# Trajectories of Depressive Symptoms and Self-Esteem in Latino Youths: Examining the Role of Gender and Perceived Discrimination

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The current longitudinal study examined changes in Latino adolescents' (N = 323, M age = 15.31 years) self-esteem and depressive symptoms across the high school years. Differences in trajectories were examined by gender and perceived ethnic discrimination. Findings revealed that self-esteem increased across high school for both male adolescents and female adolescents. Depressive symptoms, however, showed differences by gender, with female adolescents reporting a decline in depressive symptoms across high school and male adolescents reporting no change. Perceived ethnic discrimination emerged as an important predictor of male adolescents' self-esteem in early high school and predicted changes in self-esteem growth for male adolescents and female adolescents across the high school years. Perceived ethnic discrimination also emerged as a significant predictor of adolescents' depressive symptoms in early high school but did not relate to changes in symptoms across time. Together, findings suggest that Latino adolescents experience positive changes in psychological adjustment across this developmental time. Experiences of ethnic discrimination, however, have the potential of placing adolescents at risk for maladjustment over time. These findings inform our understanding of Latino youth development and point to the importance of early high school years in youths' psychological functioning.

Keywords: Latino adolescents, mental health trajectories, perceived ethnic discrimination

Adolescence is a developmental period characterized by numerous cognitive, biological, and social changes. The challenges associated with these changes are theorized to take a toll on individuals' psychological functioning, including impacting self-esteem and increasing individuals' susceptibility to depressive symptoms (Cicchetti, Rogosch, & Toth, 1994; Mruk, 2006). Self-esteem and depressive symptoms during adolescence not only shape youths' immediate context but also play an important role later in life. Lower levels of self-esteem in adolescence have been related to greater mental health problems and substance abuse and to lower levels of life satisfaction in early adulthood (Boden, Fergusson, & Horwood, 2008). Similarly, higher levels of depressive symptomatology during adolescence have been linked to early adulthood depressive and anxiety disorders (Fergusson, Boden, & Horwood, 2007), poor overall health (Keenan-Miller, Hammen, & Brennan, 2007), and sexual risk taking (Bonomo et al., 2001). Because of their links to later adjustment, researchers have begun to examine the developmental progression of self-esteem and depressive symptoms during adolescence, with attention to gender differences and the role of environmental factors in shaping trajectories (e.g., Baldwin & Hoffman, 2002; Ge, Conger, & Elder, 2001; Scheier, Botvin, Griffin, & Diaz, 2000).

Most of this work has focused on European Americans (e.g., Baldwin et al., 2002; Ge et al., 2001; Scheier et al., 2000), with little attention given to the Latino adolescent population. Latinos

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are the fastest growing ethnic minority group in the United States (Fry, 2008), with estimates suggesting that by 2050 nearly 29% of the U.S. population will be Latino (Passel & Cohn, 2008). The Latino population also is relatively young; the mean age of the Latino population is 27 years old, younger than African Americans (31 years old), Asians (36 years old) and European Americans (41 years old; Pew Hispanic Center, 2009). Further, evidence suggests that Latino adolescents are at greater risk for developing mental health disorders, compared with European Americans (Gore & Aseltine, 2003; Twenge & Nolen-Hoeksema, 2002). As such, a better understanding of developmental changes in key indicators of adjustment, such as self-esteem and depressive symptoms, in Latino adolescents is greatly needed.

García Coll and colleagues' (1996) integrative model for minority children suggests that there are important environmental stressors associated with living as an ethnic minority in the United States, such as experiences with ethnic discrimination, and that these stressors significantly impact youths' development and help explain disparities in mental health disorders (DuBois, Burk-Braxton, Swenson, Tevendale, & Hardesty, 2002; García Coll et al., 1996). Despite theoretical advances in this area, few empirical studies have examined how perceptions of ethnic discrimination relate to the development of Latino youths' psychological functioning longitudinally (see Greene, Way, & Pahl, 2006, for an exception). To address these gaps in the literature, the current study had three primary goals: (a) describe Latino adolescents' trajectories of self-esteem and depressive symptoms across the high school years, (b) examine gender differences in trajectories of self-esteem and depressive symptoms, and (c) examine how perceived ethnic discrimination was associated with youths' trajectories of self-esteem and depressive symptoms.

# **Trajectories of Self-Esteem**

Global self-esteem refers to an "individual's positive or negative attitude toward the self as a totality" (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995, p. 141). Theorists have long posited that fluctuations in self-esteem are expected during adolescence, given the significant physical and social changes that individuals experience during this developmental period (Elliot & Feldman, 1990; Santrock, 1986). Specifically, as individuals enter puberty, transition throughout middle school, and experience significant changes in social relationships, self-esteem declines; however, as individuals gain a better grasp of changes and a more developed self-concept (which corresponds with the high school years), self-esteem is expected to stabilize or gradually incline.

Gender differences in the development of self-esteem have also been theorized and focus on gender role development and differing gender socialization processes experienced by male adolescents and female adolescents (Galambos, 2004; Hill & Lynch, 1983). That is, after puberty, male adolescents and female adolescents face increased pressure to conform to traditionally masculine or feminine roles/behaviors. Given the generally positive societal views and merit associated with stereotypically masculine behaviors (e.g., competition, independence) and given that self-esteem is more strongly tied to masculine traits than feminine traits, male adolescents are theorized to have higher levels of self-esteem, compared with female adolescents (Orlofsky & O'Heron, 1987).

Consistent with these theoretical notions, a significant body of work has demonstrated that individuals in middle adolescence report significantly lower levels of self-esteem than do their late adolescent counterparts (e.g., O'Malley & Bachman, 1983; Robins & Trzesniewski, 2005; Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002) and that male adolescents tend to report higher self-esteem than do female adolescents across middle and late adolescence (e.g., Kling, Hyde, Showers, & Buswell, 1999). These studies, however, have relied primarily on cross-sectional data, and the extent to which cohort effects contribute to these differences is therefore unclear. To achieve a more accurate understanding of the developmental progression of self-esteem, assessments of intraindividual change across time are needed. The few existing longitudinal studies have reported mixed findings or have examined a restricted range of time, which limits our ability to compare across studies. For instance, Scheier and colleagues (2000) examined European American adolescents from seventh to 10th grade and found declines in both male adolescents' and female adolescents' self-esteem over time. In contrast, Baldwin and Hoffman (2002) examined European American adolescents, from ages 12 years (sixth or seventh grade) to 20 years and found that male participants and female participants increased in self-esteem from middle to late adolescence (16-20 years old). Finally, Block and Robins (1993) found that female participants' and male participants' selfesteem trajectories differed from 15 years old to 23 years old, with female participants reporting decreases and male participants reporting increases.

