

EXAMINING THE LINKS BETWEEN LATINO ADOLESCENTS' ACTIVE COPING
STRATEGIES, SCHOOL BELONGING, AND SCHOOL PERFORMANCE

by

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I. INTRODUCTION

Latino adolescents make up the majority population enrolled in public schools in states that border Mexico, such as in Texas (51%) (National Center for Education Statistics [NCES], 2013). However, past research examining the school performance of students of Latin American descent in the U.S. has demonstrated that these students exhibit lower levels of school performance (i.e., grades and test scores) compared to students of European descent (Sherman et. al., 2013; NCES, 2015). For instance, the percentage of Latino students that scored at or above a basic level of proficiency on the eighth grade 2015 Reading Assessment was smaller (66%) than that of their White counterparts (85%) (NCES, 2015). This is concerning as poor school performance has been linked to maladjustment (e.g., depressive symptoms) in Latino adolescents (Zychinski & Polo, 2012).

To understand the factors that might contribute to these concerning statistics, it is important to examine the context in which Latino youth develop. Many Latino youth develop in a context in which they experience unique stressors (Gonzales & Kim, 1997), such as racism, discrimination, and various cultural adaption stressors (e.g., language difficulties; Dawson & Williams, 2008). For example, acculturative stress, or stress due to the cultural adaptation process (Stein, Gonzalez, & Huq, 2012; Berry & Annis, 1974), is a risk factor that has been associated with poor academic adjustment (i.e., school belonging and school performance) in Latino youth (Roche & Kuperminc, 2012). Whereas it might be ideal to target the reduction of such stressors, it might not be feasible as some stressors (e.g., racism) are too widespread and integrated within societies' social systems (Wells, Merritt, & Briggs, 2009). Thus, it may be more realistic to identify

mechanisms that might disrupt the negative effects of stressors (e.g., racism, discrimination) to enhance the development of Latino youth. Qualitative work (Brietzke & Perrira, 2017) and stress and coping theory (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986) suggest that coping strategies (e.g., problem-focused, emotion-focused) may be an avenue to counteracting stressors (e.g., racism, adaptation stressors). As such, adaptive coping strategies (e.g., problem-focused; Thompson, et al., 2010) may be related to better academic adjustment. Despite this robust theoretical framework, surprisingly, these links remain understudied in adolescent literature; further, there is no published empirical work that examines the direct links from active coping strategies to school belonging and school performance among Latino adolescents. Thus, the current study represents a contribution to the literature as it will examine these links; specifically, the purpose of the current study is to examine the relation between active coping strategies and school belonging and school performance among Latino adolescents (see figure 1).

Theoretical Background

The integrative model for the study of developmental competencies in minority children (Garcia-Coll et al., 1996) suggests that these youth experience unique negative stressors (e.g., ethnic/racial discrimination, Zeiders, Umaña-Taylor, & Derlan, 2013; acculturation stressors, Stein et al., 2012) that create inhibiting environments, which play a harmful role in the development of ethnic/racial minority youth. Furthermore, Garcia-Coll and colleagues (1996) purport that environments can be both inhibiting and promoting; in terms of inhibiting environments, this may occur when aspects of youths' culture conflict with environmental ideologies (Garcia-Coll et al., 1996). For example,

schools can have an English language only policy, influencing adolescents' ability to learn and develop and may create a sense of alienation, lowering feelings of school belonging (Garcia-Coll et al.,1996).

Garcia Coll and colleagues' (1996) integrative model further highlights that youth develop adaptive characteristics in response to negative experiences encountered in inhibiting environments. Such negative experiences (e.g., ethnic/racial discrimination) may be deemed as taxing or exceeding an individual's abilities to maintain control; in other words, these experiences may be deemed as stressful (Lazarus & Folkman, 1984). An adaptive characteristic, particularly salient in the context of stress, is coping (Lazarus & Folkman, 1984). Coping is defined as any thoughts and/or behaviors an individual enacts to manage the underlying problem and/or to regulate their emotional responses during events they deem to be stressful; thus, coping acts to mediate the relation between stressful experiences and outcomes associated with such experiences (Pearlin & Schooler, 1978; Lazarus & Folkman, 1984). Theoretical models of stress and coping have identified various types of coping such as problem-focused (distinct aspects include active coping, planning, suppression of competing activities, restraint coping, seeking of instrumental social support; Carver, Scheier, & Weintraub, 1989; Lazarus & Folkman, 1984) and emotion-focused (distinct aspects include seeking of emotional social support, positive reinterpretation, acceptance, denial, turning to religion; Carver et al.,1989; Lazarus & Folkman, 1984). Further, these models suggest that such coping responses can have a direct positive impact on youth adjustment including components of academic adjustment (Gonzales & Kim, 1997). These types of coping strategies may allow youth to feel in control, promoting positive outcomes despite their stressful encounters (e.g.,

