca-Colbert, M. Y., Umaña-Taylor, A. J., & Gayles, J. G. (2012). A developmental-contextual model of depressive symptoms in Mexican-origin female adolescents. *Developmental Psychology*, *48*, 406–421. 10.1037/a0025666
- Behnke, A. O., Plunkett, S. W., Sands, T., & Bámaca-Colbert, M. Y. (2011). The relationship of parenting on self-esteem and depressive symptoms. *Journal of Cross-Cultural Psychology*, *42*, 1179–1197. 10.1177/0022022110383424
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, *46*, 5–34.
- Boutelle, K., Eisenberg, M. E., Gregory, M. L., & Neumark-Sztainer, D. (2009). The reciprocal relationship between parent-child connectedness and adolescent emotional functioning over 5 years. *Journal of Psychosomatic Research*, *66*, 309–316. 10.1016/j.jpsychores.2008.10.019
- Bronfenbrenner, U. (1994). Ecological models of human development. *Readings on the Development of Children*, *2*, 37–43.
- Calzada, E. J., Tamis-LeMonda, C. S., & Yoshikawa, H. (2012). Familismo in Mexican and Dominican Families from low-income, urban communities. *Journal of Family Issues*, *33*, 1–29.
- Chiu, M. L., Feldman, S. S., & Rosenthal, D. A. (1992). The influence of immigration on parental behavior and adolescent distress in Chinese families residing in two western nations. *Journal of Research on Adolescence*, *2*, 205–239. 10.1207/s15327795jra0203\_2
- Colarossi, L. G., & Eccles, J. S. (2003). Differential effects of support providers on adolescents' mental health. *Social Work Research*, *27*, 19–30. 10.1093/swr/27.1.19

- Daviss, W. B., Birmaher, B., Melhem, N. A., Axelson, D. A., Michaels, S. M., & Brent, D. A. (2006). Criterion validity of the Mood and Feelings Questionnaire for depressive episodes in clinic and non-clinic subjects. *Journal of Child Psychology and Psychiatry*, *47*, 927–934. 10.1111/j.1469-7610.2006.01646.x
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum Press. 10.1007/978-1-4899-2271-7
- Furman, W., & Buhrmester, D. (2009). The network of relationships inventory: Behavioral systems version. *International Journal of Behavioral Development*, *33*, 470–478. 10.1177/0165025409342634
- García Coll, C., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, *67*, 1891–1914. 10.2307/1131600
- Gorman-Smith, D., Tolan, P. H., Henry, D. B., & Florsheim, P. (2000). Patterns of family functioning and adolescent outcomes among urban African American and Mexican American families. *Journal of Family Psychology*, *14*, 436–457. 10.1037/0893-3200.14.3.436
- Kiang, L. (2012). Deriving daily purpose through daily events and role fulfillment among Asian American youth. *Journal of Research on Adolescence*, *22*, 185–198. 10.1111/j.1532-7795.2011.00767.x
- Kiang, L., Perreira, K. M., & Fuligni, A. J. (2011). Ethnic label use in adolescents from traditional and non-traditional immigrant communities. *Journal of Youth and Adolescence*, *40*, 719–729. 10.1007/s10964-010-9597-3
- Kuperminc, G. P., Jurkovic, G. J., & Casey, S. (2009). Relation of filial responsibility to the personal and social adjustment of Latino adolescents from immigrant families. *Journal of Family Psychology*, *23*, 14–22. 10.1037/a0014064
- Kuttler, A. F., LA Greca, A. M., & Prinstein, M. J. (1999). Friendship qualities and social-emotional functioning of adolescents with close, cross-sex friendships. *Journal of Research on Adolescence*, *9*, 339–366. 10.1207/s15327795jra0903\_5
- Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, *83*, 1198–1202. 10.1080/01621459.1988.10478722
- Lugo Steidel, A. L., & Contreras, J. M. (2003). A new familism scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*, *25*, 312–330. 10.1177/0739986303256912

Lynch, M., & Cicchetti, D. (1992). Maltreated children's reports of relatedness to their teachers. In R. C. Pianta (Ed.), *Beyond the parent: The role of other adults in children's lives: New directions for child development* (pp. 81–108). San Francisco, CA: Jossey-Bass.

Malecki, C. K., & Demaray, M. D. (2002). Measuring perceived social support: Development of the Child and Adolescent Social Support Scale (CASSS). *Psychology in the Schools, 39*, 1–18. 10.1002/pits.10004

Malecki, C. K., Demaray, M. K., Elliot, S. N., & Nolton, P. W. (1999). *The Child and Adolescent Social Support Scale*. Dekalb, IL: Northern Illinois University.

