

Perceived Discrimination and Depressive Symptoms Among Immigrant-Origin Adolescents

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Although discrimination has been found to contribute to psychological distress among immigrant populations, there are few studies that have examined the relationship between racial and ethnic discrimination in the school setting among foreign-born immigrant and U.S.-born immigrant-origin adolescents. This study examined the relationship between perceived discrimination by adults and peers in the school setting and depressive symptoms in a sample ($N = 95$) of racial minority immigrant-origin adolescents (13 to 19 years of age) attending an urban high school. We examined the relation between perceived discrimination and depressive symptomology across gender and nativity status (foreign born vs. U.S. born), and the potential moderating role of ethnic identity and social support. Consistent with previous research, girls reported higher levels of depressive symptomology than boys, although the relationship between perceived discrimination and depressive symptoms was significant for both boys and girls. Perceived discrimination by adults and by peers at school was positively related to depressive symptoms for U.S.-born adolescents. For U.S.-born adolescents, ethnic identity mitigated the negative effects of perceived adult discrimination on depressive symptoms. However, ethnic identity did not moderate the relationship between perceived peer discrimination and depressive symptoms. Social support did not moderate the relationship between adult and peer discrimination and depressive symptoms for either foreign-born or U.S.-born adolescents. The findings support previous research concerning the immigrant paradox and highlight the importance of context in the relationship between perceived discrimination and mental health. Implications for future research and intervention are discussed.

Keywords: immigration, adolescents, discrimination, mental health, ethnic identity

Immigrant youth account for a significant portion of the 75 million children in the United States. Latino/a, Asian, and multi-racial immigrant youth constitute one third of all children in the United States (Passel, 2011) and approximately one fourth of adolescents in the United States are part of an immigrant family (Mather, 2009; Sirin, Ryce, Gupta, & Rogers-Sirin, 2012). Research indicates rising rates of mental health concerns and underutilization of mental health services among immigrant (foreign born) and later generations of immigrant-origin youth, with girls reporting higher levels of depressive symptoms when compared with boys (Merikangas et al., 2011; Sirin et al., 2012). Further, internalizing problems (e.g., depression) among foreign-born and U.S.-born immigrant-origin adolescents are often unrecognized by parents, caregivers, teachers, and peers (Patel & Kull, 2011).

The American Psychological Association's (APA) Presidential Task Force on Immigration (2012) has noted that psychological experiences of immigration should be considered through a socio-ecological perspective (Bronfenbrenner & Morris, 2006), which

suggests that multiple layers of one's social context interact and contribute to risk and protective factors in individual well-being. Although contextual factors are thought to shape adolescent development and psychological well-being, few studies have examined the effects of racial and ethnic discrimination in the school setting on mental health among foreign-born and U.S.-born immigrant-origin youth. There has been little research addressing specific developmental and contextual factors, such as a sense of attachment to one's ethnic group (e.g., ethnic identity) and social support from others, which may be relevant to the relationship between discrimination and mental health. This study investigated the relationship between perceived discrimination and depressive symptoms and focused on the potential protective role of ethnic identity and social support among racial minority immigrant-origin adolescents in an urban high school. This study further aimed to fill existing gaps in research concerning perceived discrimination and mental health across gender and nativity status (foreign born vs. U.S. born). In the following sections, we review relevant literature concerning racial/ethnic discrimination and mental health, and the role of ethnic identity and social support in mental health among immigrant populations.

Perceived Discrimination and Mental Health

Numerous studies have noted the deleterious effects of discrimination on physical and psychological well-being (e.g., depressive symptoms, posttraumatic stress, self-esteem) among various immigrant and ethnic minority communities (Flores, Tschann, Dimas, Pasch, & de Groat, 2010; Greene, Way, & Pahl, 2006;

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Sellers, Copeland-Linder, Martin, & Lewis, 2006; Tummala-Narra, Alegria, & Chen, 2012; Yoo & Lee, 2009). Subtle and overt forms of racial and ethnic discrimination are unfortunately not isolated events but rather may be a normative experience (Garcia Coll et al., 1996; Suárez-Orozco, Suárez-Orozco, & Todorova, 2008; Zárate, Garcia, Garza, & Hitlan, 2004) for many immigrant-origin youth. Recent studies have found that experiences of discrimination may be especially problematic during adolescence as this is a critical period in which youth explore their identities and are increasingly sensitive to others' perceptions of them (Greene et al., 2006; Rivas-Drake, Hughes, & Way, 2008; Sirin & Fine, 2008). Negative messages about adolescents' race and ethnicity communicated by adults and peers in schools, both important socializing agents for adolescents, can contribute to adverse developmental outcomes (Suárez-Orozco et al., 2008; Wong, Eccles, & Sameroff, 2003). In fact, ethnic minority (e.g., Black, Latino, and Asian American) adolescents who experience higher levels of stereotyping and discrimination by peers and adults have been found to report more depressive symptoms compared with adolescents who report less stereotyping and discrimination (Greene et al., 2006; Grossman & Liang, 2008; Sirin et al., 2012). Negative and positive stereotyping can contribute to psychological stress (APA, 2012; Yoo & Castro, 2011). For example, Asian Americans who have been construed in the United States as model minorities may be viewed as a source of threat to educational and employment opportunities for other groups (Alvarez, Juang, & Liang, 2006). Further, the model minority stereotype can contribute to Asian American youth's stress of performing academically and occupationally at a level that feels unattainable, and to a lack of recognition of mental health concerns (e.g., depression, suicidal ideation) in these communities (Yoo & Castro, 2011).

Considering the heightened importance of social relations in adolescence, discrimination in the school setting by peers and adults may be particularly detrimental to development, when adolescents experience adults and/or peers as devaluing or disrespectful of their racial and cultural backgrounds (Wong et al., 2003). Recent research has further indicated that the source of discrimination (e.g., discrimination by peers and discrimination by adults) may have different consequences on adolescents' mental health. For example, discrimination by peers, but not discrimination by adults, has been associated with adolescents' views of their ethnic groups (Rivas-Drake et al., 2009), and the effects of discrimination by peers on psychological well-being have been found to be stronger when compared with the effects of discrimination by adults (Greene et al., 2006; Pahl & Way, 2006). Although research on specific sources of discrimination among youth has been emerging, there are a limited number of studies that have examined the effects of peer and adult discrimination on mental health outcomes among immigrant-origin adolescents. In the present study, we sought to extend existing research by examining the relationship between distinct sources of discrimination (peer and adult) and depressive symptomology among immigrant-origin adolescents.

