

UC Irvine

UC Irvine Previously Published Works

Title

Cultural mechanisms linking mothers' familism values to externalizing behaviors among Midwest U.S. Latinx adolescents.

Permalink

<https://escholarship.org/uc/item/05q078q8>

Authors

Crockett, Lisa J
Streit, Cara
Carlo, Gustavo

Publication Date

2022-06-01

DOI

10.1037/cdp0000551

Peer reviewed

CULTURAL MECHANISMS AND EXTERNALIZING BEHAVIOR

Word count = 5972

Cultural Mechanisms Linking Mothers' Familism Values to Externalizing Behaviors Among Midwest U.S. Latinx Adolescents

Lisa J. Crockett¹, Cara Streit², and Gustavo Carlo³

¹Department of Psychology, University of Nebraska-Lincoln

²Family and Child Studies, University of New Mexico

³School of Education, University of California, Irvine

Author Note

Lisa J. Crockett: <https://orcid.org/0000-0001-5072-6190>

Gustavo Carlo: <https://orcid.org/0000-0002-4967-241X>

Cara Streit: <https://orcid.org/0000-0002-8100-4542>

The authors have no known conflict of interest to disclose.

This work was supported by grant #1022744 from the National Science Foundation. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

Correspondence should be addressed to L. Crockett, ecrockett1@unl.edu.

Co-authors: Cara Streit, cestreit@unm.edu; Gustavo Carlo: gcarlo@irvine

Abstract

Objectives: This study was designed to examine associations among parents' familism values, adolescents' cultural resources, and externalizing behavior among Latinx youth in the Midwestern United States.

Method: Participants were 267 Latinx adolescents (M age = 15.58 years; SD = 1.28 years; 45% girls; 82.8% Mexican American) and their mothers/mother figures who completed individually administered interviews comprised of standardized measures. Structural equation modeling was used to test several alternative mediational models in which youth ethnic identity and familism values served as potential cultural mechanisms linking parents' familism values to lower levels of youth externalizing behavior.

Results: Results showed that mothers' familism values were positively associated with youth ethnic identity which was positively associated with youth familism values; in turn, youth familism values were inversely associated with externalizing behavior. The findings did not differ by youth gender or nativity (U.S.-born versus foreign-born youth).

Conclusions: These findings provide support for cultural resilience perspectives by highlighting the protective role of ethnic identity and familism values among U.S. Latinx adolescents.

Keywords: Latinx youth; familism; ethnic identity; externalizing behavior

Public Significance Statement

U.S. Latinx youth are at increased risk of developing externalizing behaviors such as aggression and substance use. Our study showed that mothers' familism values, youth ethnic identity, and youth familism values were linked, either directly or indirectly, to less externalizing behavior among U.S. Latinx youth, suggesting that these cultural resources are protective. Interventions that enhance these resources may help prevent or reduce externalizing behavior among U.S. Latinx adolescents.

Cultural Mechanisms Linking Mothers' Familism Values to Externalizing Behaviors Among Midwest U.S. Latinx Adolescents

Latinx youth comprise one of the largest and fastest growing youth populations in the United States (Lopez et al., 2018). Furthermore, U.S. Latinx adolescents are at risk for elevated levels of externalizing behaviors, including aggression, delinquency, and substance use. For example, national surveys indicate that Latinx youth report rates of alcohol and drug use that equal or surpass those of African Americans and non-Latinx Whites (Johnston et al., 2018) and report higher rates of physical aggression (fights) than non-Latinx Whites (Kann et al., 2018). Understanding the processes influencing externalizing behaviors is crucial for identifying ways to reduce these negative behaviors and improve developmental outcomes in this rapidly growing population.

Scholars have emphasized the need to consider culture-specific variables to better understand development among Latinx children and youth (e.g., Raffaelli et al., 2005; White et al., 2018). Two important Latinx cultural variables are ethnic identity and familism values. Ethnic identity development involves an exploration of one's cultural heritage and what it means to be a member of that ethnic group (Phinney, 1993); it is thought to include three processes: exploration (delving into one's ethnic heritage), resolution (understanding what one's ethnic identity means personally), and affirmation (positive attitudes towards one's group) (Umaña-Taylor et al., 2004). Familism refers to feelings of support from, obligation to, and identification with the family (Knight et al., 2010). Ethnic identity and familism values may be especially relevant during adolescence, when young people reflect on who they are and develop a deeper understanding of their cultural heritage and the position their ethnic group holds in society (Umaña-Taylor et al., 2009). These cultural resources are associated with positive adjustment

among minority adolescents (Rivas-Drake et al., 2014; Smith & Silva, 2011), including Latinx youth (Berkel et al., 2010; Gonzales et al., 2008; Smokowski & Baccalao, 2006), and may play a protective role in deterring externalizing behavior.

As primary socialization agents, parents are instrumental in helping adolescents learn cultural values, develop an ethnic identity, and engage in appropriate behavior. Parents' socialization practices, in turn, are thought to be grounded in their cultural values, beliefs, and knowledge (e.g., Super & Harkness, 1986). Thus, understanding the linkages among parents' values, adolescents' cultural resources, and externalizing behavior could illuminate cultural processes that reduce antisocial behaviors among Latinx youth. In turn, identifying protective cultural mechanisms could inform interventions to prevent or reduce externalizing behavior and associated problems. For example, strengthening youth familism values and/or ethnic identity might prove helpful in discouraging externalizing behavior among Latinx youth.

To date, most research on U.S. Latinx youth has been conducted in large metropolitan areas of the Southwestern and eastern United States, and relatively few studies have focused on Latinx youth residing the Midwest and in smaller urban and rural communities (Carlo et al., 2016; Carlo et al., 2020). Apart from a few large cities, Midwestern communities tend to be less diverse and to have less experience with Latinx immigrants and non-English speakers than traditional receiving communities in the Southwestern and eastern United States. Latinx families in these contexts have fewer social resources (e.g., fewer Latinx teachers) and less access to bilingual services (health-related, educational, and legal) than those residing in other locations, and such features of the community context could affect the salience of cultural resources and their implications for youth adjustment. Accordingly, this study focused on interconnections among ethnic identity, familism values, and externalizing behaviors for Latinx youth in the

Midwest.

Conceptual Framework

Resilience perspectives on minority child development (e.g., Garcia Coll et al., 1996; Murry, 2019) posit that families provide resources that foster adaptive child functioning despite adversity. Such perspectives offer a contrast to deficit models which emphasize deficiencies in minoritized groups. Key cultural resources could be transmitted to children through family ethnic socialization, a process whereby parents expose their children to values, traditions, and behaviors consistent with their heritage culture (Umaña-Taylor et al., 2009). Drawing on these notions, Carlo and colleagues proposed an eco-cultural resilience model of U.S. Latinx youth development (Carlo et al., 2016; Carlo et al., 2014). The model proposes that: (a) parents' socialization goals and practices are attuned to their cultural values and to features of the ecological context and are intended to forge competencies that facilitate their children's successful adaptation; (b) culture-specific mechanisms, such as ethnic identity and cultural values (e.g., familism) are assets that can promote positive development and reduce maladjustment among youth; and (c) parents' characteristics, including their cultural values, influence youth socio-cognitive processes (e.g., their ethnic identity and familism values) which, in turn, (d) affect their levels of positive (e.g., prosocial behaviors) and negative (e.g., externalizing behavior) outcomes. The eco-cultural resilience model provided an overarching theoretical framework for the present study.

