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Ethnic-racial discrimination is a salient stressor for Latinx youth that has been associated with a myriad of negative mental health outcomes (Benner et al., 2018). Thus, there is an urgent need to understand how Latinx adolescents cope with discrimination and which strategies relate to psychological well-being, yet there is a dearth of knowledge in the coping literature on how minoritized youth cope with race-based stressors. Moreover, although coping has primarily been studied as a mediator or moderator between the relation of discrimination and health outcomes, less research has investigated the predictors of race-based coping. One factor that has accumulated theoretical support for predicting adaptive coping strategies in response to discrimination is parental ethnic-racial socialization, or the messages that parents communicate to their children about their race/ethnicity and culture. However, there are few empirical studies that have directly tested this link, and of those that have, most were conducted with Black samples. Accordingly, this study used multiple linear regression to examine concurrent and longitudinal relations between ethnic-racial socialization and proactive coping with discrimination and between proactive coping and lower anxiety and depressive symptoms in a community sample of 135 Latinx adolescents living in the southeastern U.S. Results indicate that cultural socialization but not preparation for bias was related to higher endorsement of proactive coping with discrimination. However, this effect was not found over time. Furthermore, proactive coping with discrimination did not predict lower symptomology concurrently but did predict lower depressive and anxiety symptoms six months later.

ETHNIC-RACIAL SOCIALIZATION, PROACTIVE COPING WITH DISCRIMINATION, AND LATINX YOUTH'S PSYCHOLOGICAL WELL-BEING

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CHAPTER I: INTRODUCTION

Ethnic-racial discrimination serves as a well-established risk factor for Latinx youth as a majority report experiences of unfair treatment due to their ethnicity or race (Flores et al., 2010; Jones et al., 2018). Several meta-analyses (e.g., Benner et al., 2018; Paradies et al., 2015; Pascoe & Richman, 2009; Schmitt et al., 2014) have demonstrated discrimination's negative impact on numerous outcomes across development and domains (i.e., mental health, physical health, psychosocial, behavioral, and academic outcomes). Recent findings also suggest that antiimmigrant and anti-Latinx sentiments have been on the rise since the 2016 U.S. presidential election (Costello, 2016), which have spurred increased incidents of interpersonal discrimination against the Latinx population, as well as accompanying institutional and structural discrimination consisting of legislation and policing targeting Latinx communities (Canizales & Vallejo, 2021). There is further emerging evidence indicating that adolescence may be a sensitive developmental period in which exposure to racism may have a greater impact on subsequent physical and mental health (Adam et al., 2015; Seaton, 2020). Given that Latinx youth make up about a quarter of the current U.S. youth population (Murphey et al., 2014) and the reality of discrimination as a prevalent stressor for this population, researchers must determine what factors promote adaptive coping responses to discrimination for Latinx youth and the effectiveness of these strategies in reducing internalizing symptoms.

Ethnic-racial discrimination, or the behavioral component of racism, refers to actions by the dominant racial group that denies equitable treatment to an individual or group of individuals due to their racial-ethnic group affiliation (Clark et al., 1999). Coping is traditionally defined as an individual's intentional behavioral and/or cognitive efforts to manage or alleviate experiences or instances that are assessed as stressful (Lazarus & Folkman, 1984). While burgeoning

research has examined how coping mediates or moderates the relation between ethnic-racial discrimination and mental health outcomes among minoritized youth (see Brondolo et al., 2009 and Pascoe & Richman, 2009 for reviews), how youth come to develop effective coping strategies for discrimination has rarely been examined in the literature. Theoretically, parental ethnic-racial socialization (ERS) has been proposed to be a critical antecedent to coping with race-based stressors for minoritized youth (e.g., Neblett et al., 2012), but few empirical studies have directly tested this link, especially in Latinx populations. Similarly, little work has examined how coping with discrimination relates to outcomes among Latinx adolescents. Accordingly, this study will examine ERS as a predictor of proactive coping with discrimination and how proactive coping relates to depressive and anxiety symptoms in Latinx youth.

Coping with Discrimination

Theoretical models and conceptualizations of racism and its relation to various outcomes identify coping as a key mediator. For instance, Clark et al.'s (1999) formative biopsychosocial model on racism as a stressor built on Lazarus and Folkman's (1984) more general, prevailing stress-coping model. In their model, first an environmental stimulus is perceived as racist, leading an individual to utilize a coping response that then influences the psychological and physiological response to the stressor, and over time, subsequent health outcomes. In this way, coping is one variable that may account for differential effects of racism on health outcomes across individuals. They further propose that adaptive coping responses likely buffer discrimination's adverse effects on mental health while maladaptive coping exacerbates negative outcomes. In her multidimensional conceptualization of racism-related stress, Harrell (2000) similarly posits that coping behavior is a mediator between racism and markers of well-being for people of color. Yet, other reviews and models conceptualize coping as a moderator (e.g.,

Brondolo et al., 2009; Pascoe & Smart Richman, 2009). Aligned with all these models, empirical research on coping with discrimination has primarily focused on testing coping as a predictor of mental health outcomes or as either a moderator or mediator of the link between discrimination and mental health outcomes in Black (e.g., Gaylord-Harden & Cunningham, 2009; Seaton et al., 2014), Latinx (e.g., Park et al., 2018; Brittian et al., 2013), and Asian American youth samples (e.g., Yoo & Lee, 2005).

The general literature on coping in youth and adolescence has not specifically focused on discrimination as a stressor but suggests that coping can be conceptualized across the axis of control. The control-based model of coping includes primary control coping, secondary control coping, and disengagement coping (Compas et al., 2001). Primary control coping refers to dealing with a stressor or one's emotional response to the stressor directly (e.g., problem-solving, emotional expression) while secondary control involves adapting to the source of stress (e.g., cognitive reappraisal, acceptance). Collectively, primary control coping and secondary control coping have been characterized as engagement coping. In contrast, disengagement coping, or avoidant coping, includes strategies that orient away from the stressor, such as avoiding the stressor and/or its emotional response (e.g., denial, wishful thinking, withdrawal; Compas et al., 2017). In a recent meta-analysis of over 200 studies examining coping and psychopathology in childhood and adolescence, Compas et al. (2017) found that both primary control and secondary control coping were significantly negatively associated with internalizing and externalizing symptoms while greater use of disengagement coping was related to higher levels of internalizing and externalizing symptoms. It is important to note that scholars have used other distinctions to classify coping responses and behaviors that focus on other aspects of the response or hone in on one specific function, such as active/approach coping, problem-focused

coping, emotion-focused coping, and social support coping (Compas et al., 2017). Although there is some overlap in these factors and a general lack of consensus in the definition and conceptualization of coping in youth, primary control coping and secondary control coping have been the most frequently studied factors of coping in adolescence and childhood in the past decade, and furthermore, in meta-analysis demonstrated most consistent effects in relation to psychopathology (Compas et al., 2017).

However, despite the broader literature, research on how coping specifically with discrimination relates to mental health outcomes is limited and mixed. In a meta-analysis of studies examining discrimination and health outcomes across racial-ethnic groups and including studies with both youth and adults, Pascoe and Richman (2009) identified seven studies that examined the interactive effects of coping and discrimination on mental health outcomes for a total of 26 effects. Although the majority of studies did not find any significant moderating effects, evidence from the studies that did find significant effects suggest that approach and problem-focused coping strategies may buffer the negative discrimination-health link whereas avoidant coping may exacerbate the link. However, in a separate meta-analysis that only included Latinx samples but also both youth and adults, Lee and Ahn (2012) found an aggregated null effect of active coping (i.e., proactive coping, problem-based coping, and approach coping) to mental health outcomes due to mixed findings. The relation between coping, discrimination, and mental health has limited support in these meta-analyses, but it is important to note that the literature is scant in terms of Latinx youth and emerging adults.

