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Perceptions of Intragroup Rejection and Coping Strategies: Malleable Factors Affecting Hispanic Adolescents' Emotional and Academic Outcomes

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Abstract

Understanding psychosocial factors that affect the academic achievement of Hispanic adolescents remains a nationwide priority in the United States. Extending previous studies of the stressful effects of perceived discrimination, this year-long longitudinal study examined the correlates of perceived ethnic in-group rejection, coping strategies and fatalistic beliefs, on depressive symptoms, grades, and college aspirations of 2,214 Hispanic adolescents (54 % female) in Southern California. Based on the transactional model of stress and coping and on self-perception theory, structural equation models revealed that high perceived intragroup rejection (10th grade) and low levels of active coping (11th grade) were associated with depressive symptoms in 11th grade. Also, depressive symptoms partially mediated the link between intragroup rejection and both academic outcomes. Avoidant coping strategies (e.g., watching TV) also predicted depressive symptoms and were positively related to fatalism. In addition, fatalism was negatively related to grades and aspiration to attend college. The findings suggest the need to help adolescents find adequate outlets for communication and to create awareness about the potential effects of intragroup rejection.

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Author contributions TB conceived of the study, participated in the secondary data analysis and interpretation of the data, and drafted the manuscript, MW performed the statistical analysis, participated in the interpretation of the data, and helped to draft the manuscript, WC helped design the secondary data analysis plan and draft the manuscript, JU was the principal investigator designing the data collection part of the study and helped to draft the manuscript. All authors read and approved the final manuscript.

Keywords

Coping strategies; Hispanics; Intragroup rejection; Discrimination; Academic achievement; Depression

Introduction

The health and academic outcomes of Hispanic adolescents in the United States suggest ethnic group disparities in need of remedy. In 2011, the nationwide prevalence of “having felt sad or hopeless almost every day for 2 or more weeks in a row” was higher for Hispanic female (41.4 %) and male students (24.4 %) than for Caucasian and African American students of both gender groups (Eaton et al. 2012). For Caucasians, the prevalence was 34.3 % for females, and 20.7 % for males; for African Americans, the rate was 31.4 % for females and 18 % for males. Furthermore, the National Center for Education Statistics indicated that in 2009 the high school dropout rate for Hispanics was 17.6 %, compared to 5 % for Caucasians (Chapman et al. 2011). It is important to find ways to improve adolescents’ psychosocial adjustment and academic behaviors, as these indicators are predictors of occupational achievement and socioeconomic assimilation into the U.S. mainstream (Alba and Nee 1997; Zsembik and Llanes 1996).

Lazarus and Folkman’s (1984) transactional model of stress and coping holds that people’s appraisal of stressors determines their coping strategies, which in turn predict their outcomes. Building on that model, conservation of resources theory recognizes the role played by actual life experiences, and emphasizes that people’s appraisal of stress depends on prior observation of the resources that are available to them (Hobfoll 1989, 2009, 2011). Based on that framework, the present study explores intragroup rejection as a potential stressor affecting Hispanic adolescents, and its association with variables assumed to be malleable such as communication with caregivers, coping strategies, and fatalistic beliefs. The research assessed the degree of association between those variables and high school students’ psychological and academic outcomes across 1 year between 10th and 11th grades.

Prior Research

Intragroup Rejection as a Stressor—The negative effects of discrimination and exclusion on health outcomes are well established (Flores et al. 2010; Kulis et al. 2009; MacDonald and Jensen-Campbell 2011). Perceived discrimination originating from dominant out-groups has been associated with increased anxiety and depressive symptoms among adults (Alamilla et al. 2010; Torres and Ong 2010) with depressive symptoms, substance use, and low academic achievement among Hispanic adolescents (Basáñez et al. 2012; Brittan et al. 2013; Perreira et al. 2010). However, the effect of negative behaviors originating from Hispanics against other Hispanics is underexplored. O’Brien et al. (2012) found that Hispanics who perceived in-group rejection reported high feelings of betrayal and felt more betrayed when their ethnic in-group excluded them than when other ethnic groups did so.

There also is evidence documenting intragroup discrimination among Hispanics in interviews and observational data reported by Rosenbloom and Way (2004), who found that Puerto Ricans engaged in downward comparisons against recent immigrants from other Latin American countries, and that there was a general sense of tension between American-born and new immigrant students. Their finding was bolstered by Córdova and Cervantes (2010, p. 268), who concluded that U.S.-born Hispanics “look down on immigrants.” One issue for which U.S.-born Hispanics discriminate against recent immigrants is lack of English proficiency. However, ability to speak Spanish also becomes a source of ingroup discrimination when new immigrants use it as an opportunity for downward comparison. Furthermore, there is evidence suggesting that negative stereotypes of Hispanics are endorsed by third generation Hispanics almost at the same level as by Caucasians (Buriel and Vasquez 1982). Perhaps, for these adolescents, neither members of their culture of origin nor the mainstream society at large provide them with a sense of connection and group belongingness. More studies are warranted to understand the potential implications of intragroup rejection. Assessing the extent to which intragroup discrimination is a source of depressive symptoms among Hispanics is a necessary first step before developing strategies or interventions to raise awareness.

Parental Involvement or Communication with Caregiver—Parental monitoring and communication is a common predictor of positive outcomes for adolescents (Hemovich et al. 2011; Lac et al. 2011). However, Hill and Torres (2010) argued that, if school district policies in America remain overly focused on parental involvement, the possibility of reducing the academic achievement gap may remain unattainable for Hispanics because many parents work more than one job and are not available to take care of their children or monitor their activities. For research to find effective coping strategies, it may need to focus on variables that adolescents can employ even though not all of them are lucky enough to have a cohesive and available family structure. As a first step, it is important to assess the extent to which active coping strategies rely on such cohesive family structures.

