

Academic Aspirations as a Moderator of the link between Negative Life Events and Delinquency
in a Sample of Latino Youth

By

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Abstract

Background: Latino youth are one of the fastest growing populations in the United States (Passel, 2011), and Latino youth are at a disproportionately higher risk for experiencing negative life events (NLEs). However, there are few studies examining risk and protective factors for the potentially negative outcomes that Latino youth who experience high levels of NLEs may face.

Objectives: This study examined the effect of NLEs on self-reported delinquency in a sample of Latino youth and evaluated academic aspirations as a moderator of these associations. It was hypothesized that the association between NLEs and delinquency would be buffered by high levels of academic aspirations.

Methods: 144 Latino adolescents (N = 78 Males, M = 16.25 years, SD = 1.46; range = 14 - 19 years) attending a charter high school in a large, Midwestern city completed a survey that included NLEs, self-reported delinquency and academic aspiration measures.

Results: Findings supported a link between NLEs and delinquency. Further, academic aspirations moderated the associations between NLEs related to safety and health and delinquency. For safety-related NLEs, the highest levels of delinquency occurred when academic aspirations were low and safety-related NLEs were high. For health-related NLEs, at low levels of academic aspirations, delinquent behaviors were consistently high. Further, the lowest levels of delinquency occurred when academic aspirations were high and health-related NLEs were low.

Conclusions: Results have important implications for targeting Latino students who report high levels of NLEs for the prevention of delinquent behaviors. Encouraging academic goals may be an effective strategy for deterring delinquent behavior among those who experience NLEs. Implications and future directions for research are discussed.

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Academic Aspirations as a Moderator of the link between Negative Life Events and Delinquency in a Sample of Latino Youth

Latinos are one of the fastest growing populations in the United States and will likely comprise about one third of the United States population by 2050 (Passel, 2011). Accordingly, the population of Latino youth is rapidly increasing, as 24% of schoolchildren and 26.3% of newborns are of Latino descent (Pew Hispanic Center, 2012). Yet, there is little research on the risk and protective factors for this population, and research on risk and protective factors for other racial and ethnic groups may not be applicable to Latino youth.

Latino youth may be more likely to experience negative life events (NLEs), including psychosocial, financial, and emotional stressors that are not common or non-existent in other demographic groups of youth. NLEs represent a number of stressors that can be disruptive to healthy psychological development (Oliva, Jiménez, & Parra, 2009). These events include being the victim of violence, family financial problems, parental mental illness, and other psychosocial stressors (Swearingen & Cohen, 1985). NLEs have been associated with negative outcomes among youth (Franko et al., 2004), including Latinos (Rubens et al., 2013).

Specifically, Latino youth residing in the United States face unique psychosocial stressors, including ethnic discrimination, acculturation concerns, and lower socioeconomic status (SES; Buchanan & Smokowski, 2009; Wagner, et al., 2010). These stressors commonly lead to NLEs such as parental mental illness and financial stressors (Wadsworth, Raviv, Compas, & Connor-Smith, 2005), as well as parental alcohol problems and limited opportunities for parents to find jobs (Martinez, McClure, Eddy, & Wilson, 2011).

Furthermore, data suggest that youth residing in disadvantaged neighborhoods are more likely to experience NLEs, such as witnessing neighborhood violence (Covey, Menard, & Franzese, 2013). Since 26.6% of Latino youth live in poverty, many Latino youth are at an

increased risk of experiencing NLEs (US Census Bureau, 2011). Youth living in poverty face a number of associated stressors which include dangerous neighborhoods, family discord, and physical illness due to malnutrition or difficulty paying for treatment (Wadsworth et al., 2008). Families of Latino youth may be at an increased risk for poverty due to limited job opportunities resulting from documentation status, discrimination, lower educational attainment, or language barriers (Morales, Lara, Kington, Valdez, & Escarce, 2002).