First, three studies have examined how primary and secondary control coping strategies relate to outcomes in Latinx youth samples. In a sample of Mexican-origin adolescents, active coping (e.g., problem-solving, positive cognitive restructuring) did not moderate the associations

between discrimination and mental health outcomes (Brittian et al., 2013). Conversely, in a sample of Mexican American youth, Edwards and Romero (2008) did find that problem-solving coping buffered the link between discrimination and self-esteem. Among Mexican American college students, problem-solving coping mediated the relation between perceived discrimination and well-being such that discrimination was related to higher reports of problem-solving, which in turn, was positively related to elevated subjective well-being (Villegas-Gold & Yoo, 2014). Other engagement coping strategies examined (cognitive restructuring, social support, and expression of emotion) did not have any mediating effects. Second, these three studies also examined how disengagement coping related to outcomes. Brittian et al. (2013) did not find that avoidant coping moderated the associations between discrimination and youth's mental health outcomes. However, they did find that distraction coping attenuated the relation between discrimination and internalizing symptoms but only for youth who were less acculturated. Moreover, Edwards and Romero (2008) found that higher levels of avoidance coping were positively associated with higher reports of discrimination-related stress. Similarly, Villegas-Gold and Yoo's (2014) mediation study found that discrimination was positively related to three separate disengagement strategies (i.e., self-criticism, wishful thinking, and social withdrawal), which in turn, were related to lower subjective well-being. Two additional studies examined the relation between disengagement coping and outcomes in Latinx samples. One did not find any relation between disengagement coping and mental health outcomes among college students (Sanchez et al., 2018a). Similarly, in another college sample, while disengagement coping was negatively related to behavioral/emotional control, neither engagement or disengagement coping strategies mediated the relations between discrimination and mental health outcomes (Sanchez et al., 2018b).

These inconsistent findings conflict with the broader coping literature among children and adolescents that has generally found that primary and secondary coping strategies are related to lower internalizing symptoms and disengagement coping with higher internalizing symptoms (Compas et al., 2017). One reason for this discrepancy may be due to the lack of specificity in the coping measures used. Every single study previously reviewed employed a generic coping measure with no reference to discrimination. Furthermore, coping measures have historically been developed and validated on predominately White samples in response to generic stressors rather than race-related stressors. As such, strategies that minoritized communities use directly and uniquely in response to discrimination (e.g., attend a rally, assert their cultural pride, educate the perpetrator) are not captured (Wei et al., 2010). Culturally relevant coping strategies, such as collective coping and spiritual-centered coping, are similarly excluded from generic coping measures (Gonzalez et al., 2022). Indeed, another reason for the mixed results may be that coping models and the coping literature broadly emphasize individualistic coping strategies, which may not align with how minoritized youth cope (Gonzalez et al., 2022). Emerging qualitative and mixed-methods work with Latinx adolescents suggest that Latinx youth may engage in more collectivist coping strategies and rely on their family to interdependently cope with race-based stressors (Gonzalez et al., 2022; Martin Romero et al., 2022). Thus, in order to advance the field of coping and discrimination and clarify relations between coping and internalizing symptoms, specificity in measurement of exactly what strategies Latinx youth use when faced with discrimination is needed.

Only one measurement exists that specifically assesses coping in response to discrimination that has been developed and validated on Latinx samples (McDermott et al., 2019a). Using this scale, one form of coping endorsed by Latinx adolescents that has been found

to be efficacious in promoting positive outcomes is proactive coping with discrimination. Proactive or problem-focused coping with discrimination, a form of adaptive coping, can refer to active efforts such as clarifying common misconceptions, positive cognitive reframing, or working hard to prove others wrong (Umaña-Taylor et al., 2008; McDermott et al., 2018). McDermott et al. (2019b) found that Latinx adolescents that endorsed proactive coping strategies with discrimination reported higher self-esteem and academic motivation compared to those who used confrontative or passive coping (defined as responding rudely and avoidance, respectively). McDermott et al. (2018) similarly found that proactive coping strategies were related to higher academic achievement, as measured by GPA. Moreover, in a large sample of Black, Asian American, and Latinx high school students, proactive coping with discrimination was related to greater school belonging across all racial-ethnic groups (Montoro et al., 2021). While this quantitative measure does not capture culturally relevant and family-based coping strategies that qualitative work indicates that Latinx youth utilize (e.g., Gonzalez et al., 2022), it has been found to be commonly endorsed by Latinx adolescents and related to positive youth outcomes. I extend the research on the use of proactive coping amongst Latinx adolescents by examining internalizing symptomatology as an outcome.

ERS and Coping with Discrimination

In models of discrimination described above, Clark et al. (1999) and Harrell et al. (2000) acknowledge that sociodemographic, socioenvironmental, familial, psychological, and behavioral factors, among others, directly influence coping responses to discrimination, yet determining predictors of coping strategies is often neglected in the literature. While examining how coping strategies relate to various outcomes is essential, understanding what predicts effective forms of coping is also critical for interventionalists and practitioners who want to

promote proactive coping in marginalized adolescent populations. Even less studied are cultural factors that might shape coping responses despite the evidence that cultural assets can promote psychological well-being and protect Latinx youth in the face of discrimination and despite qualitative evidence illuminating how intertwined culture and coping are (e.g., Gonzalez et al., 2022; Martin Romero et al., 2021). One predictor of coping that has accumulated theoretical support (e.g., Harrell, 2000), yet lacks empirical attention, is parental ethnic-racial socialization (ERS).

ERS is the process through which parents communicate information, values, and beliefs about race and ethnicity to their children (Hughes et al., 2006). An extensive literature review of ERS practices and strategies (Hughes et al., 2006) identified four dimensions of ERS, which have continued to be the most studied themes in the literature (Huguley et al., 2019). Cultural socialization refers to promoting ethnic-racial pride and teaching about cultural values, history, and traditions. Preparation for bias messages include raising awareness about racism and preparing youth to process and cope with encounters of discrimination. Promotion of mistrust messages center on being wary when interacting with members of the dominant group. Lastly, egalitarian messages emphasize the value of diversity and equal treatment for all groups. This study focuses specifically on cultural socialization and preparation for bias as these are the two most studied dimensions in Latinx families (Ayón et al., 2020). ERS has been conceptualized as a cultural asset for minoritized youth that fosters positive youth development and attenuates the adverse effects of discrimination and bias (e.g., Neblett et al., 2012). A recent systematic review of ERS in Latinx families (Ayón et al., 2020) concluded that evidence strongly suggests cultural socialization is related to ethnic identity development, academic adjustment, and positive mental health outcomes and can buffer the negative effects of discrimination. Additionally, although

findings regarding preparation for bias are more equivocal with some evidence suggesting it is harmful, the authors assert that this evidence is limited given that preparation for bias is far less studied in Latinx populations compared to cultural socialization.

