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Author

Espinosa, Jamila Ferreira

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Testing the Protective Role of Peer Support and Peer Cultural Socialization in the Lives of
Ethnic-Racial Minority Youth

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JAMILA ESPINOSA
THESIS

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Approved:

Maciel M. Hernández, Chair

Olga Kornienko

Adrienne Nishina

Committee in Charge

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Abstract

Experiences of ethnic-racial discrimination are commonplace among youth in the U.S. and are associated with increased mental health difficulties. Although social orientation towards peers is a normative developmental process in adolescence, few studies have examined whether peer support and peer cultural socialization, two contextual resources at the peer level, might help mitigate the negative consequences of experiences of ethnic-racial discrimination for minority youth. The total sample included youth ($N = 717$, 49.9% girls) from a public school district in a large Southwestern city in the U.S.; a subsample of youth from minoritized ethnic-racial backgrounds ($n = 534$, 50.0% girls) with a mean age of 13.54 years was extracted for the current study. The selected subsample of participants includes Hispanic/Latinx (42.7%), Multiethnic (42.5%), Black or African American (9.7%), Asian American or Pacific Islander (1.9%), American Indian or Alaska Native (1.9%), and Arab, Middle Eastern, or North African (1.3%) backgrounds. The present study examined the association between perceived ethnic-racial discrimination and depressive symptoms and the moderating role of peer support and peer cultural socialization as potential protective assets against ethnic-racial discrimination. Based on correlations, experiences of discrimination were higher for older children. Independent samples t-test demonstrated a significant difference in mean number of depressive symptoms between girls and boys such that girls experienced more depressive symptoms on average. Peer cultural socialization was positively correlated with peer support. Results from regression analyses indicated that ethnic-racial discrimination did not significantly predict depressive symptoms. Peer cultural socialization moderated this association, while peer support did not. The simple slopes analysis suggested that for youth experiencing low levels of peer cultural socialization, the association between ethnic-racial discrimination and depressive symptoms was non-significant.

At high levels of peer cultural socialization, the association between ethnic-racial discrimination and depressive symptoms was significant and positive. Peer support did not significantly moderate the association between ethnic-racial discrimination and depressive symptoms, thus, highlighting the role of potential contextual factors that are relevant to these processes. Future work understanding adaptive responses to ethnic-racial stress can further specify the identity-based components that might promote adaptive responses to discrimination in ethnic-racial minority youth.

Testing the Protective Role of Peer Support and Peer Cultural Socialization in the Lives of Ethnic-Racial Minority Youth

Experiences of racial and ethnic discrimination are salient to the development of ethnic minority youth in the United States, as approximately half of the U.S. adolescent population identified as a racial or ethnic minority in 2020 (U.S. Census Bureau, 2020). Thus, ethnic-minority youth encompass a significant portion of youth developing in the United States. Ethnic-racial inequities in the United States are symptoms of systemic racism resulting in ethno-racially hostile developmental contexts for youth (Umaña-Taylor & Rivas-Drake, 2021). Racism specifically refers to the racial hierarchy of White superiority influencing political, legal, and economic systems (Williams et al., 2019). Regardless of ethnic-racial background, the transformation from childhood to adolescence is notable as youth seek autonomy (Dahl et al., 2018) and social engagement with peers (Brown & Larson, 2009). These changes converge within the socially established context of racial hierarchy and discrimination in the United States. Ethnic and racial discrimination refers to the social phenomena in which the unfair division of power, resources, and opportunities manifests as beliefs (e.g., stereotypes), negative emotions such as fear or hatred, behavior, and practices (e.g., unfair treatment) from individuals and social systems against racial or ethnic groups (Priest et al., 2013). Thus, potential exposure to discrimination is a relevant factor in the psychological adjustment of ethnic-minority youth.

Ethnic-racial discrimination is pervasive in the United States. Most adults recognize the presence of at least some discrimination against several ethnic and racial groups (Pew Research Center, 2021). Recognition of ethnic-racial discrimination, however, occurs as early as childhood. Research examining child stereotype awareness suggests that children from academically stigmatized groups, such as Black and Latino students, are more likely to report

knowledge of broadly held racial stereotypes as early as age six and commonly by ages eight to nine (McKown & Weinstein, 2003). As children become aware of cultural stereotypes during middle childhood, they can recognize overt and covert discrimination by age ten (McKown & Weinstein, 2003). Concurrent leaps in cognitive development, such as formal operational thought (Greene et al., 2006; Inhelder & Piaget, 1958) and the development of racial constancy, allow 10- to 12-year-old children to view race as stable and unchanging despite superficial alterations (Byrd, 2012). Thus, as youth establish ethnic-racial understanding and awareness, they might navigate a continuous source of developmental risk: experiences of ethnic-racial discrimination.

Understanding the effects of ethnic-racial discrimination during adolescence is critical, given that it may influence the psychological and developmental outcomes of ethnic-racial minority youth. Moreover, research suggests that discrimination is a chronic stressor that can result in psychological distress (Sanders-Phillips et al., 2009) and potentially disrupts adaptive physiological stress responses (Benner et al., 2018; Huynh & Fuligini, 2010). Depressive symptoms can indicate a lack of psychological well-being (Hou et al., 2015; Schmitt et al., 2014), and research suggests an association between experiencing racial discrimination and depressive symptoms (Neblett et al., 2008). Thus, understanding the pathway between discrimination and depressive symptoms (Figure 1) is relevant to understanding the interactions between developmental contexts in which ethnic minority youth are embedded and their implications for adolescent well-being. A visual representation of these concepts is proposed in Figure 1. Specifically, the conceptual model of this study (Figure 1) establishes that discrimination is an important contextual factor positively related to depressive symptoms (Path A). Moreover, considering the significance of contextual factors on development, it is relevant to

identify potential moderators of the effects of ethnic-racial discrimination within the adolescent social context. The Integrative Model for the Study of Developmental Competencies (Garcia Coll et al., 1996) and theory on risk and resilience (Masten et al., 1990) inform the developmental framework in this investigation and will be further discussed in the following section.

The significance of peer interaction on development expands during adolescence as physical, social, and psychological changes occur (Brown & Anistranski, 2020). This shift in the importance of social context is not specific to ethnic-minority adolescents; however, the roles of peers in mitigating the psychological distress associated with ethnic-racial discrimination and thereby functioning as a protective environmental resource is a worthwhile consideration. It is also possible that as the frequency of peer interactions increases, adolescents may supplement gaps in emotional support or socialization from their family in their friendships. In this study, social support and cultural socialization from peers are conceptualized as protective environmental resources buffering the effects of ethnic-racial stress resulting from discrimination (Dumont & Provost, 1999). Specifically, social support refers to the sense of belonging peers may provide through their role as “supporters” following a discriminatory event (Kornienko et al., 2020). Given the salience of peer relationships in the adolescent environment, the social support obtained from these relationships may attenuate the effects of discrimination (Dumont & Provost, 1999). Specifically, research suggests that supportive peer relationships can buffer depressive symptoms associated with ethnic-racial discrimination (Delgado et al., 2019; Juang et al., 2016).