Together, these studies suggest that self-esteem changes during the adolescent years; the extent and direction of these changes is less clear. It should be noted, however, that these findings are based largely on studies with European American adolescents (e.g., Baldwin & Hoffman, 2002; Scheier et al., 2000; Galambos, Baker, & Krahn, 2006). The few studies that have included ethnic

and racial minority adolescents have found significant differences between ethnic and racial groups in trajectories of self-esteem (Biro, Striegel-Moore, Franko, Padgett, & Bean, 2006; Greene & Way, 2005). For instance, Greene and Way (2005) found that Black, Latino, Asian American, and biracial youths all reported significant increases in self-esteem from ages 13 years to 20 years, but Latino adolescents reported significantly lower levels of selfesteem at age 13 years than did Black adolescents and demonstrated significantly faster growth over time, reaching comparable levels of self-esteem to Black adolescents at age 20. These findings suggest that there might be important differences in the development of self-esteem across racial and ethnic groups and that the trajectories that have been identified for European American adolescents cannot be generalized to youths from other ethnic and racial groups without empirical examination. Research examining the trajectories of self-esteem among Latino youths is greatly needed, given the substantial population growth and prior evidence suggesting that these adolescents are at risk for relatively poor psychological outcomes (Gore & Aseltine, 2003; Twenge & Nolen-Hoeksema, 2002).

Further, an examination of gender differences in the developmental changes of self-esteem could be especially relevant for the Latino population. Latino culture has been characterized by a strong adherence to traditional gender roles, which impacts individuals' gender socialization process (Abreu, Goodyear, Campos, & Newcomb, 2000; Azmitia & Brown, 2002). In fact, Latinos have been found to report greater adherence to traditional gender roles than have members of other ethnic/racial groups in the United States (e.g., Abreu et al., 2000). These values are believed to be passed down from parents to adolescents, with more traditional parents encouraging male adolescents to engage in more "manly" behaviors and with femininity encouraged in female adolescents (Raffaelli & Ontai, 2004). As previously mentioned, gender differences in self-esteem during adolescence have been explained, in part, by mainstream societal views that tend to favor stereotypically masculine behaviors. Thus, in a culture that strongly adheres to rigid gender role socialization, such as the Latino culture, it is possible that gender differences might be amplified. That is, Latino male adolescents might be particularly likely to report significantly higher levels of self-esteem than their female counterparts because their cultural orientation aligns with the larger societal values. Thus, because both the heritage culture (i.e., Latino) and the mainstream culture favor stereotypical masculine behaviors, Latino male adolescents may benefit from traditional gender role socialization and expectations. The current study contributes to narrowing this gap in the literature by empirically examining the trajectories of Latino male adolescents' and female adolescents' self-esteem during the high school years.

#### **Trajectories of Depressive Symptoms**

Similar to self-esteem, depressive symptomatology, or symptoms associated with depressive disorders (i.e., major depressive disorder, dysthymia), has been identified as a significant indicator of adjustment during the adolescent years. Estimates suggest that during this time, 25%–40% of female adolescents and 20%–35% of male adolescents will experience high levels of depressive symptoms (Petersen et al., 1993) and that most individuals who experience depressive disorders in adulthood will first experience

symptoms during adolescence (Kim-Cohen et al., 2003). Depressive disorders and increased depressive symptoms appear to be especially relevant to Latinos, as studies have suggested that these adolescents are at increased risk of experiencing depressive symptoms, compared with other adolescents (Anderson & Mayes, 2010). Theories of depressive disorders suggest that many of the changes occurring during adolescence contribute to adolescents experiencing depressive symptoms and to the development of depression (Hankin, 2006; Lewinsohn & Essau, 2002). Specifically, individuals are tasked with the goals of adapting to the numerous changes associated with puberty, having peer relationships with members of the opposite sex, and forming a sense of personal identity (Cicchetti et al., 1994). Difficulty in adjusting can leave adolescents with limited resources, increased conflict, and other problems in interpersonal relationships, which ultimately make adolescents vulnerable to experiencing depressive symptoms and developing a depressive disorder.

Depressive symptoms are more common in female adolescents than in male adolescents, as nearly twice as many female adolescents are diagnosed with depression, compared with male adolescents (Nolen-Hoeksema, 1990). Paralleling explanations of gender differences in self-esteem, some theories of depression focus on gender role development (Hill & Lynch, 1983). Specifically, after puberty, female adolescents face increased pressure to conform to traditional gender roles and become less assertive, which in turn is related to a less positive view of one's self and to increased depressive symptoms. Other theories have focused more on environmental stressors (Nolen-Hoeksema & Girgus, 1994), positing that differences are likely due to the increased exposure and/or increased reactivity to stressors for female adolescents, compared with male adolescents. Although the exact mechanisms underlying differences are not understood, gender remains an important consideration in understanding adolescents' development of depressive symptoms.

Though there are a few studies that have examined depressive symptoms throughout adolescence, similar to the literature on self-esteem, most of this work is based on cross-sectional data. Findings from these studies imply significant gender differences, with female adolescents demonstrating higher levels of depressive symptoms in late adolescence, compared with early adolescence, and male adolescents reporting stability or decreases in depressive symptoms across these same developmental periods (Petersen, Sarigiani, & Kennedy, 1991). The few studies that have examined intraindividual changes in depressive symptoms across adolescence, however, have produced somewhat inconsistent findings with respect to when male adolescents' and female adolescents' trajectories of depressive symptomatology converge and diverge. For instance, Ge, Conger, and Elder (2001) examined European American high school students' trajectories of depressive symptoms from seventh to twelfth grade. Female adolescents reported an increase in depressive symptoms from eighth to 12th grade, while male adolescents reported a decline from eighth to ninth grade but an increase from 10th to 12th grade. In a second study, Garber and colleagues (2002) found that female adolescents reported an increase in depressive symptoms from sixth to 11th grade, while their male counterparts reported no change during this time. Although the findings by Ge et al., and Garber et al. were based on predominately European American samples, a recent study (i.e., Adkins, Wang, Dupre, van den Oord, & Elder, 2009)

found that Latino and European American youths demonstrated similar trajectories of depressive symptoms, increasing from middle adolescence (i.e., seventh grade) to about age 17 years and then declining into young adulthood. However, Latinos and female adolescents started at greater levels of depression (at seventh grade), compared with European Americans and male adolescents, respectively. Given the limited number of studies that have examined intraindividual change in depressive symptoms, however, it is difficult to draw conclusions from this work. Nevertheless, one consistent finding is that trajectories of depressive symptoms during adolescence differ for male and female adolescents, and variability by gender should be considered in this work. Given that depressive symptomatology represents a significant public health concern (O'Connell, Boat, & Warner, 2009) and that Latinos appear to be at relatively greater risk for exhibiting depressive symptoms than are European American and other racial/ethnic minority youths (Anderson & Mayes, 2010; Mikolajczyk, Bredehorst, Khelaifat, Maier, & Maxwell, 2007), it is necessary to gain a more complete understanding of the developmental changes in depressive symptoms among this population.