Coping Strategies and Depressive Symptoms—Coping has been defined as “efforts to manage adaptational demands and the emotions they generate” (Lazarus et al. 2006, p. 10), and as “efforts to manage demands regardless of the success of those efforts” (Folkman 1984, p. 843). Seiffge-Krenke and Pakalniskiene (2011) point out that coping strategies can be classified into two categories: active vs. inactive (e.g., “actively tackling problems versus avoiding or withdrawing from them”) (Seiffge-Krenke and Pakalniskiene 2011, p. 984). Other researchers have referred to inactive/avoidant coping as escape-avoidance or ineffective escapism (Folkman 1984; Rohde et al. 1990), which stands in stark contrast to approach-oriented forms of coping. Yet others distinguish between emotion-focused and problem-focused coping. For example, Noh and Kaspar (2003) studied the coping strategies of immigrants who experienced discrimination, using the theoretical framework by Folkman and Lazarus (1988). They distinguished between *emotion-focused* coping, which includes passive acceptance and using emotional distractions to cope with stressors (e.g., watching TV or playing games), and *problem-focused* strategies, which include personal confrontation and seeking social support. That study found that using personal confrontation (an active coping style that is problem-focused) was associated with having fewer depressive

symptoms than using passive coping strategies. Likewise, Kendler et al. (1991) found that active coping (e.g., turning to others) tended to reduce depressive symptoms, while denial tended to increase anxiety.

Although many studies find a link between active coping and positive health outcomes (Aldridge and Roesch 2008b; Kiecolt et al. 2009; Seiffge-Krenke and Klessinger 2000), there is also some evidence that active coping can sometimes be detrimental. For example, the phenomenon labeled “John Henryism active coping”—based on the anecdote of a worker who died from exhaustion—refers to the use of continuous high effort in cases in which psychosocial stressors exceed the individual’s coping resources (Haritatos et al. 2007). Among low SES individuals facing significant barriers to economic success, John Henryism active coping has been linked to an increased risk for medical problems and depressive symptoms (Merritt and Dillon 2012; Neighbors et al. 2007). A meta-analysis of 43 studies indicated that active coping predicted better outcomes only over the long-run, but that the effects were not strong enough to clearly favor it over avoidant coping (Suls and Fletcher 1985). After reviewing several studies that focused only on Hispanic adolescents, Aldridge and Roesch (2008a, p. 342) concluded that “a blend of approach coping and to a lesser degree avoidant coping has been observed to promote psychological health among this group.” In their sample of Mexican–American adolescents, the use of an avoidant strategy (acceptance) produced mixed findings: acceptance was associated with increased positive affect as well as with increased negative affect. In contrast, active strategies (positive thinking and problem-solving) were systematically associated with positive affect. In summary, researchers seem to concur that the effect of a strategy depends on the type of outcomes being considered, actors’ dispositions, and context (Glanz and Schwartz 2008). Although numerous factors can contribute to depressive symptoms in adolescence including a strong genetic influence, the central role of coping with stressors is widely acknowledged (Compas et al. 2009).

Fatalism/Belief in Control as a Predictor of Academic Engagement and Depressive Symptoms—Studies focusing on the ability of control beliefs to affect academic outcomes have been framed under a variety of terms related to fatalism—e.g., “perceived control” (You et al. 2011), “possible-selves mind-set” (Destin and Oyserman 2009) “self-efficacy” (Bandura 1994). Fatalism has been defined as “a general belief that the course of fate cannot be changed” (Abraído-Lanza et al. 2007, p. 2), and as “the extent to which people feel their destinies are outside of their control” (Guzmán et al. 2005, p. 6). According to Ross and Broh (2000), fatalism, as a concept, overlaps to a great extent with constructs indicating people’s beliefs in controllability or powerlessness. However, while fatalism refers to a general orientation to life, controllability and self-efficacy refer to perceived resources that can be applied to specific situations and contexts. Abraído-Lanza et al. (2007, p. 5) defined fatalism as “a cognitive construction that emerges from experiences of social disempowerment.” A similar process is described by Bandura’s term “self-efficacy”: that “people’s beliefs in their personal efficacy influence what courses of action they choose to pursue, how much effort they will invest in activities” and how long they persevere while facing obstacles (Bandura 1994, p. 65). In sum, while perceived control and self-efficacy are conceptualized as momentary states of perception, their accumulated effect

potentially shapes people's beliefs in fatalism. The concept of fatalism is relevant to educational achievement and emotional health because it refers to the extent to which one believes it is possible to affect one's future outcomes. Fatalistic beliefs are malleable because they are based on experiences. Thus, fatalism can be conceived of as emerging from the appraisal stage referred to as "perceived control over outcomes" in Lazarus and Folkman's (1984) transactional model of stress and coping (Glanz and Schwartz 2008).

Experimental evidence has found that adolescents' control beliefs are malleable and that they have a direct effect on academic outcomes. For example, Destin and Oyserman (2009) used an essay manipulation that changed Hispanic and African American adolescent students' perceptions that college was affordable, and thereby managed to alter students' willingness to spend more time doing homework as well as their expectation of obtaining higher grades. In addition, a nationwide longitudinal study of public and private schools in the U.S. found that sense of personal/internal control in 10th grade was significantly predictive of school outcomes in 12th grade, but did not predict emotional outcomes related to self-esteem (Ross and Broh 2000). In another national longitudinal study, You et al. (2011) used measures of perceived control, grades, and school engagement. For Hispanics, that study found that perceived control positively predicted academic achievement and time spent doing homework.