Moreover, research also suggests that cultural socialization is a relevant developmental consideration for ethnic-minority youth. Cultural socialization refers to the practices used to

convey information and values about racial or ethnic heritage and history (Hughes et al., 2006; Wang & Benner, 2016; Umaña-Taylor & Fine, 2004). In the lives of ethnic-minority youth, cultural socialization might function as a buffer by providing youth with the ability to think more positively about themselves and with strategies to navigate challenging encounters with discrimination (Neblett et al., 2012). Although cultural socialization has been extensively reviewed within the family context (Hughes et al., 2006), the role of peer cultural socialization as a potential buffer against the effects of ethnic-racial discrimination requires additional examination, given the multidimensional nature of this process. The proposed significance of the peer cultural socialization context is discussed later.

Given the research suggesting the potential moderating effects of peer social support (Figure 1, Path B) and peer cultural socialization (Figure 1, Path C), both are considered potential mitigating factors of the effects of ethnic-racial discrimination on depressive symptoms in ethnic-minority youth. The following study tests the moderating role of peer cultural socialization and peer support for ethnic minority adolescents experiencing ethnic-racial discrimination. This study investigates the significance of peers as a potential protective resource against psychological maladjustment derived from ethnic-racial discrimination in the lives of ethnic minority adolescents in the U.S.

Ethnic-Racial Discrimination as a Developmental Risk Factor

Ethnic-racial discrimination can manifest as unfair treatment and other forms of marginalization based on ethnic-racial backgrounds (Umaña-Taylor, 2016). Two theoretical frameworks inform how ethnic-racial discrimination is a developmental risk factor for youth. The Integrative Model for the Study of Developmental Competencies contextualizes the influences of relevant oppressive social systems, such as racism, social stratification, and

segregation, on children's development (Garcia Coll et al., 1996). Importantly, this model considers how protective factors, such as those in family and social networks (Garcia Coll et al., 1996; Umaña-Taylor & Rivas-Drake, 2021), can buffer developmental risks related to identity-based discrimination. The Integrative Model supports an assets-based approach to examining the significance of protective factors in the lives of ethnic minority youth and the risk of ethnic-racial discrimination through a risk and resilience framework. A risk and resilience framework establishes that resilience occurs as "the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten et al., 1990, p. 426). Together, the Integrative Model and theory on risk and resilience suggest that ethnic minority youth could demonstrate resilience to ethnic-racial discrimination in the presence and use of developmental resources, such as peer support and cultural socialization.

Developmental Implications of Ethnic-Racial Discrimination

Ethnic-racial discrimination is a multi-dimensional health determinant nested within social, psychological, and environmental race-related stressors (Williams & Mohammed, 2009), resulting in far-reaching consequences such as health vulnerability (Pascoe & Richman, 2009). Environmental stress triggers a sequence of behavioral and biological responses that increase proximity to disease (Cohen et al., 2016). Indeed, distress sustained throughout the lifespan is associated with increased risk behaviors, aggression, risk of chronic illness, and susceptibility to infectious diseases (Sanders-Phillips et al., 2009). Racial discrimination is only one of the pathways by which racism affects health (Williams & Mohammed, 2009). For example, perceived racial discrimination resulting in psychological distress can lead to unhealthy coping mechanisms and immune system responses (Cohen et al., 2016). According to Williams and Mohammed (2009), these psychological and behavioral responses to stress can ultimately change

physiological system functionality, influencing the onset, progression, and even the severity of health risks.

In the lives of ethnic minority youth, experiences of ethnic and racial discrimination are a part of everyday life as discrimination occurs across various sources (Benner & Graham, 2013). For instance, in a daily diary study, adolescents from Latinx, Asian, and Black backgrounds who experienced increases in ethnic and racial discrimination from peers and adults experienced concurrent increases in depressive symptoms (Greene et al., 2006). A systematic review by Paradies et al. (2013) established that after adjusting for confounding variables in 128 studies, there was a positive relation between self-reported racism and illness, with the strongest and most consistent association being racism and poor physical health outcomes. Although a meta-analysis of 134 samples suggested similar associations between perceived discrimination and physical health outcomes (Pascoe & Richman, 2009), a more recent meta-analysis examining data from 293 studies in the U.S. found that racism, or race-related discrimination, was more strongly related to poor mental health than poor physical health (Pariedes et al., 2015). Furthermore, another meta-analysis found that a greater perception of ethnic-racial discrimination was associated with depressive symptoms during adolescence (Benner et al., 2018). Specifically, 76 studies on the relation between perceived race/ethnic discrimination and depressive symptoms and depressive affect (87 unique effect sizes in total) reported small to moderate-sized correlations (Benner et al., 2018). Thus, depressive symptoms may be one way to measure the psychological effects of ethnic-racial discrimination, and we expect that ethnic minority youth experiencing ethnic-racial discrimination will be more likely to experience depressive symptoms (Figure 1, Path A). Lee and Ahn (2013) report that the effect of perceived racism on distress is magnified in children compared to adults indicating the potential

significance of adolescence as a time to develop coping strategies and resources against discrimination (Schmitt et al., 2014). Prior studies also indicate a potential correlation between gender and depressive symptoms favoring girls (Hankin et al., 2007; Neblett Jr. et al., 2008) as well as age on depressive symptoms, with dramatic rises in middle to late adolescence (Brooks-Gunn & Peterson, 1991; Whittle et al., 2014). As such, the effects of age will be considered a covariate (Brooks-Gunn & Peterson, 1991; Whittle et al., 2014), as will gender (Hankin et al., 2007; Neblett Jr. et al., 2008).

Given that adolescence is marked by high emotionality (Schriber & Guyer, 2016) and social reorientation (Nelson et al., 2016), understanding factors that may amplify or dampen the impact of racial discrimination on youth psychological adjustment and mental health is of practical and theoretical importance. Stressful experiences of discrimination additionally challenge a youth's sense of social belonging and ability to navigate social contexts typical in adolescence (Grossman & Liang, 2008). Although parental influence has been examined as the primary protective factor against discrimination in the study of ethnic-racial socialization (Benner et al., 2018), the role of peer ethnic-racial socialization and peer support as potential protective factors requires additional examination (Wang et al., 2015).

The Protective Effect of Peer Cultural Socialization during Adolescence

Ethnic-racial socialization is commonly organized into four strategies. They include cultural socialization, preparation for bias, promotion of mistrust, and egalitarianism (Hughes et al., 2006). Cultural socialization, a dimension of ethnic-racial socialization, is the process through which youth learn cultural information and develop a sense of belonging to a cultural group (Umaña-Taylor & Fine, 2004; Umaña-Taylor & Hill, 2020). This dimension of socialization refers to socializing practices that instill a sense of ethnic-racial pride, culture, and

values in youth (Banerjee et al., 2018; Chen et al., 2020). The main effects between family cultural socialization and youth outcomes are well-documented (Hughes et al., 2006; Umaña-Taylor & Hill, 2020). Given the established association between ethnic and racial resources, such as cultural socialization, and developmental outcomes in the lives of ethnic minority youth, identifying the racial and ethnic protective factors that may moderate the effects of discrimination, such as through cultural socialization, is a promising direction for research (Neblett et al., 2012). This current study thereby identifies cultural socialization as a relevant process for youth adjustment with the potential to buffer the effects of discrimination. Research relevant to the potential moderating role of cultural socialization is discussed below.