racism, discrimination) in the school environment (Crockett, et al., 2007). This study focuses on active coping, which is defined as the process of taking active steps to find resolutions to stressful experiences or to alter their effect (Carver et al., 1989). This strategy of coping (active coping) can take many forms, including cognitive decision making, direct problem solving, seeking understanding, and positive cognitive restructuring (Sandler, Tein, & West, 1994).

Empirical findings demonstrate Latino adolescents report experiencing language conflicts, perceived discrimination, and perceptions of a closed society (Dawson & Williams, 2008). Such acculturative stressors have been shown to hinder school performance (Santiago, Gudiño, Baweja, & Nadeem, 2014) and school belonging (Roche & Kuperminc, 2012) in Latino adolescents. However, adolescents are not passive recipients of negative environmental influences; as such, theory suggests that youth will develop adaptive characteristics such as coping strategies in response to negative environmental experiences (e.g., ethnic/racial discrimination) (Garcia-Coll et al., 1996). Hence, it is important to understand the skills and strategies, (i.e., coping strategies), that Latino youth use to counteract the negative effects of an inhibiting environment to help youth achieve healthy levels of school belonging and school performance.

Active Coping Strategies

There are several reasons to justify the focus on active coping. First, active coping may be particularly salient for adolescents' functioning in the school context. For example, a study on Canadian seventh grade students (51% White, 14% South Asian) found that adolescents more often employed active coping strategies in the school context over other coping strategies (i.e., withdrawal) when encountering stressors (i.e., peer

conflict, peer rejections, getting into trouble, concerns with friend's welfare; Bowker, Bukowski, Hymel, & Sippola, 2000). Second, active coping strategies are tangible and malleable skills. A meta-analysis of 19 publications found that one method through which stress management programs were effective in reducing stress was strengthening coping skills (e.g., problem-focused, social-emotional coping) (Kraag, Zeegers, Kok, Hosman, & Abu-Saad, 2006). Third, the current study is the first to examine the association between active coping strategies and school belonging in the Latino adolescent population. This is unexpected given the high levels of stress experienced by this population (Cervantes, Padilla, Napper, & Goldbach, 2013). Thus, the current study expands on the scant existing literature by examining the role of coping strategies on school performance *and* school belonging in Latino youth. Guided by the integrative model (Garcia Coll et al., 1996) and stress and coping theory (Lazarus & Folkman, 1984), this study examines active coping strategies as a key adaptive characteristic that, when employed, may relate to better school outcomes.

Active Coping and School Belonging. A review of the empirical literature supports the theoretical notions that active coping functions as a key adaptive characteristic for youth that is positively related to both school belonging and school performance. Turning first to research focused on links between coping and school belonging, research has found that coping counteracted the various stressor encounters in the school context by fostering feelings of belonging and connectedness to the school environment (Reschly, Huebner, Appleton, & Antaramian, 2008). When youth use active coping strategies, they engage in more problem-focused thought processes (Bowker et al., 2000), which may encourage developing strong relationships with teachers and

counselors. For example, a study using a mixed-ethnic (47.8% Caucasian, 41.2% African American) sample of seventh to tenth grade students, found that active coping strategies (self-reliance/problem solving) were positively related to engagement in school activities and more supportive teacher-student relationships (Reschly et al., 2008). Additionally, a longitudinal study on 8th grade Australian students found that active coping (i.e., working at solving problems) related to higher levels of school connectedness (Frydenberg, Care, Freeman, & Chan, 2009), whereas non-productive (i.e., worrying about consequences) coping related to lower levels of school connectedness (Frydenberg et al., 2009). The literature provides some evidence supporting the link between coping and school belonging; however, to my knowledge, none of these studies included Latino adolescents. Thus, the current study addresses this gap in the literature by examining the link between active coping strategies and school belonging in a Latino adolescent sample.