Based on the above three studies, we can conclude that adolescents' sense of controllability ends up affecting their school engagement and school outcomes. For this reason, we assume that Hispanic adolescents' fatalistic beliefs will correlate with our two academic outcomes: grades in school and aspirations to attend college. However, with regards to the ability of fatalism to predict depressive symptoms, the evidence regarding the direction of the relationship is not conclusive. Falicov (1998) noted that fatalistic beliefs can have different outcomes depending on how they are conceptualized: As a *deficit oriented* theory, fatalistic beliefs should increase psychological distress, but as a *resource oriented* theory, they can be adaptive if used selectively to cope with losses by accepting events that are beyond one's control. The adaptive function was also specified by Crocker and Major (1989), who argued that, by making external attributions, people can protect their self-esteem.

Coping Behaviors Predicting Fatalistic Beliefs—The interest in examining this direction of causality as going from behaviors to beliefs is based on self-perception theory (Bem 1967), which argues that people form their attitudes and beliefs based on their prior adoption of specific behaviors. The more recent research on embodied cognitions (Ackerman et al. 2010; Slepian et al. 2011) is based on a similar premise because it states that we develop abstract ideas about reality (e.g., fatalism) based on what we perceive. For example, a concrete experience is obtained about the availability of a supportive network when one is able to talk to others, and observe them listening and giving advice. In the stress and coping literature, Hobfoll (1989, 2011) emphasizes this point by stating that prior studies have confused the time sequence between social support and its appraisal. The author describes how the appraisal of social support is created as a product of an objective reality and accumulated real life events (Hobfoll 2009). For this study, we hypothesized that if they proactively seek others, individuals will be more likely to form the experience of having a support network. Obtaining that concrete experience should later influence future

abstract appraisal about the availability of resources and, thus, fatalism will be affected indirectly. In this way, using active coping strategies could end up increasing belief in controllability if the results are successful, because the outcome would act as a positive reinforcement that increases the likelihood of feeling prepared, at a later occasion, to shape one's own destiny. In contrast, the tendency to choose avoidant strategies should, over time, decrease controllability and ultimately increase fatalistic beliefs.

Depressive Symptoms as Predictors of Academic Engagement—Research on U.S. Hispanics has found a link between depressive symptoms and academic achievement (Zychinski and Polo 2012). A 5 years longitudinal study exploring the causal direction between depressive symptoms and academic outcomes in high school students concluded that depressive symptoms “preced[ed] and caus[ed] subsequent decreases in high school academic achievement in the form of GPA” and “not the other way around” (Hishinuma et al. 2012, p. 1, 13). Although there are reasons to believe that GPA may also affect adolescents' depression, our expectation that Hispanic adolescents' depressive symptoms affect their academic engagement is based on Hishinuma and colleagues' study.

Study Purpose and Hypotheses

We investigated the underexplored topic of intragroup rejection as a stressor and conceived the direction of causality as flowing from coping behaviors to fatalism (see Fig. 1 for a conceptual diagram of the hypothetical model). However, we did not expect a direct relationship between the stressor and coping because the dataset under analysis did not include tailored questions about coping with that type of stressor in particular. Instead, we assessed whether the two types of coping strategies were systematically associated with psychosocial and academic outcomes. Thus, this study may provide a first step towards gauging John Henryism active coping in a sample of Hispanic adolescents. We expect fatalism to reflect adolescents' appraisals about their resources and abilities, leading to variation in depressive symptoms and academic behaviors (grades and aspirations). However, according to Abraído-Lanza et al. (2007), the behavioral consequences of fatalistic beliefs have not been adequately established. Thus, the study will contribute to the literature on fatalism by measuring the extent to which those beliefs are associated with depressive symptoms, grades, and aspirations to attend college, and thereby assess whether, among a low SES sample of adolescents, fatalism acts as a deficit or as a resource. Outcome variables related to health and academic achievement were selected because they are likely to affect Hispanic adolescents' ability to enter America's job market (Destin and Oyserman 2009; Zsembik and Llanes 1996).

The overall hypothesized model is depicted in Fig. 1, based on the literature reviewed. Hypothesis 1 proposes that perceived intragroup rejection from Hispanics in 10th grade will be positively associated with depressive symptoms in 11th grade (H1a). Further, depressive symptoms will mediate associations between perceived rejection from Hispanics and grades (H1b), and between perceived rejection from Hispanics and aspirations to attend college (H1c). Hypothesis 2 holds that depressive symptoms will predict lower grades in school (H2a) and lower aspirations to attend college (Hishinuma et al. 2012) (H2b). The path between depressive symptoms and aspirations to attend college will be mediated by grades

in school (H2c). Hypothesis 3 predicts that active coping will be associated with fewer depressive symptoms (H3a) (Noh and Kaspar 2003), that avoidant coping strategies will predict more depressive symptoms (H3b) (Seiffge-Krenke and Klessinger 2000; Aldridge and Roesch 2008a) and that active coping strategies will be negatively associated with fatalism (H3c), whereas avoidant coping strategies will be positively associated with fatalism (H3d). Hypotheses 3c and 3d are based on self-perception theory (Bem 1967), which predicts that behaviors can change cognitions. Based on Destin and Oyserman (2009), hypothesis 4 predicts that fatalism will be negatively associated with school grades (H4a) and aspiration to attend college (H4b), and that the path between fatalism and aspiration to attend college will be mediated by grades in school (H4c).