Needham, B. L. (2008). Reciprocal relationships between symptoms of depression and parental support during the transition from adolescence to young adulthood. *Journal of Youth and Adolescence, 37*, 893–905. 10.1007/s10964-007-9181-7

Perez-Brena, N. J., Updegraff, K. A., & Umaña-Taylor, A. J. (2014). Transmission of cultural values among Mexican-Origin parents and their adolescent and emerging adult offspring. *Family Process, 54*, 232–246. 10.1111/famp.12114

Potochnick, S. R., & Perreira, K. M. (2010). Depression and anxiety among first-generation immigrant Latino youth: Key correlates and implications for future research. *Journal of Nervous and Mental Disease, 198*, 470–477. 10.1097/NMD.0b013e3181e4ce24

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*, 437–448. 10.3102/10769986031004437

Roeser, R. W., & Eccles, J. S. (1998). Adolescents' perceptions of middle school: Relation to longitudinal changes in academic and psychological adjustment. *Journal of Research on Adolescence, 8*, 123–158. 10.1207/s15327795jra0801\_6

Rueger, S. Y., Malecki, C. K., & Demaray, M. K. (2010). Relationship between multiple sources of perceived social support and psychological and academic adjustment in early adolescence: Comparisons across gender. *Journal of Youth and Adolescence, 39*, 47–61. 10.1007/s10964-008-9368-6

Rueter, M. A., & Conger, R. D. (1995). Antecedents of parent-adolescent disagreements. *Journal of Marriage and the Family, 57*, 435–438. 10.2307/353697

Sheeber, L., Hops, H., Alpert, A., Davis, B., & Andrews, J. (1997). Family support and conflict: Prospective relations to adolescent depression. *Journal of Abnormal Child Psychology, 25*, 333–344. 10.1023/A:1025768504415

Smokowski, P. R., & Bacallao, M. L. (2007). Acculturation, internalizing mental health symptoms, and self-esteem: Cultural experiences of Latino adolescents in North Carolina. *Child Psychiatry and Human Development, 37*, 273–292. 10.1007/s10578-006-0035-4

Smokowski, P., Bacallao, M., & Buchanan, R. L. (2009). Interpersonal mediators linking acculturation stressors to subsequent internalizing symptoms and self-esteem in Latino adolescents. *Journal of Community Psychology, 37*, 1024–1045. 10.1002/jcop.20346

Smokowski, P. R., Rose, R. A., & Bacallao, M. (2010). Influence of risk factors and cultural assets on Latino adolescents' trajectories of self-esteem and internalizing symptoms. *Child Psychiatry and Human Development, 41*, 133–155. 10.1007/s10578-009-0157-6

Stein, G. L., Cupito, A. M., Mendez, J. L., Prandoni, J., Huq, N., & Westerberg, D. (2014). Familism through a developmental lens. *Journal of Latina/o Psychology, 2*, 224.

Stice, E., Ragan, J., & Randall, P. (2004). Prospective relations between social support and depression: Differential direction of effects for parent and peer support? *Journal of Abnormal Psychology, 113*, 155–159. 10.1037/0021-843X.113.1.155

Twenge, J. M., & Nolen-Hoeksema, S. (2002). Age, gender, race, socioeconomic status, and birth cohort differences on the children's depression inventory: A meta-analysis. *Journal of Abnormal Psychology, 111*, 578–588. 10.1037/0021-843X.111.4.578

Umaña-Taylor, A. J., Updegraff, K. A., & Gonzales-Backen, M. A. (2011). Mexican-origin adolescent mothers' stressors and psychosocial functioning: Examining ethnic identity affirmation and familism as moderators. *Journal of Youth and Adolescence, 40*, 140–157. 10.1007/s10964-010-9511-z

Young, J. F., Berenson, K., Cohen, P., & Garcia, J. (2005). The role of parent and peer support in predicting adolescent depression: A longitudinal community study. *Journal of Research on Adolescence, 15*, 407–423. 10.1111/j.1532-7795.2005.00105.x

Zayas, L. H., Bright, C. L., Alvarez-Sánchez, T., & Cabassa, L. J. (2009). Acculturation, familism and mother-daughter relations among suicidal and non-suicidal adolescent Latinas. *The Journal of Primary Prevention, 30*, 351–369. 10.1007/s10935-009-0181-0