Active Coping and School Performance. The extant literature also provides some evidence for the positive relationship between active coping and youths' school performance (e.g., grades/GPA). Lazarus and Folkman (1984), purports that the ability of youth to cope effectively allows them to resolve problems and reduce distress, making it more likely that they will be able to achieve their educational goals. However, the little work available has examined coping more broadly. In the qualitative context, adolescents' self-identified coping strategies (e.g., trying to fit in) were related to upward trajectories (i.e., graduating high school) in Latino adolescents (Brietzke & Perreira, 2017). Similarly, a mixed-methods (i.e., quantitative and qualitative) study of White (47%) and Latino (53%) adolescents found that emotion-focused coping strategies, such as venting feelings, positively related to teacher reports of academic achievement (i.e.,

scholastic competence) (Hawley, Chavez, & St. Romain, 2017). Additionally, there is limited quantitative work that links active coping specifically to school performance. A study conducted in Australia found that high levels of active coping related to greater academic achievement (i.e., higher Math and English grades) for eighth and tenth graders (Boon, 2011). There is empirical evidence to support a direct positive link between general coping and academic achievement (e.g., scholastic competence) in the Latino adolescent population (Brietzke & Perrira, 2017; Hawley et al., 2017). However, there has yet to be a study that examines active coping specifically as a predictor of school performance (i.e., grades) in the Latino adolescent population. Thus, the current study will expand on this preliminary work (Brietzke & Perrira, 2017; Hawley et al., 2017), by examining the link between active coping strategies and school performance in Latino adolescents.

Confounds on the Relations between Active Coping and School Belonging, and between Active Coping and School Performance

It is important to note that school belonging, and school performance may vary by nativity, gender, and SES. First, for school belonging, empirical and theoretical work would suggest gender, SES, and nativity are important. Past work on Latino adolescents' school belonging found that ninth grade females had higher levels of school belonging than their male counterparts (Neel & Fuligni, 2013). A study with a mixed-ethnic minority sample (i.e., African American, Hispanic American, and Asian American) found a direct link between parent education (i.e., attended, but not graduated from college and parents graduated from college) and school belonging, such that higher parental education predicted higher levels of school belonging (Pittman & Richmond, 2007). No

empirical literature has examined the relation between nativity and school belonging, but theory would suggest it is important. For example, given the shifting politics and immigration policies (Wray-Lake et al., 2018), it is likely that foreign-born youth might feel a lower sense of belonging at school than native-born youth. Second, in terms of school performance, an investigation found that indeed GPA in U.S.-born Latino students was lower than GPAs of immigrant Latino students (Suárez-Orozco, Rhodes, & Milburn, 2009). Gender has also been associated with better academic performance such that female adolescents do better than their male counterparts (Santiago et al., 2014; Umaña-Taylor et al., 2012; Alfaro et al., 2009). Also, parent education level related to youth academic achievement, such that higher levels of parent education related to better academic achievement (Martinez & Eddy, 2004). As there is theoretical and empirical work suggesting that school belonging, and school performance may differ for varying levels of nativity, gender, and SES, these individual and social characteristics were included in the current study as covariates.

Study Summary

Latinos are the nation's second fastest growing racial/ethnic group, with a 2% growth rate between 2015 and 2016 (Pew Research Center [PRC], 2017). However, in states such as Texas they are the fastest growing population (PRC, 2017), and Latino adolescents make up the majority population enrolled in public schools in those states (NCES, 2013). Yet, students of European and Asian descent continuously outperform Latino youths on national exams (NCES, 2015). This is concerning as poor school performance has been linked to maladjustment (e.g., depressive symptoms) in Latino adolescents (e.g., Zychinski & Polo, 2012). Yet, these concerning academic statistics are

better conceptualized in the context of inhibiting environments. Such environments can play a harmful role in minority youths development (Garcia-Coll et al.,1996). For example, research has found that Latino youths' experiences of culturally unique stressors, such as discrimination (Roche & Kuperminc, 2012) has been linked to poor academic adjustment (Santiago et al., 2014). As it might not be feasible to reduce such complicated stressors within the environment, it is important to identify mechanisms that might disrupt the negative effects of such stress. As such, the purpose of this study is to examine active coping as a predictor of school belonging and school performance.