Because the literature on the topic is inconclusive regarding the adaptiveness of fatalism for the psychosocial adjustment of Hispanics, the relationship between fatalism and depressive symptoms will be assessed as an exploratory question. A second exploratory question was added to investigate the extent to which communication with care-givers is linked to active coping. In addition, we controlled for gender and aspects of SES given that prior research has found these characteristics are associated with several of the variables in this study (Brittian et al. 2013; Cardarelli et al. 2007).

Method

This research uses data from the Reteniendo y Entendiendo la Diversidad (RED) study, a longitudinal panel investigation that followed adolescents from 9th to 11th grade in Southern California. Surveys were conducted in the autumns of 2005 through 2007, and contained measures of perceived discrimination, coping strategies, students' fatalism, depressive symptoms, and academic achievement (Unger et al. 2009). To recruit participants, a list of high schools in Los Angeles County with a population of at least 70 % Hispanic students was compiled. The schools were ranked by socioeconomic status (SES) using the proportion of students receiving free lunch as an indicator, resulting in a sample of seven schools diverse in SES. Participating schools ranged from 1,166 to 4,286 students and the percent Hispanic population ranged from 70 to 99 % ($M = 89.6\%$). Across the seven schools, 3,218 students in 9th grade were invited to participate. Of those, 2,222 participated in 9th grade and of those, 1,947 also participated in 10th grade. One of the schools changed its boundaries so both of the schools that the 9th graders attended were surveyed, adding 703 new participants to the study in 10th grade (see Lorenzo-Blanco et al. (2013) for details). Previous analyses of this dataset included multilevel modeling but the nesting of students within schools did not change the results as the intra-class correlations were very low (Unger et al. 2009).

Participants

Analyses focused on 2,214 Hispanic adolescents who attended high school and responded to surveys in both 10th and 11th grades. Only participants who reported a Hispanic/Latino ethnic origin at some point during the study were included. As participants were given the option to select more than one country, they reported the following countries of origin: Mexico (84 %), the United States (29 %), El Salvador (9 %), Guatemala (6 %), and

Honduras (1 %). Approximately 85 % of participants were born in the United States, 79 % had foreign-born parents, and 54 % were female. In 10th grade, about 7 % of participants were 14 years of age, 84 % were 15, 9 % were 16, and less than 1 % were older than 16 (see Unger et al. (2009) for details).

Measures

Perceived Intragroup Rejection—Perceived rejection from the Hispanic in-group was measured in 10th grade with four self-report items ($\alpha = .79$). Two items were selected from the Pressure against Acculturation subscale of the Multidimensional Acculturative Stress Inventory (MASI; Rodríguez et al. 2002). Those items were: “I have had conflicts with others because I prefer American customs (e.g., celebrating Halloween or Thanksgiving over Día de los Muertos or Quinceañeras)” and “People look down upon me if I practice American customs.” In addition, two items from MASI’s Pressure to Acculturate subscale were adapted by substituting the word “Whites” for “Latinos/Hispanics”. These items were: “Because of my cultural background, I have a hard time fitting in with Latinos/Hispanics”, “I don’t feel accepted by Latinos/Hispanics”. Participants used a 6-point Likert scale format (1 = *not stressful at all*, 6 = *extremely stressful*) to respond to these four items. The items served as indicators for a latent variable of ingroup rejection.

Avoidant Coping—Avoidant coping was assessed in 11th grade with six self-report items ($\alpha = .62$) from the adolescent version of the Kidcope Checklist (Spirito et al. 1988). Adolescents were asked to think of a problem they had in the last month and then to consider the ways they typically dealt with it. They were presented with “a list of common ways teens deal with a problem.” Based on a factor analysis, the following items were indicators of avoidant coping: “I did something like watch TV or play a game to forget it.” “I kept quiet about the problem.” “I blamed myself for causing the problem.” “I blamed someone else for causing the problem.” “I wished I could make things different.” “I didn’t do anything because the problem couldn’t be fixed.” Participants responded using a 5-point Likert scale (1 = *Never do this*, to 5 = *Almost always do this*). Higher scores reflected greater avoidant coping behaviors. The relatively low internal consistency of the scale is likely due to the fact that the items tapped a wide range of avoidant coping behaviors. It would be unusual for an adolescent to enact all six behaviors in response to a single problem. The six items were averaged into a composite score for avoidant coping, such that higher scores signaled more avoidant coping.

Active Coping—Active coping was assessed in 11th grade using the same scale and instructions for the coping factor described above. The three items ($\alpha = .62$) were: “I tried to fix the problem by doing something or talking to someone.” “I tried to feel better by spending time with others like family, grownups, or friends.” “I tried to see the good side of things.” The three items were averaged into a composite score such that higher scores reflected more active coping.

Communication with Parents/Guardians—Four items reflecting open communication were measured in 10th grade ($\alpha = .80$) by adapting three questions from the Communication subscale and one from the Parental Monitoring subscale of the Parenting Scale (Cohen et al.

1994). The instructions specified, “When it says parents, it means the person/people who raised you. This could also be grandparents, an aunt, a stepparent, or a legal guardian.” Participants used 4-point Likert scales (1 = *Never*, to 4 = *Very often*) to respond to the following items: “How often do your parents know where you really are?” “How often do you talk to your parents about what’s on your mind?” “How often do you ask your parents for advice?” “How often do you tell your parents your secrets?” The four communication items served as indicators for a latent variable of communication.