The cumulative stress model supports the idea that multiple stressors can have a compounding negative effect on healthy development in children (Morales & Guerra, 2006). Therefore, the more psychosocial stressors one experiences, the more likely he or she will be at-risk for externalizing problems and other difficulties (Beuhler & Gerard, 2013; Oliva, Jiménez, & Parra, 2009). Because of the strong relation between NLEs and delinquency, (Katz, Esparza, Smith-Carter, Grant & Meyerson, 2012; Zinzow et al., 2009) Latino youth experiencing high levels of NLEs may become more involved in delinquent activities (Rubens et al., 2013).

The factors that may help to buffer the association between NLEs and delinquency are not fully known. High academic aspirations (i.e., plans to graduate high school and pursue higher education) are associated with lower rates of delinquency (Carroll et al., 2009). Students with high academic aspirations may be aware of the ways that delinquency can keep them from reaching their academic goals, which may deter engagement in delinquent behavior (Henry, Knight, & Thornberry, 2012). Accordingly, the current study examined the moderating effects of academic aspirations on the association between NLEs and delinquency in a sample of Latino youth.

Negative Life Events and Delinquency

Youth who exhibit externalizing behaviors are at-risk for incarceration, lower graduation rates, and serious mental illness in adolescence and adulthood (Bierman et al., 2013; Brook, Brook, Rubenstone, Zhang, & Sarr, 2011; Thompson et al., 2011). Therefore, there is vast research on factors that contribute to delinquent behaviors, such as NLEs, so that effective prevention and intervention programs can be developed. Indeed, exposure to NLEs is associated with a greater likelihood of developing externalizing behaviors such as aggression, substance abuse, and delinquency (Estrada-Martínez et al., 2013; King, Molina & Chassin, 2010). A study by Estrada-Martínez et al. (2013) examined the moderating effects of family dynamics on neighborhood SES and delinquency in a sample of Black, White, and Latino youth. In particular, youth who experienced high levels of family conflict displayed more violent behavior than those with low levels of family conflict. This finding was especially true in Latino families compared to Black and White families. This finding demonstrates the link between psychosocial stressors and externalizing behaviors and how particular stressors may be related to violent behaviors in Latino youth.

A lack of healthy coping behaviors and poor social modeling may partially explain why high levels of NLEs are associated with delinquency. Children and adolescents who have experienced NLEs are less likely to be provided with the social, financial, or emotional resources that are needed to develop healthy coping mechanisms for stressors later in their lives (King et al., 2010; Marmorstein, Iacono, & McGue, 2009). Therefore, NLEs can have long-term, negative consequences on the psychological development of youth. Additionally, youth exposed to NLEs, such as parental mental illness or substance abuse, may be at an increased risk for developing delinquent behaviors by modeling their parents' behavior in addition to living in a stressful home

environment (Hicks, South DiRago, Iacono, & McGue, 2009; Hussong, Huang, Serrano, Curran, & Chassin, 2012).

The Role of Academic Aspirations

From a developmental perspective, the school context provides adolescents opportunities for setting and achieving goals. As high school progresses, adolescents begin to set goals for graduation and possibly further education. For an adolescent, the prospect of graduation can feel overwhelming and requires a solid plan with goals to achieve, including taking core classes and earning respectable grades. Therefore, a certain level of motivation and ability is necessary to create and accomplish the goals to graduate. In addition to earning a high school degree, setting the appropriate goals to graduate high school can have other benefits as well.

Most relevant to the current study, goal-setting behavior has been suggested to deter delinquency (Carroll, Gordon, Haynes, & Houghton, 2013). Specifically, academic aspirations are associated with decreased levels of delinquency (Carroll et al., 2009). In a study of Black and Latino 8th and 9th grade students, those who showed warning signs of dropping out of high school (i.e., poor performance on standardized tests, school suspensions, grade retention, failing a core subject, or poor school attendance) were more likely to show signs of delinquency and problem substance use during adolescence (Henry, Knight, & Thornberry, 2011). Further, Latino youth who were interviewed about personal or peer experiences of dropping out of high school commonly cited delinquency as a negative consequence as a result of dropping out (Nesman, 2007). There was also a relation between low academic aspirations and high levels of delinquency for both Latino and non-Latino students in the study (Nesman, 2007).