Theoretical frameworks suggest that both cultural socialization and preparation for bias may foster coping skills that enable youth to cope more effectively with race-based stressors. For instance, Harrell (2000) posited that racial socialization processes affect the development of adaptive styles of coping with racism through promoting strength and pride. Indeed, recent metaanalyses have found that across racial-ethnic groups, cultural socialization predicts higher selfconcept and self-esteem (Wang et al., 2020) as well as builds pride and fosters a community and sense of belonging to one's ethnic-racial group (Huguley et al., 2019). More recent models and frameworks regarding discrimination and outcomes similarly theorize that ERS predicts coping. In their model, Neblett et al. (2012) identify racial and ethnic protective factors that promote positive youth development in the face of race-based stressors. They conceptualize ERS as one such factor and postulate that ERS confers its protective benefits through equipping youth with effective coping strategies to negotiate and navigate experiences of discrimination. Specifically, preparation for bias messages may prepare youth for the possibility of experiencing discrimination and guide them in thinking about different strategies they can use. Together with cultural socialization messages that emphasize cultural pride, youth may draw from these messages and feel more confident, competent, and capable in the face of discrimination (Neblett et al., 2012). Similarly, Gaylord-Harden et al. (2012) propose that ERS is a cultural asset that promotes effective coping with discrimination through parents transmitting beliefs about how the world works. According to coping theory (Lazarus & Folkman, 1984), how people make sense of their world and environment informs how they cope with their surroundings. Moreover, ERS

can promote a sense of competence to deal with race-related stressors and facilitate knowledge of and access to familial support systems (Gaylord-Harden et al., 2012).

Given these theoretical models suggesting that ERS is a critical antecedent to coping and a proposed mechanism through which ERS protects youth from discrimination, it is surprising that so few studies have directly tested how ERS relates to actual coping behavior, and even fewer on coping behavior specifically in response to racial discrimination. Most of these studies have concentrated on Black samples. For instance, in a sample of Black adolescents in high school, Scott (2003) examined the relation between the frequency of ERS messages and coping strategies in response to discrimination. He found that the frequency of ERS messages was positively associated with approach coping strategies (e.g., support seeking, problem-solving) but unrelated to avoidance coping. Studies since then have generally replicated these findings. In samples of Black college students, cultural socialization has been positively related to approach coping strategies (e.g., planning and active coping; Womack & Sloan, 2017) and spiritualcentered, collective, and ritual-centered engagement coping strategies (Blackmon et al., 2016). Moreover, in a sample of Black children and early adolescents from grades 3-8, Anderson et al. (2019) found that frequency of ERS messages positively related to primary and secondary control coping above and beyond general coping socialization messages from parents, suggesting that ERS has a unique, additive influence on how youth generally cope to stressors. Another common finding across studies is that ERS is not related to disengagement coping (i.e., avoidance; Anderson et al., 2019; Scott, 2003).

While studies with Black samples generally find that ERS messages, specifically cultural socialization messages, predict primary and secondary control coping, findings amongst the few studies conducted with Latinx samples are more mixed. Some studies have demonstrated, akin to

studies with Black samples, that ERS messages are related to engagement coping strategies. For instance, in a longitudinal study following Latinx adolescents across all four years of high school, McDermott et al. (2018) found that higher levels of cultural socialization promoted more proactive coping strategies in response to discrimination, which in turn led to increased selfefficacy and higher GPA. Moreover, in a Latinx college sample, Sanchez et al. (2018) found that preparation for bias was related to increased engagement coping strategies (e.g., problemsolving, cognitive restructuring). Doan et al. (2019) also found in a sample of 7- to 8-year-old Latinx children and their parents that cultural socialization was positively related with higher levels of parent-reported positive coping (e.g., problem-solving, support seeking). However, they also tested whether ERS moderated the relation between discrimination and maladaptive coping (i.e., resolving problems through aggression or crying) and found that ERS no longer protected against maladaptive coping at high levels of discrimination. Furthermore, using daily diary methodology, Santiago et al. (2016) found that on days with higher levels of stress, higher endorsement of cultural socialization was associated with higher levels of disengagement coping but not engagement coping for Latinx middle schoolers. These latter two studies suggest that ERS may no longer relate to engagement coping strategies for Latinx youth under contexts of stress.

Moreover, across the studies that examined cultural socialization messages and preparation for bias messages separately, researchers found that preparation for bias, in contrast to cultural socialization messages, did *not* predict engagement coping (Blackmon et al., 2016; Womack & Sloan, 2017). Additionally, Scott et al. (2020) only examined preparation for bias messages and did not find that they predicted Black early adolescents' proactive coping responses to discriminatory situations. However, the only study conducted with a Latinx sample

that included preparation for bias found that preparation for bias messages did relate to engagement coping (Sanchez et al., 2018). Given these mixed findings, I will explore how cultural socialization and preparation for bias messages may differentially predict coping.

Notably, of the nine studies reviewed, almost every study used a different coping measure. The only exception is that Santiago et al. (2016) used a shortened measurement of the same scale Anderson et al. (2019) used. Three studies (Doan et al., 2019; Sanchez et al., 2018; Womack & Sloan, 2017) assessed just general coping while Anderson et al. (2019), Blackmon et al. (2016), and Santiago et al. (2016) used measures in which they asked participants to selfidentify a situation that has been a problem for them, a recent stressor, or the most significant stressor of the day, respectively. Responses related mainly to interpersonal or school domains, and either none (Anderson et al., 2019) or very few were explicitly race-related (Blackmon et al., 2016; Santiago et al., 2016). Scott (2003), Scott et al. (2020), and McDermott et al. (2018) were the only studies that used measures that assessed coping specifically in response to discrimination. Similar to the literature on how coping relates to youth outcomes, the literature on what predicts coping may be further clarified by using measures that specifically capture the coping strategies minoritized youth are utilizing in the face of discrimination. Lastly, all of these except one (McDermott et al., 2018) examined ERS and coping cross-sectionally. Thus, what little we empirically know about how ERS relates to coping is derived mainly from crosssectional studies conducted primarily with Black samples that have lacked consistency in how coping is assessed.

Goals and Hypotheses

The current study aims to address two gaps in the literature. The first gap addresses the ERS body of research. Though theoretical frameworks posit that ERS messages influence how

minoritized youth cope with stress (e.g., Gaylord-Harden et al., 2012; Neblett et al., 2012), few studies have empirically tested this relation. Of the limited studies that have considered how ERS messages predict coping strategies, most have focused on Black samples, are cross-sectional, frequently only assess one dimension of ERS, and have used coping measures that assess coping with general stressors rather than race-related stressors. The second gap addresses the dearth of knowledge of predictors of coping strategies minoritized youth use in response to racially discriminatory situations and how different coping strategies to race-based stressors relate to psychological well-being. Given that discrimination has been related to negative mental health outcomes in Latinx samples and that Latinx youth are at increased risk for depression (Céspedes & Huey, 2008), I specifically examine how proactive coping with discrimination is related to anxiety and depressive symptoms. Accordingly, this longitudinal study's overall goal is to examine how ERS messages relate to coping with experiences of discrimination and how proactive coping strategies are associated with psychological well-being in a sample of Latinx adolescents in southeastern U.S.

To address these gaps in the literature, the current study poses two distinct questions, one of which addresses concurrent associations and the other of which addresses longitudinal associations. Although theoretical work suggests that coping is a mediator between the relation of ERS messages and mental health outcomes, this study did not directly test a mediation model due to a small sample size. Instead, two separate models were analyzed: one examining the relation of ERS to proactive coping and the other examining the relation of proactive coping to mental health outcomes. Specifically, Question 1a asks whether youth-reported forms of ERS messages—preparation for bias and cultural socialization—are both independently associated with proactive coping with discrimination. Aligned with theoretical work (e.g., Neblett et al.,

2012), cultural socialization and preparation for bias should be positively associated with proactive coping. Question 1b asks whether proactive coping with discrimination is related to lower anxiety and depressive symptoms in Latinx youth. Given meta-analyses that have found that primary and secondary control coping are related to lower internalizing symptoms (Compas et al., 2017), proactive coping with discrimination should similarly have an inverse relation with anxiety and depressive symptoms. Question 2a asks whether cultural socialization and preparation for bias predict greater proactive coping with discrimination 6-months later, and Question 2b asks whether there are longitudinal protective effects of proactive coping on anxiety and depressive symptoms in the same 6-month period. Longitudinal tests controlled for the outcome variables at the prior timepoint.