The direct links between coping strategies and school belonging, as well as coping strategies and school performance, are understudied among Latino youth in the United States. However, the limited existing work available, using mixed-ethnic samples (Hawley et al.,2017), youth samples outside the United States (Boon, 2011; Frydenberg et al., 2009; Reschly et al., 2008), and one sample of Latino youth (Brietzke & Perrira, 2017), provide support for positive direct links between active coping strategies and school belonging and between active coping and school performance. Additionally, the integrative model suggests that researchers should focus on identifying adaptive characteristics that develop competencies which allow ethnic minority youth to navigate the stressful experiences they may face (Garcia-Coll et al., 1996). Further, the focus on active coping allows for a malleable target for intervention that focuses on managing unique stressors for ethnic minority youth by building active coping skills. As such, the first hypothesis of the current study is that active coping strategies will be positively associated with school belonging (Goal 1).

The second hypothesis of the current study is that active coping strategies will be positively associated with school performance (Goal 2).

II. METHOD

Procedure

The data for the current study come from The *ALCANCE* Project. The project included 329 middle school students and their parents. Families were eligible to participate if they had a child in the eighth-grade, had at least one biological and/or long term legal guardian living with them, and at least one biological parents' origins were in Latin America. Participants were recruited from five school districts in Central Texas. To recruit eighth-graders, undergraduate or graduate research assistants called parents to receive consent using the school district's open records data.

Once eligibility was established, parents were read consent forms either in Spanish or English by the undergraduate/graduate research assistants. After parents gave consent, undergraduate/graduate research assistants contacted participating adolescents and verbally administered survey questions by telephone. All survey answers were recorded using the online data collection site Qualtrics (2017). All participating families were given a \$25 gift-card for stores such as Wal-Mart, Target, or H.E.B after completing the survey. All study procedures were reviewed and approved by the Texas State University, 2014, Institutional Review Board (IRB# 2014D2548).

Participants

Adolescents of Mexican or Latino/Hispanic heritage were recruited from five different school districts in Central Texas. Participants ($N = 329$) were 13 (35.4%, $n = 102$), 14 (59.7%, $n = 172$), and 15 (4.9%, $n = 14$) years old ($M = 13.69$, $SD = .56$); 41 participants did not report their age. The sample included slightly more girls (45.9%, $n = 151$) than boys (39.5%, $n = 130$), however, 48 students did not report their gender.

Participants self-report of birthplace included the United States (86.3%, $n = 284$), Mexico (8.8%, $n = 29$), and Latin/Hispanic Countries (4.6%, $n = 15$); one participant was not sure of their birthplace (.3%). Adolescents' self-reported ethnicity included White (2.7%, $n = 9$), Mexican (19.8%, $n = 65$), Mexican American (18.8%, $n = 62$), Hispanic (44.4%, $n = 146$), Latino (7.0%, $n = 23$), Other Hispanic (.3%, $n = 1$), White/Hispanic (2.1%, $n = 7$), African American/Mexican (.6%, $n = 2$), African American/Latino (.9%, $n = 3$), African American (.3%, $n = 1$), Chicano (1.5%, $n = 5$), Mixed/Other (.6%, $n = 2$), and Native American (.6%, $n = 2$); one participant did not report their ethnicity.

Measures

Background Characteristics. At the start of the survey teens were asked demographic questions such as their current age, gender, racial/ethnic identity, SES, and place of birth. Gender was dummy coded: 0 = *male adolescents*, 1 = *female adolescents*. Nativity was dummy coded: 0 = *U.S.-born adolescents*, 1 = *foreign-born adolescents*. SES was calculated using family's highest education level based on parents reported educational attainment. Parents educational attainment was coded as follows: 0 = *no formal schooling*, 1 = *elementary school*, 2 = *middle school (6-8th grade)*, 3 = *some high school (9-12th grade)*, 4 = *GED*, 5 = *graduated high school*, 6 = *vocational/technical school*, 7 = *some college*, 8 = *associates degree (2 year degree)*, 9 = *college degree (BS/BA)*, 10 = *graduate degree (Master's degree)*, and 11 = *Doctoral/advanced degree (MD, JD, DO, DDS, Ph.D., etc.)*. I used the mean of families' highest education level as a proxy for SES (centered $M = 5.39$).

Adolescent Coping Strategies. Adolescents reported on their coping strategies using the Children's Coping Strategies Checklist (CCSC), which is a self-report inventory

in which children describe their coping efforts. The items were supplemented with additional items that were seen as appropriate for children ages 9 – 13 and measured 11 dimensions of coping which included Positive Cognitive Restructuring (PCR), and Problem Focused Support (PFS) (Ayers, Sandler, Bernzweig, Harrison, Wampler, & Lustig, 1989). However, in 1997, Sandler, Wolchik, MacKinnon, Ayers, and Roosa, found that combining Problem Focused Coping and Positive Cognitive Restructuring created the single latent factor of Active Coping. The current study uses items of the latent Active Coping factor to measure adolescent coping strategies. Some items used in the current study include, “when you had a problem you told yourself that you could handle this problem” “you did something to make things better”. This measure has demonstrated adequate reliability and support for validity (Sandler et al., 1997). For the current sample the Cronbach’s alpha is 0.93.