Research over the past decade has examined variations in the effects of discrimination of psychological outcomes among subgroups of youth. For example, studies suggest that adolescents across ethnic minority groups (e.g., Black, Latino, Asian American) report experiences of racial and ethnic discrimination in their school environment, with some subgroups reporting more discrim-

ination by peers and other subgroups reporting more discrimination by adults (Greene et al., 2006). With respect to gender, research with immigrant and ethnic minority adolescents has indicated that girls are more vulnerable to developing internalizing symptoms, such as depression, when compared with boys (Almgren, Magarati, & Mogford, 2009; Céspedes & Huey, 2008). However, the role of gender in the relationship between perceived racial/ethnic discrimination and mental health has not been adequately addressed. Recent research has also indicated differences in mental health outcomes across nativity status. Although some studies suggest that first-generation immigrants (those born outside the United States) are at greater risk for mental health problems (e.g., depression, anxiety) when compared with U.S.-born immigrant-origin individuals (Sirin et al., 2012), a majority of research findings concerning generational differences highlight the "immigrant paradox," indicating that first-generation (foreign-born) immigrants have better mental health outcomes when compared with later generations (U.S.-born) (Alegria et al., 2008; García Coll & Marks, 2011; Gee, Spencer, Chen, Yip, & Takeuchi, 2007). Some researchers have speculated that being raised in the United States as a racial minority may pose greater risk to the well-being of second and later generations (Nguyen, 2006). The immigrant paradox, therefore, raises questions concerning unique risk and protective factors in mental health outcomes across nativity status. In an effort to extend existing knowledge on discrimination and mental health across subgroups of immigrant-origin adolescents, in the present study, we examined the relationship between perceived discrimination by peers and by adults at school and depressive symptomology across gender and nativity status (foreign born vs. U.S. born).

The Role of Ethnic Identity and Social Support

The socioecological perspective (Bronfenbrenner & Morris, 2006) highlights the role of risk and protective factors in adolescents' psychological health. In the present study, we were interested in exploring the potential protective role of ethnic identity and social support in the face of racial and ethnic discrimination among immigrant-origin adolescents. Research has provided evidence that a stronger ethnic identity and a greater degree of social support are related to better mental health outcomes among ethnic minority adolescents (Smith & Silva, 2011). In the present study, we extended this research to examine the role of ethnic identity and social support in the context of racial and ethnic discrimination among foreign-born and U.S.-born immigrant-origin adolescents. Although *ethnic identity* refers to the extent of one's sense of commitment and belonging to his or her ethnic group (Phinney, 1996), *social support* involves the ability to turn to others for help when facing a problem or difficult situation (Ajrouch, Reisine, Lim, Sohn, & Ismail, 2010; Organista, 2007). Ethnic identity and social support are distinct factors but related in that they both potentially contribute to coping with stressful experiences, such as racial and ethnic discrimination.

For many racial minority immigrant youth, visible markers of race and ethnicity contribute to the salience of ethnic identity when compared with White, Euro American youth (Phinney, 1996). When faced with discrimination and social marginalization, a strong ethnic identity may help individuals cope with negative societal messages about their ethnic groups, as they connect with

positive aspects of their own ethnic group (Smith & Silva, 2011). In fact, numerous studies with ethnic minority adolescents and young adults indicate a negative relationship between ethnic identity and psychological distress (e.g., lower self-esteem, depressive symptoms) (Costigan, Koryzma, Hua, & Chance, 2010; Rivas-Drake et al., 2008; Rogers-Sirin & Gupta, 2012; Smith & Silva, 2011). Ethnic identity has been thought to buffer against the negative effects of acculturative stress among immigrant-origin youth (Quintana, 2007; Umaña-Taylor, Vargas-Chanes, Garcia, & Gonzales-Backen, 2008).

There have, however, been mixed findings concerning the relationship between ethnic identity and psychological distress, in the context of racial and ethnic discrimination. Some studies with ethnic minority adolescents and adults suggest that a stronger ethnic identity protects against the negative effects of racial/ethnic discrimination and coping with discrimination (Noh, Beiser, Kaspar, Hou, & Rummens, 1999; Umaña-Taylor et al., 2008; Wong et al., 2003), whereas other studies indicate that individuals with strong ethnic identity are more likely to attend to interethnic dynamics and to report experiences of discrimination and discrimination-related stress (Sellers & Shelton, 2003; Smith & Silva, 2011; Syed & Azmitia, 2010; Yoo & Lee, 2009). Further, the effect of ethnic identity on psychological well-being has been noted to vary across nativity status. For example, Yoo and Lee (2009) found that the positive relationship between racial discrimination and negative affect was more pronounced for U.S.-born Asian Americans with high ethnic identity, and that the positive relationship between racial discrimination and negative affect was stronger for Asian American immigrants with low ethnic identity. Other studies (Yip, Gee, & Takeuchi, 2008) have indicated that ethnic identity has both buffering and exacerbating effects on the relationship between discrimination and mental health, varying with nativity status and age. Specifically, Yip et al. found that ethnic identity buffered against the negative effects of discrimination on mental health distress for U.S.-born individuals between 41 to 50 years of age and exacerbated the negative effects of discrimination on mental health for U.S.-born individuals between 31 and 40 years of age and those between 51 to 75 years of age.

These mixed findings concerning the role of ethnic identity support the need for more clarity on the relationship between ethnic identity and specific mental health symptomatology in the context of discrimination (Smith & Silva, 2011). Although the relation between ethnic identity and well-being seems to be consistent across some contextual variables such as gender and race, the role of ethnic identity in the relationship between discrimination and mental health across nativity status (foreign born and U.S. born) among adolescents is less consistent. In the present study, we examined the moderating role of ethnic identity in the relationship between experiences of racial/ethnic discrimination at school and depressive symptomatology across foreign-born and U.S.-born adolescents.

Although adolescence is a period involving increasing exploration of ethnic identity, it is also a period in which support from adults and peers is critical to psychological well-being. There is ample evidence for the beneficial role of social support from family, friends, and teachers in adolescents' psychological adjustment. For example, research indicates that the ability to talk openly with parents about problems and the perception of being cared for by parents have been associated with better mental health out-

comes among adolescent boys and girls from various cultural backgrounds (Ackard, Neumark-Sztainer, Story, & Perry, 2006; Cho & Haslam, 2010; Meadows, Brown, & Elder, 2006; Organista, 2007). Research also indicates that teachers and adults in the school context play an important role in adolescents' psychological well-being, with the youth-school relationship protecting against depressive symptomatology (Moon & Rao, 2010). Peer support has also been found to play a protective role in psychological well-being among ethnic minority adolescents. For example, Thomas and Choi (2006) found that Indian and Korean immigrant adolescents experienced their friends and parents as important sources of support that buffered the effects of acculturative stress.

Although the protective role of social support in mental health symptomatology is well established, only a few studies have addressed the role of social support in the relationship between perceived discrimination and mental health among immigrant-origin adolescents. Some studies indicate that social support may not protect against discrimination related stress (Thompson, 2006). However, a majority of research (Ajrouch et al., 2010; Cho & Haslam, 2010; Yoo & Lee, 2005) suggests that social support seeking from family and friends can protect against the negative effects of racial and ethnic discrimination by providing emotional comfort. In a study with Korean immigrant adults (Noh & Kasper, 2003), problem-focused coping strategies, including seeking social support, was found to reduce distress related to perceived discrimination. A few studies have examined the protective role of social support and ethnic identity together in the relationship between discrimination and psychological well-being. For example, Yoo and Lee (2005) found that a strong ethnic identity was associated with more social support seeking and problem solving coping in the face of racial discrimination among Asian American college students.