CHAPTER II: METHODS

Participant Sample

The sample consisted of a community sample of 135 Latinx middle and high schoolers (59.3% female; 38.5% male) recruited from North Carolina. The overall sample is part of a larger study broadly assessing coping, identity and cultural values, COVID- and race-based stressors, and psychological well-being. Participants were recruited from October 2020 to September 2021, and adolescents completed two surveys 6-months apart. 104 adolescents (77%) participated in both waves of data collection. The average age of adolescents at Time 1 was 16 years old (SD = 1.27, range = 13-18). The majority of the sample (n = 115, 85.2%) were U.S.born. Of the adolescents who were foreign-born (n = 20, 14.8%), 45% were born in South America, 30% in Central America, and 25% in Mexico. In contrast to adolescents, the vast majority of primary caregivers were foreign-born, with most being born in Mexico (primary caregiver 1 n = 94, 69.6%; primary caregiver 2 n = 80, 59.3%), with others born in Central and South American countries (primary caregiver 1 n = 29, 21.5%; primary caregiver 2 n = 32, 23.7%) and the United States (primary caregiver 1 n = 12, 8.9%; primary caregiver 2 n = 19, 14.1%). 92.4% of primary caregiver 1 were female and 77.5% of primary caregiver 2 were male. **Procedure**

After receiving Institutional Review Board approval, recruitment involved emailing flyers to community partners to distribute and passing out flyers outside of marketplaces, food distributions, community events, and in public spaces such as parks. Participants were also recruited through attending planned events at partnerships with Latinx-serving, communitybased organizations to. Additionally, flyers were posted on social media, and participants were asked to send the flyer to friends or classmates who might be interested (i.e., snowball

recruitment). If recruited in-person, parents or youth provided their names and phone numbers. Otherwise, if parents or youth saw they flyer, they could call the lab phone number, email, or fill out a short survey using a QRC code on the flyer to express interest. Bilingual research assistants contacted interested participants to screen for eligibility over the phone and obtain verbal consent from a parental guardian. To be eligible for the study, youth must have been either in middle or high school, identify as Latinx, and be living in North Carolina.

Youth who met the criteria and received parental consent were emailed a link to complete an online survey through Qualtrics Survey Software, an online platform that is free and easily accessible to interested participants. The first page of the survey was the form for child assent that had to be completed before the rest of the survey. Included on this page after the assent was the question, "The questions we ask you today are very important for research and the answer you give us will guide our work in helping other people. We hope that you will be able to answer honestly and accurately as you work through the survey. Will you do your best to answer these accurately?" Response options included "Yes, I will answer them accurately," "I will try to be as accurate as I can," "I might not answer everything accurately," and "No, I don't want to answer them accurately." Participants who endorsed any of the latter two items were removed from analyses as well as participants who took less than 20 minutes to complete the whole survey or completed less than 50% of the survey. 142 adolescents completed the survey, but data was removed for 7 people who either completed the survey in under 20 minutes or completed less than half the survey, resulting in a final sample size of 135.

The consent was followed by a demographic questionnaire. Demographic information collected included the age, gender, and place of birth of the participant and his/her primary caregiver(s) as well as household income, household composition, and level of education and

occupational status of caregiver(s). Afterwards, blocks of measures with discrimination in one block, ethnic-racial socialization in another block, and coping with discrimination, anxiety, and depression in a third block, were presented in a randomized order, but the measures within each block were not randomized. There was no time limit, but the survey was estimated to take about 40–60 min to complete. Upon completion of the survey, adolescents were compensated with a \$15 gift card. Participants could choose to stop taking the survey at any point and could choose to skip any question they did not want to answer, although they were told they must complete at least 70% of the survey to receive the gift card. Six months after completing the first survey, participants were emailed and contacted again to complete the online follow-up survey on Qualtrics and were compensated with another \$15 gift card. If participants completed both waves of the survey, they were entered in a drawing for a \$100 gift card as further incentive.

104 adolescents participated in both waves, with the average number of weeks in between survey completions being 27 weeks or 6.75 months (SD = 4 weeks). Number of weeks in between time-points was not correlated significantly with any study or demographic variable. Attrition analyses were conducted to examine if there were any differences in demographic variables between retained adolescents and adolescents who did not participate in the follow-up survey. Drop-out was associated with age and nativity with younger (r = -.21, p = .014) and foreign-born (r = -.20, p = .018) adolescents being more likely to not participate in follow-up. Gender and household income were not associated with drop-out.

Measures

Proactive Coping with Discrimination

Proactive coping with discrimination was assessed using the 3-item Proactive Coping Strategies subscale of the Discrimination Coping Strategies Scale (DCSS; Umaña-Taylor et al., 2008). Adolescents were asked how often they use each of the following strategies to deal with ethnic-racial discrimination with no specific time-frame given. Items (e.g., "talk to the person; clarify common misconceptions about ethnic groups") were rated on a 5-point Likert scale from 1 (*Never*) to (*Very Often*). A study on the psychometric properties of the DCSS scale tested across four-waves in a sample of Latinx adolescents employed confirmatory factor analysis, which indicated a three-item latent factor (McDermott et al., 2019). Tests of convergent, discriminant, and predictive validity further provided evidence for the 3-item proactive coping subscale of the DCSS as a measure of Latinx adolescents' proactive coping with discrimination (McDermott et al., 2019a). Items were averaged with higher scores indicating greater levels of proactive coping with discrimination (α at Time 1= .62; α at Time 2 = .66).

Ethnic-Racial Socialization

Ethnic-racial socialization was assessed using two subscales of the Ethnic-Racial Socialization Scale (Hughes & Chen, 1997). The Preparation for Bias subscale consists of six items (e.g., "Told you that people might try to limit you because of your ethnicity"). The Cultural Socialization subscale includes 5 items (e.g., "Talked to you about important people or events in the history of your ethnic group"). Each subscale asks adolescents to rate the frequency with which their parents discussed each topic in the past year on a Likert scale of 1 (*Never*) to 5 (*Six or more times*). Adolescents typically responded to each subscale twice, once thinking about their primary caregiver and then again thinking about their secondary caregiver. Items within each subscale were averaged across both parents such that a higher number indicated higher frequency of socialization experiences with parents. However, some adolescents (13%) reported that their primary caregiver 1 was "Both Mom and Dad." In these cases, the average of responses for primary caregiver 1 was used, rather than the average of primary caregiver 1 and 2. Of those

that put one person down for primary caregiver 1, 76% identified Mom, 6% identified Dad, 2% identified Grandmother, 1.5% identified sister, and 1.5% just wrote names. Cronbach's alphas for primary caregiver 1 cultural socialization and preparation for bias were .79 and .83, respectively. For primary caregiver 2, 59% of adolescents identified Dad, 7% identified Mom, 6% identified Aunt, 4.4% identified sister, 2.2% identified brother, 2.2% identified stepfather, 2.2% identified grandma, 1.4% identified uncle, 3.7% were missing, and 2.2% just wrote names. Cronbach's alphas for primary caregiver 2 cultural socialization and preparation for bias at Time 1 were .86 and .90, respectively.

Racial-Ethnic Discrimination

Adolescents' perceived discrimination was assessed with the discrimination subscale of the Perceived Immigration Policy Effects Scale (PIPES; Ayón, 2017). PIPES was originally developed and validated to assess the effects of state-level immigration policies for immigrant parents (Ayón, 2017). The discrimination subscale includes 11 items (e.g., "Have you been silenced by others or felt that your opinion did not matter?") that capture lifetime discrimination based on language and ethnicity as well as intergroup and intragroup discrimination. Items were rated on a scale from 1 (*Never*) to 5 (*Always*). Some of the items were adapted from parent-report to adolescent-report format for this study (i.e., changing item from "Have your children been treated differently in school due to the immigration policies or negative attitudes toward immigrants" to "Have you been treated differently due to..."). Items were averaged together such that a greater number indicates greater frequency of discrimination (α at Time 1= .90).