Parents' Cultural Values and Latinx Adolescents' Cultural Resources

Applying the eco-cultural resilience model to externalizing behavior leads to the expectation that Latinx parents with strong familism values are likely to socialize their children to internalize those values and to develop a strong connection to their ethnic heritage and

1
2
3
4 identity. Furthermore, because familism involves a close connection between one's sense of self
5
6 and one's family, youth who have adopted strong familism values may refrain from participating
7
8 in socially proscribed externalizing behaviors such as delinquency, substance use, and aggression
9
10 which reflect poorly on their families (Gonzales et al., 2008). Similarly, a commitment to a
11
12 Latinx ethnic identity could lead adolescents to avoid behaviors they do not associate with being
13
14 Latinx, including externalizing behaviors. This is because committing to a Latinx ethnic identity
15
16 involves internalizing traditional cultural values such as familism, respect, religiosity, and *bien*
17
18 *educado* (showing good manners) which reflect being considerate and prosocial towards others
19
20 (Carlo & Conejo, 2019).
21
22
23
24

25
26 In line with these expectations, research has documented associations between parents'
27
28 values and/or ethnic socialization practices and their children's ethnic identity and familism
29
30 values. For example, in a study of Mexican-origin youth in the U.S, adolescents' reports of
31
32 family ethnic socialization were positively associated with their level of ethnic identity
33
34 achievement (Umaña-Taylor & Fine, 2004). This finding was later replicated across diverse
35
36 samples in the U.S., including Salvadoran, Filipino, and Chinese adolescents (Umaña-Taylor et
37
38 al., 2006). Parents' cultural values and ethnic socialization have also been linked to familism
39
40 values among Latinx youth. In one study, mothers' and fathers' endorsement of familism values
41
42 predicted higher levels of familism among Mexican-origin adolescents two years later (Knight et
43
44 al., 2016). In a second study, mothers' familism values, but not fathers', predicted increases in
45
46 adolescents' familism values over a five-year period (Perez-Brena et al., 2015). Although most
47
48 studies have focused on either ethnic identity or familism values, studies that have examined
49
50 both indicate that aspects of ethnic identity and familism values are positively correlated among
51
52 U.S. Latinx adolescents (Armenta et al., 2011; Constante et al. 2019).]
53
54
55
56
57
58
59
60
61
62
63
64
65

Adolescents' Cultural Resources and Externalizing Behaviors

Externalizing behaviors encompass a broad array of behaviors including aggression (e.g., fighting, bullying), rule breaking (e.g., school misconduct, cheating), substance use, and other antisocial behaviors such as lying, stealing, or vandalism (Achenbach, 1991). In adolescence, such behavior is captured by two broad dimensions: aggression (physical, verbal, relational) and delinquent behavior (illegal acts, including substance use). In this study we focused on aggression, delinquency, and substance use.

Regarding the role of cultural resources, a growing body of research supports a negative association between Latinx youths' familism values and externalizing behaviors. For example, studies using broad measures of externalizing behavior (e.g., combining aggressiveness, rule breaking, and/or other delinquent behaviors) show that Latinx adolescents who endorse familism values (and other traditional cultural values) report lower levels of externalizing concurrently and over time (e.g., Gonzales et al., 2008; Kapke et al., 2017; Marsiglia et al., 2009; Wheeler et al., 2017). Other studies indicate a negative association between Latinx adolescents' familism values and levels of substance use (Gil et al., 2000; Telzer et al., 2014). In contrast, evidence for a direct association between ethnic identity development and Latinx externalizing behaviors is sparse and inconsistent. For example, some studies indicate negative associations with substance use (e.g., Marsiglia et al., 2001) whereas others report positive associations (e.g., Marsiglia et al., 2004) or no association (Sanchez et al., 2019). Nonetheless, ethnic identity exploration and resolution are generally associated with psychological well-being among adolescents of color (Smith & Silva, 2011). Thus, it is plausible that adolescents who have explored their ethnic heritage and integrated their ethnicity into their identity would avoid acting in ways that cast Latinx people in an unfavorable light. Accordingly, both ethnic identity and familism may play a role in youth's

behavior. However, the joint role of these two factors is uncertain, as most analyses have focused on either ethnic identity or familism values rather than examining them together.

Parents' Cultural Values, Adolescents' Cultural Resources, and Externalizing Behavior

Given the associations among parents' values, adolescents' cultural resources, and externalizing behaviors, it is possible that parents' cultural values influence adolescents' externalizing behavior indirectly via youth's cultural resources. Furthermore, theory suggests that ethnic identity may precede youth familism in the sequence linking parent familism values to youth externalizing behavior (Knight et al., 2016). According to social identity theory, individuals acquire various social identities based on the groups they belong to (Tajfel & Turner, 1979). A social identity is activated when the group associated with that identity becomes salient due to situational cues or to the person's inclination to see themselves as a member of that group (Turner et al., 1987). Furthermore, activation of a social identity is thought to increase the tendency to see oneself as being more like a typical group member. This process of self-stereotyping is believed to increase a person's tendency to adopt the group's norms and act according to those norms (Lemay & Ashmore, 2004). Notably, individuals who feel a strong attachment to their group are also more likely to experience activation of that social identity (Spears et al., 1999). Taken together, these tenets suggest that parents who express their familism values verbally or through their actions may activate an adolescent's Latinx ethnic identity, thereby facilitating the internalization of familism values. Furthermore, Latinx youth who strongly identify with their ethnic group (i.e., have a strong ethnic identity) and subscribe to Latinx norms and values (e.g., familism values) should tend to behave in accordance with them. Thus, they should avoid behaviors such as aggression, delinquency, and substance use that conflict with Latinx values of prosociality and proper behavior.

1
2
3
4 Following this line of reasoning, Knight et al. (2016) proposed a pathway wherein
5
6 parents' cultural values and ethnic socialization practices influence adolescents' ethnic identity
7
8 and familism which then affect youth's prosocial behaviors. Consistent with predictions, their
9
10 findings showed that mothers' familism values were associated with their ethnic socialization
11
12 practices; in turn, these practices predicted adolescents' ethnic identity two years later, which
13
14 predicted youth's familism values (Knight et al., 2016). Moreover, youth's familism values
15
16 predicted their subsequent prosocial tendencies. The findings suggest that parents who strongly
17
18 endorsed familism values also engaged in socialization practices that promoted a strong sense of
19
20 ethnic identity in their children which led to youths' stronger endorsement of familism values and
21
22 that youth with strong familism values exhibited more culturally approved behaviors.
23
24
25
26
27

28 To our knowledge, the study by Knight et al., (2016) is the only one that has tested the
29
30 sequence connecting parent familism to youth behavior via both ethnic identity and youth
31
32 familism values. Other studies have examined parts of such a sequence. In a study of Mexican-
33
34 origin adolescents, a latent variable reflecting mothers' cultural values (including familism) was
35
36 associated with mothers' ethnic socialization efforts; in turn, ethnic socialization predicted youth
37
38 ethnic identity, which predicted their familism values (Knight et al., 2011). This study supports
39
40 an association between parents' cultural values and youth's familism values that is mediated by
41
42 ethnic identity. Three other studies support an indirect association between youth ethnic identity
43
44 and positive youth functioning. Constante and colleagues (2019) reported that, among U.S.
45
46 Midwestern Latinx youth, ethnic-racial identity exploration was indirectly related to early
47
48 adolescents' school engagement via their familism values. Similarly, Armenta and colleagues
49
50 (2011) showed that U.S. Mexican adolescents' familism values partially mediated the association
51
52 between their ethnic group attachment and prosocial behaviors. Taken together, these few studies
53
54
55
56
57
58
59
60
61
62
63
64
65

point to an indirect pathway (or sequence) where parents' cultural values predict youth's ethnic identity which predicts youth's familism values, and youth's familism values predict their behavior. Yet, as far as we know, no study has tested this model with externalizing behavior.

Potential Moderating Effects of Gender and Nativity

It is possible that the pathway leading from parents' familism values to youth externalizing behaviors varies depending on youth gender and nativity. Gender is an organizing principle of family life, and traditional Latinx families tend to practice more rigid gender socialization (Cauce & Domenech-Rodriguez, 2002). Accordingly, parents' familism values might affect boys' and girls' cultural development differently. In line with this notion, family ethnic socialization was differentially associated with U.S. Latinx girls' and boys' ethnic identity resolution in some prior research (Umaña-Taylor et al., 2009). Regarding nativity, researchers have shown that some aspects of familism tend to decline in later generations (Sabogal et al., 1987), which could mean that U.S.-born youths are less susceptible to their parents' attempts to inculcate ethnic identity and familism values. If so, associations between parents' familism values and youth's cultural resources might be weaker among later-generation youth than among first-generation youth, with implications for their behavior.