The protective effect of cultural socialization has been studied across sources and contexts with complex findings. For example, a longitudinal study examining the effects of racial discrimination on African American adolescents indicated that youth experiencing stronger patterns of positive racial socialization from parents, which included messages about racial pride, racial barriers, egalitarianism, and self-worth, reported the most positive psychological adjustment outcomes, measured as reduced levels of stress and problem behaviors, when compared to youth with moderate to low levels of racial socialization (Neblett et al., 2008). Specifically, these findings indicate the role of socialization in buffering the effects of racial discrimination. Although these findings underscore the importance of family cultural socialization, they also identify sources of socialization outside of the family system.

For example, researchers propose that non-familial ethnic-racial and cultural socialization can occur in schools through peer and teacher interactions (Saleem & Byrd, 2021) and potentially through media (Umaña-Taylor & Fine, 2004). The transition from childhood to adolescence results in changes in the individual, social context, and social norms, which seem to

increase the significance of peer interactions in the lives of adolescents (Brown & Larson, 2009). As such, cultural socialization from peers during adolescence might offer a similar protective effect against ethnic-racial discrimination (Wang & Benner, 2016), although it requires additional examination of its potential buffering role against the effects of discrimination. A related investigation on the moderating effects of racial socialization by parents and friends on racial discrimination and alcohol consumption in African American young adults found that cultural socialization by friends buffered the effects of racist encounters on alcohol consumption and alcohol problems in a sample of 383 young adults (Su et al., 2020). Su et al. (2020) asked participants to recall their experiences of cultural socialization during childhood and adolescence, thus highlighting the developmental significance of this process related to the contextual influence of peers. In a recent commentary, researchers propose that peer cultural socialization may vary from family cultural socialization given the means and content of how adolescents socialize around ethnicity/race (Wang & Lin, 2023). For example, it may be that certain processes such as affiliating with peers from same or diverse ethnic/racial groups, learning about peers' ethnic/racial identities and attitudes, and even peer interactions across social media are fundamentally different from family cultural socialization (Wang & Lin, 2023). Despite these findings indicating a protective effect of cultural socialization, one study suggests that cultural socialization might have a magnifier effect.

A study examining family and peer cultural socialization found that Latinx adolescents in low-discrimination contexts who received high cultural socialization reported lower depressive symptoms than their peers with little to no cultural socialization (Chen et al., 2020). However, Chen et al. (2020) noted that youth experiencing high levels of discrimination and peer cultural socialization indicated elevated depressive symptoms, suggesting a protective-reactive (Luthar et

al., 2000) quality to cultural socialization. Specifically, cultural socialization may increase feelings of ethnic centrality and lead to heightened vigilance in situations of high discrimination against their ethnicity or race (Hughes et al., 2006) and thus also worsen the effects of discrimination on emotional maladjustment such as depressive symptomology (Chen et al., 2020). Although findings indicating the buffering effect of cultural socialization are mixed, with one study showing a protective-reactive effect (Chen et al., 2020) and some studies demonstrating a moderating protective role for psychological adjustment (Neblett et al., 2012; Yasui et al., 2015) and educational outcomes (Wang & Huguley, 2012), the current investigation explores this pathway due to the developmental salience of peer interactions during this time. Specifically, given the protective effects of family cultural socialization in prior studies and some evidence for the importance of peer cultural socialization for academic markers of youth adjustment (Hughes et al., 2006), and the prevalence of peer interactions during adolescence, peer cultural socialization is hypothesized to provide ethnic minority youth with a sense of ethnic-racial pride and culture thus attenuating the effects of discrimination on socioemotional outcomes such as depressive symptoms. Nonetheless, given the scarce research on the topic, we also examine whether peer cultural socialization has a protective-reactive role, or magnifier effect, in the association between ethnic-racial discrimination and depressive symptoms.

Peer Support during Adolescence

Social support refers to the multidimensional transaction of aid (concrete or emotional) provided to individuals across family, friends, or significant others (Zimet et al, 1988). Similarly, a meta-analysis on the role of discrimination on health defines social support as an individual's perception of having one person or multiple people available to aid when needed (Pascoe & Richman, 2009). Thus, this study operationalizes peer support as the emotional support peers

provide to aid when needed. In adolescence, informational and emotional support from peers increases from ages twelve to eighteen (Hombrados-Mendieta et al., 2013). Yet, adolescents who do not have close positive peer relationships are less likely to receive and seek emotional support in times of stress (Hussong, 2000), emphasizing the importance of peers in potentially mitigating the negative consequences of stress. Social support following discriminatory experiences may promote feelings of self-worth and potentially prevent the development of depressive symptoms (Pascoe & Richman, 2009). For instance, youth with access to support from peers might talk to their peers about the discrimination and resulting feelings of ethnic-racial stress they might be experiencing.

Some empirical research examining the moderating role of social support against ethnic-racial stress has begun to examine this proposition with mixed findings. For example, in a sample of high school students (9th-12th grades) in the United States, researchers found no significant interaction between racial discrimination and coping styles (distractive, avoidance, and support-seeking) in regard to depressive symptoms (Garnet et al., 2015). In a similar study of ethnically diverse college students, peer support buffered the harmful effects of discrimination on depressive symptoms such as somatization (Juang et al., 2016). Positive engagement with peers has also been identified as a contextual moderator for the link between racial discrimination at school and experiences of depressive symptoms for African American youth (Brittian & Gray, 2014). Although there is limited research exploring the mechanisms by which social support serves a buffering role against discrimination, it may be the case that individuals who seek out support actively cope by challenging the validity of discriminatory events and reducing negative feelings about the self (Pascoe & Richman, 2009). Due to these limited findings, the following study examines the potential moderating role of peers' support. We

hypothesize that peer support buffers against symptoms of depression for students experiencing ethnic-racial discrimination (Figure 1, Path C).

Given the salience of the peer context in providing support during adolescence, the support provided by peers may also attenuate the effects of discriminatory experiences. Following an experience of negative treatment, it may be that peers function as “supporters” by engaging fellow youth in behaviors that prevent the internalization of discrimination through emotional support, social support, or by reinforcing a sense of social belonging for targeted youth (Kornienko et al., 2022). Supportive friendships might provide youth experiencing high levels of discrimination the space to disclose their negative experiences to their friends, who in turn provide emotional support to buffer depressive symptoms (Delgado et al., 2019). For example, in a sample of Mexican-origin youth, researchers found that adolescent girls experiencing higher than average discrimination from peers experienced a protective effect against depressive symptoms when they also had high friendship intimacy, as measured by the degree of closeness with a same-sex friend (Delgado et al., 2019). In a different study of ethnically diverse middle school youth, social support buffered the negative effects of peer victimization on depressive symptoms when gender was controlled for (Spiekerman et al., 2021). Together, these studies suggest that peer support might buffer against unfair treatment based on one’s social status. Thus, we hypothesize that peer support buffers against symptoms of depression for students experiencing ethnic-racial discrimination.

Although additional research is required to identify the mechanisms by which it operates in response to discrimination (Kornienko et al., 2022), a couple of related studies have tested and not found the moderating role of peer support in buffering the negative consequences of discrimination. For example, in a cross-sectional analysis of ethnically diverse 9th-12th urban

high school students, researchers examined coping mechanisms used by youth; they found no protective effect of social support in the link between racial discrimination and depressive symptoms (Garnett et al., 2015). Similarly, a study of Asian American adolescents did not find a buffering effect of peer support on the association between ethnic-racial discrimination and depressive symptoms (Grossman & Liang, 2008). Researchers speculate that given the internal psychological focus of depressive symptomology; peer support may have a stronger impact on external prosocial interactions than on inner psychological well-being (Grossman & Liang, 2008). Despite these discrepant findings, the effects of discrimination on mental health outcomes are documented (Pascoe & Smart Richman, 2009). Thus, additional studies are required to understand the conditions under which peer support buffers the adverse effects of ethnic-racial discrimination on depressive symptoms. Ultimately, the current study aims to understand the strategies used by ethnic-minority youth to navigate discrimination. Analyzing the peer context through a resource-based framework (Masten et al., 1990) more clearly specifies the role of the peer context in eliciting a protective response.