Goals can create a locus of control and maintain self-efficacy after experiencing significant life stressors (Carroll et al., 2009; Williams & Bryan, 2013). In this way, goal-setting

behaviors may be a protective factor for youth experiencing high levels of NLEs and prevent negative outcomes, including delinquency. That is, high academic aspirations may buffer the impact of NLEs on delinquency. Students who plan to graduate high school and continue with higher education may actively avoid behaviors that could result in negative consequences and keep them from attaining their educational goals. In other words, individuals with high academic aspirations may be connected to a focus on the future and be less directed by negative influences in their lives (Caprara et al., 2008). Students with high academic aspirations may also be involved in a structured routine afterschool of completing homework assignments and therefore be distracted from becoming involved in delinquent behaviors and feeling the effects of their NLEs (Fleming et al., 2008). Latino youth, however, have one of the highest high school dropout rates in the country (Snyder & Dillow, 2010), so increasing academic aspirations may be particularly important for this population.

There are various types of NLEs youth may experience, and there is evidence to suggest that specific NLEs may be more related to certain outcomes than others (Bernert et al., 2007; Franko et al., 2004; Joiner & Rudd, 2010; Kobus & Reyes, 2004; Kraaij, & De Wilde, 2001). It may also be that academic aspirations have different effects on preventing delinquent behavior on students who experience certain types of NLEs. Accordingly, the current study evaluated the influence of academic aspirations on the associations between various types of NLEs and delinquency.

For instance, students who experience mostly social-related NLEs may find a community in a school setting where they are able to establish healthy relationships with students and other staff. Academic engagement may provide a stable community (Shim & Finch, 2013) and

therefore prevent these students from seeking a community in other social settings, such as peers who engage in delinquent activity.

Similarly, students who experience family-related NLEs may find validation from accomplishments in school (Shim & Finch, 2013) and may view graduating high school as a means of creating a future that is more hopeful than their current family situation. By encouraging academic goal-setting, students with high levels of family-related NLEs may develop healthy relationships with teachers and like-minded peers (Barile et al., 2012) which protect them from turning to peers who engage in delinquency as their support system.

Students who have experienced high levels of safety-related NLEs may be motivated to create a tangible future in order to create a sense of control by setting academic goals. These goals may help them to avoid dangerous neighborhoods, and focus on attaining academic goals rather than the influence of peers who engage in delinquent behavior.

Students who experience financial-related NLEs may similarly desire a future different from their current situation by setting academic goals for graduating high school and attending college (Hopson & Lee, 2011), knowing that there is more job security with higher levels of education. Students may be deterred from delinquent activity when they focus on goals that will provide future financial security, while delinquency may jeopardize job and college attainment.

Finally, students who have high levels of health-related NLEs and have academic goals may develop a sense of control after a family member, friend or themselves were diagnosed with a serious illness. Knowing the consequences of such illnesses, students with high levels of health-related NLEs may avoid delinquent behaviors which could jeopardize their own physical well-being. Instead, these students may focus on attainable goals that can provide them with a sense of future security.

Current Study

Extant literature indicates a strong relation between NLEs and delinquent activity in youth (Etile & Turner, 2002; Hoffman & Cerbone, 1999; Maschi, 2006). However, associations between specific types of NLEs and delinquency are not as clear. Further, in spite of the evidence on the relation between NLEs and delinquency, the factors that contribute to this association remain under researched and would be particularly valuable in preventing delinquent behavior in Latino youth who are at an increased risk for experiencing NLEs. Accordingly, the current study examined the moderating effects of academic aspirations on the association between NLEs and self-reported delinquency in a population of Latino youth. High levels of NLEs were expected to be associated with high levels of delinquency. However, academic aspirations were expected to buffer this association, such that the association between NLEs and delinquency was expected to be weaker when academic aspirations were high when compared to when academic aspirations were low.