# Perceived Ethnic Discrimination and Psychosocial Functioning

During adolescence, individuals face a number of stressful events that influence their psychosocial functioning. For ethnic minority adolescents living in the United States, these events include experiences of ethnic discrimination or mistreatment based on preconceived stereotypes and biases (Fisher, Wallace, & Fenton, 2000). These events are frequent, as some studies have suggested that nearly 50% of adolescents report daily experiences (e.g., Fisher et al., 2000). For Latinos, specifically, recent attention has been given to the unique experiences of discrimination that include mistreatment based on differences from the majority culture on language and, in the case of individuals born outside the United States, immigration status (Dovidio, Gluszek, John, Ditlmann, & Lagunes, 2010). Although the Latino population comprises individuals from diverse ethnic origins, in the context of the United States, Latinos are categorized (e.g., U.S. Census categorization) and considered to be a monolithic ethnic group. The social construction of a pan ethnic Latino ethnicity in the U.S. context makes certain experiences, such as ethnic discrimination, somewhat of a shared experience for members of an otherwise diverse population. As an example, recent research suggests that Latinos of varying ethnic origins and immigration statuses have reported perceiving greater levels of ethnic discrimination due to the increased focus on immigration in the United States (Lopez, Morin, & Taylor, 2010). As the integrative model of minority health suggests, these perceptions of ethnic discrimination are theorized to play a key role in developmental processes by disrupting immediate psychological functioning and having lasting effects over time (DuBois et al., 2002; García Coll et al., 1996).

The examination of perceived ethnic discrimination appears particularly important during adolescence, as individuals undergo changes in cognitive appraisal processes and a greater sense of self-identity is reached. Due to these changes, theorists have posited that adolescents experience an increased understanding that societal attitudes of racial/ethnic biases are based on opinions and perspectives of its majority members (Brown & Bigler, 2005;

Clark, Anderson, Clark, & Williams, 1999; Selman, 1976). Adolescents, in turn, develop a greater awareness of biases and ethnic discrimination at an interpersonal level, leading to increased perceptions of ethnic discrimination.

Theory also suggests that perceptions of ethnic discrimination have the potential of impacting individuals' functioning. For instance, social identity theory suggests that adolescence is a time during which individuals undergo identity changes that are directly related to self-concept. Identities are based on social categories (e.g., ethnicity, nationality) in which individuals have a sense of belonging (Hogg, Terry, & White, 1995; Tajfel & Turner, 1986); for ethnic minority adolescents, these social categories often include their identification with their own ethnic group (Umaña-Taylor, Yazedjian, & Bámaca-Gomez, 2004). Experiences with ethnic discrimination, in which one's ethnic group is devalued, can then pose a significant threat to one's self-esteem (Umaña-Taylor & Updegraff, 2007). Furthermore, from a stress process perspective, discriminatory experiences are theorized to take a toll on individuals' functioning both physiologically and psychologically and through numerous pathways (e.g., rumination, hypothalamicpituitary-adrenal axis activation) resulting in increased depressive symptoms (Pachter & García Coll, 2009).

Empirically, perceptions of ethnic discrimination have been consistently linked to overall poor psychological outcomes that include self-esteem and depressive symptoms (Torres & Ong, 2010; Umaña-Taylor, Updegraff, & Gonzales-Backen, 2011; Williams & Mohammed, 2009). For instance, Smokowski and Bacallao (2007) found that Latino adolescents' reports of perceived ethnic discrimination were related to lower self-esteem and greater internalizing symptoms. Further, prospective studies of Mexicanorigin adolescents have found that perceptions of ethnic discrimination contribute to increases in depressive symptoms and decreases in academic self-efficacy, grades, and self-esteem over time (e.g., Berkel et al., 2010). To our knowledge, only one empirical study exists examining how perceived ethnic discrimination shapes the development (or trajectories) of psychological functioning. Among Black, Latino (primarily Dominican), and Asian American adolescents, Greene and colleagues (2006) found that perceptions of ethnic discrimination were associated with decreases in self-esteem and increases in depressive symptoms across the high school years. These findings suggest that perceived ethnic discrimination has the potential of shaping minority youths' trajectories of psychological functioning. To expand our understanding of these processes among Latino adolescents, however, research that examines potential within-group variability is needed (García Coll et al., 1996).

Adolescent gender is one aspect of within group variability that deserves a more nuanced examination, particularly with respect to examining the impact of perceived ethnic discrimination on psychological functioning over time. Findings suggest that male participants report greater perceptions of ethnic/racial discrimination than do female participants (e.g., Chavous, Rivas-Drake, Smalls, Griffin, & Cogburn, 2008), and some evidence suggests that male participants are more greatly impacted by these experiences than are female participants. For instance, male participants report a greater link between perceived ethnic discrimination and smoking (Wiehe, Aalsma, Liu, & Fortenberry, 2010), academic outcomes (Alfaro, Umaña-Taylor, Gonzales-Backen, Bámaca, & Zeiders, 2009), risk behavior (Delgado, Updegraff, Roosa, & Umaña-

Taylor, 2011), and self-esteem (Cassidy, O'Connor, Howe, & Warden, 2004). However, no gender differences have emerged linking perceptions of ethnic discrimination and depressive symptoms (Brody et al., 2006; Delgado et al., 2011). In longitudinal work, Greene and colleagues (2006) found no gender differences linking perceived ethnic discrimination and both self-esteem and depressive symptoms. However, it should be noted that Greene and colleagues did not explore the role of gender within specific ethnic groups. Specific to Latino male adolescents, some scholars have posited that they might perceive more ethnic discrimination than do female adolescents because of the socialization of traditional gender roles in Latino families (Alfaro et al., 2009). That is, Latino parents might focus on socializing their adolescent female adolescents regarding the importance of the family environment and the home setting, while male adolescents may be socialized more toward taking a larger role in activities outside of the family. In turn, male adolescents have greater opportunities to perceive ethnic discrimination and might be more impacted by such encounters because of the importance of the extrafamilial context in shaping their development (Bulcroft, Carmody, & Bulcroft, 1996; Delgado et al., 2011). However, it could also be that the more frequent exposure to these experiences actually desensitizes male adolescents, making the influence of perceived ethnic discrimination less impactful.