Fatalism—Fatalism was assessed in 11th grade with four items ($\alpha = .79$) selected from a series of questions about beliefs and values taken from the short form of the Cuéllar et al. (1995) Fatalism Scale. Participants used a 4-point Likert scale (1 = *Definitely no*, to 4 = *Definitely yes*) to respond to four indicators of level of fatalism and beliefs in control: “It’s more important to enjoy life now than to plan for the future.” “People can’t really do much to change what happens in life. You just have to accept things.” “I live for today because I don’t know what will happen in the future.” “I don’t plan ahead because most things in life are a matter of luck.” The four items served as indicators for a latent variable of fatalism.

Dependent Variables

Depressive Symptoms—Depressive symptoms were assessed in 11th grade using the 20-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff 1977), a self-report measure that asks participants about the frequency with which they experienced various depressive symptoms over the past week. Adolescents used 4-point Likert scales (1 = *Rarely or none of the time*, to 4 = *Most or all of the time*) to respond to each item (e.g., “I felt depressed.”). Because the CES-D is a common, validated measure of depressive symptoms, a composite of the 20 items was constructed ($\alpha = .88$); higher scores reflected greater depressive symptoms.

Grades—Adolescents in 11th grade used a 9-point Likert scale (1 = *Mostly F’s*, 9 = *Mostly A’s*) to respond to the question, “What grades did you get in school last year?”

Aspiration to Attend College—College aspiration was measured in 11th grade using the single item, “Will you go to college after high school, work, or something else?” Youth responded on a 3-point Likert scale (1 = *Work after high school only*, 2 = *Attend a community college*, 3 = *Attend a four year college*); higher values indicated higher aspiration.

Covariates

SES—Several aspects of SES were used as control variables in the analyses, including: parents’ highest level of education (1 = *8th grade or less*, 6 = *Advanced degree*), “Number of rooms per person living in home.” (0 = *poorer*, 6 = *richer*) family owns versus rents home (0 = *does not own*, 1 = *owns*), and whether respondent could afford lunch at school (0 = *no*, 1 = *yes*). The SES variables each served as separate covariates for all endogenous variables.

Gender—A dichotomized gender variable (1 = *female*, 2 = *male*) was used as a control variable in the analyses.

Statistical Analyses

Mplus 6.11 (Muthén and Muthén 1998–2012) was used to test the measurement and structural portions of the model in Fig. 2. Robust weighted least-squares estimation was used in all analyses to accommodate the discrete, ordinal variables in our model (Flora and Curran 2004). Missing data were implicitly handled by the program by using full information maximum likelihood (FIML) to model missing data while estimating the model. FIML uses all of the data present in a model to compute unbiased parameter estimates and standard errors in a single step (Graham, 2009). Due to the associations of gender and aspects of SES with many key study variables, our analyses controlled for these demographic variables.

Because there is no consensus in the standards used to determine whether a model has good statistical fit to the data (McDonald and Ho 2002), we utilized several fit indices. Chi square, an index of badness-of fit, indicates mismatch between the specified model and the observed covariance matrix. High Chi square values with p-values less than .05 indicate that the model significantly deviates from the data. Parsimony-adjusted measures were also used, including the comparative fit index (CFI), Tucker Lewis index (TLI), and root-mean-square error of approximation (RMSEA). These indices penalize the fit estimate for every additional parameter in the model. The CFI and TLI index goodness-of-fit, with values greater than .95 suggesting “good” improvement over the null model (Hu and Bentler 1999). The RMSEA, on the other hand, indexes badness-of-fit and is not affected by sample size, with a conventional threshold of less than .05 (and the upper limit of the 90 % CI less than .08) indicating good fit (Hu and Bentler 1999).

Each mediation hypothesis was examined separately from the structural model, using the three variables involved in each mediation hypothesis, plus the gender and SES covariates. The significance of the indirect effects was tested with 95 % confidence intervals, based on a bias-corrected bootstrapping approach with 10,000 bootstrap samples. Compared with traditional tests of mediation, a bootstrap approach yields greater control over Type I error rates while making fewer assumptions about the sampling distributions (Shrout and Bolger 2002).

Results

Factor loadings and correlations among main study variables for the measurement model are displayed in Table 1. Most factor loadings were above .70 and all were statistically significant ($p < .001$). The three latent variables and five measured variables exhibited discriminant validity, as no correlations were close to 1.0 (max $r = .51$). Thus, empirical underidentification was not an issue.

There was evidence supporting our overall hypothesis that the model displayed in Fig. 1 would be a good fit to the data. The measurement model exhibited a good fit to the observed covariance matrix: $\chi^2(96) = 392.56$, $p < .001$; CFI = .99; TLI = .98; RMSEA = .037 (90 %

CI .034–.041). Each of these model fit indexes characterizes the measurement model as a good fit to the observed covariance matrix, with the exception of the Chi square statistic. However, even slight deviations from perfect fit can produce a significant Chi square in large samples. Thus, on the basis of goodness of fit, high and significant factor loadings, and discriminant validity among the main study variables, no respecifications were made to the measurement model.

The structural portion of the model was tested next, using gender and aspects of SES as control variables. Standardized path coefficients are displayed in Fig. 2. This model exhibited good fit to the observed covariance matrix, $\chi^2(155) = 631.15, p < .001$; CFI = .98; TLI = .97; RMSEA = .037 (90 % CI .034–.040). With the exception of the significant Chi square statistic, all fit indexes converged in affirming a good-fitting model.