This study extends prior work by examining culture-specific mechanisms linking Latinx parents' familism values to youth externalizing behavior. Although parts of the proposed model have been studied previously in relation to other youth outcomes, to the best of our knowledge no prior study has examined ethnic identity and familism values together as intervening variables linking parents' cultural values to youth externalizing behavior. Doing so provides a more comprehensive picture of the culture-specific mechanisms associated with externalizing behavior and how they are interrelated, which may point to additional strategies for reducing externalizing

behaviors (e.g., by strengthening ethnic identity and/or familism values).

The Present Study

The goal of this study was to examine culture-specific mechanisms linking parents' familism values to externalizing behavior among U.S. Midwestern Latinx adolescents, with a specific focus on adolescent ethnic identity and familism values as potential protective mechanisms. To this end, we investigated the association between mothers' familism values and externalizing behavior and whether **ethnic identity and familism values** mediated this association. Furthermore, to assess the generalizability of the findings, we explored whether the results differed by adolescent gender and nativity. Based on theory (e.g., Carlo et al., 2016) and prior empirical findings (Knight et al., 2011; Knight et al., 2016), we hypothesized that mothers' familism values would be positively related to adolescents' ethnic identity, that adolescents' ethnic identity would be positively associated with their familism values, and that adolescents' familism values would be negatively associated with their externalizing outcomes. We also expected to find indirect associations whereby parents' familism values were related to youths' externalizing behaviors via adolescents' ethnic identity and familism values.

Method

Participants

Participants were 267 Latinx adolescents (M age = 15.58 years; SD = 1.28 years; 45% girls) and their primary caregivers residing in four communities across Nebraska. The participating communities differed in size, ranging from 7000 to over 400,000 residents. The two communities with populations over 50,000 were considered urban and the others were considered rural. The concentration of Latinx individuals also varied, ranging from 8% to 45% across the four communities. Only mothers or mother figures (hereafter "mothers") were

1 included in this analysis because most of the primary caregivers were women and prior research
2
3
4 included in this analysis because most of the primary caregivers were women and prior research
5
6 indicates that mothers' and father's socialization practices have different effects (e.g., Perez-
7
8 Brena et al., 2015). Most of the mothers (91%) were born outside of the U.S., whereas most
9
10 adolescents were born in the U.S. (69.5%). Adolescents born outside the United States had been
11
12 living in the United States for an average of 10 years (range = 3 months to 17 years). Most youth
13
14 identified as Mexican heritage (82.8%). Among the mothers, less than half (39%) had graduated
15
16 from high school. The median household income fell between \$15,001 and \$30,000, indicating a
17
18 largely low-income sample.
19
20
21
22

23 Families were recruited through local public high schools and community settings using
24
25 parent recruitment letters (in schools) and community flyers. Families that were interested in
26
27 participating contacted the research team or provided their contact information. Data were
28
29 collected at participants' homes or a convenient community location. Once parental consent and
30
31 youth assent were obtained, caregivers and adolescents were interviewed separately and
32
33 completed measures in Spanish or English (based on their preference) administered by trained
34
35 interviewers using computer-assisted technology. Families received \$50 for their participation.
36
37 Research procedures were approved by the University Institutional Review Board.
38
39
40
41
42

43 **Measures**

44
45 The interviews included demographic questions and standardized measures that have
46
47 been used successfully with Latinx samples and show evidence of good psychometric properties.
48
49

50 *Sociodemographic Variables*

51
52 Mothers reported their educational attainment along with the adolescent's age, gender,
53
54 and nativity. Educational attainment was based on high school completion (0 = did not complete
55
56 high school; 1 = completed high school). Nativity was coded as U.S.-born or foreign-born.
57
58
59
60
61
62
63
64
65

Familism Values

Mothers and adolescents completed the familism scale of the Mexican American Cultural Values Scale (Knight et al., 2010). This 16-item measure includes three subscales: familism-support, reflecting emotional closeness to and reliance on the family (6 items, e.g., “Family provides a sense of security because they will always be there for you”; $\alpha=.56$ for parents and .81 for youth); familism-obligation, reflecting the duty to help family members (5 items, e.g., “if a relative is having a hard time financially, one should help them out if possible”; $\alpha=.69$ and .73 for parents and youth, respectively); and familism-referent, reflecting the notion that the family is an important reference group to consider when making decisions (5 items, e.g., “Children should be taught to always be good because they represent the family”; $\alpha=.67$ and .76).

Responses are made on a 5-point scale where 1 = “Not at all” and 5 = “Completely.” Items were averaged within subscales with higher scores corresponding to stronger familism values. This measure was developed specifically for use with Latinx samples and has shown evidence of reliability and validity among Latinx adolescents and adults (Knight et al., 2010).

Ethnic Identity

Adolescents reported their ethnic identity development using two subscales from the Ethnic Identity Scale (Umaña-Taylor et al., 2004): exploration (7 items, e.g., “I have participated in activities that have exposed me to my ethnicity”; $\alpha=.78$) and resolution (5 items, e.g., “I am clear about what my ethnicity means to me”; $\alpha=.86$). Adolescents responded on a 4-point scale (1 = *Does not describe me at all*; 4 = *Describes me very well*). Items were averaged within subscales, with higher scores indicating higher levels of the construct. Although a third dimension, ethnic pride or affirmation, has been proposed as another component of ethnic identity (Umaña-Taylor et al., 2004), only exploration and resolution were included in this

analysis because affirmation (positive affect towards one's group) is conceptually distinct from the processes of exploration and resolution. Moreover, a confirmatory factor analysis showed that affirmation did not load substantially on a factor with the other two indicators. This measure has demonstrated reliability and validity among Latinx youth as well as youth from other racial/ethnic groups (Umaña-Taylor et al., 2004).

Externalizing Behaviors

Adolescents completed three measures representing different aspects of externalizing behavior; all have been used successfully with ethnically diverse samples. Aggression was assessed with a shortened subscale from the Weinberger Adjustment Inventory (Weinberger, 1991). The 5-item scale measures the intensity of emotions and physical reactions experienced when angry (e.g., "People who get me angry better watch out"; $\alpha = .77$). Responses were based on a 5-point scale (1 = *almost never*; 5 = *almost always*). Delinquency was measured with a 14-item scale (Trzesniewski & Donnellan, 2010) that describes participation in antisocial behaviors during the past 12 months (e.g., "How often have you hit an instructor or supervisor?"; $\alpha = .72$). Adolescents responded on a 5-point scale (1 = *not at all*; 5 = *5 or more times*). Substance use was based on 5 items adapted from the Youth Risk Behavior Surveillance System (Centers for Disease Control, 2009). Adolescents reported how often in the last 12 months they had used five substances (alcohol, tobacco, marijuana, medications not prescribed for them, and other drugs) using a 7-point scale (1 = *never*; 7 = *100 times or more*; $\alpha = .73$). For each externalizing behavior measure, items were averaged such that higher scores indicated more of the corresponding behavior.

Data Analysis

Structural equation modeling (SEM) analyses with latent variables were conducted using

maximum likelihood estimation in *Mplus* version 7.2. Missing data was accounted for using full information maximum likelihood (Muthén & Muthén, 2010). To decrease the number of estimated paths, the individual subscales comprising ethnic identity and familism values, respectively, were used as indicators of latent variables. Similarly, the scale scores for aggression, delinquency, and substance use were used as indicators of a latent variable corresponding to youth externalizing behaviors. Separate measurement models were conducted for each latent variable. Across all three latent variables, standardized factor loadings were significant and above .46, supporting the use of latent variables. In SEM, model fit is considered good if the Comparative Fit Index (CFI) is greater than or equal to .95 (adequate if greater than or equal to .90), the Root Mean Square Error of Approximation (RMSEA) is less than or equal to .06 (adequate if less than or equal to .08), and the Standardized Root Mean Squared Residual (SRMR) is less than or equal to .08 (Hu & Bentler, 1999). Bias corrected bootstrap confidence intervals were used to test the significance of indirect effects. This method is thought to have strong statistical power and low Type I error rates (MacKinnon et al., 2002; Sobel, 1982).