### The Current Study

To address prior limitations in the literature and to advance our understanding of Latino youths' developmental changes in psychological functioning, the current study describes Latino adolescents' trajectories of self-esteem and depressive symptoms across the high school years and examines gender as a possible moderator. Further, we examine the role of perceived ethnic discrimination on Latino male adolescents' and female adolescents' trajectories of self-esteem and depressive symptoms, hypothesizing that individuals who reported greater discrimination would report lower levels of self-esteem and greater levels of depressive symptoms across the high school years.

#### Method

Data for the current study came from a 4-year longitudinal study, with data collected once per year, focused on Latino youths' adjustment in high school (Umaña-Taylor, Alfaro, Bámaca, & Guimond, 2009). The sample consisted of 323 Latino adolescents (49.5% female) attending one of five high schools in nonmetropolitan communities in Illinois. In all schools, Latino students represented a minority (i.e., less than 20%) of the student body, and European American students represented a numerical majority (i.e., greater than 75%). At Time 1 (T1), participants were approximately 15 years old (M = 15.3, SD = 0.75, range = 14–17) and were enrolled in either ninth (53.6%; Cohort 1) or 10th (46.4%, Cohort 2) grade. At Time 4 (T4), nearly 41.5% of adolescents had graduated from high school or received their general equivalency diploma (GED; 13.3% of Cohort 1 and 74% of Cohort 2). Of those who participated in T4 and graduated, nearly 87% planned on attending college or technical training. The remaining participants planned on entering the military (3%), doing a combination of military, employment, and college (6%) or working full-time (no college; 4%). The sample included multiple Latino backgrounds (e.g., Chilean, Cuban, Dominican, Guatemalan, Puerto Rican), but the majority of participants were of Mexican origin (77%). Nearly 72% of adolescents reported being born in the United States, with 93.4% of foreign-born adolescents being born in Mexico. Given the limited number of adolescents representing diverse ethnic backgrounds and nativity, the current study combined Latino adolescents across country of origin and generational status. Adolescents came from families in which nearly 43% of mothers and 45% of fathers had less than a high school education, 28% of mothers and 32% of fathers had a GED or high school degree, and 29% of mothers and 23% of fathers had some college.

#### **Procedures**

In 2003, ninth and 10th grade Latino students (as identified by school records) were invited to attend an informational meeting to explain the purpose of the study and the requirements of parental consent and youth assent. After the meeting, data collection times and dates were determined by school personnel; four of the schools held data collection during a specified school hour, while the fifth school held data collection after school on an early dismissal day. Adolescents who returned parental consent and assent forms completed a self-administered survey in their preferred language (i.e., English or Spanish), which took approximately 45 min to complete. In subsequent waves, the same data collection procedure was followed, and adolescents who were unable to attend (e.g., missed school, graduated) were given the option of participating via mail. Adolescents received \$10, \$15, \$20, and \$25 for their participation at Times 1, 2, 3, and 4, respectively. All measures used in the current study were translated into Spanish using the back translation method (Knight, Roosa, & Umaña-Taylor, 2009).

#### Measures

**Self-esteem.** The 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1979) was used to measure global self-esteem at T1, T2, T3, and T4. Participants responded to items (e.g., "I feel that I have a number of good qualities") utilizing a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Higher scores indicate higher levels of self-esteem. Among other samples of Latinos, the scale has demonstrated adequate reliability (alphas ranging from .74–.87; Bracey, Bámaca, & Umaña-Taylor, 2004; Kiang, Yip, Gonzales-Backen, Witkow, & Fuligni, 2006; Umaña-Taylor et al., 2004). In the current study, alphas were .87, .87, and .88 for T1, T2, T3, and T4, respectively.

**Depressive symptoms.** The 20-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) was used to assess depressive symptoms during T2, T3, and T4. Depressive symptomatology was not assessed at T1. Participants responded to items (e.g., "You felt lonely") using a 4-point Likert scale ranging from 0 (*rarely or none of the time [less than 1 day]*) to 3 (*mostly or almost all the time [5–7 days]*), with higher values indicating more depressive symptoms. This scale has demonstrated adequate reliability in other Latino samples (McHale, Updegraff, Shanahan, Crouter, & Killoren, 2005) and has demonstrated adequate internal consistency with the current sample ( $\alpha = .90$ , .89, and .89 for T2, T3, and T4, respectively).

**Perceived discrimination.** A revised version of the Perceived Discrimination Scale (Whitbeck, Hoyt, McMorris, Chen, &

Stubben, 2001) was used to assess the degree to which participants perceived having experienced ethnic discrimination. The original measure, developed for Native American youths, was revised by changing the items to focus on Hispanic/Latino culture. This 10-item scale assesses global ("How often has someone yelled racial slurs or racial insults at you?"), authority ("How often has the police hassled you because you are Hispanic/Latino?"), and school discrimination ("How often have you encountered teachers who didn't expect you to do well because you are Hispanic/Latino?"). At T2 only, individuals responded using a 4-point Likert scale ranging from 1 (almost never) to 4 (very often). This scale has been utilized in other Latino samples, and it has demonstrated reliable estimates (Umaña-Taylor et al., 2011). For the current study, Cronbach's alpha was .89.

#### Results

#### Plan of Analyses

Preliminary analyses were conducted to estimate missing data and examine descriptive properties and correlations among study variables. Next, study hypotheses were tested with a series of latent growth curve models via structural equation modeling in Mplus (Muthén & Muthén, 2007). This type of modeling allows for the examination of developmental trajectories in which an unobserved growth trajectory is estimated based on observed repeated measures of a particular construct (Singer & Willet, 2003). Growth models were conducted separately for self-esteem and depressive symptoms. First, an unconditional growth model was estimated to test developmental changes in the outcome of interest and to determine whether there was significant individual variability in initial starting values (i.e., intercept) and rate of growth (i.e., slopes). Next, time-invariant predictors (i.e., gender, perceived discrimination) were included in the model to test whether each of these explained significant variability in initial starting values and/or rate of change in the outcome variable (i.e., self-esteem, depressive symptoms). Finally, the interaction between gender and perceived ethnic discrimination was added to the model to test whether the relation between perceived ethnic discrimination and trajectories of self-esteem, and between perceived ethnic discrimination and trajectories of depressive symptoms, varied as a function of adolescent gender. In all analyses, cohort (either ninth or 10th grade at T1) and adolescent nativity (U.S.- or foreign-born) were included as control variables.