In the present study, we extend previous research on the role of social support and ethnic identity in the context of racial and ethnic discrimination to examine whether these two factors potentially help immigrant-origin adolescents cope with discrimination. We were interested in whether adolescents' sense of commitment and belonging to their ethnic group (e.g., ethnic identity) and the ability to turn to one's parents, friends, and/or teachers for support (e.g., social support) protect them from the negative effects of racial/ethnic discrimination on mental health (e.g., depressive symptoms). Although recognizing that social support has been measured in distinct ways in previous research, in the present study, social support is conceptualized as the degree to which an individual seeks help from a number of different sources, including parents/caregivers, other family members (e.g., siblings), friends, and adults at school (e.g., teachers, guidance counselors), when coping with problems.

The Present Study

The present study aimed to examine the following questions: (a) Is there a significant relationship between perceived discrimination by peers at school and depressive symptoms, and between perceived discrimination by adults at school and depressive symptoms among immigrant-origin adolescents? (b) Does the relationship between perceived discrimination (by peers and by adults) at school and depressive symptomatology vary across gender and

nativity status (foreign born vs. U.S. born)? (c) Do ethnic identity and social support play a protective role against the negative effects of perceived discrimination on depressive symptoms among foreign-born and U.S.-born immigrant-origin adolescents? As previous research has indicated a relatively consistent relationship between discrimination and mental health distress among youth (Rivas-Drake et al., 2008; Sirin & Fine, 2008; Yoo & Castro, 2011), we expected that perceived discrimination by peers and by adults at school are related to a greater degree of depressive symptomology among foreign-born and U.S.-born adolescents. Considering evidence (Almgren et al., 2009) indicating that immigrant adolescent girls are more vulnerable to developing internalizing symptoms when compared with immigrant adolescent boys, we expected that girls would report higher levels of depressive symptoms when compared with boys, although we did not have specific hypotheses concerning gender differences in the relationship between perceived discrimination and depressive symptomology. Based on previous findings concerning the immigrant paradox (Alegría et al., 2008; Gee et al., 2007), we expected that the relationship between perceived discrimination and depressive symptomology is stronger for U.S.-born immigrant-origin adolescents when compared with foreign-born immigrant adolescents. We also expected that higher levels of ethnic identity and a greater degree of social support would protect against the negative effects of perceived discrimination at school (by peers and by adults) on depressive symptoms for both foreign-born and U.S.-born adolescents.

Methods

Participants

Our initial sample included 103 students attending an urban high school with a relatively high concentration of racial/ethnic minority students, in the Northeastern part of the United States. Eight participants who did not indicate whether or not they were born in the United States or outside of the United States were excluded from analysis, resulting in a final sample of 95 students. Fifty-one participants (53.7%) identified as male and 44 participants (46.3%) were female. Participants' ages ranged between 13 to 19 years of age ($M = 15.07$, $SD = 1.09$), but most were 14–16 years old (1% 13 years old, 34% 14 years old, 35% 15 years old, 22% 16 years old, 5% 17 years old, 1% 18 years old, and 1% 19 years old). U.S.-born participants had a mean age of 14.76, whereas foreign-born participants were slightly older with a mean age of 15.38 years. The average participant was 15 years old ($M = 15.07$, $SD = 1.08$) and in the 9th grade ($M = 9.32$, $SD = .53$); specifically 71% of the sample were in the 9th grade, 28% in 10th grade, and 1% in 12th grade (0% were 11th graders). Of the sample, 49 participants indicated that they were born outside of the United States and 46 participants indicated that they were born in the United States. Of the 49 foreign-born participants, 21 were female and 28 were male, and of the 46 U.S.-born participants, 23 were female and 23 were male. About half of foreign-born participants moved to the United States prior to age 11 ($N = 26$), whereas the remaining foreign-born participants immigrated at age 11 or later ($M = 9.04$, $SD = 5.56$). Parental educational backgrounds ranged from not graduating high school to attending graduate school. Specifically, 24 mothers (26.4%) and 19 (21.6%) fathers did not graduate from

high school. Thirty-five (38.5%) mothers and 34 (38.6%) fathers completed high school. Fifteen (16.5%) mothers and 13 (14.8%) fathers attended some college. Sixteen mothers (17.6%) and 18 fathers (20.5%) graduated from college, and one (1.1%) mother and four (4.5%) fathers pursued graduate studies. Participants self-identified as Black, Afro/Caribbean, or Haitian ($n = 37$, 38.9%); Latino/Latina or Hispanic ($n = 29$, 30.5%); South Asian or Pacific Islander ($n = 22$, 23.2%); and multiracial ($n = 7$, 7.4%). Foreign-born participants were born in Latin America ($n = 31$), Asia ($N = 11$), and Africa ($n = 7$). The countries of origin of parents included various regions including the Caribbean, South America, Central America, Mexico, Asia, Middle East, and Africa. In addition to English, participants reported speaking Spanish, Creole, Portuguese, Chinese, Cantonese, Vietnamese, Arabic, and a number of other languages at home.

Procedure

Prior to data collection, the university's institutional review board approved the study. In collaboration with the school's head of guidance, we invited students who identified as an immigrant or immigrant-origin (foreign born or U.S. born) and as a racial minority, and fluent in English, to participate in a survey study focused on experiences of discrimination. Students interested in participating in the survey were provided with consent forms for their parents/guardians several days prior to the administration of the survey. Parent and youth consent forms were collected on the day of the survey administration. The first author and five graduate research assistants with the assistance of the head of guidance of the high school administered the surveys at the school during a 50-min time period. The first author and graduate research assistants were available to respond to participants' questions throughout the survey administration. The survey responses were not in any way connected with participants' names to ensure anonymity. There was no financial incentive given to participants for completing the survey.

Measures

Participants completed a background form that included questions about age, gender, grade, racial/ethnic background, parents' highest level of education, languages spoken at home, and whether they were born in the United States. Participants who were not born in the United States were asked to indicate their countries of origin, and all participants were asked to indicate their parents' countries of origin. In addition to the background demographic form, participants completed several measures assessing perceived discrimination, depressive symptomology, ethnic identity, and perceived social support. All surveys were conducted in English.

Adult and peer discrimination. Perceived discrimination by adults and by peers in school was assessed using a scale developed by Way and colleagues (Rivas-Drake et al., 2008; Greene et al., 2006; Rosenbloom & Way, 2004) that also includes items based on Williams's (Williams, Yu, Jackson, & Anderson, 1997) measure of everyday discrimination and qualitative interviews concerning discrimination experiences with adolescents in Boston and New York conducted by Way and her research team (Rivas-Drake, Hughes, & Way, 2009; Rosenbloom & Way, 2004). Both the Adult Discrimination and Peer Discrimination Scales each include

21 items. On the Adult Discrimination Scale, participants were asked to recall events when they had felt discriminated against by adults in school, based on their race or ethnicity. A sample item is "How often do you feel that adults in school treat you like a troublemaker because of your race or ethnicity?" Given research indicating that "positive stereotypes" also have harmful effects on youth development (Yoo & Castro, 2011), the scale also includes items such as "How often do you think adults in school treat you like you are smart because of your race or ethnicity?" Participants were asked to indicate how often they experienced discrimination by adults based on their race or ethnicity with response choices ranging from 0 (*never*) to 4 (*all the time*). Similar to previous studies demonstrating excellent reliability of the Adult Discrimination Scale (Greene et al., 2006; Pahl & Way, 2006; Rivas-Drake et al., 2009), the scale had excellent internal consistency ($\alpha = .96$) in the present study.