Results

Preliminary Analyses

Bivariate correlations among study variables are presented in Table 1. Parent familism values were negatively correlated with externalizing behaviors and positively correlated with adolescents' ethnic identity but were not significantly correlated with adolescents' familism values. Adolescents' ethnic identity was positively associated with their familism values and negatively associated with externalizing behaviors. Adolescents' familism values were negatively associated with externalizing behaviors.

Path Models Linking Parents' Familism Values and Youth Externalizing Behaviors

We first conducted two simple mediation models. In each model, either ethnic identity or youth familism was examined as a mediating variable linking mothers' familism values to youth externalizing behavior (Figures 1a and 1b). Each model controlled for adolescent gender and mother's educational status (high school completion). In the first model, mothers' familism was positively associated with youth ethnic identity and negatively associated with externalizing behavior; moreover, ethnic identity was inversely related to externalizing behavior (Figure 1a). However, the indirect path from mothers' familism to externalizing behavior via ethnic identity was not significant ($\beta = -.03$; 95% CI = $-.08$ to $.02$; $p = .27$). In the second model, mother's familism and youth familism were each negatively associated with externalizing behavior, but mother's and youth's familism values were not significantly related to each other. Again, the indirect path from mothers' familism to externalizing behavior via youth familism was not significant ($\beta = -.03$; 95% CI = $-.08$ to $.02$; $p = .25$).

Next, we examined a combined path model in which the association between parents' familism values and adolescents' externalizing behaviors was mediated by both youth ethnic identity development and familism values, with ethnic identity preceding youth familism values in the sequence (see Figure 2). The hypothesized model fit the data well based on multiple fit indices: $\chi^2(58) = 92.07$, $p < .05$, CFI = .96, RMSEA = .05, SRMR = .05. Parent familism values were positively associated with youth ethnic identity ($b = .22$, $p < .01$) which was positively associated with youth familism values ($b = .55$, $p < .001$). In turn, youth familism values were negatively associated with externalizing behaviors ($b = -.21$, $p < .01$). Parent familism values were also directly associated with youth externalizing behaviors ($b = -.18$, $p < .05$).

Indirect Effects

There was a significant indirect association between parent and youth familism values via

1
2
3
4 youth ethnic identity ($\beta = .12$; 95% CI = .03 to .22; $p = .01$). There was also a significant indirect
5
6 association between ethnic identity and youth externalizing behaviors via youth familism values
7
8 ($\beta = -.15$; 95% CI = -.29 to -.01; $p = .04$). The longer indirect path from parent familism to youth
9
10 externalizing behavior was not significant. However, using joint significance tests to examine
11
12 mediation as suggested by Taylor, MacKinnon, and Tein (2008; see also MacKinnon et al.,
13
14 2002) indicated support for the full mediational model, as the paths from parent familism values
15
16 to youth ethnic identity, from ethnic identity to youth familism values, and from youth familism
17
18 values in externalizing behavior were all significant.
19
20
21
22

23 *Alternative Models*

24
25
26 To probe the sequence of mediators further, we tested two additional SEM models: (a)
27
28 one where youth familism predicted ethnic identity (i.e., reversing the hypothesized sequence of
29
30 mediators) and (b) one where youth familism and ethnic identity served as equivalent mediators,
31
32 with no order specified. Based on the pattern of significant paths observed, both analyses
33
34 confirmed the sequence specified in the primary model. Specifically, mother's familism was
35
36 significantly associated with youth ethnic identity, but not with youth familism values;
37
38 furthermore, youth familism, but not youth ethnic identity, was significantly associated with
39
40 externalizing behavior. Results for the first alternative model are summarized in the
41
42 supplemental materials.
43
44
45
46
47

48 *Moderation Analyses*

49
50 Multigroup analyses were conducted to determine whether the hypothesized model
51
52 differed by either youth gender or nativity. Chi-square difference tests (Muthén & Muthén, 2010)
53
54 were conducted to examine moderation. The fit of the constrained and partially unconstrained
55
56 models was not significantly different for boys and girls ($\Delta\chi^2(6) = 3.14, p = .79$) or for youth
57
58
59
60
61
62
63
64
65

born inside versus outside the United States ($\Delta\chi^2(6) = 6.94, p = .33$), suggesting that associations in the model were not moderated by gender or nativity.

Discussion

The overarching goal of this study was to advance understanding of cultural mechanisms that may reduce externalizing behavior among Latinx adolescents in the Midwestern U.S. Guided by an eco-cultural resilience model (Carlo et al., 2016) we examined the role of ethnic identity and youth familism values as potential mediators of the association between mothers' familism values and youth's externalizing behaviors. Results showed that mothers' familism values were positively related to youth ethnic identity, which was positively linked to youth familism; in turn, youth familism was negatively associated with externalizing behaviors. Tests for moderation indicated that these relations did not differ between boys and girls or between foreign-born and U.S.-born youth. Overall, the findings are consistent with the notion that these cultural resources serve a protective role in reducing externalizing outcomes, as suggested by cultural resilience models (e.g., Carlo et al., 2016).

Mediation analyses supported several indirect associations that are consistent with the hypothesized model. There was a significant indirect path from mothers' familism values to youth familism values through ethnic identity. Presumably, parents with strong familism values engaged in ethnic socialization practices that exposed their children to family-oriented activities and to Latinx cultural traditions. These experiences should lead adolescents to become more interested in exploring their heritage and discovering what it means to be Latinx, resulting in a stronger sense of ethnic identity (Umaña-Taylor et al., 2009). In turn, higher levels of ethnic identity exploration and commitment could engender a stronger commitment to familism values among Latinx youth. **The finding is largely consistent with prior studies showing that parents'**

1
2
3
4 cultural values and ethnic socialization practices predict adolescents' cultural resources (Knight
5
6 et al., 2011) and with studies showing a positive association between adolescents' ethnic identity
7
8 and their familism values (Constante et al., 2019; Umaña-Taylor et al., 2011). However, the
9
10 present study is perhaps unique in showing that maternal familism values predicted adolescent's
11
12 familism values indirectly through adolescent ethnic identity. This finding supports the notion
13
14 that ethnic identity development facilitates the transmission of cultural values (Armenta et al.,
15
16 2011), while also highlighting the potential role of maternal familism values in this process.
17
18
19
20

21 Although the indirect association between maternal familism and youth familism via
22
23 ethnic identity is consistent with some prior research, the lack of a direct relation between
24
25 mothers' and adolescents' familism is somewhat surprising, as other studies have reported
26
27 significant positive associations between parent and adolescent cultural values (Knight et al.,
28
29 2016; Perez-Brena et al., 2015). In our study, the reliability of the maternal familism scale was
30
31 relatively low, which may have attenuated associations with other study variables, including
32
33 youth familism values. However, the indirect effect of maternal familism on youth familism via
34
35 ethnic identity was significant in the structural model, indicating that the maternal familism
36
37 latent variable functioned as expected. Another possibility is that the previous studies were
38
39 conducted with Latinx samples in the Southwestern U.S., in contrast to the Midwestern location
40
41 of the present sample. A disconnect between parents' and adolescents' cultural values may be
42
43 especially likely in the Midwest where the proportion of Latinx families is relatively low,
44
45 providing fewer Latinx role models and community resources to support parents' ethnic
46
47 socialization efforts. In other words, in places where Latinx populations are sparse, mainstream
48
49 U.S. cultural values may have a relatively strong influence on Latinx youth. More research on
50
51 Latinx families and youth from sparsely Latinx-populated regions of the U.S. is needed to
52
53
54
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4 disentangle the effects of region and nativity on the association between parental values and
5
6 youth externalizing behavior.
7