Participants

Participants were recruited during parent-teacher conferences in an academically-focused charter high school of a large Midwestern city during the Fall of 2012. A table was set-up in the hallway during conferences, and caregivers who approached the table were provided with a brief overview of the study, types of questions that would be asked, and when the study would take place. Consent forms were also sent home with students if they were not consented during parent-teacher conferences. Caregivers who gave permission for their adolescent to participate signed a consent form. Students ages 18 and over were able to provide consent for themselves if they wished to participate. Consent forms were available in both English and Spanish to accommodate for the large number of caregivers whose native language was not English.

Further, a school-sanctioned translator was available to help with further communication among parents and study staff.

Of the 207 students attending the school, 155 (77%) consented to participate, with 13 providing their own written informed consent and 142 having parental consent. The majority of consent forms returned (66%) were in Spanish. Prior to completing the survey, all participants gave verbal assent, and 152 of the 155 (98%) students actually participated on the day of data collection; three students were not present at school on the day of data collection.

Of all the participants in the study, 144 (94.7%) participants self-identified as Hispanic/Latino on the demographics form of the survey. Of the 144 self-identifying Hispanic/Latino participants, 78 were males and 66 were females with a mean age of 16.25 years (SD = 1.46; range = 14 - 19 years). School records indicated that 95.4% of the students in the school qualified for free or reduced lunch.

Measures

Demographics. Participants self-reported on ethnicity (including Hispanic/Latino or not Hispanic/Latino), age, gender, and time spent within the United States.

Negative Life Events. Negative life events were assessed using adolescent reports on Swearingen and Cohen's (1985) Negative Life Events questionnaire. The questionnaire included various psychosocial, financial, and relational stressors that could have a significant impact on a student's life. Participants responded to 26 items indicating whether they had experienced the event within the past year (yes = 1, no = 0). The measure included items such as "saw crime/accident," "someone in family was arrested," and "breakup with boyfriend/girlfriend." The total number of NLEs endorsed was summed across items, with higher scores indicating that an adolescent had experienced a greater number of NLEs. Further, there is evidence to suggest that

specific NLEs may be more related to certain outcomes than others (Bernert et al., 2007; Franko et al., 2004; Kobus & Reyes, 2004; Kraaij, & De Wilde, 2001; Joiner & Rudd, 2010). Therefore, the 26 NLEs were separated into five different domains to evaluate their specific impact on levels of delinquency. The author of this study sorted the items into categories, which were then reviewed and agreed upon by a second independent reviewer, based on face validity of the items. These groups included: safety (7 items; “Victim of crime/violent assault, “Parent went to jail”), health, (3 items; “seriously sick or injured, “serious sickness/injury of close friend”), family structure (8 items; “Parental separation, “A new adult moved into the house”) financial (3 items; “Parent got a new job”, “Mother/father figure lost job”), and social (5 items; “Family moved,” “Death of a close friend”). Given the dichotomous nature of responses, internal consistencies were not computed for the measure (Cohen et al., 2003)

Academic Aspirations. Research staff developed items to evaluate students’ post-graduation plans. For the purposes of this study, academic aspirations were measured by a single question in the survey, “What are your school plans?” Responses included: “(a) *Drop out of high school before graduation and not attain a degree, (b) Drop out of high school before graduation and eventually get a GED, (c) Graduate high school and get a job, (d) Graduate high school and go to the military, (e) Graduate high school and go to a 2 year college/technical school, (f) Graduate high school and go to a 4 year college.*” Students were asked to select one option that best suited their current academic goals. For the purpose of analysis, items were assigned point values from 1-6, with higher point values associated with higher academic aspirations.

Adolescent Delinquency. Self-reported delinquency was assessed using adolescent reports on Fergusson, Woodward, and Horwood’s (1999) delinquency items. The researchers believed that adolescents would be the best reporters of delinquent activity, especially because

this activity can be secretive and have negative consequences if revealed. Adolescents responded to fourteen questions about whether they had engaged in various antisocial and deviant behaviors within the past year (yes = 1, no = 0). Behaviors listed in this scale ranged in severity and included items such as shoplifting, property damage, drug use, and police contact. Delinquent behaviors endorsed were summed across items, with higher scores representing greater levels of delinquency. Due to dichotomous response options, internal consistency was not computed for the measure (Cohen et al., 2003).