On the Peer Discrimination Scale, which includes the same 21 items and the same 5-point Likert scale as the Adult Discrimination Scale, participants were asked to recall experiences of discrimination by peers in school. Sample items included "How often do you feel that other students in school call you names because of your race or ethnicity?" and "How often do you feel that other students in school think that you will do well in school because of your race or ethnicity?" Higher scores on both the Adult and Peer Discrimination Scales indicate a higher degree of perceived racial/ethnic discrimination. The Peer Discrimination Scale has previously demonstrated high reliability (Rivas-Drake et al., 2009) and in the present study showed excellent internal consistency ($\alpha = .96$).

Depressive symptoms. The Center for Epidemiologic Studies Depression Scale for Children (CES-DC; Weissman, Orvaschel, & Padian, 1980) is a 20-item self-report depression inventory used to assess behavioral, emotional, and cognitive components of depression among children and adolescents. Participants were asked to report whether they experienced various features of depressive symptomology in the past week, on a 4-point Likert scale from 0 (*not at all*) to 3 (*a lot*). Sample items include "I didn't sleep as well as I usually sleep," and "I felt down and unhappy." Higher scores on the CES-DC are suggestive of greater degree of depressive symptomology. The scale has previously demonstrated good test-retest reliability, strong validity, and high internal consistency (Radloff, 1977). In the present study, the internal consistency of the CES-DC was strong, with Cronbach's alpha of .85.

Ethnic identity. The Multigroup Ethnic Identity Measure (Phinney, 1992) is a 15-item self-report scale assessing four broad areas of ethnic identity: positive ethnic attitudes, a sense of belonging, ethnic identity of achievement, and ethnic behaviors or practices. On a 4-point Likert scale from 1 (*strongly disagree*) to 4 (*strongly agree*), participants responded to items such as "I think a lot about how my life will be affected by my ethnic group membership," and "I have a lot of pride in my ethnic group." Higher scores are indicative of greater sense of commitment and belongingness to one's own ethnic group. The MEIM has demonstrated good reliability and validity with ethnically diverse high school students (Phinney, 1992). In the current sample, the MEIM yielded strong internal consistency with an alpha coefficient of .89.

Social support. The social support measure of the Polling for Justice Survey (PFJ) (Fox et al., 2010) was used in the present study to assess support from adults and peers. The PFJ was created

in New York City as a part of a participatory action research project through the collaboration of university-based researchers and students, public health professionals, and racially and economically diverse backgrounds youth researchers "to document and create policy action around youth experiences with health, education and criminal justice" (Fox et al., 2010, p. 7). The PFJ survey was constructed through a series of focus groups and informal meetings with youth researchers and includes questions concerning the areas of health, education, and interactions with adults and peers. Analysis of the data from the PFJ survey is ongoing, and, as such, information concerning the psychometrics of the PFJ survey is not yet available. However, we believe that questions from this survey are especially relevant to the present study. The social support measure from the PFJ survey was selected for the present study as it closely reflects the perspectives of youth from diverse backgrounds in large urban areas. Further, we recognize that using community self-surveys in social science research is an important approach to collaboration with and promotion of social justice within communities (Torre & Fine, 2011).

The social support measure in the PFJ survey includes a total of 7 items, such as "When you are going through a hard time, how often do you turn to adult family members (like: My mother, father, grandparent, guardian)?" "When you are going through a hard time, how often do you turn to adults at school (like: teachers, guidance counselor)?" "When you are going through a hard time, how often do you turn to friends (including boyfriend/girlfriend)?" Response options for questions are based on a 4-point Likert scale from 1 (*always*) to 4 (*never*). Responses on the scale were recoded in the present study such that higher scores in the analysis indicated higher social support. In the present study, internal consistency for this scale was adequate ($\alpha = .70$).

Results

Data Analyses

Multiple regression was used to assess the influence of perceived peer and adult racial/ethnic discrimination, ethnic identity, social support, gender, and nativity status on participants' scores on depressive symptoms. The two types of racial/ethnic discrimination (discrimination by adults and by peers) were highly related ($r = .80, p < .01$). Such a high correlation between predictors is likely to lead to multicollinearity, whereby the presence of both predictors in the model masks their effects on the dependent variable. Two ways of addressing this problem were considered: (a) creating a combination of these two variables (e.g., by averaging adult and peer discrimination or creating a factor) or (b) conducting separate regressions that examined the distinct roles of peer and adult discrimination. Because of our interest in examining the distinct role of these two different sources of discrimination, separate regression analyses were conducted. Variables were examined for normality. Two of the variables (adult and peer discrimination) exhibited extreme kurtosis. Log transformations of the variables created reasonably normal distributions and, therefore, all analyses were conducted on the log-transformed versions of these variables. There was also a nonnegligible amount of missing data on the continuous variables (ranging from 7.4% to 15.8% missing). Expectation maximization (EM) was used to impute missing data, and therefore all descriptives and results are

based on the imputed data. EM is an appropriate tool for handling the amount of data that was missing in the current study and is preferable to other methods of addressing missing data, such as listwise and pairwise deletion (Schafer & Graham, 2002).

In the initial regression models, the log-transformed discrimination variable, ethnic identity, social support, nativity status (0 = U.S.-born participants, 1 = foreign-born participants), gender (0 = girls, 1 = boys), and four interactions between the log-transformed discrimination variable and each of the other independent variables were entered as predictors of depressive symptomology. Continuous variables were centered. To increase parsimony and conserve statistical power, nonsignificant predictors were sequentially trimmed from the model (with the exception of predictors that were main effects required to test interactions effect). That is, based on the results of the initial "full" model with all predictors, the predictor that was furthest from statistical significance was cut, and a new regression was conducted without this predictor. Then based on the results of this model, another predictor was trimmed. This process continued until a final model was reached in which only significant predictors (or predictors that were necessary to test interaction effects) were included in the model. Finally, when significant interaction effects were identified in the final regression models, simple slopes analyses were conducted to examine the effects of discrimination on depressive symptoms at different levels of the moderator variable.

Preliminary Analyses

Approximately three-fourth (75.8%) of participants reported at least one incident of racial and ethnic discrimination by peers at school, and over half (63.2%) of our participants reported at least one incident of racial and ethnic discrimination by adults at school. Discrimination by peers ($M = .64$, $SD = .86$) was more frequent than discrimination by adults ($M = .39$, $SD = .67$). Average depression scores were relatively low ($M = .92$, $SD = .50$). Participants reported moderately high levels of ethnic identity ($M = 2.99$, $SD = .50$) and somewhat low levels of social support ($M = 1.90$, $SD = .59$). An independent samples t -test revealed a significant difference on social support between foreign-born and U.S.-born participants, with foreign-born adolescents reporting a

higher degree of social support. There were no significant differences on any of the other variables across gender or nativity status. Descriptives are provided for the full sample by gender and by nativity status (foreign born vs. U.S. born) in Table 1. Correlations among the variables of interest are presented in Table 2. With the exception of the correlation between adult and peer discrimination ($r = .80$), correlations were low to moderate ($r = -.29$ to $r = .23$).

