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Familial Acculturative Stress and Adolescent Internalizing and Externalizing Behaviors in Latinx Immigrant Families of the Southwest

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Abstract

Background: Experiencing acculturative stress burdens Latinx families in a variety of negative and deleterious ways. Using the Family Stress Model, this study aims to explore the patterns and experiences of acculturative stress in Latinx families, and how these experiences related to Latinx adolescent internalizing and externalizing behaviors.

Method: Data came from baseline reports of three cohorts of parent-youth dyads ($n = 532$) participating in a longitudinal randomized control effectiveness trial testing a parenting intervention in southwestern U.S. area.

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Results: Findings indicate that youth exhibited more depressive symptomology when both parent and child reported higher acculturative stress. While youths' anti-social behaviors were only associated with their own acculturative stress and not their parents' acculturative stress levels.

Discussion: This study advances new knowledge about the relationship between acculturative stress and youth behaviors, and provides recommendations for developing future interventions with Latinx youth to prevent the onset of internalizing and externalizing behaviors.

Keywords

Acculturative Stress; depressive symptom; anti-social behaviors; Latinx immigrant family; youth

INTRODUCTION

Adolescence is a stage of challenges for youth and their parents. During adolescence a great number of changes occur at different levels, involving different processes [1,2], and all these variations affect the family system. Parents and adolescents have to redefine their relationships to maintain the harmony of the family system [3]. Increased parent-child conflict can arise as adolescents transition to wanting more autonomy and independence [4,5] and to focusing more on relationships with friends and romantic partners [6]. How families manage these conflicts can partially determine the apparent or actual increase in confrontation between parents and adolescents [7] and the development of emotional and behavioral problems in adolescents [8]. In addition, stressful events can appease or exacerbate these outcomes in adolescents. Specifically for youth and parents with a Latino heritage who moved to the United States, normative stressful experiences during adolescence can be intensified.

Acculturative stress and related outcomes in Latinx families

Latinx families may face additional stressors during their children's adolescence period if dealing with this developmental period occurs as the family acculturates to the United States. The stressful process of acculturation can lead to immigrant families feeling socially excluded and isolated, encountering discrepant norms and values among their members, and facing callous anti-immigrant or anti-Latinx sentiments [9,10].

In general, experiencing acculturative stress burdens Latinx families in a variety of negative and deleterious ways. For Latinx adolescents, acculturative stress has been linked to externalizing behaviors (e.g., delinquency, aggression, rule breaking, conduct problems, smoking cigarettes, and alcohol use), as well as internalizing behaviors (e.g., depression and anxiety; [11,12]). For Latinx adults, experiencing acculturative stress can take a physical and psychological toll, as well. Higher levels of acculturative stress have been associated with increased sexual risk-taking, depression, anxiety, and alcohol use [13,14].

Theoretical Framework

The Family Stress Model (FSM) has been applied to explain the connection between acculturative stress and poor outcomes in adolescents, like depression and risky behaviors [15]. According to the FSM, parental stress, in this case acculturative stress, leads to

increases in parental depression and psychological distress and, in turn, reduces parent-child communication, escalates family conflict, and diminishes positive parenting practices such as parental monitoring [16]. These weakened familial processes, consequently, contribute to maladaptive behaviors in adolescents, including internalizing symptoms, externalizing problems, and substance use disorders [8,15].

Research in the Latin context employing FSM has supported the link between parental acculturation stress and internalizing and externalizing behaviors in adolescents [8,17]. Within Latinx families, experiences of parental acculturative stress have been found to jeopardize family functioning, decrease parental involvement, and weaken family cohesion [17,18]. Among Latinx parent-adolescent dyads living in Miami and Los Angeles, parents who experienced acculturative stress reported lower family functioning. The decrease in family functioning was linked to an increase in substance use among adolescents [19].

The Differential Impacts of Parent and Youth Experiences on Adolescent Outcomes

Dyadic research regarding the effect of Latinx parents' and adolescents' experiences of acculturative stress on adolescent maladaptive behaviors, is limited and results are inconclusive when both parents' and adolescents' stressful experiences are included in statistical models. Research on Latinx adolescent-parent dyads found that it was the adolescents and not their parents' experiences of acculturative stress that predicted poor family functioning [8]. Over time, those families with lower family functioning had adolescents with more externalizing and internalizing behaviors.