# **Missing Data**

Of the 323 participants at Time 1, 85.4% (N = 276), 82.7% (N = 267), and 80.5% (N = 260) of individuals participated at Times 2, 3, and 4, respectively. To account for missing data, multiple imputation procedures were conducted in SAS (Version 9) with the expectation-maximization (EM) algorithm (Enders,

<sup>&</sup>lt;sup>1</sup> To acknowledge the diversity in the Latino population, mean differences by ethnic origin (Mexican origin vs. all others), nativity, and generational status on all study variables were examined. Additionally, each of these was tested as potential moderator (interacting with perceived discrimination) of the associations of interest. No significant moderation emerged.

2010). Fifty data sets containing imputed estimates and standard errors were generated based on information from all study variables and additional variables not included in the analysis of the current study (e.g., age, acculturation, enculturation). Descriptive statistics and correlations among study variables were generated from the imputed data sets using the PROC MIANALYZE in SAS. For latent growth curve analyses, imputed data sets were read into MPLUS using the TYPE = Imputation feature (Muthén & Muthén, 2007).

## **Descriptive Statistics and Zero-Order Correlations**

Table 1 presents descriptive statistics for the full sample and separately by adolescent gender. An examination of means for the sample as a whole suggested an increase in self-esteem and a decrease in depressive symptoms across time. When examined separately for male and female adolescents, male adolescents appeared to report higher levels of self-esteem than did female adolescents across all time points. Further, for depressive symptoms, male adolescents showed little or no change over time, while female adolescents' depressive symptoms appeared to decrease over time, and female adolescents seemed to report higher values than male adolescents at all time points.

Correlations revealed that the interrelations among self-esteem across time and among depressive symptoms across time were high for both male and female adolescents (see Table 2). High levels of perceived ethnic discrimination were associated with lower self-esteem and higher depressive symptoms across each time point for male adolescents, but only related to higher depressive symptoms at T2 and T4 for female adolescents.

#### **Self-Esteem Growth Models**

Table 3 presents latent growth model results for self-esteem trajectory analyses. First, an unconditional growth model was estimated to examine adolescents' trajectories of self-esteem across four waves of data. Specifically, a two-factor growth model was estimated in which the paths from each observed indicator to the latent intercept were set equal to 1, and linear change (i.e., slope) was estimated by setting the paths equal to -1, 0, 1, and 2, resulting in time being centered at T2. We centered at T2 because the earliest wave at which data were available for one of the predictors (i.e., perceived ethnic discrimination) was T2. Centering at different time points changes the intercept coefficient but does not change the meaning or significance of slope coefficients. The unconditional growth model revealed that adolescents' self-esteem increased significantly from T1 to T4 (see Model 1, Table 3). Significant variability emerged in both the intercept and the slope, suggesting that there was significant individual variability in initial starting values (i.e., self-esteem at T2) and in adolescents' rate of growth in self-esteem. Because previous work suggests that growth in self-esteem is sometimes nonlinear (Baldwin & Hoffmann, 2002), a quadratic growth term was entered in the model. The term was not significant, and its inclusion did not result in a better fitting model; thus, we proceeded with the linear model.

Next, we examined whether trajectories of self-esteem varied as a function of adolescent gender (see Model 2, Table 3). Gender was a significant predictor of the intercept but not the slope, suggesting that male adolescents reported significantly higher selfesteem than did female adolescents at T2, but male adolescents and female adolescents did not differ in their rate of growth over time. Next, perceived ethnic discrimination was added to the model to test whether perceived ethnic discrimination at T2 significantly predicted adolescents' rate of growth in self-esteem (Model 3). Results revealed that perceived ethnic discrimination was a significant predictor of the intercept and slope; that is, individuals who reported greater levels of perceived ethnic discrimination reported lower levels of self-esteem at T2 and a significantly slower rate of growth in self-esteem across time (see Figure 1). Finally, the interaction between gender and perceived ethnic discrimination was added to the growth model (Model 4). Results revealed a significant interaction on the self-esteem intercept, but not the slope. Using procedures outlined by Aiken and West (1991) for probing interactions, findings revealed that higher perceived ethnic discrimination at T2 was significantly associated with lower selfesteem at T2, but only for male adolescents.

#### **Depressive Symptoms Growth Models**

The unconditional growth model for depressive symptoms was estimated with three waves of data (T2, T3, T4) because data on depressive symptoms was not gathered during T1. A two-factor growth model was estimated in which the paths from each observed indicator to the latent intercept were set equal to 1, and the slope was estimated by setting paths to 0, 1, and 2, resulting in time being centered at T2. Results revealed that there was no significant change in adolescents' depressive symptoms over the 3-year period (see Model 1, Table 4). However, significant variability emerged in both the intercept and the slope, suggesting that there was significant individual variability in initial levels of depressive symptoms and individual variability in linear growth in depressive symptoms over time.

Next, we tested whether adolescent gender significantly predicted rate of growth in depressive symptoms over time (see Model 2, Table 4). Gender emerged as a significant predictor of both the intercept and the slope, indicating that male adolescents reported lower initial levels of depressive symptoms than did female adolescents and that male adolescents' reports of depressive symptoms did not change over time, while a decline was seen in female adolescents' reports of depressive symptoms (see Figure 2). We then examined whether perceived ethnic discrimination predicted adolescents' trajectories of depressive symptoms (Model 3). Results revealed that perceived ethnic discrimination was a significant predictor of the intercept; adolescents who reported higher levels of perceived ethnic discrimination at T2 tended to also report greater levels of depressive symptoms at T2. Perceived discrimination did not significantly predict rate of growth in depressive symptoms. Finally, the gender by perceived ethnic discrimination interaction was added, and this did not explain significant variance in the intercept or slope (Model 4).

#### Discussion

The current study contributed to the extant theoretical and empirical literature by examining Latino youths' developmental

<sup>&</sup>lt;sup>2</sup> Means, standard deviations, and ranges for the full sample were obtained by pooling across 50 imputed data sets; descriptive information by gender was computed using a randomly selected imputed data set.