8
9 The second significant indirect effect—that linking adolescent ethnic identity to
10 externalizing behavior through youth’s familism values—was also instructive. Adolescents’
11 familism values were directly associated with externalizing behavior, suggesting that
12
13 commitment to these values may help in reducing antisocial behaviors. One possibility is that
14
15 youth with strong familism values feel a strong sense of identification with and obligation to
16
17 their family, making them reluctant to engage in behaviors that would reflect poorly on the
18
19 family (Gonzales et al., 2008). Past research has shown that youth’s familism values mediate the
20
21 effects of their ethnic identity on positive outcomes such as prosocial behavior (Armenta et al.,
22
23 2011; Knight et al., 2016) and school engagement (Constante et al., 2019); similarly, the results
24
25 of the present study show that youth’s familism values may mediate the relation between Latinx
26
27 adolescents’ ethnic identity and their externalizing behavior. **To our knowledge, this is the first**
28
29 **study to show that ethnic identity and youth familism may mediate the relation between maternal**
30
31 **familism and youth externalizing behavior.** In conjunction with prior research findings, the
32
33 present results provide further evidence of the protective role of ethnic identity and familism for
34
35 U.S. Latinx youth.
36
37
38
39
40
41
42
43
44

45 It is also noteworthy that simple path models with only a single mediator (either ethnic
46 identity or youth familism values) revealed no significant indirect paths linking maternal
47
48 familism values to youth externalizing behaviors. Instead, evidence of mediation was found only
49
50 when both cultural resources were included in the path model and ethnic identity preceded youth
51
52 familism. That the indirect effects of maternal values were a function of both youth ethnic
53
54 identity and familism values suggests the need to consider multiple culture-specific mechanisms,
55
56
57
58
59
60
61
62
63
64
65

1
2
3
4 and their interplay, to explain U.S. Latinx youth externalizing outcomes. Moreover, the direct
5
6 association between mother's familism and youth externalizing behavior remained significant,
7
8 indicating that the effect of mother's familism was not fully accounted for by the cultural
9
10 mediators. This latter finding suggests that Latinx mothers influence their adolescents'
11
12 externalizing outcomes in ways beyond encouraging a strong sense of ethnic identity and the
13
14 internalization of familism values.
15
16
17

18
19 The findings are consistent with cultural resilience models of minority youth
20
21 development (Garcia Coll et al., 1009; Murry, 2019) and support predictions based on the eco-
22
23 cultural resilience model (Carlo et al., 2016). Specifically, they provide evidence that culture-
24
25 specific mechanisms (e.g., ethnic identity and familism values) are beneficial for positive youth
26
27 adaptation and that parents' characteristics (e.g., cultural values) influence their adolescent
28
29 children's socio-cognitive processes (e.g., ethnic identity, familism values) which, in turn, guide
30
31 their behavior. Such findings add to the accumulating evidence that culture-specific variables
32
33 play a role in resilience among minority adolescents and that minority parents contribute to the
34
35 adaptive functioning of their children in part through cultural mechanisms.
36
37
38
39

40
41 The findings also have important implications for intervention. Specifically, they point to
42
43 ethnic identity and familism values as cultural resources could be augmented to reduce
44
45 externalizing behavior among Latinx youth. Interventions might strengthen youth familism
46
47 values by encouraging young people to consider what family members do for them and the
48
49 importance of family in their lives. Youth ethnic identity development might be supported
50
51 through school and community programs that celebrate adolescents' cultural heritage and
52
53 encourage exploration of cultural traditions and history. Furthermore, because ethnic identity and
54
55 youth familism values appeared to operate in tandem to deter externalizing behavior, it might be
56
57
58
59
60
61
62
63
64
65

important to enhance both resources simultaneously. Indeed, interventions to strengthen ethnic identity might also encourage commitment to familism values. Moreover, as parents are a major source of cultural socialization, it might be helpful to involve them in interventions designed to bolster adolescents' cultural resources.

Study Limitations

As in most studies of U.S. Latinx youth, the sample was primarily of Mexican heritage and, consequently, the findings may not generalize to other subgroups of U.S. Latinx youth. Similarly, the Midwestern location of the sample may limit generalizability to Latinx youth residing in other regions of the U.S. Future studies could examine whether findings differ across community contexts (e.g., rural/urban, ethnic composition). Other study limitations should also be considered. Only mothers were included in the analysis, and additional research is needed to determine whether fathers' cultural values bear similar relations to adolescents' cultural resources and externalizing behaviors. Furthermore, the internal reliability of the familism scale was relatively low for mothers, which may have reduced associations between maternal familism and other study variables. Additionally, the study was based on a single time of measurement and thus does not permit causal inferences; future longitudinal studies that measure the study variables at different waves may provide stronger evidence for the direction of the relationships.

Conclusions

Despite these caveats, the study provides new information regarding cultural mechanisms leading to Latinx youth's externalizing behavior, resulting in a more nuanced picture of the likely sequence involved. Specifically, the findings underscore the importance of ethnic identity and familism values as cultural assets that may protect U.S. Latinx youth from engaging in externalizing behavior. They also suggest that ethnic identity and familism values need to be

1
2
3
4 considered together in interventions intended to reduce U.S. Latinx adolescents' participation in
5
6 externalizing behaviors and that ethnic identity may facilitate the internalization of cultural
7
8 values. The findings support cultural resilience models (Carlo et al., 2016; Garcia Coll et al.
9
10 1996; Murry, 2019) providing additional evidence of the beneficial effects of cultural factors for
11
12 minority youth adaptation and underscore the need to consider cultural variables in efforts to
13
14 understand Latinx youth behavior and development.
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4–18 and 1991 Profile*. Burlington, VT: University of Vermont Department of Psychiatry.
- Armenta, B. E., Knight, G. P., Carlo, G., & Jacobson, R. P. (2011). The relation between ethnic group attachment and prosocial tendencies: The mediating role of cultural values. *European Journal of Social Psychology, 41*(1), 107 – 115. DOI: 10.1002/ejsp.742
- Berkel, C., Knight, G. P., Zeiders, K. H., Tein, J-Y, Roosa, M. W., Gonzales, N. A., & Saenz, D. (2010). Discrimination and adjustment for Mexican American Adolescents: A prospective examination of the benefits of culturally related values. *Journal of Research on Adolescence, 20*(4), 893–915. <https://doi.org/10.1111/j.1532-7795.2010.00668.x>
- Carlo, G., & Conejo, L. D. (2019). Traditional and culture-specific parenting of prosociality in U.S. Latino/as. In D. J. Laible, L. Padilla-Walker & G. Carlo (Eds.), *Oxford Handbook of Parenting and Moral Development* (pp. 247-266). New York: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190638696.001.0001>
- Carlo, G., Crockett, L. J., Streit, C., & Cardenas, R. (2016). Rural Latinx youth and parents on the Northern Great Plains: Preliminary findings from the Latino Youth Care Project (LYCP). In L. J. Crockett & G. Carlo (Eds.), *Rural ethnic minority youth in the United States: Theory, research and applications* (pp. 165-183). In R. Levesque (Series Ed.) *Advancing Responsible Adolescent Development*. New York: Springer. https://doi.org/10.1007/978-3-319-20976-0_10
- Carlo, G., Memmott-Elison, M., & Crockett, L. J. (2020). Latino prosocial development in the rural U.S. In J. E. Glick et al. (Eds.), *Rural families and communities in the United States: Facing challenges and leveraging opportunities* (pp. 237-251). Springer.

https://doi.org/10.1007/978-3-030-37689-5_9

Carlo, G., & Knight, G. P., Basilio, C. D., & Davis, A. N. (2014). Predicting prosocial tendencies among Mexican American youth: The intersection of cultural values, social cognitions, and social emotions. In L. M. Padilla-Walker & G. Carlo (Eds.), *Prosocial development: A multidimensional approach* (pp. 242–257). Oxford University Press.