The Present Study

This study aims to examine the main effects of perceived discrimination on depressive symptoms for ethnic minority youth, and whether peer cultural socialization and peer support served as potential sources of protection against depressive symptoms among adolescents from ethnic-racial minority backgrounds in the U.S. Based on the previous literature, it is hypothesized that ethnic-racial minority youth experiencing discrimination will experience depressive outcomes (Figure 1, Path A), and peer support (Path B) and peer cultural socialization (Path C) will buffer against the harms of ethnic-racial discrimination on depressive symptoms.

Method

Participants

The Teen Interpersonal Educational Success (TIES) dataset examines the association between school, social connectedness, and academic outcomes. Self-report data were collected in December 2019 and January 2020 from 6th grade ($n = 281$, $M_{\text{age}}=11.53$ years) and 9th grade ($n = 437$, $M_{\text{age}}=14.55$ years) students from a public school district in a large Southwestern city in the U.S. Self-reported gender for both grades were 49.9% girls, 48.9% boys and 1.1% other. This study uses a subset of the sample, including adolescents identifying as part of an ethnic-racial minority group and excluding monoracial White participants ($n = 534$, 50.0% girls). The selected subsample of participants includes Hispanic/Latinx (42.7%), Multiethnic (42.5%), Black or African American (9.7%), Asian American or Pacific Islander (1.9%), American Indian or Alaska Native (1.9%), and Arab, Middle Eastern, or North African (1.3%) backgrounds.

Procedures

Sixth grade students were recruited from two middle schools, and 9th grade students were recruited from two high schools in the same public school district. Students were compensated with \$10 for returning their signed parental consent forms, regardless of their study participation decision. Teachers received \$50 and two movie tickets in recognition of their efforts of reminding students to return consent forms.

Parental consent was obtained before in-class surveys through consent letters sent home in English and Spanish. Across the four schools, rates of consent for the full sample ranged from 71% to 81%; consent rate data are not available for the subsample. Written assent was obtained from all participants prior to the completion of the survey. Students completed these questionnaires in English during the regular school day. School staff and research assistants aided as needed.

Measures

Ethnic-Racial Discrimination

Ethnic-racial discrimination was measured through the 6-item Everyday Inequity Scale (Strenthel et al., 2011) adapted to a 6-month timespan rather than 12-month timespan (i.e., “You are treated with less courtesy than other people are;” “You receive poorer service than other people at restaurants or stores”). As data collection occurred in December and January, the timespan was changed to capture data from the same academic school year. Responses were selected from a 6-point Likert scale with the following responses: 1 = *Almost every day*, 2 = *A few times a week*, 3 = *A few times a month*, 4 = *A few times in the past six months*, 5 = *Less than once every six months*, and 6 = *Never*. Responses were reverse coded so that a higher score reflects more frequent experiences of everyday inequity. After responding to the everyday inequity scale, students responded to, “What do you think is the main reason for these experiences?” Participants then chose from the following categories, with the option to select more than one: ancestry or national origin, gender, race, religion, height, weight, some other aspect of your physical appearance, education or income level, and a write-in option. For participants who indicated race or ancestry/national origin as a reason for discrimination, an average score was computed across the 6-item reverse-coded scale. For participants who indicated any other reason for discrimination, their scores were re-coded to represent no discrimination based on race or ancestry/national origins. The Everyday Inequity Scale used in this study has been validated in young adult and older adult samples and had adequate reliability across the study’s subsample (Cronbach’s $\alpha = .88$). On average, youth experienced discrimination from never to once a year ($M = 1.43$, $SD = .90$), indicating that participants recalled infrequent experiences of discrimination across 6 months.

Peer Cultural Socialization

Peer cultural socialization was measured through an adaptation to Nelson et al.'s (2018) version of the Cultural Socialization/Pluralism scale (Hughes & Johnson, 2001). Youth were asked to recall their experiences of receiving cultural messages they received about their own racial/ethnic group based on two items, over a 6-month timespan rather than a 12-month timespan (i.e., "Friends/Peers encouraged you to read books about your racial/ethnic group;" "Friends/Peers talked to you about important people or events in the history of your racial/ethnic group"). Youth responded on a 5-point Likert scale with the following responses: 0 = *Never*, 1 = *Rarely*, 2 = *Sometimes*, 3 = *Often*, and 4 = *Very Often*. The average score of the two items was used to indicate frequency of experiences of peer cultural socialization reported by the participant ($M = .91$, $SD = .97$). Previous studies report validity and reliability of the original socialization scale by Hughes and Johnson (2001) in African American children and emerging adults (Hughes et al., 2016; Nelson et al., 2018). The Friend/Peer Cultural Socialization scale items used in the study subsample had a moderate Spearman Brown Split-Half reliability ($r_{sb} = .71$) and an unadjusted correlation ($r = .56$) across the subsample.

Peer Support

Feelings about peer support were reported using the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988). Youth were asked to recall experiences of support over a 6-month timespan (i.e., "My friends really try to help me;" "I can count on my friends when things go wrong"). The 4-items were scored on a 7-point Likert scale with the following possible options: 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Somewhat Disagree*, 4 = *Neither Agree nor Disagree*, 5 = *Somewhat Agree*, 6 = *Agree*, and 7 = *Strongly Agree*. The original scale asked participants about support over one year, however, in this study, they were asked to recall six

months instead. The average score of the peer subscale is used to indicate the average feelings of support indicated by the participant ($M = 5.58$, $SD = 1.47$). The Peer Support scale used in this study had strong reliability across all subsample participants (Cronbach's $\alpha = .89$) and is validated in college-aged students of ethnic-minority backgrounds (Ermis-Demirtas et al., 2018).

Depressive Symptoms

Depressive symptoms were measured with the Center for Epidemiologic Studies Depression (CES-D) Scale (Radloff, 1977). Students completed a 10-item 4-point Likert scale in which they rated the frequency of depressive symptoms during a 1-week period (i.e., "I was bothered by things that don't usually bother me;" "I had trouble keeping my mind on what I was doing"). Youth selected from the following responses: 1 = *Rarely or none of the time (less than 1 day)*, 2 = *Some or little of the time (1-2 days)*, 3 = *Occasionally or a moderate amount (3-4 days)*, and 4 = *Most of the time (5-7 days)*. The average score across the depressive symptom items was used in analyses ($M = 2.00$, $SD = .65$). The CES-D scale used in this study had moderate reliability across the study's subsample (Cronbach's $\alpha = .81$) and has been used across samples of ethnic-minority youth (Safa et al., 2022; Seaton et al., 2008). Higher scores indicate a higher frequency of depressive symptoms.

Covariates

Data on students' age and gender were gathered. Based on this information, gender (0 = *Boy*; 1 = *Girl*) and age were controlled for. Due to the limited number of cases ($n = 6$), those who identified as "other" for gender were removed from the analysis.