School performance. School performance was measured using a self-report question at the start of the survey; participants were asked about the overall letter grades they make in school. The question asks, “what grades do you earn in school”, giving participant the following choices: “Mostly As”, “about half As and half Bs”, “mostly Bs”, “about half Bs and half Cs”, “mostly Cs”, “about half Cs and half Ds”, “mostly Ds”, or “mostly below Ds”. Grades were coded: 1 = *mostly As*, 2 = *about half As and half Bs*, 3 = *mostly Bs*, 4 = *about half Bs and half Cs*, 5 = *mostly Cs*, 6 = *about half Cs and half Ds*, 7 = *mostly Ds*, and 8 = *mostly below Ds*. This question was used to determine overall school performance. School performance was reverse coded so that higher scores represented higher levels of school performance.

School belonging. Adolescents also reported on their school belonging. The

school belonging scale consists of four items that has been established and evaluated for decades. Anderman (2002) used the school belonging scale to examine school effects on psychological outcomes during adolescence; Maurizi, Grogan-Kaylor, Granillo, and Delva (2013) used the scale to examine the relation between school relationships and adolescent depressive symptoms and academic achievement. The four items presented in the scale asks the teens about their feelings regarding school, safety, and peer relationships (Anderman, 2002; Maurizi et al., 2013; Vaquera, 2009). Two sample items used in the current study include, “I am happy to be at school” and “I feel close to others at my school”. This measure has demonstrated adequate reliability and support for validity (Vaquera, 2009). For this sample the Cronbach’s alpha for this measure is 0.77.

Analytic Plan

IBM SPSS Statistics version 25 (IBM Corporation, 2017) was used to conduct all analyses. First, the data was examined for normality, all continuous variables met standards for normality; skewness (<2.0) and kurtosis (<7.0) were within the standard range (Curran, West, & Finch, 1996), see Table 1. Second, descriptive statistics and correlations were conducted (See Table 1). Third, a multiple hierarchical linear regression analysis was conducted to examine the direct link between active coping strategies and school belonging and to include the control variables. The first step of the regression model predicting school belonging from active coping included nativity, gender, and SES; the second step, included the predictor variable active coping strategies. Last, a multiple hierarchical linear regression analysis was conducted to examine the direct link between active coping strategies and school performance and to include control variables. For the latter model, the first step of the regression model included

nativity, gender, and SES; the second step, included the predictor variable active coping strategies.

III. RESULTS

As part of the preliminary analyses, the bivariate correlations indicated that the study variables were related in the expected direction (see Table 1). Results suggest that at the bivariate level there was a positive association between active coping strategies and school belonging, such that higher levels of coping related to higher levels of school belonging. There was a positive association between active coping and school performance, suggesting that higher levels of active coping related to better school performance. However, gender, SES and nativity were not related to school belonging. Also, as expected, gender was positively related to school performance, such that female adolescents had higher school performance than male adolescents. SES was positively related to school performance, that is, higher parental education related to better school performance. However, nativity was not associated with school performance.

In addressing the first goal of the study, results from Step 1 of the multiple hierarchical linear regression model indicated that gender, SES and nativity were not related to school belonging, $F(3, 273) = 1.402, ns$, and explained 2% of the variance (see Table 2). Results from Step 2 of the multiple hierarchical linear regression indicated that higher levels of active coping positively predicted higher levels of school belonging, $F(4, 272) = 15.360, p < .001$, and explained 18% of variance (a 16% increase from Step 1). Results from Step 2 indicated that for every one standard deviation increase in active coping there was a .41 increase in school belonging. The findings of the multiple hierarchical linear regression (Step 1 and Step 2) conducted to address the first goal were consistent with the findings of the bivariate correlations.