Perceived Adult Discrimination and Depressive Symptoms

Results of the initial model (with all nine predictors included transformed adult discrimination, gender, nativity status [foreign born vs. U.S. born], ethnic identity, social support and interactions between transformed adult discrimination and each of the other variables) are presented in Table 3. Next, nonsignificant predictors were sequentially trimmed from the model to increase parsimony and conserve statistical power. The results of the final, trimmed model are also presented in Table 3. The final adult discrimination model accounted for 27% of the variance in students' scores on depressive symptoms, $R^2 = .27$, $F(6, 88) = 5.39$, $MSE = 1.07$, $p < .001$. Examination of Mahalanobis's and Cook's distance revealed two potentially influential cases. Analyses were replicated with these cases removed. The substantive pattern of results was consistent, and, therefore, the cases were retained in the sample. Inspection of residuals and tolerance statistics did not indicate any problems with the model. Social support was not related to depressive symptoms and did not moderate the relationship between log-transformed adult discrimination and depressive symptomology, and was therefore trimmed from the model. After controlling for the other independent variables, gender was a significant predictor of depressive symptoms, such that boys reported fewer depressive symptoms when compared with girls ($b = -.25$, $p < .01$). Gender did not moderate the relationship between transformed adult discrimination and depressive symptoms. However, two significant interactions revealed that the effect of perceived adult discrimination on depressive symptomology was moderated by nativity status and ethnic identity levels. Specifically, the effect of transformed adult discrimination on depressive symptoms was lower for foreign born participants than for U.S.-

Table 1
t-Tests on Sample Differences in the Variables of Interest by Gender and Nativity Status

Variable	Full sample ($n = 95$)	Boys ($n = 51$)	Girls ($n = 44$)	Boys vs. girls ($df = 93$)	Foreign-born participants ($n = 49$)	U.S.-born participants ($n = 46$)	Foreign- vs. U.S.- born participants ($df = 93$)
Depressive symptoms	$M = .92$ $SD = .50$	$M = .85$ $SD = .55$	$M = 1.00$ $SD = .43$	$t = 1.44$, <i>n.s.</i>	$M = .96$ $SD = .48$	$M = .88$ $SD = .53$	$t = -.74$, <i>n.s.</i>
Transformed adult discrimination	$M = .11$ $SD = .15$	$M = .13$ $SD = .16$	$M = .10$ $SD = .14$	$t = -1.01$, <i>n.s.</i>	$M = .13$ $SD = .18$	$M = .09$ $SD = .11$	$t = -1.39$, <i>n.s.</i>
Transformed peer discrimination	$M = .17$ $SD = .18$	$M = .18$ $SD = .18$	$M = .16$ $SD = .19$	$t = -.67$, <i>n.s.</i>	$M = .16$ $SD = .19$	$M = .18$ $SD = .18$	$t = .32$, <i>n.s.</i>
Ethnic identity	$M = 2.99$ $SD = .50$	$M = 2.91$ $SD = .51$	$M = 3.09$ $SD = .48$	$t = 1.75$, <i>n.s.</i>	$M = 2.95$ $SD = .44$	$M = 3.04$ $SD = .57$	$t = .88$, <i>n.s.</i>
Social support	$M = 1.90$ $SD = .59$	$M = 1.81$ $SD = .55$	$M = 2.01$ $SD = .62$	$t = 1.71$, <i>n.s.</i>	$M = 2.04$ $SD = .64$	$M = 1.76$ $SD = .50$	$t = -2.32$, $p < .05$

Table 2
Bivariate Correlations Among Variables of Interest

Variable	1	2	3	4	5	6
1. Depressive symptoms	—					
2. Transformed adult discrimination	.199	—				
3. Transformed peer discrimination	.232*	.798**	—			
4. Nativity status	.077	.142	-.033	—		
5. Gender	-.148	.104	.069	.072	—	
6. Ethnic identity	-.289**	-.093	-.016	-.090	-.181	—
7. Social support	.124	-.029	.040	.234*	-.174	.024

Note. Gender coded 0 = female, 1 = male; Nativity status coded 0 = U.S. born, 1 = foreign born. Point-biserial correlations are presented for correlations between dichotomous and continuous variables.

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

born participants ($b = -1.97, p < .01$) and the effect of transformed adult discrimination on depressive symptomology was higher for students with lower ethnic identity scores ($b = -1.38, p < .05$).

Multiple regression models with different methods of centering (simple slopes analysis) were conducted to understand the effect of transformed adult discrimination on depressive symptoms at different levels of nativity status (foreign born vs. U.S. born) and ethnic identity (high = 1 *SD* above the mean; low = 1 *SD* below the mean; see Table 5 and Figure 1). Perceived adult discrimination was positively associated with depressive symptoms for U.S.-born participants with low or average levels of ethnic identity ($b = 2.572, p < .001$ and $b = 1.875, p < .01$, respectively). However, perceived adult discrimination was not associated with depressive symptoms for foreign born participants (at low, high, or average levels of ethnic identity) and was not associated with depressive symptoms for U.S.-born participants with high levels of ethnic identity.

Perceived Peer Discrimination and Depressive Symptoms

Regression analyses were also conducted to examine the role of perceived discrimination by peers on adolescents' depressive symptoms. Results of the initial model (with all nine predictors included transformed peer discrimination, gender, nativity status [foreign born vs. U.S. born], ethnic identity, social support, and interactions between transformed peer discrimination and each of the other variables) are presented in Table 4. Next, nonsignificant predictors were sequentially trimmed from the model to increase parsimony and conserve statistical power. The results of the final trimmed model are also presented in Table 4. The final model accounted for 24% of the variance in scores of depressive symptoms ($R^2 = .24, F(5, 89) = 5.76, MSE = 1.16, p < .001$). No problems were identified with the model based on examination of Mahalanobis' distance, Cook's distance, residuals, and tolerance statistics.

Social support was not related to depressive symptoms and did not moderate the relationship between log-transformed peer discrimination and depressive symptoms, and was therefore trimmed from the model. After controlling for the other variables in the

model, gender was related to depressive symptoms, such that boys reported lower levels of depressive symptomology than girls ($b = -.23, p < .05$). In addition, there was a significant relation between ethnic identity and depressive symptoms, with lower levels of depressive symptomology among participants with high ethnic identity ($b = -.31, p < .01$). Neither gender nor ethnic identity was a moderator of the effect of transformed peer discrimination on depressive symptoms; these variables were also trimmed.

On the other hand, a statistically significant interaction effect revealed that nativity status did moderate the effect of transformed peer discrimination on depressive symptomology. Specifically, the effect of transformed peer discrimination on depressive symptoms was stronger for U.S.-born participants than for foreign-born participants ($b = -1.31, p < .05$). Multiple regression models with different methods of centering (simple slopes analysis) were conducted to understand the effect of transformed peer discrimination on depressive symptomology for foreign-born and U.S.-born participants (see Table 5 and Figure 2). Results indicated that perceived peer discrimination was associated with depressive symptoms among U.S.-born participants but was not associated with depressive symptoms among foreign-born participants ($b = 1.38, p < .001$; $b = .072, ns$, respectively).