Analysis Plan

Using SPSS (Version 29), correlations were examined among variables of interest and regression analyses were used to test main effect associations between perceived ethnic-racial

discrimination and depressive symptoms, controlling for age and gender covariates in Step 1 of the hierarchical linear regression. Separate moderation analyses were examined to test whether peer cultural socialization and peer support moderated the association between perceived discrimination and depressive symptoms. All predictors and moderators were mean-centered prior to the creation of interaction terms to avoid multicollinearity and improve interpretability. Step 2 analyzed the interaction effect of peer support through the interaction term of discrimination and support. Step 3 analyzed the interaction effect of peer cultural socialization through the interaction term of discrimination and peer cultural socialization. Finally, step 4 analyzed the effect of both interaction terms. For any significant interactions, simple slopes were further probed at low, average, and high levels of peer cultural socialization or peer support (Aiken & West, 1991; Dawson, 2002).

Results

Table 1 includes the means, standard deviations, and Pearson correlations of the variables of interest. The mean of depressive symptoms at Wave 1 was at the midpoint of the scale ($M = 2.00$; $SD = .65$), indicating that, on average, adolescents experience moderate levels of depressive symptoms. Youth reported experiencing low levels of ethnic-racial discrimination ($M = 1.43$; $SD = .90$) and low levels of peer cultural socialization ($M = .91$; $SD = .98$). The mean for peer support was approximately one and a half points above the midpoint of the scale ($M = 5.58$; $SD = 1.47$), suggesting that on average, adolescents' experience moderate-to-high levels of peer support.

The associations among depressive symptoms, ethnic-racial discrimination, peer support, peer cultural socialization, age, and gender were also examined using zero-order correlations (Table 1). There was a small positive correlation between ethnic-racial discrimination and

depressive symptoms ($r = .12; p < .05$). Ethnic-racial discrimination was also positively correlated with age ($r = .18; p < .01$) and gender ($r = .21; p < .01$), such that older youth and girls reported higher ethnic-racial discrimination. There was a modest positive correlation between peer support and peer cultural socialization ($r = .15; p < .05$). Finally, age ($r = .18; p < .01$) was positively correlated with depressive symptoms and there was a significant difference in mean number of depressive symptoms between girls and boys based on an independent samples t-test.¹

Ethnic-Racial Discrimination Predicting Depressive Symptoms

The hypothesized main effect of ethnic-racial discrimination predicting depression was examined, controlling for age and gender as covariates (Table 2). The results did not indicate a significant main effect between ethnic-racial discrimination and depression ($b = .07, p = .19$, Model 1, Table 2). Thus, although ethnic-racial discrimination and depressive symptoms were correlated, experiences of ethnic-racial discrimination do not predict depressive symptoms in the main effect model.

Peer Cultural Socialization and Peer Support Predicting Depressive Symptoms

We tested the direct effects of peer cultural socialization and peer support on depressive symptoms while controlling for age and gender. Peer cultural socialization ($b = -.06, p = .27$, Model 2, Table 2) and peer support ($b = -.32, p = .322$, Model 2, Table 2) did not significantly predict depressive symptoms.

Peer Cultural Socialization and Peer Support as Moderators

¹ There was a significant difference in mean number of depressive symptoms between girls and boys ($t_{403.87} = 4.92, p < .001$). The average depressive symptoms for boys were .30 symptoms lower than the average number of depressive symptoms for girls.

We tested the moderating effects of peer support and peer cultural socialization on the association between ethnic-racial discrimination and depressive symptoms while controlling for age and gender. The results suggest that peer cultural socialization significantly moderated the association between ethnic-racial discrimination and depressive symptoms ($b = .09, p = .01$, Model 3, Table 2). Figure 2 displays the simple slope analysis results (i.e., the association between ethnic-racial discrimination and depressive symptoms moderated by peer cultural socialization). The simple slopes analysis suggests that for youth experiencing low levels of peer cultural socialization (one *SD* below the mean), the association between ethnic-racial discrimination and depressive symptoms is non-significant ($b = -0.08, p = 0.19$). At high levels of peer cultural socialization (one *SD* above the mean), the association between ethnic-racial discrimination and depressive symptoms is significant and positive ($b = 0.10, p = 0.02$). Peer support did not significantly moderate the association between ethnic-racial discrimination and depressive symptoms.

Discussion

The present study examined the direct association between ethnic-racial discrimination and depressive symptoms and the potential moderating role of peer support and peer cultural socialization in the associations between discrimination and depressive symptoms in the lives of ethnic minority youth. Previous research suggests a main effect between ethnic-racial discrimination and depressive symptoms (Williams et al., 2019). Additionally, support and cultural socialization from peers have also been identified as promotive factors in the lives of youth experiencing ethnic-racial discrimination. As interactions with peers increase during adolescence (Brown & Larson, 2009), a strong sense of cultural belonging and emotional support may function as a protective developmental competency for youth who are navigating

discrimination, racism, or bias, which are salient developmental experiences for ethnic-minority youth (Garcia Coll et al., 1996). Therefore, elucidating the potential moderators of the effects of ethnic-racial discrimination is critical to understanding how ethnic minority youth may use resources stemming from peer contexts to mitigate discrimination resulting in potentially adaptive responses (Masten et al., 1990). We used self-reports from youth to assess peer cultural socialization and peer support to test whether they could buffer against depressive symptoms associated with ethnic-racial discrimination. The study hypotheses were generally not supported, but an unexpected result on peer cultural socialization suggests the need to further examine the interplay of contextual factors, such as ethnic-racial discrimination, experienced by ethnic-minority youth.

The Role of Ethnic-Racial Discrimination and Depressive Symptoms

Despite a positive correlation (Table 1) and supporting meta-analytic evidence on the association between discrimination and depressive symptoms among youth (Benner et al., 2018) and adults (Pascoe & Richman, 2009; Williams et al., 2019), ethnic-racial discrimination did not predict depressive symptoms once age and gender covariates were accounted for. It is possible that the null finding in this study results from the influence of youth characteristics, such as ethnic-racial identity, on these processes, the measurement of discrimination, or even the political contexts in which discrimination occurs (Benner, 2017). Specifically, this unexpected finding reflects a similar pattern identified in research assessing discrimination and adjustment-related outcomes that vary as a function of social position, such as ethnicity and gender (Greene et al., 2006; Niwa et al., 2014). For example, in a study of Dominican American, Chinese American, and Black American youth, Chinese American youth and boys reported more experiences of explicit discrimination from peers and adults than Black American youth and

girls, potentially due to racialized and gendered stereotypes of a “model minority” for Chinese American youth and of aggression for boys (Niwa et al., 2014). Chinese Americans were also more likely to have depressive symptoms than African American youth (Niwa et al., 2014), pointing to the role of social position on depressive symptoms. These findings reflect similar patterns in a meta-analysis, which identified a stronger link between ethnic-racial discrimination and socioemotional distress among youth from Asian and Latino backgrounds vs. those of African descent (Benner et al., 2018). These differences could be attributed to the role of social position variables.