<https://doi.org/10.1093/acprof:oso/9780199964772.001.0001>

Cauce, A. M., & Domenech-Rodríguez, M. (2002). Latino families: Myths and realities. In J. M. Contreras, K. A. Kerns, & A. M. Neal-Barnett (Eds.) *Latino children and families in the United States: Current research and future directions* (pp. 3–25). Praeger Publishers/Greenwood Publishing Group.

Centers for Disease Control (2009). 2009 National Youth Risk Behavior Survey. Available from ftp://ftp.cdc.gov/pub/data/yrbs/2009/2009_xxh_questionnaire.pdf

Centers for Disease Control and Prevention (2014). Youth risk behavior surveillance – United States. *MMWR*, 2013;63. No. SS-4, 1-168.

<https://www.cdc.gov/mmwr/preview/mmwrhtml/ss6304a1.htm>

Constante, K., Marchand, A. D., Cross, F. L., & Rivas-Drake, D. (2019). Understanding the promotive role of familism in the link between ethnic-racial identity and Latino youth school engagement. *Journal of Latinx Psychology*, 7(3), 230–244.

<http://dx.doi.org/10.1037/lat0000117>

Crockett, L. J., Carlo, G., & Temmen, C. (2016). Racial and ethnic minority youth in the rural United States: An overview. In L. J. Crockett & G Carlo (Eds.), *Rural ethnic minority youth in the United States: Theory, research and applications* (pp. 1-12). In R. Levesque (Series Ed.) *Advancing Responsible Adolescent Development*. New York: Springer.

https://doi.org/10.1007/978-3-319-20976-0_1

Garcia Coll, C., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., Vazquez Garcia, H., & McAdoo, H. P. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, 67(5), 1891-1914.

<https://doi.org/10.2307/1131600>

Gil, A. G., Wagner, E. F., & Vega, W. A. (2000). Acculturation, familism, and alcohol use among Latino adolescent males: Longitudinal relations. *Journal of Community Psychology*, 28(4), 443-458. [https://doi.org/10.1002/1520-6629\(200007\)28:4<443::AID-JCOP6>3.0.CO;2-A](https://doi.org/10.1002/1520-6629(200007)28:4<443::AID-JCOP6>3.0.CO;2-A)

Gonzales, N. A., Germán, M., Kim, S. Y., George, P., Fabrett, F. C., Millsap, R., et al. (2008). Mexican American adolescents' cultural orientation, externalizing behavior and academic engagement: The role of traditional cultural values. *American Journal of Community Psychology*, 41(1-2), 151-164. <https://doi.org/10.1007/s10464-007-9152-x>

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>

Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2018). *Monitoring the Future national survey results on drug use: 1975-2017: Overview, key findings on adolescent drug use*. Ann Arbor: Institute for Social Research, University of Michigan. <http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2017.pdf>

Kann, L., McManus, T., Harris, W. A., Shanklin, S. L., Flint, K. H., Queen, B., Lowry, R., Chyen, D., Whittle, L., Thornton, J., Lim, C., Bradford, D., Yamakawa, Y., Leon, M.,

- 1
2
3
4 Brener, N., & Ethier, K. A. (2018). Youth Risk Behavior Surveillance — United States,
5
6
7 2017. *MMWR Surveillance Summaries*, 67 (No. SS-8). Retrieved from
8
9 <https://www.cdc.gov/healthyyouth/data/yrbs/pdf/2017/ss6708.pdf>
10
- 11 Kapke, T. L., Grace, M. A., Gerdes, A. C., & Lawton, K. E. (2017). Latino early adolescent
12
13 mental health: Examining the impact of family functioning, familism, and global self-
14
15 worth. *Journal of Latina/o Psychology*, 5(1), 27–44. <https://doi.org/10.1037/lat0000057>
16
17
- 18 Knight, G. P., Carlo, G., Mahrer, N. E., & Davis, A. N. (2016). The socialization of culturally
19
20 related values and prosocial tendencies among Mexican American adolescents. *Child*
21
22 *Development*, 87(6), 1758-1771. <https://doi.org/10.1111/cdev.12634>
23
24
- 25 Knight, G. P., Gonzales, N. A., Saenz, D. S., Bonds, D. D., Germán, M., Deardorff, J., Roosa,
26
27 M., & Updegraff, K. A. (2010). The Mexican American cultural values scale for
28
29 adolescents and adults. *Journal of Early Adolescence*, 30(3), 444-481.
30
31
32 <https://doi.org/10.1177/0272431609338178>
33
34
- 35 Knight, G. P., Berkel, C., Umaña-Taylor, A. J., Gonzales, N. A., Ettekal, I., Jaconis, M., Boyd,
36
37 B. M. (2011). The familial socialization of culturally related values in Mexican American
38
39 families. *Journal of Marriage and Family*, 73(5), 913 – 925.
40
41
42 <https://doi.org/10.1111/j.1741-3737.2011.00856.x>
43
44
- 45 Lemay, E. P., Jr., & Ashmore, R. D. (2004). Reactions to perceived categorization by others
46
47 during the transition to college: Internalization and Self-Verification Processes. *Group*
48
49 *Processes & Intergroup Relations*, 7(2), 173–187.
50
51
52 <https://doi.org/10.1177/1368430204043722>
53
54
- 55 Lopez, M. K., Krogstad, M., & Flores, A. (2018). Key facts about young Latinos, one of the
56
57 nation’s fastest-growing populations. Fact Tank: News in Numbers, Pew Research
58
59
60
61
62
63
64
65

Center. Retrieved from <https://www.pewresearch.org/fact-tank/2018/09/13/key-facts-about-young-latinos/>

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects.

Psychological Methods, 7(1), 83–104. <https://doi.org/10.1037/1082-989x.7.1.83>

Marsiglia, F. F., Kulis, S., & Hecht, M. L. (2001). Ethnic labels and ethnic identity as predictors of drug use among middle school students in the Southwest. *Journal of Research on*

Adolescence, 11(1), 21-48. <https://doi.org/10.1111/1532-7795.00002>

Marsiglia, F. F., Kulis, S., Hecht, M. L., & Sills, S. (2004). Ethnicity and ethnic identity as predictors of drug norms and drug use among preadolescents in the US Southwest.

Substance Use and Misuse, 39(7), 1061–1094. <https://doi.org/10.1081/JA-120038030>

Marsiglia, F. F., Parsai, M., & Kulis, S., & the Southwest Interdisciplinary Research Center.

(2009). Effects of familism and family cohesion on problem behaviors among

adolescents in Mexican immigrant families in the Southwest United States. *Journal of Ethnic & Cultural Diversity in Social Work*, 18(3), 203–220.

<http://dx.doi.org/10.1080/15313200903070965>

Murry, V. M. (2019). Healthy African American families in the 21st century: Navigating opportunities and transcending adversities. *Family Relations*, 68(3), 342–357.

<https://doi.org/10.1111/fare.12363>

Muthén, L. K., & Muthén, B. O. (1998-2010). Mplus User's Guide. Sixth Edition.

Los Angeles, CA: Muthén & Muthén.

Perez-Brena, N. J., Updegraff, K. A., & Umaña-Taylor, A. J. (2015). Transmission of cultural

values among Mexican-origin parents and their adolescent and emerging adult offspring.

1
2
3
4 *Family Process*, 54(2), 232-246. <https://doi.org/10.1111/famp.12114>

5
6
7 Phinney, J. S. (1993). A three-stage model of ethnic identity development in adolescence. In M.
8
9 E. Bernal & G. P. Knight (Eds.), *Ethnic identity: Formation and transmission among*
10
11 *Hispanics and other minorities* (pp. 61-79). Albany, NY: State University of New York
12
13 Press.