In addressing the second goal of the study, results from Step 1 of the multiple

hierarchical linear regression model found that gender and SES were related to school performance $F(3, 273) = 14.352, p < .001$, however, nativity was not. This model explained 12% of the variance. Results from Step 1 indicated that female adolescents had higher average levels of school performance than male adolescents by a metric of .25. Moreover, higher levels of parental education related to higher levels of school performance, such that a one standard deviation increase in parental education related to a .24 increase in adolescent school performance. Turning to results from Step 2 of the multiple hierarchical linear regression model, active coping was related to school performance and explained 16% of the variance (a 4% increase from Step 1). Results indicated that higher levels of active coping significantly and positively predicted higher levels of school performance $F(4, 272) = 13.491, p < .001$, such that a one standard deviation increase in active coping related to a .18 increase in school performance. These findings were also consistent with the bivariate correlation findings.

IV. DISCUSSION

The integrative model suggests that ethnic/racial minority youth (e.g., Latino) have unique, negative experiences, such as acculturative stressors (e.g., language conflicts, perceived discrimination; Dawson & Williams, 2008) that have also been shown to hinder school performance (Santiago et al., 2014) and school belonging (Roche & Kuperminc, 2012) among Latinos. Concurrently, coping strategies have been identified as a mechanism that might disrupt the negative effects of stressors (e.g., racism, discrimination) to enhance the development of Latino youth (Gonzales & Kim, 1997). Active coping strategies, specifically, have been identified as the most readily used coping strategy of adolescents when encountering stressors (e.g., peer rejections in school; Bowker et al., 2000). Yet, the scant work on Latino adolescents' coping strategies has focused on self-identified coping strategies (e.g., fitting in) (Brietzke & Perreira, 2017) or emotion-focused coping (Hawley et al., 2017). As such, the current study had two main goals, the first examined the link between active coping and school belonging; the second examined the relation between active coping and school performance.

In addressing these two goals, the current study makes several contributions. This study is the first to examine active coping strategies in relation to school belonging and school performance in Latino adolescents. As such, the results from this study can be used to better inform those working to improve Latino adolescent academic adjustment. Additionally, the study's strengths include a large sample size, culturally appropriate measures, and a community sample. This study provides quantitative evidence for the potential role of active coping strategies as an adaptive characteristic (as described in the integrative model; Garcia Coll et al., 1996) that likely relates to better academic

adjustment in Latino adolescents.

Active Coping and School Belonging

Consistent with stress and coping theory (Lazarus & Folkman, 1984), the findings from this study indicate that for Latino adolescents, active coping (the process of taking active steps to find resolutions to stressful experiences or to alter their effect; Carver et al., 1989) indeed related to higher levels of school belonging. These findings are consistent with previous work and they extend research that has relied on mixed-ethnic samples (Reschly et al., 2008; Frydenberg et al., 2009) to a Latino-homogenous sample. Further, the findings of the current study suggest that active coping strategies represent a malleable target for intervention that, if modified, would allow for Latino adolescents' school belonging. When youth use active coping strategies, they engage in more problem-focused thought processes (Bowker et al., 2000), as such, active coping may encourage developing strong relationships with teachers and counselors, developing feelings of belonging at school (Reschly et al., 2008). In sum, consistent with stress and coping theory (Lazarus & Folkman, 1984), the findings of the current study suggest that active coping may indeed be an adaptive characteristic that relates to better outcomes for Latino youth, despite the stressors they experience in inhibiting environments.

Active Coping and School Performance

Consistent with stress and coping theory (Lazarus & Folkman, 1984), the current study found that active coping was also related to better school performance. Moreover, the current study's findings are consistent with past quantitative work that examined active coping in an Australian adolescent population (Boon, 2011), however, the current study extends active coping research to a Latino-homogenous sample. Additionally, an

explanation of the findings from the current study may be that active coping allows youth to resolve problems (Lazarus & Folkman, 1984), making it more likely that they will have better school performance (Gonzales, & Kim, 1997). Furthermore, previous work that has examined coping and school performance among Latinos has been qualitative in nature; thus, the results of the current study serve to corroborate and extend past qualitative work (Brietzke & Perreira, 2017; Hawley et al., 2017). These past qualitative studies have examined both self-identified coping (Brietzke & Perreira, 2017) and emotion-focused coping (Hawley et al., 2017) as avenues for better school performance; the results of the current study suggest that active coping is also an effective coping strategy that relates to better school performance among Latino youth. Thus, intervention programs focused on improving school performance, among Latino adolescents, should consider fostering and developing active coping strategies.