Key social position variables, such as a child’s ethnic-racial background, may shape experiences of discrimination (Garcia Coll et al., 1996). Therefore, it may be that the differences in the experiences of ethnic-racial discrimination across subgroups are important to consider. For example, with the recent rise of anti-Asian sentiment associated with the Covid-19 pandemic, publicly referred to as the “China virus” by the former president of the U.S., combined with increasingly publicized incidents of police brutality against Black Americans (Benner et al., 2022), it may be that youth of Asian and African descent are experiencing and understanding ethnic-racial discrimination differentially from one another. The current study was conducted before these specific events. However, it is possible that among the subsample of ethnic minority youth, ethnic-racial discrimination is experienced differentially across this subsample’s ethnic groups (i.e., Hispanic/Latinx, Black/African American, Asian American/Pacific Islander, American Indian/Alaska Native, and Arab, Middle Eastern/North African). Specifically, it may be that minoritized youth are conceptualizing ethnic-racial discrimination as particular forms of marginalization and racism publicized in mass media experienced by specific ethnic-racial groups instead of the more implicit forms operationalized by the Everyday Inequity Scale

(Strenthel et al., 2011). It is important to note, however, that a meta-analysis of 242 (1805 effect sizes) studies on the effects of racial discrimination on adults of color in the United States indicated no differences in mental health outcomes across racial groups (Carter et al., 2019). However, as Benner et al. (2022) suggest, today's youth are more connected to each other through social media platforms than previous generations, and it remains unknown whether newer operationalizations of discrimination that incorporate manifestations in social media, for instance, can more closely approximate their lived experiences. Despite these compelling patterns, the present study did not examine specific differences in depressive symptoms by ethnic-racial group or other group-based differences; rather, it combined all non-white students. This method may not capture the differential experiences of discrimination and the potential heterogeneity of developmental outcomes based on these differences (Niwa et al., 2014). Furthermore, given this study's ethnic-racial grouping methodology, it is also possible that nuances experienced by youth who identify as multiracial remains unaddressed. One proposed approach of addressing the nuances of these lived experiences is to utilize the Model of Multiracial Racialization (Gabriel et al., 2023). This model contextualizes an individual's racial category and identity within six levels of analysis: (1) Individual Characteristics, (2) Interpersonal Experiences, (3) Contextual Factors, (4) Social, Economic, and Political Environment, (5) Systems of Oppression, and (6) Time (Gabriel et al., 2023). Such an approach aims to capture how multiracial individuals can experience race and racism differently than those who identify as monoracial and has subsequent implications for how the field examines the effects of discrimination.

Future examinations utilizing the Model of Multiracial Racialization (Gabriel et al., 2023) can better identify how multiracial individuals experience traditional and unique forms of

ethnic-racial discrimination. For example, multiracial adult experiences of racial identity invalidation (e.g., victimization based on not looking or acting like a racial group or not being accepted by other racial groups) have been associated with increased depressive symptoms (Franco & O'Brien, 2018). In another study of multiracial adults, when researchers controlled for traditional forms of discrimination, experiences of identity incongruent discrimination (e.g., discrimination based on a perceived identity that does not match self-identity) were no longer associated with depressive symptoms (Franco et al., 2019). Given that identity incongruent discrimination is based upon an outsider's perception of a multiracial individual's identity versus an individual's self-identification, it is possible that this form of multiracial discrimination is less impactful on psychological adjustment (Franco, 2019). Thus, one potential direction for future examinations of ethnic-racial discrimination is to identify the basis of discriminatory encounters to understand the role of potential mitigating factors such as cultural socialization. Considering that previous measures of cultural socialization have been primarily designed for studying monoracial minority families (Atkin et al., 2022), theoretical frameworks that consider the unique experiences of the multiracial identity in navigating racial stress are urgently needed.

The Role of Peer Cultural Socialization

There was an observable moderation effect of peer cultural socialization. However, this moderation effect was not in the hypothesized direction. Instead, we observed that higher levels of ethnic-racial discrimination predicted more depressive symptoms for those with high peer cultural socialization relative to other youth with lower instances of cultural socialization. It is significant to note the context of infrequent levels of cultural socialization. Within the range noted by youth participants ($M = .91$; $SD = .98$), relatively high levels of cultural socialization correspond to "sometimes" whereas low levels correspond to "never." This finding is not

representative of students who experience cultural socialization “often” or “very often.” The association between discrimination and depressive symptoms was not significant for those experiencing low cultural socialization. These findings partially support the hypothesis Chen et al. (2020) posited, indicating that peer cultural socialization may have a protective-reactive (Luthar et al., 2000) effect on depressive symptoms in low-discrimination environments. Specifically, it may be that ethnic-minority youth experiencing high-risk conditions (Luthar et al., 2000), such as high ethnic-racial discrimination contexts, might experience less benefit from peer cultural socialization as higher levels of ethnic centrality increase sensitivity to discrimination and depressive symptoms (Chen et al., 2020; Hughes et al., 2006). Conversely, in low-risk conditions, such as low ethnic-racial discrimination contexts, the sense of higher ethnic centrality resulting from peer cultural socialization might strengthen more adaptive psychological outcomes and fewer depressive symptoms (Chen et al., 2020). This overall pattern was similarly reflected in the current study. However, it is important to note that in this study’s current sample, peer cultural socialization was experienced at relatively low levels as demonstrated by the average score ($M = .91$; $SD = .98$). Additionally, both cultural socialization items used in this study measured over instances of socialization (i.e., “Friends/Peers encouraged you to read books about your racial/ethnic group;” “Friends/Peers talked to you about important people or events in the history of your racial/ethnic group”) in contrast to the 6-item combination of overt and covert practices used by Chen et al. (2020). It is interesting to note that youth in the present study report relatively infrequent experiences of ethnic-racial discrimination ($M = 1.43$, $SD = .90$, Table 1), suggesting that even small increases in ethnic-racial discrimination relate to higher depressive symptoms for youth experiencing relatively higher peer cultural socialization. The developmental significance of peers during adolescence may

account for this interesting finding.

Initial evidence suggests that peer cultural socialization varies according to context. In contrast to parent cultural socialization, peer cultural socialization is not restricted to home settings (Saleem & Byrd, 2021; Wang, 2021). Thus, peer cultural socialization may occur across potentially limitless social encounters across home, school, and in community-based and media-based settings. Peer relationships concurrently influence developmental competencies such as the formation of an ethnic-racial identity (Douglass & Umaña-Taylor, 2016). Ethnic-racial identity is the combination of ethnic heritage and racialized experiences (Umaña-Taylor, 2018). A positive ethnic-racial identity in minority youth is associated with better academic, psychosocial, and health outcomes (Rivas-Drake et al., 2014). For example, findings from a qualitative examination of ethnic-racial identity development in youth seem to support the notion that identity develops as a potential response to contextual stress, such as ethnic-racial discrimination, and the broader sociohistorical context of the U.S. (Sladek et al., 2022; Umaña-Taylor et al., 2004). However, youth who experience ethnic-racial stress and high levels of cultural socialization from peers without having achieved ERI resolution, may not experience sufficient benefit from peer cultural socialization to buffer the depressive feelings associated with discrimination. The current study does not analyze the potentially moderating role of dimensions of ethnic-racial identity to buffer against discrimination; however, future research may consider the internal mechanisms associated with ethnic-racial identity and their potentially protective effects.