Depressive Symptoms

Depressive symptoms were assessed with the PROMIS Pediatric Short Form-Depression measure. PROMIS is an NIH-funded program to develop and validate patient reported outcomes

for clinical research and practice. Substantial qualitative and quantitative evidence supports the validity of PROMIS measures (DeWalt et al., 2010; Irwin et al., 2009; Reeve et al., 2007; Walsh et al., 2008). The specific short-form pediatric measures for both anxiety and depressive symptoms were validated in a study of 1,529 children of which 17% were Latinx (Irwin et al., 2010). The depressive symptoms measure consists of 8 items (e.g., "I could not stop feeling sad") that adolescents responded to thinking about the past seven days on a Likert scale ranging from 1 (*Never*) to 5 (*Almost Always*). Items were averaged with higher scores indicating greater severity of depression (α at Time 1= .95; α at Time 2 = .96).

Anxiety Symptoms

The PROMIS Pediatric Short Form-Anxiety scale assessed anxiety symptoms. This scale was validated in the same study the measure for depressive symptoms was (Irwin et al., 2010). The scale consists of 7 items (e.g., "I worried about what could happen to me"). Participants answered each item thinking about the past seven days on a Likert scale ranging from 1 (*Never*) to 5 (*Almost Always*). Items were averaged with higher scores indicating greater severity of anxiety (α at Time 1= .93; α at Time 2 = .94).

CHAPTER III: RESULTS

Descriptive Analyses

Analyses were conducted using Mplus version 8.7 (Muthén & Muthén, 1998–2017). Full information maximum likelihood estimation was adopted to handle missing data. Data were Missing at Random; models were ran with both age and nativity as covariates since they were both related to missingness. Nativity was removed for parsimony since it was not significant and did not change results (see sensitivity analyses).

Table 1 displays the descriptive statistics of each variable at Time 1, including the mean, standard deviation, range, skewness, and kurtosis. There were very few changes in the averages of outcome variables (i.e., proactive coping with discrimination, anxiety symptoms, and depressive symptoms) from Time 1 to Time 2. At Time 1, on average, when faced with discrimination, adolescents reported using proactive coping with discrimination strategies sometimes (M = 3.27). Moreover, youth reported receiving preparation for bias and cultural socialization messages an average of two to three times in the past year (M = 2.77 and 2.99, respectively). On average, youth reported rarely experiencing racial-ethnic discrimination (M =1.89). Adolescents also experienced similar levels of depressive and anxiety symptoms (M =2.23 and 2.26 at Time 1, respectively). Since both anxiety and depressive symptoms were assessed using PROMIS measures, I converted the raw scores into standardized T-scores and categorized youth using the PROMIS cut-off points to assess severity of symptoms. In this sample, 13.3% of adolescents at T1 and 18% at T2 reported mild depressive symptoms. 48.1% at T1 and 45.7% at T2 reported moderate to severe depressive symptoms, suggesting that the sample had significant mental health distress. There were similar rates of anxiety with 13.3% at

T1 and 20.6% at T2 reporting mild anxiety symptoms as well as 43% at T1 and 38% at T2 reporting moderate to severe symptoms.

Preliminary analyses examining correlations (see Table 2) among the study variables revealed that racial-ethnic discrimination was related to every study variable at Time 1. Specifically, higher levels of racial-ethnic discrimination were associated with older age and higher levels of proactive coping with discrimination, cultural socialization, and preparation for bias at Time 1 as well as both Time 1 and 2 depressive and anxiety symptoms. Experiences of racial-ethnic discrimination were not related to proactive coping with discrimination six months later. Moreover, in this sample, girls tended to be older and report higher levels of racial-ethnic discrimination, proactive coping with discrimination, preparation for bias, depressive symptoms, and anxiety symptoms. Cultural socialization and preparation for bias were highly correlated to each other and both related to greater proactive coping with discrimination at Time 1 and Time 2. Notably, proactive coping with discrimination had no associations with depressive or anxiety symptoms at the bivariate level at either time point. However, youth who reported higher levels of preparation for bias messages at Time 1 also tended to report greater depressive and anxiety symptoms at Time 1 and Time 2. Additionally, as expected, anxiety and depressive symptoms were highly correlated with one another at both time points.

Regression Results

Multiple regression analyses were used to first examine three models (Table 4). The first model included cultural socialization, preparation for bias, racial-ethnic discrimination, age, and gender predicting proactive coping with discrimination. Cultural socialization messages but not preparation for bias messages were associated greater endorsement of higher proactive coping with discrimination ($\beta = .33$, p = .002). Racial-ethnic discrimination was also related to higher

proactive coping with discrimination ($\beta = .23$, p = .020). In the second set of models, proactive coping, gender, and age predicted depressive and anxiety symptoms. Proactive coping was not related to either mental health outcome, and no variable was significantly associated with depressive symptoms. However, boys experienced lower levels of anxiety ($\beta = .18$, p = .040).

Next, to test longitudinal relations, the three models were re-estimated, except the three outcomes were Time 2 data and each model controlled for baseline measure of the respective outcome. Baseline level of each outcome significantly predicted itself at Time 2 (Table 4). Neither cultural socialization nor preparation for bias were related to later proactive coping with discrimination after controlling for baseline levels of proactive coping with discrimination. However, two significant effects emerged in the second set of models, such that higher levels of proactive coping with discrimination at Time 1 was related to lower depressive ($\beta = -.16$, p = .050) and anxiety ($\beta = -.15$, p = .050) symptoms 6-months later, controlling for baseline symptoms.

Sensitivity Analyses

Since drop-out between T1 and T2 was correlated with nativity, I ran all of the models to also include nativity as a covariate. Results remained the same so original models and tables were retained for parsimony.

Additionally, given the low reliability of the proactive coping with discrimination scale, bivariate correlations of each item of the scale to each study variable at Time 1 were examined (Table 3). Each coping strategy was significantly related to the other two strategies. Additionally, cultural socialization and preparation for bias messages were significantly associated with higher levels of each coping strategy. None of the strategies were related to anxiety or depressive symptoms. Racial-ethnic discrimination was positively related to talking with the person to

clarify the misconception or stereotype and working hard to prove discriminatory people wrong, but not related to being proud of who you are. Girls tended to report higher use of talking to the person than boys and older adolescents were more likely to endorse working hard to prove discriminatory people wrong. There were no other significant correlations between gender and age and the other coping strategies.

CHAPTER IV: DISCUSSION

The current study investigated how Latinx parental messages centered on cultural pride and raising awareness of discrimination were related to the use of proactive coping strategies in the face of racial-ethnic discrimination given that these strategies have been found to be promotive of positive Latinx youth outcomes (e.g., McDermott et al., 2019a). While scholars have long posited that the ERS messages parents transmit shape how minoritized youth cope with race-based stressors (e.g., Harrell et al., 2000; Neblett et al., 2012), few studies have empirically tested this link, especially among Latinx samples. Similarly, the literature on how coping with discrimination relates to mental health outcomes is scarce. This study addressed these gaps in the literature and found that cultural socialization was related to higher concurrent endorsement of proactive coping with discrimination but was not related to greater proactive coping with discrimination six months later. Preparation for bias was not related to proactive coping with discrimination at either time point. Moreover, while proactive coping with discrimination was not related to concurrent levels of depressive and anxiety symptoms, use of proactive coping strategies was related to lower depressive and anxiety symptoms 6 months later controlling for baseline levels of symptoms.