14
15
16 Raffaelli, M., Carlo, G., Carranza, M., & Gonzalez-Kruger, G. (2005). Understanding Latino
17
18 children and adolescents in the mainstream: Placing culture at the center of
19
20 developmental models. In R. Larson & L. Arnett Jensen (Eds.), *New horizons in*
21
22 *developmental theory and research. New Directions for Child and Adolescent*
23
24 *Development*, No. 109 (pp. 23-32). San Francisco, CA: Jossey-Bass.
25
26
27
28 <https://doi.org/10.1002/cd.134>

29
30
31 Rivas- Drake, D., Seaton, E. K., Markstrom, C., Quintana, S., Syed, M., Lee, R. M., Adriana J.
32
33 Umaña-Taylor, A.J., Yip, T., Seaton, E. K., Quintana, S., Schwartz, S. J., French, S. &
34
35 Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial
36
37 identity in adolescence: Implications for psychosocial, academic, and health outcomes.
38
39
40
41 *Child Development*, 85(1), 40-57. <https://doi.org/10.1111/cdev.12200>

42
43 Sabogal, F., Marín, G., Otero-Sabogal, R., Marín, B. V., & Perez-Stable, E. J. (1987). Hispanic
44
45 familism and acculturation: What changes and what doesn't? *Hispanic Journal of*
46
47 *Behavioral Sciences*, 9(4), 397-412. <https://doi.org/10.1177/07399863870094003>

48
49
50 Sanchez, D., Vandewater, E. A., & Hamilton, E. R., (2019). Examining marianismo gender role
51
52 attitudes, ethnic identity, mental health, and substance use in Mexican American early
53
54 adolescent girls. *Journal of Ethnicity in Substance Abuse*, 18(2), 319-342.
55
56
57
58 <https://doi.org/10.1080/15332640.2017.1356785>

- 1
2
3
4 Smith, T. B., & Silva, L. (2011). Ethnic identity and personal well-being of people of color:
5
6 A meta-analysis. *Journal of Counseling Psychology*, 58(1), 42-60.
7
8 <https://doi.org/10.1111/famp.1211410.1037/a0021528>
9
10
11 Smokowski, P. R., & Bacallao, M. L. (2006). Acculturation and aggression in Latino
12
13 adolescents: A structural model focusing on cultural risk factors and assets. *Journal of*
14
15 *Abnormal Child Psychology*, 34(5), 659–673. <https://doi.org/10.1007/s10802-006-9049-4>
16
17
18
19 Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation
20
21 models. *Sociological Methodology*, 13, 290-312. <http://dx.doi.org/10.2307/270723>
22
23
24 Spears, R., Doosje, B., & Ellemers, N. (1999). Commitment and the context of social perception.
25
26 In N. Ellemers, R. Spears R, & B. Doosje B (Eds.), *Social identity: Context, commitment,*
27
28 *content* (pp. 59–83). Oxford: Blackwell.
29
30
31 Super, C. M., & Harkness, S. (1986). The developmental niche: A conceptualization at the
32
33 interface of child and culture. *International Journal of Behavioral Development*, 9(4),
34
35 545–569. <https://doi.org/10.1177/016502548600900409>
36
37
38 Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin,
39
40 & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37).
41
42 Monterey, CA: Brooks/Cole.
43
44
45 Taylor, A. B., MacKinnon, D. P., & Tein, J.-Y. (2008). Tests of the three-path mediated effect.
46
47 *Organizational Research Methods*, 11(2), 241–269.
48
49 <https://doi.org/10.1177/1094428107300344>
50
51
52
53 Telzer, E. H., Gonzales, N., & Fuligni, A. J. (2014). Family obligation values and family
54
55 assistance behaviors: Protective and risk factors for Mexican-American adolescents’
56
57 substance use. *Journal of Youth and Adolescence*, 43(2), 270 –283.
58
59
60
61
62
63
64
65

<http://dx.doi.org/10.1007/s10964-013-9941-5>

Trzesniewski, K. H., & Donnellan, M. B. (2010). Rethinking “Generation Me” a study of cohort effects from 1976–2006. *Perspectives on Psychological Science*, 5(1), 58-75.

<https://doi.org/10.1177/1745691609356789>

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987).

Rediscovering the social group: A self-categorization theory. Basil: Blackwell.

Umaña-Taylor, A. J., Alfaro, E. C., Bámaca, M. Y., & Guimond, A. B. (2009). The central role of family socialization in Latino adolescents’ cultural orientation. *Journal of Marriage*

and Family, 71(1), 46–60. <https://doi.org/10.1111/j.1741-3737.2008.00579.x>

Umaña-Taylor, A. J., Bhanot, R., & Shin, N. (2006). Ethnic identity formation during adolescence: The critical role of families. *Journal of Family Issues*, 27(3), 390-414.

<https://doi.org/10.1177/0192513X05282960>

Umaña-Taylor, A. J., & Fine, M. A. (2004). Examining ethnic identity among Mexican-origin adolescents living in the United States. *Hispanic Journal of Behavioral Sciences*, 26(1),

36-59. <https://doi.org/10.1177/0739986303262143>

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(2), 140–

157. <https://doi.org/10.1007/s10964-010-9511-z>

Umaña-Taylor, A. J., Yazedjian, A., & Bámaca-Gómez, M. (2004). Developing the Ethnic Identity Scale using Eriksonian and social identity perspectives. *Identity: An*

International Journal of Theory and Research, 4(1), 9-38.

http://dx.doi.org/10.1207/S1532706XID0401_2

Weinberger, D.A. (1991). Social-emotional adjustment in older children and adults: I.

Psychometric properties of the Weinberger Adjustment Inventory. Unpublished manuscript, Case Western Reserve University.

Wheeler, L. A., Zeiders, K. H., Updegraff, K. A., Umaña-Taylor, A. J., Rodríguez de Jesús, S.

A., & Perez-Brena, N. J. (2017). Mexican-origin youth's risk behavior from adolescence to young adulthood: The role of familism values. *Developmental Psychology*, 53(1), 126–137. <https://doi.org/10.1037/dev0000251>

White, R. M. B., Nair, R. L., & Bradley, R. H. (2018). Theorizing the benefits and costs of

adaptive cultures for development. *American Psychologist*, 73(6), 727 -739.

<http://dx.doi.org/10.1037/amp0000237>

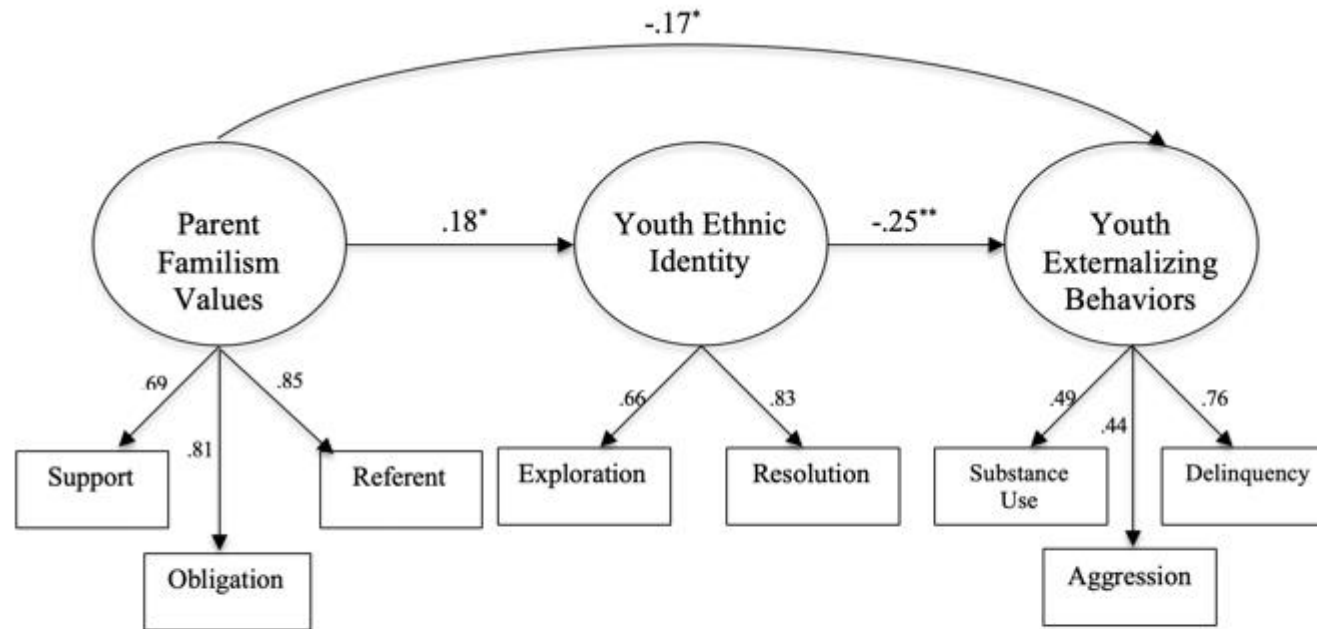
Table 1.