With regard to H1a, path coefficients of the final model indicated that Intragroup Rejection from Hispanics in grade 10 had a significant positive association with Depressive Symptoms in grade 11 (see Fig. 2). With respect to the mediation predicted in H1b, Depressive Symptoms in grade 11 was found to be a significant partial mediator of the relationship between Intragroup Rejection from Hispanics in grade 10 and Grades in School in grade 11 (effect = $-.013$, 95 % CI $-.022$ to $-.004$). Similarly, as predicted in H1c, Depressive Symptoms was a significant partial mediator of the relationship between Intragroup Rejection from Hispanics and Aspirations to Attend College in grade 11 (effect = $-.013$, 95 % CI $-.023$ to $-.003$). Thus, intragroup rejection may in part negatively affect academic outcomes by way of depressive symptoms.

Depressive Symptoms in grade 11 was negatively associated with grade 11 Grades (H2a) and with Aspirations to Attend College (H2b). Also as predicted in H2c, Grades was found to partially mediate the relationship between Depressive Symptoms and Aspirations to Attend College (effect = $-.043$, 95 % CI $-.066$ to $-.020$).

With respect to one of our exploratory questions, grade 10 Communication with Caregivers was positively associated with grade 11 Active Coping. In addition, as predicted in H3c, grade 11 Active Coping was related to grade 11 Fatalism. As expected in H3d, grade 11 Avoidance was positively associated with grade 11 Fatalism, and with respect to our exploratory question, Avoidance in grade 11 was positively associated with grade 11 Depressive Symptoms. In contrast, grade 11 Active Coping was negatively associated with grade 11 Depressive symptoms, as predicted in H3a.

Also as expected in H4a, Fatalism in grade 11 was negatively associated with grade 11 Grades and, as expected in H4b, with Aspiration to Attend College. As stated in H4c, Grades in school was found to partially mediate the association between Fatalism and Aspirations to Attend College (effect = $.092$, 95 % CI $.067$ to $.117$). However, with respect to our other exploratory question, Fatalism in grade 11 was not associated with Depressive Symptoms in grade 11.

The bivariate correlation between active and avoidant coping was positive and significant, $r = .29, p < .001$. We did not depict it in the model because we had not formulated hypotheses about this relationship. Nevertheless, we did not expect these variables to be unrelated

because both are responses to stress and individuals may enact both active and avoidant strategies in response to the same stressful event (Falicov 1998; Spirito 1996).

Discussion

The academic achievement of U.S. Hispanic adolescents is a topic of concern to a variety of stakeholders in America. Perceived intragroup discrimination and variables related to coping strategies were explored in this study because they were assumed to be somewhat malleable factors associated with Hispanic adolescents' academic and psychosocial adjustment. The transactional model of stress and coping as well self perception theory (Bem 1967) served as the theoretical guides for this study, as it was anchored in the assumption that people's ideas and future behavior can be shaped by observing their own actions. We sought to explore whether the actions people engage in are potentially able to alter their outcomes. Four sets of hypotheses were supported, and four mediation hypotheses were partially supported by the structural equation analyses (Fig. 2). Thus, this study suggests that adolescents can engage in specific behaviors to increase the likelihood of attaining positive outcomes. For example: increasing communication with their caregivers and self-disclosing information may help adolescents develop the habit of confronting problems in an active way. While active strategies correlated with less depressive symptoms, avoidant strategies correlated with more of them. Adolescents should also try to reject fatalistic views with regard to school issues and realize the need to prohibit present-day grades from affecting to such an extent the long-run goal of attending college.

There was evidence supporting the prediction in H1a that perceived intragroup rejection from Hispanics in 10th grade would be positively and significantly associated with depressive symptoms in 11th grade. In addition, our study found some support for the hypotheses that the reason why intragroup rejection is related to grades in school and to aspiration to attend college is because it potentially increases student's depressive symptoms. Previous qualitative research reported that Hispanics were afflicted by discrimination from their ethnic in-group (Córdova and Cervantes 2010; Rosenbloom and Way 2004) and, among this sample we confirmed the relevance of this experience. Its significant association with depressive symptoms suggests the need to consider whether focusing on within-group differences is less adaptive than cultivating a sense of pan-ethnic group pride. To support cohesion among Hispanics it might be important for more members of this ethnic group to rise to positions of power in the media and increase media presence. Another potentially helpful strategy might be to raise awareness of problems associated with intragroup rejection among Hispanics who currently hold influential positions in the popular media. Hispanic youth could become more vocal in their demand for accurate and positive representations in the media. For example, adolescents could boycott films, join media watchdog groups, and organize media literacy groups to raise awareness about the lack of representation and unfair portrayals. Seeing one's ethnic group in U.S. media can cultivate the sense of being a core member of mainstream America (Signorielli 2001) instead of feeling as a peripheral member which may tend to increase the need to denigrate other members of peripheral groups (Pickett and Brewer 2005). One way in which other ethnic groups may have become prepared to face various sources of discrimination is through racial socialization (Hughes et al. 2006; Neblett et al. 2009) and by having a heightened ethnic

identity. Although the Hispanic/Latino ethnic group in the U.S. is heterogeneous in country of origin and generation status, there are important similarities within the group (e.g., a common Spanish language and similar values about interpersonal relationships), which could serve as foundational for promoting group pride and ingroup cohesion.

The tendency to communicate with parents/guardians was positively related to active coping, which was associated with better outcomes than avoidant coping. Interventions that improve parent-adolescent communication are needed (Lamb and Crano 2013). However, as some parents may not be able to provide care and opportunities to communicate with their adolescent children, it is also important to consider the potential for community counselors, teachers, coaches and others to serve as outlets of self-disclosure and as role models. Adolescents who are able to communicate with adult role models would presumably be more likely to utilize active coping strategies, although more research will be needed to determine whether communication with other adults can fully compensate for lack of communication with parents/guardians.