Discussion

The main purpose of our study was to examine perceived racial/ethnic discrimination by adults and peers at school among foreign-born and U.S.-born racial minority immigrant-origin youth, and its relationship to mental health. We found that racial and ethnic discrimination remains a significant concern for immigrant-origin adolescents. Similar to previous research in which a large number (30–98%) of ethnic minority youth have reported experiences of discrimination (Alvarez et al., 2006; Fisher, Wallace, & Fenton, 2000), over three-quarter of participants in our study reported at least one incident of racial/ethnic discrimination by peers at school and over half of participants reported at least one incident of racial/ethnic discrimination by

Table 3
Results of Depressive Symptomology Regression Model: The Role of Adult Discrimination

Variable	Initial model		Final model	
	<i>b</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
AD	2.242**	.725	1.875**	.591
Nativity status	-.022	.100	.038	.093
Gender	-.222*	.096	-.254**	.094
Ethnic identity	-.275**	.094	-.287**	.093
Social support	.140	.090	—	—
Nativity Status $\times$ AD	-2.503**	.778	-1.972**	.686
Gender $\times$ AD	.110	.670	—	—
Ethnic Identity $\times$ AD	-1.281	.668	-1.382*	.650
Social Support $\times$ AD	.903	.742	—	—

Note. AD = adult discrimination. Gender coded 0 = female, 1 = male; Nativity status coded 0 = U.S. born, 1 = foreign born. All continuous variables are centered at their mean.

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

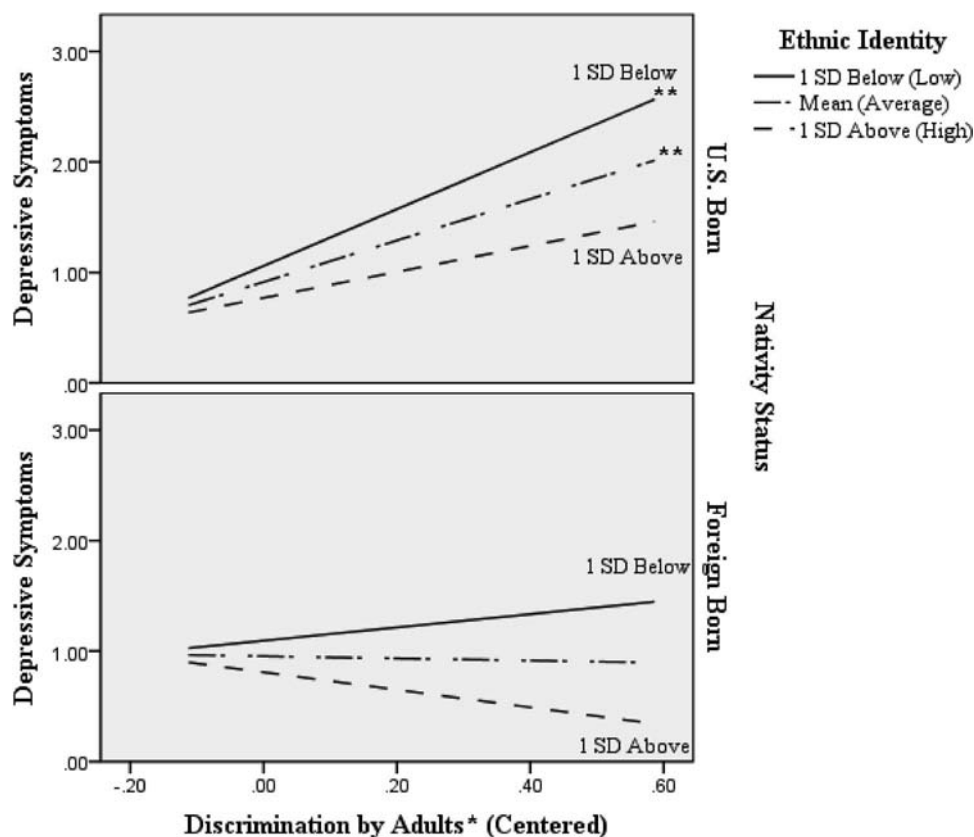


Figure 1. Relationship between adult discrimination (log-transformed) and depressive symptoms by ethnic identity and nativity status. * Represents the log-transformed centered adult discrimination variable; ** $p < .01$; SD = standard deviation; AD = adult discrimination; U.S.-born participants with low ethnic identity (1 SD below the mean): $\hat{Y} = 1.195 - .254 \text{ Gender} + 2.572 \text{ AD}$; U.S.-born participants with average ethnic identity: $\hat{Y} = 1.051 - .254 \text{ Gender} + 1.875 \text{ AD}$; U.S.-born participants with high ethnic identity (1 SD above the mean): $\hat{Y} = .906 - .254 \text{ Gender} + 1.178 \text{ AD}$; foreign born participants with low ethnic identity (1 SD below the mean): $\hat{Y} = 1.230 - .254 \text{ Gender} + .600 \text{ AD}$; foreign-born participants with average ethnic identity: $\hat{Y} = 1.089 - .254 \text{ Gender} - .097 \text{ AD}$; foreign-born participants with high ethnic identity (1 SD above the mean) $\hat{Y} = .944 - .254 \text{ Gender} - .794 \text{ AD}$. The mean value of gender was substituted into the equations in order to create the graph.

adults at school. This study highlights the salience of adolescents' perceived discrimination in the school setting, and the potential role of ethnic identity as a protective factor in mental health, especially for U.S.-born immigrant-origin adolescents. Our study extends previous research on the discrimination-mental health relationship by calling attention to important differences across contextual factors (Bronfenbrenner & Morris, 2006; Smith & Silva, 2011), such as nativity status. In the following sections, we discuss our findings in more detail and offer suggestions for future research and intervention.

Context Matters: Variations in Perceived Discrimination and Depressive Symptoms

Our hypothesis that perceived adult and peer discrimination at school would be positively associated with depressive symptomology was supported for some subgroups of participants, consistent with previous research on the relationship between

perceived racism and mental health (Greene et al., 2006; Grossman & Liang, 2008; Sirin et al., 2012). Adolescent girls reported higher levels of depressive symptoms than adolescent boys, after controlling for other independent variables (e.g., discrimination, ethnic identity, social support, nativity status). It is possible that factors, such as gender role beliefs and expectations among family members, adults at school, and peers (Céspedes & Huey, 2008) and sex role stereotypes, which were not assessed in the present study, contribute to the higher levels of depressive symptoms among adolescent girls. At the same time, it is important to note that the relationship between perceived discrimination and depressive symptomology was significant for both boys and girls. Although previous research has emphasized the vulnerability of girls in developing depressive symptomology (Almgren et al., 2009), our findings suggest that in the context of racial/ethnic discrimination at school, girls and boys both may be vulnerable to negative mental health

Table 4
Results of Depressive Symptomology Regression Model:
The Role of Peer Discrimination

Variable	Initial model		Final model	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
PD	1.566**	.455	1.384**	.375
Nativity status	.056	.098	.075	.093
Gender	-.227*	.101	-.232*	.094
Ethnic identity	-.333**	.101	-.314**	.094
Social support	.055	.091	—	—
Nativity Status × PD	-1.218*	.548	-1.312*	.511
Gender × PD	-.511	.599	—	—
Ethnic Identity × PD	-.132	.593	—	—
Social Support × PD	-.101	.600	—	—

Note. PD = peer discrimination. Gender coded 0 = female, 1 = male; Nativity status coded 0 = U.S. born, 1 = foreign born. All continuous variables are centered at their mean.