ERS and Proactive Coping with Discrimination

Findings support my first hypothesis that youth who reported higher levels of cultural socialization would report higher use of proactive coping strategies in the face of discrimination. Prior research amongst Black samples has similarly found that cultural socialization is positively related to primary and secondary control strategies (Blackmon et al., 2016; Scott, 2003; Womack & Sloan, 2017). Findings have been a bit more mixed in the few Latinx adolescent samples that have examined this link with some indicating a positive relation (e.g., McDermott et al., 2018)

and others finding no relation (e.g., Santiago et al., 2016). However, both this study and the McDermott et al. study used the same measure that specifically assesses coping in response to discrimination whereas Santiago et al. assessed general coping strategies. Notably, cultural socialization was not related to use of proactive coping with discrimination over time. At the bivariate level, cultural socialization was positively correlated with proactive coping with discrimination at Time 1 and Time 2 (r = .37 and .32, respectively). It may be that cultural socialization instills a foundation of proactive coping that is stable over time. In other words, while cultural socialization relates to higher levels of proactive coping with discrimination, it does not predict greater growth in proactive coping over time. Overall, findings suggest that Latinx parents can equip youth with proactive coping strategies to use when experiencing racialethnic discrimination through promoting cultural pride and teaching youth about their heritage and cultural traditions. Notably, a recent systematic review of ERS in Latinx families found that the vast majority of studies examining outcomes of cultural socialization focus on ethnic-racial identity (Ayon et al., 2020). Cultural socialization may additionally provide the scaffolding for learning coping responses that may prove effective in the face of discrimination.

On the other hand, preparation for bias was not concurrently or longitudinally related to use of proactive coping with discrimination. The only study to my knowledge that has examined this relation in a Latinx sample has found that preparation for bias messages were associated with higher endorsement of engagement coping (Sanchez et al., 2018a). However, most studies that have examined preparation for bias' relation to coping have been conducted in Black samples and have consistently found that preparation for bias is *not* related to engagement coping strategies (Blackmon et al., 2016; Scott et al., 2020; Womack & Sloan, 2017). This is surprising given how theoretically preparation for bias by definition includes messages around how to cope

with discriminatory behaviors (Hughes et al., 2006). However, researchers rarely measure preparation for bias as a multidimensional construct that includes both messages of raising awareness of discrimination and of how to navigate racist encounters. In a recent meta-analysis of ERS in relation to psychosocial outcomes, Wang et al., 2020 found that more than 75% of studies that included preparation for bias solely assessed bias and discrimination awareness. It may be that receiving racial barrier messages without direct guidance on how to manage and cope with discriminatory encounters may be insufficient for equipping youth with coping strategies they can use.

Proactive Coping with Discrimination and Mental Health Symptomology

Counter to hypotheses, greater use of proactive coping with discrimination was not concurrently associated with lower levels of depressive or anxiety symptoms. Another study that used person-centered analyses similarly found that individuals in the Proactive Coping profile did not report lower depressive symptoms compared to youth in other profiles (McDermott et al., 2019). It may be that the use of proactive coping with discrimination does not alleviate current mental health distress. However, I did find that proactive coping was related to lower depressive symptoms and anxiety symptoms 6 months later, controlling for baseline measurements. In other words, across all levels of symptomology, adolescents who endorsed higher use of proactive coping strategies experienced lower depressive and anxiety symptoms six months later compared to those who reported little use of proactive coping strategies. Thus, proactive coping protected individuals from increasing in or developing additional symptomology over time.

Previous research has already found that the use of proactive coping strategies in the face of discrimination is related to higher self-esteem, academic motivation, academic achievement, and sense of belonging in schools (McDermott et al., 2018; McDermott et al., 2019a McDermott

et al., 2019b; Montoro et al., 2012). This is the first study to find that these strategies are also related to lower mental health symptomology over time. Indeed, although proactive coping was not related to concurrent levels of symptomology, it can help foster resilience over time potentially through cascading effects on self-esteem, academic well-being, and sense of belonging that cumulatively support mental health. In all, this study adds further evidence that strategies such as confronting the person, working hard to prove others wrong, and being proud of who you are may be effective strategies for Latinx youth to employ when experiencing racialethnic discrimination, and these strategies protect against worsening symptoms. Put another way, Latinx youth without these coping skills demonstrated greater growth in the depressive and anxious symptoms six months later. It may be that the damaging effects of racial-ethnic discrimination cannot be attenuated completely, but at the same time, but the long reach of these experiences can accumulate and that proactive coping can help mitigate long-term effects.

Next Steps in Coping with Discrimination Literature

This study only assessed one set of coping strategies in response to one type of a racebased stressor. The proactive coping with discrimination measure only asks about instances of interpersonal discrimination, yet Latinx adolescents must navigate other stressors such as acculturative stress (Bekteshi & Kang, 2020) and more institutional forms of discrimination such as anti-immigrant policies (Eskenazi et al., 2019). Indeed, it is also important to consider the timing of when youth completed these surveys, which occurred throughout the COVID-19 shutdown and pandemic. During this time, systematic health disparities along ethnic-racial lines due to decades of racist policies and practices became readily apparent (Park, 2021). Currently, there are no measures that attempt to capture how minoritized youth cope with systemic injustices. Moreover, adolescents certainly use a myriad of strategies when confronted with race-based

stressors beyond proactive coping. Indeed, there are some important limitations of the proactive coping with discrimination measure. For one, there are only three items included and reliability of the measure in this sample was questionable. Cronbach alpha was similarly low in another sample of Latinx adolescents ($\alpha = .60$; McDermott et al., 2018). Cronbach's alpha is highly sensitive to number of items, but the low reliabilities may also suggest that these items are not measuring the same underlying construct. The significant differences in how each strategy relates to some of the study variable at the bivariate levels provides further evidence that the items may be better investigated individually rather than collectively, and deeper measure of the set of strategies may be warranted to increase reliable measurement of this nuanced construct.

Another weakness of the scale is that no item specifically measures coping strategies that are culturally-relevant. One item is "just think about all the positive things that you have to offer and being proud of you are—who cares what people think." While this item does tap into pride, it is not explicitly tying the pride to culture or ethnic background. Ultimately, a new measure is needed that can assess strategies beyond the three that the current proactive coping with discrimination measure assesses. Scholars have long argued that generic coping measures are not capable of capturing the full range of culturally relevant and nuanced strategies that minoritized youth utilize to cope with discrimination (Brondolo et al., 2009; Forsyth & Carter, 2014; Wei et al., 2010). In a mixed-methods study, Gonzalez et al. (2022) indeed found that the traditional COPE model was not a good fit for a sample of Latinx adolescents. Qualitative interviews suggested that Latinx youth expressed coping strategies that were more relational and interdependent with family members that quantitative measures currently do not assess. Moreover, other qualitative interviews with Latinx adolescents and their parents similarly found that youth used both individualistic and interdependent approaches to cope with discrimination

(Martin Romero et al., 2022). Indeed, experiences of racial-ethnic discrimination were viewed as a shared threat that all family members coped with together. Given the usefulness of qualitative studies in explicating how traditional ways of understanding coping may not apply to Latinx youth and families and in building a new foundation for conceptualizing coping in minoritized populations, scholars should continue to use these methods to inform development of new measurement. Indeed, the literature on coping with discrimination would greatly benefit from halting the use of generic coping measures, and researchers must move away from traditional coping models that emphasize individualistic coping strategies and ideals of autonomy to examine more culturally-relevant, collectivist-based strategies.