Confounds on the Relations between Active Coping and School Belonging and between Active Coping and School Performance

Although there was evidence that suggested nativity (Wray-Lake et al., 2018), gender (Neel & Fuligni, 2013), and SES (Pittman & Richmond, 2007) would be related to school belonging, the current study did not find this association. There may be a few reasons as to why no link was found in the current study, first the majority of our sample was U.S.-born Latino adolescents. Thus, a study with a more representative sample of foreign-born Latino adolescents may find an association between nativity and school belonging. Additionally, inconsistent with past literature (Neel & Fuligni, 2013), the findings of this study suggest that there is no significant difference between male and female feelings of school belonging. However, the majority of adolescents in the current

study, unlike past literature with ninth grade students (Neel & Fuligni, 2013), was in middle school, perhaps there is no variation in feeling of school belonging between male and female Latino adolescents at a younger age. Also, the school belonging measure used in the current study only asked a few questions, perhaps a more comprehensive school belonging measure would be able to detect variations between male and female Latino adolescents. Finally, the current study relied on evidence based on the findings from a study with a mixed-ethnic sample to support the link between parental education (SES), and school belonging (Pittman & Richmond, 2007). Perhaps in a Latino-homogenous sample parental education is not an important indicator of school belonging.

Unlike the findings between the covariates (gender, nativity, SES) and school belonging, the findings between the covariates and school performance yielded some significant associations. For example, as expected and consistent with past literature, gender was significantly associated with school performance. The results of the current study suggest that female Latinos have better school performance, as there are gender differences in coping (Folkman et al., 1986), perhaps female Latino adolescents have more effective active coping strategies compared to male Latino adolescents, which may account for such gender differences in school performance. Additionally, consistent with past literature, higher levels of parental education was linked to better school performance. This may be because parents with higher levels of education have access to more academic resources (e.g., after school tutors) (Umaña-Taylor et al., 2012; Alfaro et al., 2009; Garcia-Coll et al., 1996), which may explain the link between parental education and school performance in Latino adolescents. Finally, inconsistent with past literature (Suárez-Orozco et al., 2009), there was not an association between nativity and

school performance; these results may be because the sample in the current study was majority U.S.-born Latino adolescents, so perhaps there was not a large enough sample of foreign-born Latino adolescents to detect a significant variation between the two groups.

Limitations and Future Direction

There are a few limitations to this study which should be addressed in future work. The first limitation is the cross-sectional nature of the data, with which possible causal links between coping and school belonging and between coping and school performance cannot be established. Coping strategies have been identified as a mediator between stressors and outcomes (Lazarus, & Folkman, 1984); whereas this study addresses an important first step in this work, future studies should assess coping as a mediator between the unique stressors of ethnic minority youth and their academic adjustment, expanding the field's understanding of the role of coping as a process variable. The second limitation is that the current study only examined active coping strategies (e.g., including cognitive decision making, direct problem solving; Sandler et al., 1994), other coping strategies (e.g., social-emotional coping; Carver et al., 198) may also be related to better school performance and school belonging. Thus, future research should examine the various dimensions of coping in relation to school belonging and school performance in Latino adolescents. The third limitation is that the majority of our sample was born in the U.S. and live in the central Texas area. Therefore, future studies should have a more representative sample of foreign-born Latino adolescents which would provide a better understanding of the role of coping on academic adjustment. Another limitation is that the measure for school performance was only one self-report question that focused on overall grades. Future work should examine other indicators of

school performance (e.g., report card grades, teacher-report on academic competence). Also, future research should examine multiple mechanisms that relate to better school performance, such as examining active coping and school belonging as a mediator between unique stressors and school performance. In other words, perhaps school belonging might also play an explanatory role in predicting school performance. Despite the limitations, the findings of the current study demonstrate the salience of active coping in relation to academic adjustment for Latino youth. The current study provides evidence for the importance of future research to examine coping strategies as an avenue for better academic adjustment.

Implications and Conclusion

Latino adolescents have unique stressful experiences (e.g., racism, discrimination), in inhibiting environments, that may play a damaging role during their normative development (Garcia-Coll et al., 1997). However, there is very little research on the adaptive characteristics (e.g., coping strategies) of Latino youth that may counteract such stressors relating to better outcomes. The findings of this study offer some tangible implications for prevention and intervention. In particular, this study suggests that negative outcomes (i.e., poor school belonging and poor school performance) can be circumvented through active coping strategies in Latino youth. Thus, programs should teach active coping strategies to foster better academic adjustment in Latino youth. The results of the current study suggest that these coping skills would not only improve school performance but also bolster youths' sense of belonging and community, another key indicator of better academic adjustment, which has been linked to better overall psychological health in Latino adolescents (Zychinski & Polo, 2012).