Among the various factors that promote positive psychological and social outcomes in ethnic minority youth, cultural socialization is only one process among many. Specifically, the School Ethnic-Racial Socialization Transmission Model identifies a spectrum of explicit and

implicit socialization content and methods such as cultural socialization, critical consciousness, cultural competence, mainstream socialization, and color-evasive mechanisms, all ranging from images to verbal and written messages, associated with key youth outcomes (Saleem & Byrd, 2021). Therefore, given the complex task of identifying promotive buffers against ethnic-racial discrimination, future research can further identify specific content and methods youth use to resist and challenge ethnic-racial marginalization at school (Matthews et al., 2020). For instance, youth may learn about their own cultural history while using the Internet to complete school assignments (Sladek et al., 2022). Moreover, given the use of social media and other digital mediums in connecting today's youth, there is a great need to include this wide array of lived experiences in the operationalization of socialization processes and subsequent examinations of adjustment (Benner et al., 2022).

The Role of Peer Support

Another central hypothesis of the present study was that peer social support potentially mitigates the effects of ethnic-racial discrimination on depressive symptoms. This hypothesis was not supported. This pattern reflects some ambiguous findings in the literature. For example, results from a previous study of 7-10th grade Latino youth suggest that peer support is a positive resource that reduces the association between depressive symptoms and discrimination in school (Gonzalez et al., 2014). Specifically, the authors note that the interaction between peer support and peer discrimination explained only a small percentage of the variance, with further analyses showing a higher risk of depressive symptoms only for youth experiencing low levels of peer support when discrimination was high (Gonzalez et al., 2014). These associations might be better understood by determining the frequency or intensity of discrimination and other relevant contextual factors, such as the ethnic-racial composition of peers in these complex processes

(Gonzalez et al., 2014) or gender (Rose & Rudolph, 2006). Given that the present study does include these potentially relevant details, it may not accurately measure the effectiveness of social support in protecting against discrimination.

The literature also suggests that friends, and by extension peers, are important sources of intimacy and emotional support (Way, 2013). In discriminatory contexts, one hypothesis is that individual-level characteristics (i.e., gender) and strength of friendship (i.e., intimacy) are relevant factors that buffer against the risks of discrimination on depressive symptoms (Delgado et al., 2019). For example, in a study on the buffering role of friendship intimacy against the effects of peer discrimination and parent-adolescent conflict on Mexican-origin youth, results suggested that friendship intimacy protected against the depressive symptoms associated with discrimination but only for girls with high levels of friendship intimacy in early adolescence (Delgado et al., 2019). It is possible that peer support may be more significant for girls given that support facilitated by their friendships may be marked by more disclosure and, consequently, by receiving emotional support that buffers depressive symptoms (Delgado et al., 2019; Rose & Rudolph, 2006). The major school transitions that typically occur at 6th and 9th grades, namely the changes that occur from elementary to middle school and from middle school to high school, may account for a limited effect of peer support in this study's cross-sectional sample (Hoffman et al., 2019). Although the current study does not compare differences across gender, these results still demonstrate the importance of how ethnic-minority youth experience discrimination and how they may further use their contextual resources to do so. For example, it may be that these specific youth do not employ peer support as a protective resource; rather, they employ other resources such as family cultural socialization in response to discrimination. Ultimately, the current study further validates the importance of contextual resources in the lives of ethnic

minority youth and the need for future research to examine these processes with a resource-based framework (Masten et al., 1990). The role of peer support in buffering the effects remains unclear; however, additional investigations, including a more specified look into the source of support, may clarify this important process.

Limitations

The present study is not without limitations, which represent important directions for future research. Emerging literature suggests that the context of ethnic-racial socialization messaging can influence whether and how discrimination is received by ethnic-minority youth (Saleem & Byrd, 2021). For example, one study examining the contextual factors of racial and ethnic discrimination in Latino, African American, and Asian American high school students suggests that the source of discrimination is key to understanding differential influence on outcomes (Benner & Graham, 2013). Specifically, evidence indicates that experiencing greater discrimination from school staff was associated with poorer academic performance, greater societal discrimination was associated with more racial awareness and greater discrimination from peers was associated with more psychological maladjustment (Benner & Graham, 2013). One key limitation is that the present study did not identify the perpetrator or source of discrimination, thus limiting our ability to examine whether the contextual factors of peer cultural socialization are relevant to mitigating psychological maladjustment caused by ethnic-racial stress. More specifically, according to the School Ethnic-Racial Socialization Transmission Model, transmitters of socialization messages are teachers and staff, peers, policies, practices, and even outside sources such as online interactions, parents, families, communities, and historical contexts (Saleem & Byrd, 2021). Families have long been established sources of cultural socialization (Hughes et al., 2006; Umaña-Taylor & Fine, 2020;

Sladek et al., 2022); however, the human developmental science field is increasingly examining other key socializing contexts throughout development. For example, in one study of online interaction, researchers found that after adjusting for racial group membership, gender, and offline discrimination, experiences of individual online discrimination were concurrently related to depression in adolescent youth (Tynes et al., 2008). Regardless of the transmission context and source, schools function as the most salient context outside the home, moderating the frequency, depth, and integration of ethnic-racial socialization and cultural socialization messages, potentially influencing academic, psychological, and social outcomes (Saleem & Byrd, 2021). Without an understanding of these specific contextual factors of cultural socialization, we cannot assess the multidimensional interplay between the source of ethnic-racial discrimination, the transmitter of cultural socialization practices, and the corresponding effects on the adjustment of the individual. Moreover, identities are intersectional (Crenshaw, 1989). An individual's ethnic-racial background and ancestry are only a component of their overall identity; thus, further investigation is required to fully understand how discrimination based on intersectional identities and discrimination may relate to key developmental outcomes.²

Future Directions

Although previous studies have found consistent associations between discrimination and psychological adjustment, additional prospective and longitudinal research is needed to establish the sequence of mental health status and discrimination (Williams & Mohammed, 2009).

Paradies (2006) suggests that a shorter time frame (e.g., within days) of exposure measurement

² Discrimination level based on other reasons (i.e., religion, height, weight, physical appearance, and education/income level) was included as a covariate in exploratory analyses. There were no changes in the pattern of significance for ethnic-racial discrimination across all models.

may buffer recall bias and maximize the variability of self-reported racism in samples with a high prevalence of lifetime exposure. Additionally, a shorter timeframe would also hold constant the recency of the discriminatory event. For example, it may be beneficial for future research to employ a daily diary method to identify the specific context of the discrimination, including the perpetrator and the immediate corresponding psychological effects. The timeline of the TIES study survey establishes a six-month baseline to recall experiences of discrimination, thus possibly introducing recall bias and truncated variability issues within the data. It is important to note, however, that a recent meta-analysis of 379 studies (1,804 effect sizes) on racial and ethnic discrimination in youth proposes that the retrospective reference period needs to be sufficiently large to capture discriminatory events; thus, a one-year reference period may be optimal (Benner et al., 2022). To further identify the time-based significance of racism exposure within adolescence, future research can also measure perceived ethnic-racial discrimination over different waves within the same sample to approximate an etiologically relevant time to measure the effects of discrimination on psychological adjustment (Paradies, 2006). Additionally, given the research suggesting a pathway between discrimination and physical health outcomes over time, it may also be that a longitudinal design with multiple assessments could support examining the long-term health outcomes of discrimination on other health outcomes.