We predicted that depressive symptoms would be negatively associated with grades in school (H2a) and aspirations to attend college (H2b). Evidence supported both of those predictions, in accordance with the findings of Hishinuma et al. (2012). In addition, our findings supported the prediction that the link between depressive symptoms and aspirations to attend college would be partially mediated by grades in school (H2c). This may indicate that the reason why depressive symptoms may end up affecting people's aspiration to attend college is because their low grades make it difficult for them to visualize the possibility of being admitted into college.

H3a stated that active coping would be associated with fewer depressive symptoms and H3b stated that avoidant coping strategies would predict more depressive symptoms. Again, we found evidence supporting both of those hypotheses. The meta-analysis by Suls and Fletcher (1985) suggested benefits of using avoidant strategies in the short-term, but found that over time—from 2 weeks to 6 months—active coping tactics were superior to avoidant strategies. Our findings did not find evidence of any benefit associated with using avoidant strategies. As predicted in H3c, active coping was negatively and significantly associated with fatalism. That is, the more students tend to seek social support to cope with their problems the less their overall outlook is fatalistic. However, the degree of association between these variables was weak, perhaps because active coping only sometimes yields positive feedback in this population. If active coping repeatedly results in negative feedback, it may increase fatalism. This interpretation is consistent with the positive and negative feedback loops described in Suls and Fletcher (1985). In addition, there was evidence supporting the prediction that avoidance was positively associated with fatalism (H3d): adolescents who consistently selected avoidant strategies may have missed opportunities to reduce their fatalistic beliefs, presumably because they lacked cumulative experiences of controllability.

There also was evidence supporting the hypotheses that low fatalism would predict higher grades (H4a), and greater aspiration to attend college (H4b). These findings are consistent with Destin and Oyserman's (2009) observations of adolescents in Detroit. Further evidence that students' sense of self-efficacy and fatalism is highly malleable can be found in studies

showing the effect of teachers' expectations on student performance (Crano and Mellon 1978; de Boer et al. 2010; Rosenthal and Jacobson 1968; Rosenthal and Rubin 1978) as well as in stereotype threat studies (Inzlicht and Schmader 2012). Thus, it is important to encourage people's belief in control because it can promote academic achievement. Sherman et al. (2013) described a successful classroom intervention that improved Latinos' academic performance by manipulating psychological variables related to self-efficacy, just by requiring four or five written self-affirmation exercises throughout the school year. In other successful interventions, students were exposed to role models, received quality feedback from mentors, or were taught attributional retraining so they came to view social adversity as normal (Inzlicht and Schmader 2012). Nevertheless, more research is needed to determine if people's belief in controllability can be increased by artificially inducing small positive reinforcements or winning experiences (Fuxjager et al. 2011) within the academic realm.

Fatalism was not predictive of depressive symptoms in this sample. According to studies that focus on the learned component of stress, events that are unpredictable are more likely to produce stress than those that can be foreseen because a repeated experience with an aversive stimulus ends up depleting the enzymes involved in the synthesis of the stress hormone norepinephrine (Franken 2002). If students perceive that their outcomes are rarely in their control, then over time the lack of experiences of control should affect their fatalism beliefs, but because they adapt to this state, fatalism may be less likely to affect their emotional well-being. Another reason why fatalism may reduce depression is if it leads to acceptance about things that are effectively not in adolescents' control. In addition, H4b predicted that the path between fatalism and aspiration to attend college would be mediated by grades in school. We found partial mediation and a small effect size, so that low fatalism predicted aspirations to attend college in part through the mechanism of higher school grades.

Overall, this study provides evidence that active coping strategies directly predicted positive emotional outcomes and avoidant strategies predicted negative emotional outcomes for 14–16 year old Hispanic adolescents in Los Angeles. We did not find evidence among this low SES sample to support the conclusion in Bennett et al. (2004) that active coping results in worse outcomes. Instead, active coping was associated with less depressive symptoms. However, the possibility of deleterious effects suggested by the literature on John Henryism active coping should not be dismissed: it may affect other health variables, other age groups, or may be detected only over more extended periods of time. Indeed, in other research with Mexican origin adolescents, active coping did not always predict psychosocial benefits (Brittian et al. 2013).

With regards to academic outcomes, our findings suggest that inhibiting the tendency to use avoidant coping strategies may reduce fatalism, which was the strongest predictor of grades in school. This result is consistent with Guzmán et al. (2005), who found that higher scores on fatalism (i.e., low controllability) were associated with lower grades in school. Another recommendation is to find ways to provide urban youth with safe opportunities for self-disclosure, as communication was directly predictive of active coping. This result is consistent with a large body of resilience literature, which indicates that having close

relationships with supportive adults (a context in which communication and self-disclosure may emerge) is a crucial protective factor for at-risk adolescents (Masten et al. 2009). The policy implications of this result are challenging because not all adolescents have access to caring adults, and those who do may still be deprived of spending time with them because many parents work multiple jobs (Hill and Torres 2010), which limits opportunities for communication. Witkow and Fuligni (2011) observed that, compared with other ethnic groups, many Latino parents lack the social capital to help their children with educational careers, and once the children realize this limitation, they may be less eager to seek parental advice. One apparently successful example of how mentorships may be fostered is Homeboy Industries, a non-profit organization that aims to act as a substitute for the family structure often lacking among disadvantaged adolescents and young adults (Boyle 2010). The social support networks of extended family and fictive kin often created among Hispanics can also be capitalized on, by encouraging appreciation of these values.