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

consequences. Future research should address specific factors such as gender and sex role beliefs and stereotypes, and parent, teacher, and peer expectations of boys and girls, and their interactions with experiences of discrimination to better understand gender differences in depressive symptomology among immigrant-origin adolescents.

The study also highlights differences in the effects of differential effects of perceived peer and adult discrimination on depressive symptoms across nativity status. Both foreign-born and U.S.-born groups in our study reported experiencing racial and ethnic discrimination by adults and peers at school. However, the relationship between perceived racial/ethnic discrimination by adults at school and depressive symptomology, and the relationship between perceived racial/ethnic discrimination by peers at school and depressive symptoms was significant only for U.S.-born participants. Consistent with research supporting the immigrant paradox (Alegria et al., 2008; García Coll & Marks, 2011), our findings suggest that perceived discrimination at school may have worse

Table 5
Results of Simple Slopes Analyses to Examine Impact of
Discrimination on Depressive Symptoms

Group	<i>B</i>	<i>SE</i>
Impact of Adult Discrimination on Depressive Symptoms × Nativity Status and Ethnic Identity Levels		
Foreign born, low MEIM	.649	.449
Foreign born, average MEIM	-.097	.372
Foreign born, high MEIM	-.844	.567
U.S. born, low MEIM	2.572***	.635
U.S. born, average MEIM	1.875**	.591
U.S. born high MEIM	1.178	.714
Impact of Peer Discrimination on Depressive Symptoms × Nativity Status		
Foreign born	.072	.347
U.S. born	1.384***	.375

Note. MEIM = ethnic identity; Low MEIM = 1 SD below the mean; High MEIM = 1 SD above the mean.

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

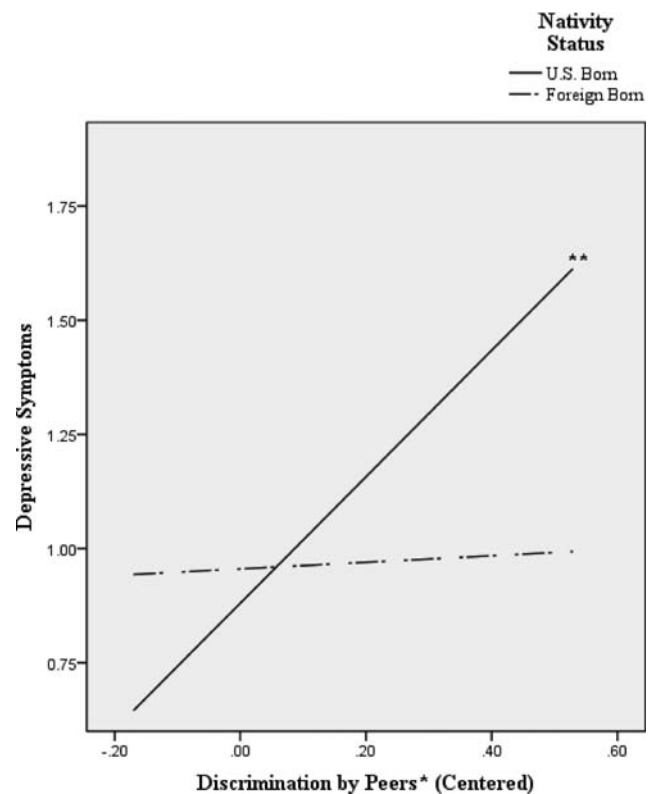


Figure 2. Nativity status as moderator of the relationship between peer discrimination (log-transformed) and depressive symptoms. * Represents the log-transformed and centered peer discrimination variable. ** $p < .01$; MEIM = ethnic identity. For U.S.-born participants: $\hat{Y} = 1.005 - .232 * \text{Gender} - .314 \text{ MEIM} + 1.384 * \text{Peer Discrimination}$. For foreign-born participants: $\hat{Y} = 1.08 - .232 * \text{Gender} - .314 \text{ MEIM} + .072 * \text{Peer Discrimination}$. The mean values of gender and the MEIM were substituted into the equations to create the graph.

mental health consequences for U.S.-born immigrant-origin adolescents when compared with foreign-born, immigrant adolescents. It is possible that foreign-born immigrant youth are less identified with racial hierarchy and dynamics of U.S. society, and their mental health may be less influenced by stereotyping and discrimination than later generations. Our findings suggest that U.S.-born participants, on the other hand, are especially vulnerable to negative mental health consequences of perceived discrimination at school. This is consistent with recent studies with adult immigrant populations indicating that second-generation immigrants experience higher levels of racism-related stress when compared with first-generation immigrants (Tummala-Narra, Inman, & Ettigi, 2011).

U.S.-born immigrant-origin adolescents may also experience discrimination by peers at school as rejection, diminishing the possibility of a sense of belonging which is especially critical to forming multiple cultural identifications across home and school (Greene et al., 2006). Racial and ethnic discrimination by adults at school can further pose serious challenges to immigrant-origin youth's sense of safety in the school environment. Previous research has suggested that perceived discrimination by peers may be qualitatively distinct from discrimination by adults (Greene et

al., 2006; Rivas-Drake et al., 2009). For example, high levels of perceived peer discrimination have been noted among Asian American youth, while more frequent reporting of institutional racism and discrimination by teachers and other adults has been noted among Black and Latino/a youth (Qin, Way, & Rana, 2008; Rosenbloom & Way, 2004). Although we did not directly examine the effects of the racial and ethnic composition of the participants' school setting (e.g., student body, teachers) on experiences of discrimination and psychological distress, our findings suggest that the high degree of ethnic minority student concentration at the participants' school actually does not seem to insulate students from experiencing racial and ethnic discrimination. Previous studies indicate that a high degree of racial and cultural diversity among students attending urban high schools coexists with high levels of discrimination and stereotyping by adults and peers (Niwa, Way, Qin, & Okazaki, 2011; Rosenbloom & Way, 2008; Suárez-Orozco, Rhodes, & Milburn, 2009). Considering the importance of emotional safety and sense of belonging in adolescent development, adult and peer discrimination experiences at school can place immigrant-origin youth at the risk of internalizing stereotypes and negative messages (Suárez-Orozco et al., 2008). This is particularly concerning as psychological problems experienced by immigrant-origin youth are often unnoticed by adults and peers at school (Patel & Kull, 2011).