Research with Latinx families has also explored the effects of disparate levels of acculturation between parents and children, also termed *acculturation gaps*, on adolescent mental health and risk behaviors. Some studies found that discrepancies in the cultural orientation –native versus host culture– between parents and children is related to greater levels of family conflict, as well as higher internalizing and externalizing behaviors in youth [20]. Parents and children tend to appraise their commitment to family or *familism* differently. After immigration, parents felt that the level of *familism* had eroded, while adolescents felt that *familism* was stronger after migration [21]. These findings suggest that acculturation processes may have differential interpretations and impacts on Latinx adolescent mental health and risk behaviors depending on who in the family – parent or youth – is experiencing the stress. Therefore, these specific acculturation processes should be considered as they can influence the general feeling of acculturative stress in Latinx families. Combining information from different family members can help us to understand more holistically, how acculturative familial stress experiences differentially affect adolescent outcomes.

The current study

This study reports the patterns and experiences of acculturative stress in Latinx families (dyads of parents and adolescents), and how these experiences contribute to, exacerbate, or compound depressive symptomology and antisocial behavior for Latinx adolescents living in the Southwestern US. From a FSM perspective [15], we hypothesize that higher levels of acculturative stress of Latinx parents and youth are associated with higher levels of youths'

depressive symptomology and antisocial behaviors, especially when both, parents and adolescents, experience high levels of acculturative stress.

METHODS

Participants

The current analysis was conducted using baseline data of three cohorts of parent-youth dyads participating in a randomized control effectiveness trial of a parenting intervention implemented in a southwestern U.S. metropolitan area [22]. The eligible sample was drawn from middle schools receiving Title I funding (n=19) that had a large number (>100) and percentage (>60%) of Latinx 7th grade students. The final sample size is based on those parents and youth who both completed a pre-intervention baseline survey to create a matched dyad (n=532 dyads).

Procedure

Consenting Procedures.—Following approved human subject protocols (by Arizona State University) and in collaboration with a community partner, trained study personnel recruited parents through telephone calls and flyers at the adolescents' schools. At the beginning of the first parenting program workshop, parents provided consent for themselves and their child. The consent emphasized the voluntary and confidential nature of participation, including survey administration. If consented, adolescents then assented. The overall consent rate for the study was 9% for youth and 11% for parents as calculated from the total number of 7th grade students in the 19 schools.

Survey Completion.—Baseline data were collected from youth and parents in the fall (September) of the student's 7th grade school year. The questionnaires (available in English and Spanish) took between 30-45 minutes to complete and collected information on sociodemographic characteristics and substance use behaviors, as well as substance use norms, expectancies, resistance skills, and intentions.

Measures

Acculturative stress.—Using the Multicultural Acculturative Stress Inventory [23], adolescents' and parents' experiences with acculturative stress in the past 3 months were independently assessed. The scale measures pressure to acculturation (e.g., "It bothers me when people pressure me to assimilate to the American ways of doing things") and pressure against acculturation (e.g., "I feel uncomfortable because my family does not know Mexican/Latino ways of doing things."). Respondents reported on a 6-item Likert scale the stressfulness of each experience, ranging from 0 = No, did not happen to me to 5=Extremely stressful. This 11-item scale had good reliability for both parents and children (Parents: $\alpha=.854$; Children: $\alpha=.846$). Dyadic information was then combined into four groups based upon who experienced acculturation stress: (1) Neither parent nor adolescent; (2) Both parent and adolescent; (3) Only parent; and (4) Only adolescent.

Adolescent internalizing behavior.—**Depressive symptomology** was measured using the Center for Epidemiologic Studies Depression Scale (CES-D) 12-item version ([24]; e.g.,

“I had trouble keeping my mind on what I was doing”, “My sleep was restless”, “I had crying spells”). All items ranged from 0= rarely or none of the time to 3 = rarely or none of the time. These 12 questions created a mean scale with higher scores indicating higher level of depression symptoms ($\alpha=.71$).