Thus, the current study expands the scant research examining coping strategies in relation to academic adjustment, providing preliminary evidence of active coping as a viable resource for better school belonging and school performance in Latino adolescents. Although this study has several limitations, the findings of this study can be used as a starting point to consider targeting active coping as a key component of programs that focus on improving the academic adjustment of Latinos. Overall, the findings from this study contribute to the field of Latino adolescent research by identifying active coping as a malleable target for intervention that can be cultivated, so that these youths are successful despite the various challenges they face while developing in inhibiting environments.

Table 1.

Correlations, means (M) and standard deviation (SD) for all study variables

	1.	2.	3.	4.	5.	6.
1. Active Coping	-					
2. Gender	-.01	-				
3. Highest Fam. Edu.	.07	-.03	-			
4. Nativity	-.06	-.04	-.01	-		
5. School Belonging	.40***	-.04	-.01	.11	-	
6. School Performance	.18**	.25***	.24***	.06	.25***	-
<i>N</i>	287	281	327	328	288	288
<i>M</i>	3.98	.54	.00	.13	3.45	6.68
<i>(SD)</i>	(.76)	(.50)	(2.65)	(.34)	(.57)	(1.12)
Skewness	-.78	-.15	.09	2.16	-1.22	-1.16
Kurtosis	-.38	-1.99	-1.27	2.67	1.21	1.70

Note. Fam. = Family; Edu. = Education; Adolescents' gender coded as 0 = male, 1 = female; Adolescents' nativity coded as 0 = US native 1 = foreign-born

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

Table 2

Summary of Hierarchical Regression Analysis for Variables Predicting School Belonging (N =276)

	<u>Model 1</u>				<u>Model 2</u>			
	<i>b</i>	<i>SE</i>	β	<i>p</i>	<i>b</i>	<i>SE</i>	β	<i>p</i>
Intercept	3.45	.05		.000	2.22	.17		.000
Controls								
Gender	-.06	.07	-.05	.375	-.06	.06	-.05	.348
Highest Fam. Edu.	-.00	.01	-.01	.902	-.01	.01	-.03	.611
Nativity	.18	.10	.11	.062	.21	.09	.13	.016
Main Effect								
Active Coping					.31	.04	.41	.000
R^2		.02				.18		
Change in R^2						.17***		.000

Note. Fam = Family; Edu. = Education; Adolescents' gender is coded as 0 = male adolescents, 1 = female adolescents; Adolescents' nativity is coded as 0 = US native, 1 = foreign-born; Number of participants (*N*); unstandardized beta (*b*); the standard error for the unstandardized beta (*SE*); the standardized beta (β); the t-test statistic (*t*); the statistical significance (*p*); **p* < .05. ***p* < .01. ****p* < .001.

Table 3.

Summary of Hierarchical Regression Analysis for Variables Predicting School Performance (N =276)

	<u>Model 1</u>				<u>Model 2</u>			
	<i>b</i>	<i>SE</i>	β	<i>p</i>	<i>b</i>	<i>SE</i>	β	<i>p</i>
Intercept	6.36	.10		.000	5.31	.34		.000
Controls								
Gender	.57	.13	.25	.000	.57	.13	.26	.000
Highest Fam. Edu.	.10	.02	.24	.000	.10	.02	.23	.000
Nativity	.15	.18	.05	.404	.18	.18	.06	.315
Main Effect								
Active Coping					.26	.08	.18	.002
R^2		.12				.16		
Change in R^2						.03*		.002

Note. Fam = Family; Edu. = Education; Adolescents' gender coded as 0 = male adolescents, 1 = female adolescents; Adolescents' nativity coded as 0 = US native, 1 = foreign-born; Number of participants (*N*); unstandardized beta (*b*); the standard error for the unstandardized beta (*SE*); the standardized beta (β); the t-test statistic (*t*); the statistical significance (*p*); * $p < .05$. ** $p < .01$. *** $p < .001$.

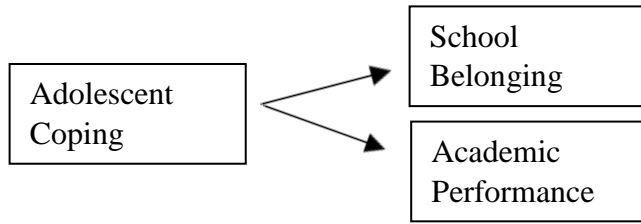


Figure 1. Conceptual Model.

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