Ethnic Identity and Social Support: Mixed Findings

Our hypotheses concerning the moderating roles of ethnic identity and social support in the relationship between perceived racial/ethnic discrimination and depressive symptomology were partially supported. For U.S.-born adolescents, ethnic identity mitigated the negative effects of perceived discrimination by adults at school on depressive symptoms. Specifically, for U.S.-born participants with low or average ethnic identity, perceived discrimination by adults was in fact related to depressive symptoms, but for U.S.-born participants with high ethnic identity, perceived adult discrimination did not contribute to depressive symptoms. Our findings suggest that U.S.-born immigrant-origin adolescents with lower levels of ethnic identity may be especially vulnerable to depressive symptoms. It is possible that, for U.S.-born adolescents, ethnic identity plays a particularly important role in coping with discrimination by adults, as they negotiate a bicultural identity that may be distinct from the identity development of immigrant, foreign-born youth. Specifically, U.S.-born adolescents may internalize mainstream norms concerning race and may be more likely to identify as racial minorities as compared with foreign-born immigrant youth (Nguyen, 2006), and as such a stronger ethnic identity may protect against discrimination stress and related mental health problems. Foreign-born youth, on the other hand, may have greater access to forming a positive ethnic identity as they may be more connected with heritage culture through interactions with parents and extended family.

Consistent with previous research concerning the relationship between ethnic identity and mental health among immigrant youth (Rivas-Drake et al., 2008; Rogers-Sirin & Gupta, 2012; Smith & Silva, 2011), higher levels of ethnic identity were associated with lower levels of depressive symptoms. However, ethnic identity did not moderate the relationship between perceived peer discrimination at school and depressive symptomology. Smith and Silva

(2011), in a review of research on ethnic identity, called attention to the possibility that discrimination in certain contexts can be experienced as a threat to both one's ethnic group and self, and as such, ethnic identity may not mitigate the negative effects of discrimination but rather potentially exacerbate distress in the face of discrimination. Although considering the relatively higher reporting of peer discrimination compared with adult discrimination in our sample, we speculate that coping with discrimination by peers at school requires strategies other than a strong sense of affiliation and belonging with one's ethnic group. Taken together, the findings concerning the relationship between perceived discrimination and depressive symptomology among U.S.-born adolescents and those indicating that ethnic identity does not protect against the negative effects of peer discrimination on depressive symptoms, we recognize that discrimination by peers at school is especially problematic for U.S.-born immigrant-origin youth.

In the present study, we did not examine separate dimensions of ethnic identity that may play a protective role in the discrimination-mental health relationship. Previous studies (Greene et al., 2006) have noted that the impact of discrimination on mental health may partly rely on how youth experience being members of their ethnic groups. The experience of ethnic group membership is a multidimensional process and certain components of ethnic identity, such as ethnic affirmation, may protect against the negative effects of peer discrimination but not those incurred with adult discrimination (Greene et al., 2006; Smith & Silva, 2011). Future research should examine the potential role of specific dimensions of ethnic identity that may be more relevant for experiences of racial and ethnic discrimination by peers and adults.

Contrary to our hypotheses, social support was not associated with depressive symptomology, and social support did not moderate the relations between perceived discrimination by adults or by peers and depressive symptoms among either foreign-born or U.S.-born participants. Some previous research has suggested that social support may not have a positive effect on psychological distress when individuals are faced with certain stressors such as traumatic events, and that social support may play primarily a coping function and does not offset stress related to everyday discrimination (Ajrouch et al., 2010; Grossman & Liang, 2008). Interestingly, foreign-born participants reported significantly greater perceived social support when compared with U.S.-born participants. These findings suggest that there may be important qualitative differences in perceptions of social support between foreign-born and U.S.-born youth. It is possible that adolescents from different immigrant generations may seek different sources of support under different circumstances. For example, some youth may seek help from parents and adult caregivers when coping with problems related to academic performance, whereas they may turn to friends to cope with problems related to social interactions or friendships. In our study, we did not ask participants to report how often they would seek help from others when coping with racial and ethnic discrimination, and as such typical sources of support sought by adolescents may not be most relevant to coping with discrimination related stress.

Our findings warrant further research on the role of specific sources of social support utilized by foreign-born and U.S.-born immigrant-origin adolescents when faced with discrimination at school. Prior research (Ajrouch et al., 2010) indicates that different types of social support, such as emotional support and instrumental

support, may have different effects on psychological distress in the context of discrimination experiences. Qualitative research may be especially helpful in exploring how subgroups of adolescents cope with discrimination at school. This is especially important when considering that a supportive school environment has been found to be an important contributor to psychological well-being among adolescents (Almgren et al., 2009). Identifying specific sources of adult and peer supports may be an important step in counteracting the negative effects of discrimination at school, and in accessing appropriate help in coping with discrimination related stress.

Limitations and Implications for Research and Intervention

There are several limitations of the present study. The findings of the study may be limited due to the relatively small sample size of foreign-born and U.S.-born immigrant-origin adolescents attending an urban high school in a specific region of the United States. We cannot, therefore, assume representativeness of our sample across geographic regions. The relatively small sample size constrained our statistical power in the current study, and as such some of our nonsignificant findings may have been due to insufficient power to detect an effect. All of the surveys were conducted in English, therefore excluding participants who are not English proficient. The measure of social support was adopted from the Polling for Justice Survey, which needs additional empirical study to establish further validity and reliability. Several potentially important factors, concerning perceived discrimination and mental health, such as acculturation, were not examined in the present study, and differences in the relationship between perceived racial/ethnic discrimination and depressive symptomology were not examined across social class and intersections of social identity such as sexual orientation. Our relatively small sample size limited our ability to discern any differences related to perceived discrimination, depressive symptoms, ethnic identity, and social support across and within ethnic subgroups (e.g., Asian American, Latino/a, Afro-Caribbean).

Despite these limitations, our findings call for new directions in future research and highlight implications for intervention. Considering our limited sample size, future research should include larger samples that allow for an in-depth examination of between and within groups differences on gender, race, ethnicity, nativity status, age, sexual orientation, language, social class, and immigration status (e.g., unauthorized vs. authorized). As there was a lack of homogeneity in the present sample with respect to ethnicity and language fluency and preferences, future research can also examine the relationship between perceived discrimination in the school setting and mental health within larger samples of adolescents who share a common cultural and linguistic background. In the present study, we included only one mental health outcome variable (e.g., depressive symptoms). Future research should further examine the specific effects of peer discrimination and adult discrimination on multiple outcomes, including other mental health indices (e.g., anxiety) and academic performance, to increase understanding of the ways in which racial and ethnic discrimination affects immigrant youths' lives (Greene et al., 2006). Longitudinal research examining the trajectories of ethnic identity development throughout adolescence would help expand knowledge concerning the role of ethnic identity in the

discrimination-mental health relationship across time and identify contextual factors that may contribute to ethnic identity development among specific subgroups of immigrant adolescents (e.g., across gender, nativity status, ethnicity, social class).

Our findings call for increased attention to the specific sources of discrimination related distress, mental health concerns, and help-seeking attitudes and behaviors of first and later generations of immigrant youth. We recommend that researchers and practitioners consider the role of contextual factors such as gender and nativity status in improving access to culturally appropriate interventions. Mental health and school-based interventions should consider the importance of the school environment, and the influence of interactions with adults (e.g., teachers, guidance counselors) and peers on psychological well-being. Interventions should also help to mobilize adolescents' sources of support both within and outside of the school setting to cope with experiences of discrimination. Our findings indicate that there is a need to address the problem of discrimination within the school setting, and as such school-based programming can be developed in collaboration with students and teachers to more effectively counter stereotyping and discrimination. Although immigrant-origin youth tend to underuse traditional mental health services (APA, 2012), school-based interventions may be especially instrumental in helping adolescents cope with distress.

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