Once a measure is created that can reliably and validly assess the full range of strategies that youth employ when dealing with a race-based stressor, an important next direction is to determine which coping strategies are adaptive and maladaptive. Clark et al.'s (1999) formative biopsychosocial model on racism defines adaptive coping responses as those that mitigate the negative effects of racism on health and maladaptive coping responses as those that do not attenuate stress responses to racism, leading to a heighted continued state of psychological and physiological activity. The coping literature traditionally has classified certain strategies as adaptive and others as maladaptive, using these terms as major classification categories. However, whether a coping strategy is adaptive or maladaptive is dependent on context, on the outcome under investigation, and on the stressor (Cheng et al., 2014). It is important to emphasize that coping strategies that are adaptive in response to general stressors may not be adaptive when used to navigate a racist encounter. For example, confronting someone who said or did something discriminatory (a primary control coping response typically conceived as adaptive) may lead to more distress if the person dismisses the concern and is unwilling to listen.

There is also emerging evidence that disengagement coping strategies may be an adaptive coping strategy when the stressor is uncontrollable (Edlynn et al., 2008; Ojeda & Liang, 2014), such as the case when the stressor is race-based. In a qualitative study, Martin Romero et al. (2022) found that youth reported ignoring discrimination in conjunction with reframing the experience with pride. Although ignoring is typically considered a disengagement strategy linked with maladjustment, when used in parallel with thinking about how much they have to offer, it may confer positive benefits for adolescents. Thus, how people typically conceive of general coping strategies' relation to mental health outcomes may not apply, and even work in opposite ways, when the stressor is discrimination. Indeed, emerging work indicates that uncontrollable stressors may require unique coping strategies, such as shift-and-persist coping, which has been found to protect against mental health symptoms for individuals exposed to discrimination (Christophe et al., 2019; Christophe et al., 2022). Adaptability may also depend on timing, as this study showed. Proactive coping with discrimination was not effective in reducing the current presence of depressive or anxiety symptoms but was an effective strategy in protecting against increasing or development of symptomology.

Overall, as reviewed previously, the current literature on which coping strategies are adaptive/effective in the face of discrimination is mixed. A major reason for this may be due to the vast majority of studies in this area utilizing generic coping measures and applying traditional coping models that do not take the nuances of facing race-based, uncontrollable stressors into account. Continued empirical research with reliable and valid measures is sorely needed to identify effective coping strategies to race-based stressors and how their effectiveness may differ depending on contextual factors such as the outcome, the timing, and racial-ethnic group membership.

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Another next step is more investigation of facilitators of effective coping strategies.

Consideration of cultural resources within the coping literature has been severely lacking. Assets such as cultural socialization and preparation for bias must continue to be examined as predictors of coping strategies. Other resources that may inform and be intricately tied with how minoritized adolescents cope with discrimination include familism (Santiago et al., 2016), spirituality (Dill, 2017; Wright et al., 2018), ethnic-racial identity (Christophe et al., 2019; Yip et al., 2019), and critical consciousness (Diemer et al., 2017). Knowing how these factors relate to effective coping strategies is crucial for aiding interventionalists and practitioners who aim to disrupt the negative effects of discrimination on mental health outcomes.

Clinical Implications

These findings have implications for clinicians who work with ethnic-minoritized youth and families. Due to the frequency of racial-ethnic discrimination, therapy adolescent clients from marginalized racial-ethnic groups likely have experienced an incidence of racial-ethnic discrimination and are likely to experience further incidents. Thus, it may be useful for the client to be able to discuss these experiences in the context of therapy. Clinicians can recommend proactive coping strategies such as talking to the person to clarify the misconception and even role-play these conversations. They can additionally incorporate positive cognitive reframing such as being proud of who they are. Furthermore, given the findings that cultural socialization can instill a foundation of use of proactive coping with discrimination, clinicians can encourage parents to talk to their children about their cultural background and traditions.

Limitations

There were notable strengths of this study. First, we recruited a community sample of Latinx middle and high schoolers, which are a hard-to-reach population. The study also included

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two waves, allowing for an examination of longitudinal analyses, and a little over 75% of adolescents participated in both waves of the study. Another strength includes assessing coping with discrimination with a measure that has been validated with Latinx adolescents and that directly assesses coping specifically in response to discrimination, rather than using a generic coping measure. However, there are some limitations of the study worth discussing. The sample size was relatively small, limiting the ability to examine a mediation model. Future studies should test whether ERS messages are related to increased use of proactive coping with discrimination strategies, which are then in turn related to lower mental health symptomatology. Another consideration is whether discrimination interacts with ERS messages to predict coping, which I also could not test due to limited sample size. Perhaps preparation for bias messages are predictive of proactive coping with discrimination only at high levels of discrimination. Next, the preparation for bias measure included in the study did not contain items that directly assessed socialization related to how to cope with discrimination. Future studies should attempt to replicate findings in a larger sample, test more complex models, and include a multidimensional measure of preparation for bias that assesses both parental messages that raise awareness of discrimination and include strategies on how to navigate racist encounters.

Conclusion

Ultimately, Latinx adolescents and families are resilient in a society that constantly degrades and ostracizes them. They certainly have an abundance of strategies they employ when faced with institutional and interpersonal incidents of discrimination. To summarize, in order to identify and tap into these strategies, researchers must 1.) develop specific measures that capture the full-range of mainstream and culturally-relevant strategies minoritized youth use, 2.) study which of these strategies are particularly useful in promoting positive youth outcomes and

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mitigating discrimination's negative effects, and 3.) investigate facilitators of these strategies in order to inform interventions. This study preliminarily examined one particular coping strategy, proactive coping, that was indeed longitudinally related to lower depressive and anxiety symptoms. Cultural socialization, but not preparation for bias, was related to higher use of proactive coping. Given the frequency of discrimination faced by minoritized youth and its incredibly harmful effects on psychological adjustment, this study adds to an emerging and crucially important literature focused on identifying effective coping strategies and their facilitators.

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APPENDIX A: TABLES

Variable	Range	Mean	SD	Skewness	Kurtosis
Proactive Coping with	1-5	3.27	.92	25	17
Discrimination T1					
Cultural Socialization T1	1-5	2.99	1.05	.03	81
Preparation for Bias T1	1-5	2.77	1.08	.44	70
Depressive Symptoms T1	1-5	2.23	1.04	.64	35
Anxiety Symptoms T1	1-5	2.26	1.05	.66	36
Discrimination T1	1-4.27	1.89	.72	.85	.32
Gender	0-1	.39	.49	.44	-1.84
Age	13-18	16.00	1.27	44	64
Proactive Coping with	1-5	3.19	1.01	41	19
Discrimination T2					
Depressive Symptoms T2	1-5	2.22	1.03	.59	61
Anxiety Symptoms T2	1-5	2.24	1.03	.70	34

Table A1. Descriptive Statistics for Study Variables (N = 135)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Proactive	1										
coping T1											
2. Cultural	.37***	1									
socialization T1											
3. Preparation for	.32***	.70***	1								
bias T1											
4. Depressive	.07	.16	.19*	1							
symptoms T1											
5. Anxiety	.04	.14	.21*	.83***	1						
symptoms T1											
6. Discrimination	.31***	.28***	.57***	.46***	.45***	1					
T1											
7. Male Gender	22*	17	20*	18*	20*	24**	1				
8. Age	.10	00	.16	.09	.14	.21*	-	1			
							.28***				
9. Proactive	.65***	.32**	.25*	.11	.01	.15	24*	.06	1		
Coping T2											
10. Depressive	-07	.10	.24*	.58***	.54***	.36***	16	.13	12	1	
symptoms T2											
11. Anxiety	06	.08	.25*	.62***	.67***	.42***	26*	.14	12	.83***	1
symptoms T2											

 Table A2. Correlation Matrix Among Study Variables (N = 135)

Note. T1 = Time 1; T2 = Time 2. All significant values are bolded.