Correlations Among Main Study Variables

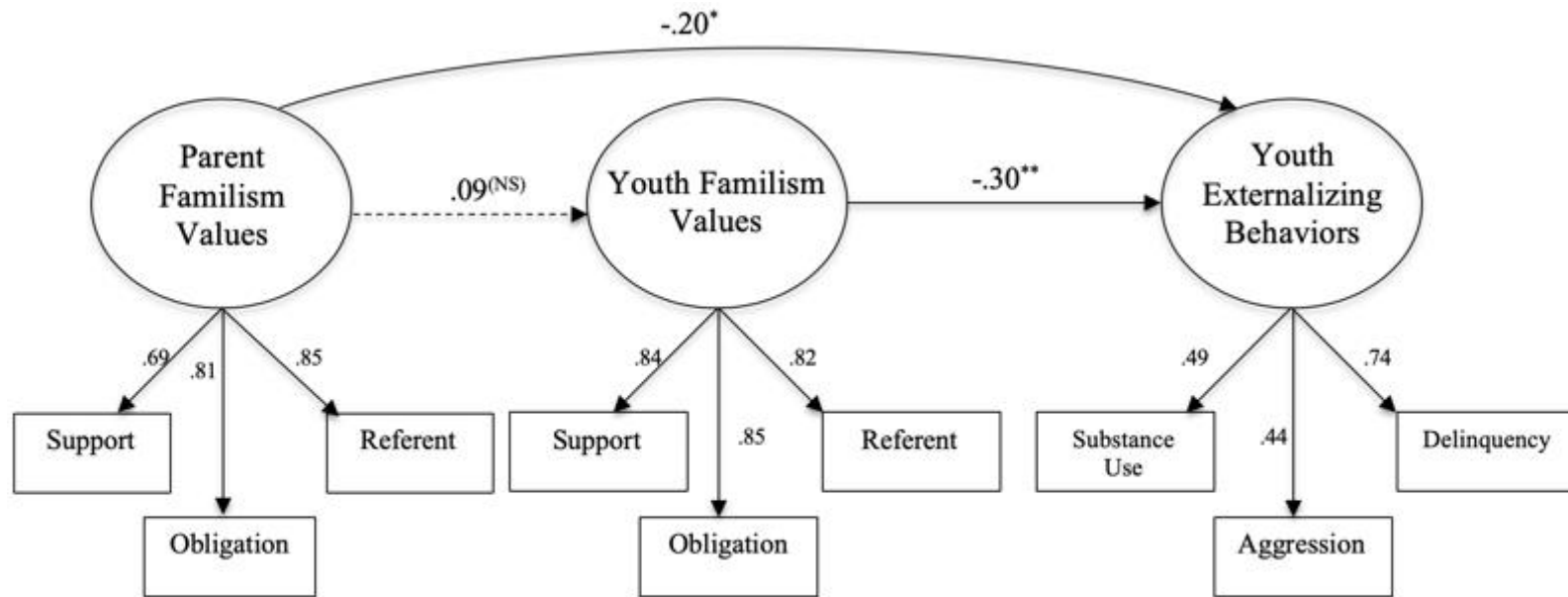
	1	2	3	4	5	6
1. Parent familism values	-					
2. Youth ethnic identity	.26**	-				
3. Youth familism values	.11	.65**	-			
4. Youth externalizing behaviors	-.25**	-.37**	-.42**	-		
5. Youth gender	-.01	.08	.01	-.08	-	
6. Parent high school graduation	-.20**	.001	.02	-.07	-.14*	-

Note. * $p < .05$, ** $p < .01$. Youth gender (1 = male; 2 = female); Parent high school graduation (0 = did not graduate; 1 = graduated from high school).

Figure 1a and 1b. Results of Single-Mediator Models

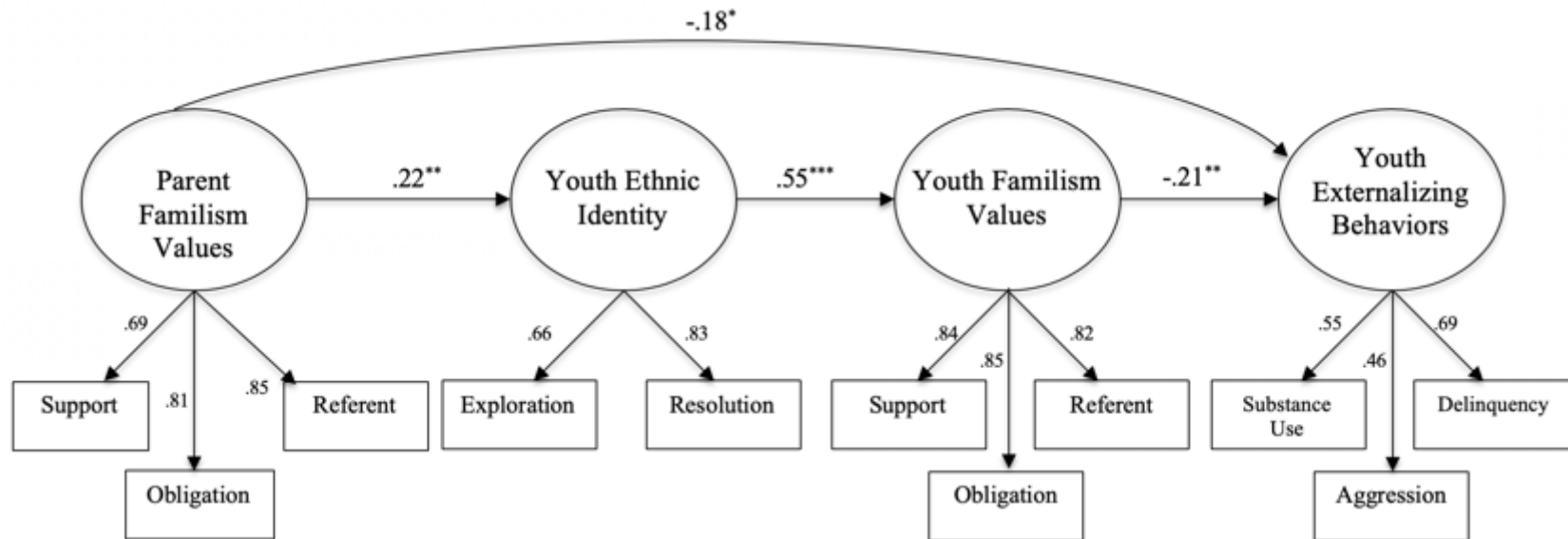


Note. $\chi^2(31) = 42.02, p < .05$, RMSEA = .04, CFI = .98, SRMR = .05. Only significant paths are depicted. Controlling for youth gender and parental high school graduation (yes or no). * $p < .05$; ** $p < .01$; *** $p < .001$.



Note. $\chi^2(40) = 61.86, p < .05$, RMSEA = .05, CFI = .97, SRMR = .04. Controlling for youth gender and parental high school graduation (yes or no). * $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 2: Combined Model Results



Note. $\chi^2(58) = 92.07, p < .05$, RMSEA = .05, CFI = .96, SRMR = .05. Only significant paths are depicted. Controlling for youth gender and parental high school graduation (yes or no). $^*p < .05$; $^{**}p < .01$; $^{***}p < .001$.



Click here to access/download

Supplemental Material

SUPPLEMENTAL MATERIALS_alternative model
figure.docx