The purpose of the study was to find malleable factors that might allow adolescents to improve their psychosocial adjustment and academic outcomes. However, the assumption that adolescents can modify their level of communication by proactively seeking supportive others or role models may be unrealistic because not all adolescents may succeed in finding people who will listen to or mentor them. Furthermore, those who were emotionally neglected and unable to form adequate attachment relationships during childhood may be more challenged in their ability to rely on others (Siegel 1999).

While we provide evidence about several key malleable factors that could be leveraged to improve Hispanic adolescent outcomes, there were several important limitations to our findings. The first limitation of our study is its reliance on secondary data. The analysis identified four items capable of capturing intragroup rejection, but it would be beneficial for future studies to replace the word “others” with “Hispanics/Latinos” in one of the MASI items to make it a more pure measure of intragroup rejection. In addition, it may be useful for future studies to explore potential confounding variables such as substance use, and perceived outgroup discrimination. With regard to the coping measure used in this study, Kidcope has been used and validated in many diverse populations in multiple countries, but more studies are needed to validate it with Hispanic adolescents. However, given that this measure correlated with other measures in predictable ways, its validity is not unlikely. Another limitation is that only two waves of data were available to examine a three-phase developmental process. This constraint led to the use of 11th grade data for both the main outcome variables (e.g., depressive symptoms) and their proximal predictors (e.g., avoidant coping). By using cross-sectional data, we may have suboptimal estimates of associations theorized to represent a temporal developmental process (Crano and Mendoza 1987). Also our final model, while exhibiting relatively good fit to the covariance matrix, is not necessarily the best model for the causal relationships that are depicted.

It is important to bring awareness of the effects of intragroup discrimination to Hispanics. Although other sources of discrimination are also associated with depressive symptoms in Hispanics, our findings suggest that preventing ingroup discrimination may reduce depressive symptoms associated with academic behaviors. It may be important for future studies to explore the potentially moderating role of generation status in the relationship

between intragroup rejection and the outcome variables in this study. Additional analyses could explore differences in the types of coping strategies used by each of the generation status groups. It would also be beneficial for future studies to further explore the deficit versus resource-oriented potential of fatalism.

Conclusions

Based on our findings, interventions designed to reduce depressive symptoms might profitably focus on teaching active coping skills and discouraging avoidant coping, while providing means of coping with intragroup discrimination. Hispanic adolescents who reported keeping open communication channels and disclosing information with parents or guardians were more prepared to use active coping strategies 1 year later. Although adopting active coping strategies was not directly related to academic outcomes, these strategies did correlate with adolescents' fatalism, and this was associated with improved academic outcomes.

Successful school interventions for ethnic minorities in the U.S. reportedly have altered students' self-concepts by teaching them to reappraise adversity and anxiety as normal challenges rather than signs of failure or lack of belonging. Our research suggests that the effectiveness of those strategies derives from their ability to decrease people's fatalism, since that variable correlates with educational outcomes but not with emotional outcomes. In summary, adopting three types of strategies—providing training to combat intragroup discrimination, encouraging communication and other ways to increase active coping, and focusing on ways to decrease fatalism—could improve the environment for students whose educational and emotional outcomes are not as positive as they might become.

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Fig. 1.
Conceptual diagram of the hypothesized relationships between the variables in the study,
based on the transactional model of stress and coping and self-perception theory

Fig. 2.

Final model predicting depressive symptoms and academic behaviors ($N = 2,214$).

Standardized path coefficients are displayed on the *causal arrows*. Model fit indices were $\chi^2(155) = 631.15$, $p < .001$; CFI = .98; TLI = .97; RMSEA = .037 (90 % CI .034–.040). Note that the disturbances for Active Coping and Avoidance were correlated ($r = .36$, $p < .001$; not depicted) since items for these constructs had the same response scale and both dealt with responses to stress. * $p < .05$; ** $p < .01$; *** $p < .001$. *Note* This model controlled for the effects of gender and socioeconomic status on all endogenous variables. Also, grades was treated as a continuous (rather than ordinal) variable to allow delta parameterization and tests of significance on the path coefficients

Table 1

Standardized factor loadings and correlations among main study variables in the measurement model (N = 2,214)

Variable (with indicators beneath latent variables)	1	2	3	4	5	6	7	8	λ
1. Rejection from Hispanics_10th	—								
Rej1									.874***
Rej2									.883***
Rej3									.794***
Rej4									.805***
2. Communication_10th	.054	—							
SD1									.469***
SD2									.885***
SD3									.879***
SD4									.867***
3. Avoidance_11th	.048	-.118***	—						
4. Active_11th	.002	.221***	.291***	—					
5. Fatalism_11th	-.031	-.046	.118***	-.018	—				
SA1									.768***
SA2									.732***
SA3									.805***
SA4									.726***
6. Depressive symptoms_11th	.132***	-.163***	.385***	-.126***	.083**	—			
7. Grades in school_11th	-.012	.173***	.013	.116***	-.235***	-.080**	—		
8. Aspiration to go to college_11th	-.015	.185***	.066*	.186***	-.238***	-.069**	.507***	—	

Measurement model fit indices were $\chi^2(96) = 392.56$, $p < .001$; CFI = .99; TLI = .98; RMSEA = .037 (90 % CI .034–.041)* $p < .05$;** $p < .01$;*** $p < .001$