Adolescent externalizing behavior.—Anti-social behavior was measured by 23 different types of risk behaviors such as asking adolescents whether they “got drunk or high”, “been in gang fights”, or “stole something worth less than \$50” during past year (1= never to 4 = more than 10 times; [25,26]). We created a mean scale on these 23 items, with higher scores indicating higher level of having anti-social behaviors. This scale had a high internal consistency ($\alpha=.91$).

Covariates.—We also controlled covariates at both adolescent and parent levels. At adolescent level, we controlled for *age* (continuous), *gender* (1 = male; 0 = female), and cultural orientation toward the Mexican culture and the Anglo culture independently [27]. At the parental and household level, we controlled parents’ demographic characteristics, including *gender* (female =1; male =0), *age* (continuous), *education level* (coded as three dummy variables: less than high school [reference group; 0/1], high school [0/1], and college or above [0/1]) and *household size* (continuous). We also controlled the frequency of conflicts within the parent-adolescent relationship through a 15-item measure of parent-adolescent conflict that assesses the frequency of conflicts within the parent-adolescent relationship across several domains[28], and the extent to which the parent is involved in the child’s life [29].

Analytical Approaches

First, we conducted descriptive analysis to yield the overall sample distributions of all variables. Second, we ran hierarchical regression models of the two outcome variables on the variables of interests, the patterns of experiences with acculturative stress. The simple OLS regression models were conducted to regress the two adolescents’ behavioral outcomes only on the variable of interests. Then, the full OLS regression models with all the covariates were included to examine whether the relationships between Latinx adolescent depressive symptoms and anti-social behaviors and the patterns of acculturative stress in their families were modified by the demographic predictors at the adolescent, and parental and household levels. All the analyses were performed using Stata15.0.

RESULTS

Participant Characteristics

Table 1 shows the sample descriptive statistics for all the variables. Results showed that the mean adolescent depression scale score was 0.84 ($SD = 0.46$; range from 0 to 3), and the mean anti-social behavior scale score was 1.26 ($SD = 0.33$; range from 1 to 3.29). As shown in Table 1, slightly more than half (55%) of the Latinx families’ had only adolescents experiencing acculturation stress, 21% of the families had neither parents nor adolescents experiencing acculturation stress, 18% of the families had both parents and adolescents

experiencing acculturation stress, and only 6% of the families had only parents experiencing acculturation stress.

Table 1 also shows that the majority of the participating parents were female (85%), and the mean age of the parents was about 39 years. Nearly two third (62%) of the parents were married. Slightly more than one-third (36%) of the parents' education level was less than high school, 38% reported a high school degree, and 26% reported a degree higher than high school. The average household size of these Latinx families was about five persons, and the mean family conflict scale score was 2.56, and the average parental involvement scale score was 3.69. At the adolescent level, 53% of the adolescents were males, with a mean age of 15.79 years old ($SD = 1.30$; range from 14 to 19 years). The mean scores of the adolescents' Mexican oriented scale was 3.61, whereas Anglo oriented scale was 3.97.

Relationships between Familial Acculturative Stress and Adolescent Internalizing and Externalizing Behaviors

Shown in Table 2 column 1, the simple regression model indicates that compared to families with no acculturative stress, experiences of acculturative stress in any combination are significantly associated with higher adolescent depressive symptomology (Parents and adolescents: $B = 0.49$; Parents only: $B = 0.11$; Youth only: $B = 0.21$; all p values $< .01$). When controlling for the covariates, the full model (column 2) showed: a) significantly higher depressive symptomology reported by adolescents from families that had both parents and adolescents experiencing acculturative stress ($B = .35$, $p < .05$); b) families that had only parents experiencing acculturative stress ($B = .15$, $p < .05$); and c) families that had only adolescents experiencing acculturative stress ($B = .29$, $p < .001$), compare with those families where neither family member experienced acculturative stress. In addition, we found that for every one-unit that family conflict scale scores increase, the level of adolescents' depressive symptomology increases by 0.10 ($p < .001$). For every one unit increases on parental involvement in child's life scale score, the level of adolescents' depressive symptomology decreases by 0.16 ($p < .001$).