Table 1
Means, Standard Deviations, and Ranges for Study Variables

	Full sample		Male $(n = 163)$		Female $(n = 160)$	
Variable	M (SD)	Range	M(SD)	Range	M(SD)	Range
Self-esteem (SE)						
SE at Time 1	2.96 (0.55)	1.00-4.00	3.03 (0.51)	1.00-4.00	2.90 (0.58)	1.60-4.00
SE at Time 2	3.07 (0.52)	1.40-4.00	3.15 (0.52)	1.70-4.00	3.00 (0.54)	1.40-4.00
SE at Time 3	3.14 (0.50)	1.00-4.00	3.18 (0.48)	1.70-4.00	3.06 (0.51)	1.00-4.00
SE at Time 4	3.22 (0.52)	1.00-4.00	3.27 (0.54)	1.00-4.00	3.16 (0.52)	1.40-4.00
Depressive symptoms (DEP)	` '		` '		, ,	
DEP at Time 1	0.79 (0.54)	0.00-2.84	0.65 (0.48)	0.00-2.45	0.88 (0.53)	0.10 - 2.35
DEP at Time 2	0.74 (0.47)	0.00 - 2.30	0.66 (0.44)	0.00-2.10	0.85 (0.50)	0.00 - 2.30
DEP at Time 3	0.71 (0.47)	0.00-2.30	0.68 (0.48)	0.00-2.30	0.74 (0.44)	0.00 - 2.05
Discrimination	1.67 (0.59)	1.00-4.00	1.76 (0.59)	1.00-4.00	1.60 (0.57)	1.00-3.60

trajectories of self-esteem and depressive symptoms across a period of 4 years. Self-esteem and depressive symptoms are important indicators of well-being during adolescence and have been associated with important indices of youth adjustment such as substance abuse (e.g., Miyamoto et al., 2001) and academic challenges (e.g., Carranza, You, Chhuon, & Hudley, 2009); furthermore, they serve as important predictors of subsequent outcomes in early adulthood (Boden et al., 2008; Fergusson et al., 2007). The field's understanding of how youths' self-esteem and depressive symptoms change over the course of adolescence, however, is based largely on work with European American samples (e.g., Baldwin & Hoffman, 2002; Scheier et al., 2000), limiting our understanding of how these critical indices of adjustment unfold for Latino adolescents. Our findings paint a promising picture of Latino youth adjustment and emphasize the importance of examining changes in psychological functioning during this develop-

First, Latino adolescents in our study demonstrated a steady increase in self-esteem across the high school years. This finding is consistent with developmental theories (e.g., Elliot & Feldman, 1990) that suggest that individuals acquire a more developed self-concept from the period of middle to late adolescence. Also consistent with prior work (e.g., Kling et al., 1999), male adolescents in our study reported significantly higher self-esteem than did female adolescents at each developmental period. Such differences are theorized to be partially due to societal attitudes and

influences on adolescents' gender role development (Galambos, 2004). That is, male adolescents are socialized to adhere to more traditional masculine behaviors or traits (e.g., competition, independence), and such traits are more strongly tied to self-esteem than are feminine traits (e.g., Orlofsky & O'Heron, 1987).

With respect to depressive symptoms, there was a decline in symptoms over time for female adolescents, while no change was evidenced for male adolescents. Our findings for Latino male adolescents align with prior work suggesting that male adolescents report relatively little change in depressive symptoms during this time (Garber et al., 2002). For female adolescents, however, our findings run counter to prior work, which has generally found increases in female adolescents' depressive symptoms across the high school years (e.g., Garber et al., 2002; Ge et al., 2001). It should be noted that although female adolescents' initial levels of depressive symptoms were significantly greater than were male adolescents, female adolescents' symptom levels were still low (M = .85), corresponding with the response option of "some or a little of the time," and importantly, this mean was comparable to or lower than mean levels of symptoms reported in prior work with multiethnic samples of female adolescents (e.g., Meadows, Brown, & Elder, 2006; Roberts, Andrews, Lewinshon, & Hops, 1990). Thus, it is not the case that female adolescents in the current study started with unusually high levels of depressive symptomatology. It is worthy of note, however, that most studies that have examined intraindividual changes in depressive symptoms have focused ex-

Table 2
Correlations Among Study Variables by Gender

Measure	1	2	3	4	5	6	7	8	9
1. Nativity	_	01	.01	08	10	.05	.06	.07	06
2. Self-esteem (T1)	02	_	.69***	.53***	.41***	45***	34***	26***	.09
3. Self-esteem (T2)	.02	.60***	_	.69***	.63***	62***	52***	41***	08
4. Self-esteem (T3)	.04	.50***	.66***	_	.64***	42***	67***	35***	01
5. Self-esteem (T4)	05	.42***	.67***	.66***		42***	$50^{***}$	56***	13
6. Depression (T2)	.06	50***	$70^{***}$	51***	54***		.55***	.38***	.28***
7. Depression (T3)	12	31***	$45^{***}$	65***	48***	.52***		.48***	.09
8. Depression (T4)	06	21***	$37^{***}$	38***	62***	.41***	.39***	_	.20*
9. Discrimination	02	15***	37***	27**	35**	.46***	.31*	.29***	_

Note. N = 323. Male adolescents' correlations are below the diagonal; female adolescents' correlations are above the diagonal. Nativity is coded as 0 = 1 foreign-born and 1 = 1 U.S.-born. 1 = 1 T =

<sup>\*</sup> p < .05. \*\* p < .01. \*\*\* p < .001.

Table 3
Unstandardized Parameter Estimates (Standard Errors) for Self-Esteem Latent Growth
Curve Models

Variable	Model 1	Model 2	Model 3	Model 4
Fixed effects				
Self-esteem intercept	3.07 (.05)***	3.00 (.06)***	3.26 (.09)***	3.05 (.11)***
Cohort	0.01 (.05)	-0.01(.05)	0.02 (.06)	0.02(.05)
Nativity	-0.02(.05)	-0.02(.06)	-0.03(.06)	-0.03(.05)
Gender		0.15 (.05)**		0.50 (.15)**
Discrimination (Disc)			$-0.12(.04)^{**}$	-0.03(.06)
Gender × Disc				$-0.20(.09)^*$
Self-esteem slope	0.11 (.02)***	0.11 (.03)***	0.16 (.04)***	0.17 (.05)**
Cohort	-0.01(.02)	-0.01(.02)	-0.01(.02)	-0.01(.02)
Nativity	-0.02(.02)	-0.02(.02)	-0.02(.02)	-0.02(.02)
Gender	` '	-0.01(.02)	` ′	-0.01(.07)
Disc		` ′	$-0.03 (.02)^{\dagger}$	-0.04(.03)
Gender × Disc			` /	0.01 (.04)
Random effects				` /
Self-esteem intercept	0.17 (.02)***	0.17 (.02)***	0.17 (.02)***	0.16 (.02)***
Self-esteem slopes	0.02 (.01)***	0.02 (.01)**	0.02 (.01)***	0.02 (.01)***
Model fit indices	. ,	` /	` /	` /
$\chi^2(df)$	13.384 (12)	13.77 (14)	23.20 (14)	23.01 (18)
CFI	0.99	0.99	0.98	0.99
RMSEA	0.02	0.01	0.05	0.03
SRMR	0.06	0.05	0.06	0.04

Note. N = 323. Nativity is coded as 0 = foreign-born and 1 = U.S.-born. Gender is coded as 0 = female and 1 = male. CFI = comparative fit index; RMSEA = root-mean-square error of approximation; SRMR = standardized root-mean-square residual.

clusively on European Americans (Ge et al., 2001) or have included a very small number of Latino participants (e.g., Garber et al., 2002). Thus, one possibility is that the pattern of decreases in symptomatology evidenced in the current study could be unique to the experience of Latina adolescents. It will be important for future work to examine whether this pattern is replicated in larger, more representative samples of Latino youths.