^{***}p < .001, **p < .01, *p < .05

Variable	Talking to the person	Being proud	Working hard
Being proud	380***		
Working hard	.363***	.331***	
Cultural socialization	.330***	.307***	.199*
Preparation for bias	.266**	.179*	.268**
Depressive symptoms	.038	.077	.037
Anxiety symptoms	.071	.035	018
Discrimination	.262**	.162	.276**
Gender	243**	093	158
Age	.012	.013	.200*

Table A3. Correlations between each Proactive Coping Strategy and Study Variables

Note. All significant values are bolded. Talking to the person = Talking to the person to

clarify the misconception or stereotype, Being proud = Just thinking about all of the positive things that you have to be offer and being proud of who you are, and Working hard = Working hard to prove discriminatory people wrong.

^{***}p < .001, **p < .01, *p < .05

Outcome	Predictor	β	SE	<i>p</i> -value	R^2
	Tin	ne 1 Outc	omes		
Proactive	Cultural Socialization	.33	.11	.002	.18
Coping	Preparation for Bias	07	.13	.604	
	Discrimination	.23	.10	.020	
	Age	.02	.09	.791	
	Male Gender	12	.09	.155	
Depressive	Proactive Coping	.02	.09	.805	.03
Symptoms	Age	.04	.09	.650	
	Male Gender	17	.09	.065	
Anxiety	Proactive Coping	01	.09	.941	.04
Symptoms	Age	.08	.09	.362	
	Male Gender	18	.09	.040	
	Tin	ne 2 Outc	omes		
Proactive	Cultural Socialization	.03	.11	.775	.43
Coping T2	Preparation for Bias	.04	.12	.762	
	Discrimination	14	.15	.193	
	Proactive Coping	.65	.10	.000	
	Age	.05	.07	.606	
	Male Gender	13	.18	.124	
Depressive	Proactive Coping	16	.08	.050	.37
Symptoms T2	Depressive Symptoms	.59	.07	.000	
	Age	.01	.09	.883	
	Male Gender	05	54	.592	
Anxiety	Proactive Coping	15	.08	.050	.48
Symptoms T2	Anxiety Symptoms	.67	.06	.000	
	Age	01	.08	.872	
	Male Gender	13	.08	.120	

Table A4. Summary of Multiple Regression Analyses (N = 135).

Note. Significant values are bolded. T2 = Time 2. All variables were measured at Time 1

unless otherwise specified.

APPENDIX B: MEASURES

Proactive Coping With Discrimination

Sometimes people experience discrimination or negative remarks about their ethnic or

racial background. There are different ways that people can deal with these situations.

- Talk to the person; clarify common misconceptions about ethnic groups
- Just think about all the positive things that you have to offer and being

proud of who you are—who cares what people think

- Work hard to prove them wrong
- Say something back to the person; if they are being rude, you should be rude right back
- Ignore it; just forget about it and go on with your life. There's nothing you

can really do about it

Thinking about what you have actually done...

	1= Never		3= Sometime s		5= Very Often
How often have you used the strategy of talking to the person to clarify the misconception or stereotype?	1	2	3	4	5
How often have you used the strategy of just thinking about all of the positive things that you have to offer and being proud of who you are?	1	2	3	4	5
How often have you used the strategy of working hard to prove discriminatory people wrong?	1	2	3	4	5
How often have you used the strategy of dealing with discrimination by saying something rude right back to the person?	1	2	3	4	5
How often have you used the strategy of ignoring the situation?	1	2	3	4	5

Ethnic-Racial Socialization

The following questions ask about your discussions with your caregivers. In the past

year, how many times have your primary caregiver talked to you about the following:

		Never	Once	Two or three times	Four or five times	Six or more times
Prep for bias	Told you that people might try to limit you because of your ethnicity	1	2	3	4	5
Cultural Socialization	Encouraged you to read books concerning the history or traditions of your ethnicity	1	2	3	4	5
Prep for bias	Talked to you about discrimination or prejudice against your ethnicity	1	2	3	4	5
Prep for bias	Explained to you something you saw on T.V. that showed poor treatment of your ethnicity	1	2	3	4	5
Prep for bias	Talked to someone else about discrimination or prejudice against your ethnic group when you were around and could hear	1	2	3	4	5
Prep for bias	Told you that you must be better than other students to get the same rewards because of your ethnicity	1	2	3	4	5
Cultural Socialization	Talked to you about important people or events in the history of your ethnic group	1	2	3	4	5
Cultural Socialization	Done or said other things to encourage you to learn about the history or traditions of your ethnic group	1	2	3	4	5
Cultural Socialization	Taken you places or events that reflect your ethnic heritage	1	2	3	4	5
Prep for bias	Talked about the possibility that some people might treat you badly or unfairly because of your ethnicity	1	2	3	4	5
Cultural Socialization	Celebrated cultural holidays of your ethnic group	1	2	3	4	5

Racial-Ethnic Discrimination

The next set of questions are about your experiences and feelings about the immigration

policy context. Please indicate how frequently you have felt in the following way.

	Never	Rarely	Someti mes	Often	Always
Have you been treated unfairly at a restaurant or store?	1	2	3	4	5
Have you been silenced by others or felt that your opinion did not matter?	1	2	3	4	5
Do others act like they had the right to treat you unfairly or poorly?	1	2	3	4	5
Have you been treated like a criminal based on who you are?	1	2	3	4	5
Were you treated poorly because you did not speak English?	1	2	3	4	5
Do other Latinos treat you poorly?	1	2	3	4	5
Do you feel ignored when seeking help?	1	2	3	4	5
Have you been humiliated because of who you are?	1	2	3	4	5
Do you feel that you were being exploited or taken advantage of at work because you are an immigrant?	1	2	3	4	5
Have you been treated differently in school due to the immigration policies or negative attitudes towards immigrants?	1	2	3	4	5
Have you been denied services due to immigration policies or negative attitudes towards immigrants?	1	2	3	4	5

Depressive Symptoms

Pediatric Depressive Symptoms - Short Form 8a

Please respond to each question or statement by marking one box per row.

	In the past 7 days	Never	Almost Never	Sometimes	Often	Almost Always
488R1r	I could not stop feeling sad		2	3	□ 4	5
461R1r	I felt alone		□2		□ 4	5
5041R1r	I felt everything in my life went wrong		\square ₂	□ 3	□ 4	5
5035R1r	I felt like I couldn't do anything right		2	□ 3	□ 4	5
711R1r	I felt lonely		□2	□	□ 4	5
228R1r	I felt sad		□2	3	□ 4	5
712R1r	I felt unhappy		\square_2	□ 3	□ 4	5
3952aR2r	It was hard for me to have fun		\square_2	3	□ 4	5

Anxiety Symptoms

Pediatric Anxiety – Short Form 8a

Please respond to each question or statement by marking one box per row.

	In the past 7 days	Never	Almost Never	Sometimes	Often	Almost Always
2220R2r	I felt like something awful might happen					5
713R1r	I felt nervous		□ 2	□ 3	□ 4	5
227bR1r	I felt scared		□ 2	3	□ 4	5
5044R1r	I felt worried			□ 3	□ 4	5
3459bR1r	I worried when I was at home		□ 2	□ 3	□ 4	5
2230R1r	I got scared really easy			□ 3	□ 4	5
231R1r	I worried about what could happen to me		□ 2	□ 3	4	5
3150bR2r	I worried when I went to bed at night			□	\square 4	5