For externalizing behaviors, however, only adolescents' singular stressful experiences were significantly associated with increases in anti-social behaviors ($B = 0.20$ for simple model, $p < .001$; and $B = 0.12$ for full model, $p < .05$). The presence of parental acculturative stress was not significantly associated with anti-social behaviors among adolescents, as compared to those families where neither family member experienced acculturative stress. We also found that for every one unit increase in the family conflict scale score, the level of adolescents' anti-social behavior scale scores increased by 0.16 ($p < .001$). For every one unit increases in the parental involvement in child's life scale score, the level of adolescents' anti-social behavior scale scores increased by 0.09 ($p < .001$).

DISCUSSION

The present study confirms existing findings [8] and at the same time, it advances new knowledge about the relationship between acculturative stress on the internalized and externalized behaviors of Latinx youth of the Southwest. From a FSM perspective [15], we hypothesized that the acculturative stress of Latinx parents and youth were associated with

the youths' internalizing and externalizing behaviors. These findings partially support the hypothesis. In the case of internalizing behaviors, the findings support the hypothesis that youth had more depressive symptomology (internalizing behaviors) when both parent and child reported higher acculturative stress. While youths' anti-social behaviors (externalizing behaviors) were only associated with the youth acculturative stress.

A newer extension to FSM examines resiliency factors that can offset or counteract stress and promote wellbeing in adolescents [16]. Because not all Latinx families experience or report acculturative stress or have deleterious outcomes because of these stressors [30], it is important to examine how Latinx families can be resilient. For example, in the face of economic stress, when Latina mothers remained optimistic, the connection between stressors and parental internalizing symptoms weakens and becomes non-significant [31]. Another example of resiliency is the case of Mexican American college students who reported higher levels of engagement in prosocial activities while experiencing acculturative stress [32].

The concept of *familism* is another main cultural factor that can protect parents and youth from deleterious outcomes. *Familism* is the strong attachment, loyalty, and closeness to family and it emphasizes the importance of contributing to the well-being of family members [33]. Familism can mitigate the effects of stress [18]. Latinx families who maintain a high level of familism also present high levels of parental warmth even in the presence of high parental stressors [34]. In order to cope with acculturative stressors, parents may rely heavily on familism, and in turn, familial cohesion and parental practices are enhanced rather than diminished. Reliance on familism appears to mediate the relationship between parental acculturative stress and internalizing and externalizing problem behaviors in Latinx adolescents [35].

There is no clear pathway on how adolescents' own experiences of acculturative stress – differentially or additively to their parents' experiences – may contribute to their own depression and anti-social behaviors. In general, youth experience and report higher levels of stress than their parents. Adolescents may not disclose these stressful experiences to their parents, which limits the parents' agency to help their children cope with those stressors [36]. Adolescents' disclosure of information to their parents, rather than parental monitoring, often explains internalizing and externalizing behaviors in adolescents [37,38]. This suggests that adolescents' own stressful experiences are also contributing to family dynamics, parent-child communication, and adolescent outcomes. Parents and children tend to appraise their commitment to family or *familism* differently. After immigration, parents felt that the level of *familism* had eroded, while adolescents felt that *familism* was stronger [21].

Limitations

This cross-sectional study only analyzed baseline reports of youth and their parents. We cannot arrive to any conclusions about causality. For example, in the case of youths' externalizing behaviors, the identified lack of an association with parents' acculturative stress merits further longitudinal research before discarding any potential cause-effect relationship. All data were self-reported, potentially raising concerns about social-desirability and reporting biases. There are also some limitations in terms of the

generalizability of the findings. The parents who accepted to participate in the study may not be representative of all parents. They were a self-selected group. In some cases, they joined because they were seeking help on how to manage their children's behavior. While other parents joined the program because they were interested in strengthening their parenting skills in general but they were not facing any specific challenges at home.