Taken together, these findings suggest that the normative developmental trajectories of Latino youths' psychosocial functioning are characterized by patterns of increased adjustment throughout middle and late adolescence. Latino adolescents are oftentimes developing within environmental contexts in which they are a numerical ethnic minority, and such contexts are often characterized as more difficult and stressful environments for development;

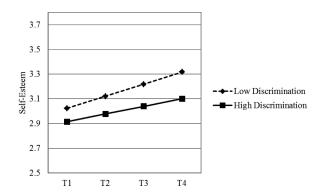


Figure 1. Trajectories self-esteem based on perceptions of discrimination. T = time.

vet our study provides evidence that despite these potential environmental constraints, youths are progressing through high school, demonstrating increases in self-esteem and relatively low levels of depressive symptomatology. Such findings come at a time when much emphasis has been placed on the underachievement and risk status of Latino youths, often highlighting negative aspects of development, including higher dropout rates (Fry, 2008), poor academic functioning (Arellano & Padilla, 1996), and high depression rates, especially among female adolescents (Joiner, Perez, Wagner, Berenson, & Marquina, 2001). To clarify, we are not arguing that Latino youths are not disproportionately at greater risk for negative outcomes; however, we do argue that our findings suggest that the normative pattern of development for Latino youths is not characterized by maladjustment. Our findings point to a resilient group, able to overcome and adapt to the many difficulties experienced during adolescence.

Although a focus on positive adjustment is warranted and necessary, it is not possible to discount the fact that many Latino adolescents face experiences of ethnic discrimination, which can hinder positive development. Prior literature linking perceived ethnic discrimination to maladjustment (e.g., lower self-esteem, higher depressive symptoms) is strong (e.g., Smokowski & Bacallao, 2007; Umaña-Taylor et al., 2011). Much of this work resulted from developmental theorists' recommendations to revise conceptual models of youth development to emphasize perceptions of ethnic discrimination as a salient and impactful risk factor for youths' development (e.g., García Coll et al., 1996). Although many researchers responded to theorists' recommendations with empirical investigations, most of the existing studies in this area are cross-sectional, and relatively few have examined the impact of

<sup>\*</sup> p < .05. \*\* p < .01. \*\*\* p < .001. † p < .05, one-tailed.

Table 4
Unstandardized Parameter Estimates (Standard Errors) for Depressive Symptoms Latent Growth
Curve Models

Variable	Model 1	Model 2	Model 3	Model 4
Fixed effects				
Depression intercept	0.73 (.06)***	0.85 (.07)***	0.31 (.10)**	0.48 (.12)***
Cohort	0.07 (.06)	0.08 (.06)	0.04 (.06)	0.04 (.05)
Nativity	0.03 (.07)	0.04 (.06)	0.03 (.06)	0.05 (.06)
Gender		$-0.25 (.06)^{***}$		$-0.49(.16)^{**}$
Discrimination (Disc)			0.26 (.05)***	0.24 (.07)**
Gender × Disc				0.11 (.09)
Depression slope	-0.02(.04)	-0.06(.04)	0.05 (.06)	0.03 (.08)
Cohort	-0.02(.04)	-0.02(.04)	-0.02(.04)	-0.02(.03)
Nativity	-0.02(.03)	-0.02(.03)	-0.01(.04)	-0.05(.04)
Gender		0.09 (.03)**		0.11(.10)
Disc			-0.04(.03)	-0.05(.04)
Gender × Disc				-0.01(.06)
Random effects				
Depression intercept	0.16 (.02)***	0.15 (.02)***	$0.14 (.02)^{***}$	0.12 (.02)***
Depression slopes	$0.02 (.01)^*$	0.02 (.01)*	$0.02 (.01)^*$	0.02(.01)
Model fit indices				
$\chi^2(df)$	3.82 (5)	3.94(6)	12.75 (6)*	12.93 (8)
CFI	1.00	1.00	0.96	0.98
RMSEA	0.01	0.01	0.06	0.04
SRMR	0.02	0.02	0.03	0.03

Note. N = 323. Gender is coded as 0 = female and 1 = male. Nativity is coded as 0 = foreign-born and 1 = U.S.-born. CFI = comparative fit index; RMSEA = root-mean-square error of approximation; SRMR = standardized root-mean-square residual.

perceived ethnic discrimination over time. The current study took an important step in understanding how perceptions of ethnic discrimination were associated with trajectories of self-esteem and depressive symptoms. Findings indicated that perceived ethnic discrimination was concurrently associated with self-esteem and depressive symptoms in theoretically expected ways and that higher initial levels of perceived ethnic discrimination predicted slower increases in self-esteem over time, while lower initial levels of perceived ethnic discrimination predicted relatively faster growth in self-esteem over the high school years. Together, these findings suggest that perceptions of ethnic discrimination place individuals at a disadvantage early in high school, and for self-esteem, specifically, perceived discrimination has the potential of

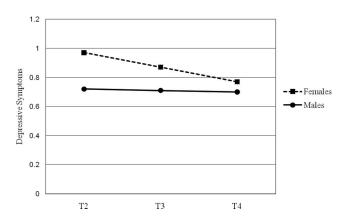


Figure 2. Trajectories of male adolescents' and female adolescents' depressive symptoms. T = time.

changing individuals' growth patterns, making it less likely that they will increase in self-esteem across the high school years. From a prevention perspective, these are important findings because it could be that lessening the impact of perceived discrimination in early high school has implications for adolescents' psychological functioning over time. It should be noted, however, that functioning prior to high school was not assessed. Therefore, it is unclear whether changes to their trajectories prior to this time occurred. Even so, prevention efforts focused on providing early and later adolescents with coping resources and/or fostering a strong ethnic identity and maintaining cultural beliefs (e.g., familism), all of which have been found to protect individuals from the impact of discriminatory experiences (e.g., Germán, Gonzales, Dumka, & Millsap, 2009; Umaña-Taylor et al., 2011; Wong, Eccles, & Sameroff, 2003), should be considered.