Future examination of responses to discrimination through a resource-based framework (Masten et al., 1990) should also incorporate the identity-related characteristics of ethnic and racial social contexts such as the role of ethnic racial identity (ERI) in youth and their surrounding social landscapes. ERI is a multidimensional psychological construct reflective of individual beliefs of one's ethnic-racial group (Umaña-Taylor et al., 2002). Research suggests that peer contexts with a higher proportion of same-race friends are associated with increased

opportunities for ERI development in Black adolescents (Derlan & Umaña-Taylor, 2015), thus highlighting the potential role of same-race friends and ERI development as an emerging protective resource during adolescence (Kornienko et al., 2022). Given the role of ethnic-racial and national identity (Rivas-Drake et al., 2017; Umaña-Taylor & Rivas-Drake, 2021) in friendship network selection, understanding how ERI might be a promotive resource can provide key insight into the developmental competencies of ethnic-racial minority youth and resources that protect against the harmful effects of discrimination.

Conclusion

The present findings are a compelling exploration into the potential resources that ethnically and racially minoritized youth utilize to navigate discrimination. Furthermore, the significant and null findings of the current study may help inform future examinations with key opportunities to specify the relevant contextual details regarding the source of discrimination and support. Future research into these complex processes may utilize the initial evidence supporting the moderating role of peer cultural socialization against depressive symptoms to inform culturally responsive practices and approaches to discussing cultural backgrounds both inside and outside of school settings. Peers remain crucial throughout adolescence thus meriting future research into their promotive roles, especially in the lives of ethnic minority youth.

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Table 1*Descriptive Statistics and Pearson Correlations for Study Variables*

Variable	1	2	3	4	5	6
1. Depressive symptoms	—					
2. Ethnic-racial discrimination	.12*	—				
3. Peer CS ^a	-.03	.08	—			
4. Peer support	-.01	-.02	.15**	—		
5. Gender ^b	.24**	-.02	.05	.21**	—	
6. Age	.16**	.18**	.00	-.02	.01	—
<i>M</i>	2.00	1.43	.91	5.58	.51	13.54
<i>SD</i>	.65	.90	.98	1.47	.50	1.56
<i>N</i>	419	513	478	452	519	491
<i>Min</i>	1.00	1.00	.00	1.00	0	10.94
<i>Max</i>	4.00	5.20	4.00	7.00	1.00	18.63

Note ^a Cultural Socialization. ^b Gender (0 = *Boy*; 1 = *Girl*).

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

Table 2*Main Effects and Interactions Predicting Depressive Symptoms*

<i>Parameter</i>	<u>Model 1</u>				<u>Model 2</u>				<u>Model 3</u>			
	<i>B</i>	<i>SE</i>	<i>b</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>b</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>b</i>	<i>p</i>
Ethnic-racial discrimination	0.05	0.04	.07	.193	0.04	0.04	.05	.338	0.01	0.04	.02	.783
Peer CS	--	--	--	--	-0.04	0.04	-.06	.265	-0.04	0.04	-.06	.296
Peer support	--	--	--	--	-0.02	0.02	-.06	.322	-0.02	0.02	-.04	.502
Discrimination X peer support	--	--	--	--	--	--	--	--	0.03	0.03	.06	.293
Discrimination X peer CS ^a	--	--	--	--	--	--	--	--	0.09*	0.04	.14	.013
Gender ^b	0.28 ***	0.06	.22	< .001	0.26***	0.07	.21	< .001	0.24***	0.07	.19	< .001
Age	0.06**	0.02	.13	.010	0.06**	0.02	.14	.01	0.06***	0.02	.15	.005

Note. Estimates are unstandardized (*B*) and standardized (*b*).^a Cultural Socialization. ^b Gender (0 = *Boy*; 1 = *Girl*).

p* < .05. *p* < .01, ****p* < .001.

Figure 1

Proposed Conceptual Model of the Association between Ethnic-Racial Discrimination and Depressive Symptoms with Peer Support and Peer Cultural Socialization as Moderators

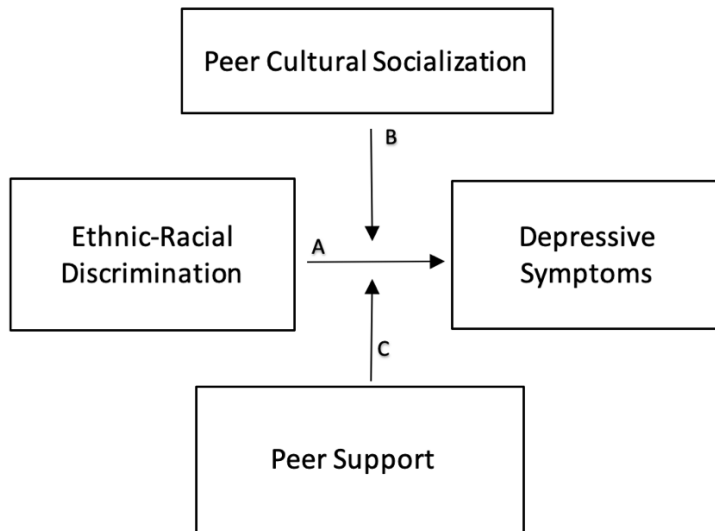
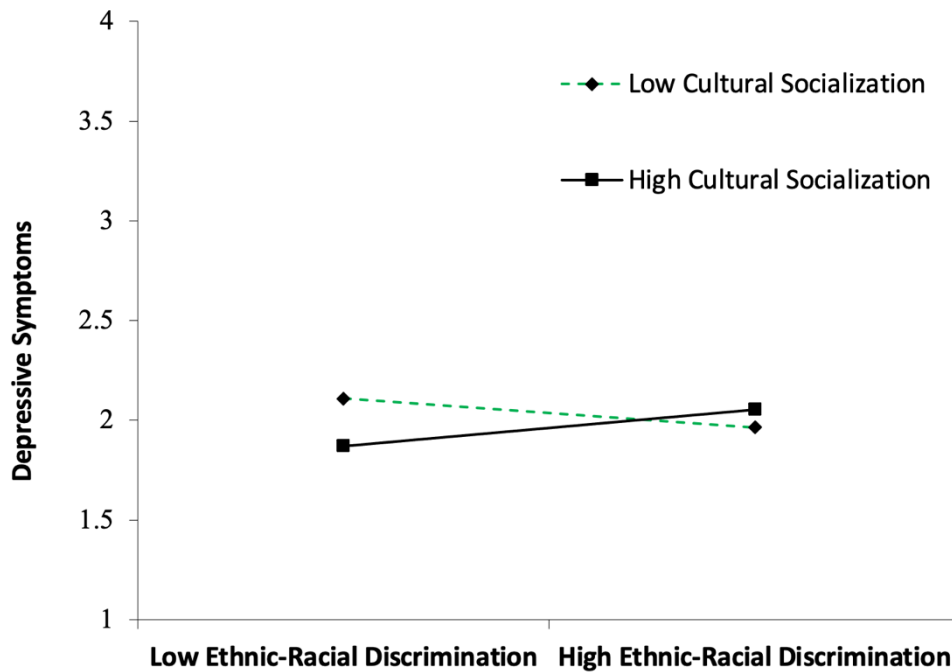


Figure 2

The Interaction Between Ethnic-Racial Discrimination and Peer Cultural Socialization in Predicting Depressive Symptoms



Note. Ethnic-racial discrimination was significantly and positively associated with depressive symptoms at high levels of peer cultural socialization ($B = 0.10, p = 0.02$), and not significantly associated with depressive symptoms at low levels of peer cultural socialization.