New Contribution to the Literature and Implications

The study generated confirmatory and new knowledge about a significant and growing population of youth. Immigrant parents appear to have lower levels of acculturative stress than their children do. In turn, the youths' own acculturative stress is the one associated with their externalizing and internalizing behaviors. Interventions supporting children from immigrant families will increase their efficacy by incorporating these findings. The focus needs to be on the youths' acculturative stress. Young people are in constant contact with the two cultures and languages at home and community of origin and at school and mainstream society. They need support as they navigate these different worlds and experience different stressors from both.

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Table 1.

Sample Statistics

Variables	Mean	SD	Min	Max
<i>Dependent Variables</i>				
Depressive symptomology	0.84	0.46	0	3
	20			
Anti-social behaviors	1.26	0.33	1	3.29
<i>Variable of Interests</i>				
<i>Acculturation Stress Pattern</i>				
Both	0.18	0.39	0	1
Parents only	0.06	0.24	0	1
Youth only	0.55	0.50	0	1
Neither	0.21	0.40	0	1
<i>Covariates</i>				
<u>Parental level</u>				
Female	0.85	0.36	0	1
Age	39.14	6.84	20.32	72.13
Married	0.62	0.49	0	1
<i>Education levels</i>				
Less than high school	0.36	0.48	0	1
High school	0.38	0.48	0	1
Higher than high school	0.26	0.44	0	1
Household size	5.21	1.61	1	15
Family conflict scale	2.56	0.78	1	5.47
Parental involvement scale	3.69	0.77	1.4	5
<u>Adolescent level</u>				
Male	0.53	0.50	0	1
Age	15.79	1.30	14	19
Mexican oriented scale	3.61	0.98	1	5
Anglo Oriented Scale	3.97	0.63	1.67	5

Table 2.

Regression results of Familial Acculturative Stress and Adolescent Internalizing and Externalizing Behaviors

Variables	(1)	(2)	(3)	(4)
	Depressive symptomology		Anti-social Behaviors	
Acculturation Stress Patterns (ref. = neither)				
Both	0.49 *** [0.26 - 0.71]	0.35 * [0.07 - 0.64]	0.07 [-0.09 - 0.24]	0.02 [-0.19 - 0.23]
Parents only	0.15 ** [0.06 - 0.25]	0.15 * [0.03 - 0.27]	0.04 [-0.03 - 0.11]	0.04 [-0.05 - 0.13]
Youth only	0.39 *** [0.25 - 0.53]	0.29 *** [0.15 - 0.43]	0.20 *** [0.10 - 0.30]	0.12 * [0.02 - 0.23]
<i>Parental level</i>				
Female		-0.16 * [-0.30 - -0.01]		-0.09 [-0.19 - 0.02]
Age		-0.00 [-0.01 - 0.00]		-0.00 [-0.01 - 0.00]
Married		-0.05 [-0.14 - 0.03]		-0.04 [-0.10 - 0.02]
Education levels (ref. = > high school)				
< high school		-0.05 [-0.15 - 0.06]		-0.04 [-0.11 - 0.04]
High school		-0.02 [-0.13 - 0.08]		0.01 [-0.07 - 0.08]
Household size		0.01 [-0.02 - 0.03]		0.01 [-0.01 - 0.03]
Family conflict scale		0.10 *** [0.05 - 0.15]		0.16 *** [0.12 - 0.20]
Parental involvement scale		-0.16 *** [-0.21 - -0.10]		-0.09 *** [-0.14 - -0.05]
<i>Youth level</i>				
Male		-0.14 *** [-0.22 - -0.06]		0.03 [-0.03 - 0.09]
Age		0.02 [-0.02 - 0.07]		-0.03 * [-0.06 - -0.00]
Mexican Oriented Scale		-0.02 [-0.06 - 0.03]		0.01 [-0.03 - 0.04]
Anglo Oriented Scale		0.01 [-0.06 - 0.08]		-0.02 [-0.07 - 0.03]
Constant	0.76 *** [0.71 - 0.81]	1.04 * [0.11 - 1.96]	1.23 *** [1.20 - 1.26]	1.90 *** [1.23 - 2.57]
Observations	519	432	519	432
R-squared	0.09	0.20	0.03	0.23

Notes: Standard errors in parentheses

p<0.001**
p<0.01*
p<0.05

⁺
p<0.1

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