Turning to variability by gender, although perceived ethnic discrimination emerged as an important predictor for both male adolescents' and female adolescents' depressive symptoms, it emerged as a stronger predictor of initial levels of self-esteem only among male adolescents. Male adolescents who reported lower levels of perceived ethnic discrimination tended to report significantly higher levels of self-esteem at T2, relative to their male counterparts who reported higher levels of perceived ethnic discrimination. Gender differences in the effect of perceived ethnic discrimination on self-esteem growth were not observed, suggesting that perceived ethnic discrimination has lasting effects across male adolescents and female adolescents. These findings, along with prior work (e.g., Cassidy et al., 2004), suggest that Latino male adolescents' self-esteem may be relatively more vulnerable to perceptions of ethnic discrimination during early adolescence. From a cultural perspective, Latino male adolescents,

p < .05. \*\* p < .01. \*\*\* p < .001.

compared with female adolescents, are typically given more freedom during early adolescence to explore domains outside of the family and are socialized in the importance of their role in such domains (Bulcroft et al., 1996; Raffaelli & Ontai, 2004). As a result, male adolescents' developing self-concept and identity might be more strongly based on their experiences in these domains. Because perceived ethnic discrimination is experienced largely in contexts outside of the family, its impact might be particularly strong among male adolescents, whose identities are relatively more tied to these extrafamilial contexts. Given that Latina female adolescents are encouraged to spend more time in the home relative to their male counterparts (Bulcroft et al., 1996), their identity may rely more on features of the intrafamilial context; furthermore, additional time with family might serve as a protective factor against perceived ethnic discrimination.

In contrast, the association between perceived ethnic discrimination and depressive symptoms did not differ by gender in the current study, which is consistent with prior work (Brody et al., 2006; Delgado et al., 2011). Perhaps male adolescents' and female adolescents' depressive symptoms are equally affected by perceived discrimination because depressive symptoms reflect a state focused on feelings of loneliness and sadness and have less to do with self-definition or feelings of oneself (Sedikides & Gregg, 2003). Regardless of the importance of the context in which perceived ethnic discrimination occurred, both male adolescents and female adolescents exhibit similar depressive feelings when these experiences are encountered. This explanation is speculative; future work focusing on cognitive processes involved in individuals' perceptions of ethnic discrimination and the role of gender socialization could help to uncover such complex relations. It also will be important for future work to conduct a more nuanced examination of how gender is informing the processes of interest. For example, rather than examining moderation by gender classification (i.e., male/female), it would be beneficial to examine whether gender role attitudes or socialization experiences are what moderate the associations examined in the current study.

In sum, our findings provide important descriptive information regarding the developmental trajectories of two key indicators of psychosocial functioning during the high school years among members of the largest ethnic minority group in the United States and advance our understanding of the role of perceived ethnic discrimination in developmental processes. From a theoretical perspective, our findings aligned with García Coll et al.'s (1996) integrative model of minority development by affirming that constructs relevant to racial and ethnic minority youths, such as perceived discrimination, contribute to variance in developmental processes (García Coll et al., 1996). Further, our study suggests that there are individual characteristics and particular areas of adjustment that are especially prone to perceptions of discrimination. That is, male adolescents' self-esteem in early adolescence appeared especially vulnerable to perceptions of ethnic discrimination. With scholars' recent interest in the specificity of linking stressors to psychosocial adjustment (McMahon, Grant, Compas, Thurm, & Ey, 2003), these findings provide some evidence that there might be some specificity in the effects of perceived ethnic discrimination. With replication, these findings have the potential of contributing to ongoing theory interested in specifying pathways underlying the effects of perceived discrimination.

#### **Limitations and Directions for Future Research**

Despite our contributions, the current study has important limitations to consider. First, our study relied on a diverse Latino population comprising individuals from many different national origin backgrounds (e.g., Puerto Rican, Cuban, Mexican), generational statuses, and nativity statuses. Analyses were run to examine whether national origin (classifying adolescents as either Mexican origin or other), generational status (combination of parent and adolescent U.S. nativity), or adolescent nativity status (foreign-born vs. U.S.-born) moderated the link between perceived ethnic discrimination and adolescent adjustment; no significant moderation emerged. However, we had a limited number of individuals representing each origin subgroup, which limited us in our ability to test the impact of perceived discrimination on developmental trajectories among each national origin group. Further, differences in nativity and generational status by ethnic origin could not be explored. Examining variability by national origin group while taking into account individuals' place of birth and generational status will be important for future work, given that prior work has identified differences in indices of psychological functioning (Portes & Zady, 2002; Supple & Plunkett, 2011) and differences in perceptions of discrimination (Pérez, Fortuna, & Alegría, 2008) among Latino origin subgroups.

Similarly, the current sample comprised mostly U.S.-born adolescents, with a limited sample of foreign-born adolescents. Prior work has demonstrated that Latinos born in the United States differ from foreign-born individuals on psychological functioning (Gavin et al., 2010) and perceptions of discrimination (Pérez et al., 2008). From a theoretical perspective, individuals who are more recent immigrants to the United States might carry a dual frame of reference, in which they tend to view experiences in their new surroundings as generally positive because they are evaluating their current situation based on the oftentimes deleterious contexts from which they immigrated (Portes, 1999; Suarez-Orozco & Suarez-Orozco, 2001). Thus, despite potentially experiencing greater discrimination than U.S.-born youths do, such experiences might have less of an impact on foreign-born youths, given their optimism about being in the United States. Although the current study examined potential moderation by nativity, limited variability in nativity status may have impeded our ability to detect moderation. Thus, studies with samples that have large enough subsamples are needed to examine the unique impact of discriminatory experiences on both U.S.- and foreign-born Latinos' psychological functioning trajectories.

Finally, the current study was limited in the number of time points available to examine the development of self-esteem and depressive symptoms and the role of perceived discrimination over time. It is possible that findings did not emerge for depressive symptoms due to the restricted range in the span of development examined (i.e., only two points of data were available for depressive symptoms after the initial assessment of perceived discrimination at Wave 2). Further, for both self-esteem and depressive symptoms, perceived discrimination was treated as a time invariant construct, constant across the high school years. Similar to psychosocial adjustment, prior literature suggests that perceptions of discrimination change across development (Greene et al., 2006). By not accessing changes in perceived discrimination across time, it is unclear to what extent the relations between psychosocial

functioning and perceptions of discrimination are reciprocal and/or whether prior psychological functioning influenced individuals' subsequent perceptions of discrimination. This is an important area for future work to explore.

#### Conclusion

Our findings suggest that Latino youths' psychosocial functioning is quite positive throughout the high school years. Furthermore, at a time in which scholars are becoming increasingly aware and interested in the role of perceived discrimination in ethnic and minority youth development, our findings reveal that perceived discrimination is indeed a serious threat for Latino adolescents, particularly Latino male adolescents. Despite its noted limitations, the current study contributes significantly to our understanding of Latino youths' development by identifying longitudinal changes in psychosocial functioning and the role of perceived discrimination across the high school years.

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