Procedures

All procedures, surveys, and study forms were approved by the research team's institutional review board and the school administration prior to data collection. Data collection took place during a writing class during the school day. Students completed surveys during this time in their respective classrooms. School faculty were not present in the room during survey administration in order to increase confidentiality and participants' truthfulness in responses. Research staff emphasized that no names would be attached to data, and that all data would remain confidential. All students were provided the opportunity to decline participation in the study although they may have consented beforehand. Students whose parents did not provide written consent were escorted out of the classroom by teachers.

One trained member of the research staff was present in each room during the survey administration, and classes consisted of 9-24 students. Research staff read aloud survey items as students followed along and completed the survey. School staff provided the research team a list of students who may have problems understanding the survey in English. These students were offered a Spanish version of the items; only three students completed the survey in Spanish. The

survey took approximately thirty minutes to complete. All participants were compensated with a \$5.00 gift card.

Results

Data Analysis

Basic descriptive statistics were first evaluated to determine levels of NLEs, self-reported delinquency, and academic aspirations within the sample. Bivariate correlations were then calculated to evaluate associations between study variables. R-values of .10 are considered small, r-values of .30 are considered medium, and r-values of .50 or greater are considered large effects (Cohen, 1988).

Skewness and kurtosis values were not a concern for NLEs (skewness = .72, kurtosis = .36), academic aspirations (skewness = -.94, kurtosis = -.49), or delinquency (skewness = 1.02, kurtosis = .40). Therefore, OLS regression models were used to evaluate study hypotheses. Age, time in the US, and gender were considered as control variables in all models, as there is evidence to suggest that age, gender, and amount of time spent in the United States can influence levels of delinquency (Coie & Dodge, 1998; Gfoerer & Tan, 2003; Wong et al., 2013; Zheng & Cleveland, 2013).

An initial model in which delinquency was regressed on the total NLEs measure, academic aspirations and the control variables was estimated to establish unique first-order effects. Then the interaction term between NLEs and academic aspirations was added to the model to determine if academic aspirations moderated the association between total NLEs and delinquency. A second set of regression models that examined the unique effects of the five NLE groups and academic aspirations on delinquency were then evaluated. All five NLE groups were entered into the model at once, along with the academic aspirations variable and control

variables to determine first-order effects. The interaction terms between the NLE groups and academic aspirations were then added to the model simultaneously to determine if the influence of these NLE groups depended on academic aspirations.¹

All variables were standardized prior to conducting regression analyses in order to aid in the interpretation of interaction effects. Significant interactions were probed at high (+1 SD) and low (-1 SD) levels of academic aspirations to determine the nature of the interaction. Note that the current sample size had adequate power to detect medium to large, but not small, interaction effects (Aiken & West, 1991).

Descriptive Statistics

Students reported having experienced between 0 and 24 NLEs in the past year ($M = 7.90$, $SD = 5.04$). Most students (96.5%) experienced at least one NLE in the past year. The most frequently reported NLEs reported were “breakup with boyfriend/girlfriend”, (55.6%), “saw crime/accident”, (54.9%), “loss of a close friend”, (50%), “someone in family was arrested”, (47.2%), and “someone in family died” (46.5%).

In terms of academic aspirations, most students reported goals consistent with high academic aspirations ($M = 5.09$, $SD = 1.10$), with higher numbers indicating higher academic aspirations. Students primarily indicated that they planned to “Graduate high school and go to a 4-year college” (41%). This was followed by “Graduate high school and go to a 2-year college/technical school” (24.3%). Students reported committing between 0-13 delinquent activities ($M = 3.33$, $SD = 3.27$). The delinquency item most frequently endorsed was “Used

¹ NLE groups were also examined separately; however, no effects were lost when all NLE groups were examined simultaneously.

alcohol without your parent's permission" (50%). The delinquency item least endorsed was "Purposefully set fire to a building, a car, or other property, or tried to do so" (6.9%).

See Table 1 for means, standard deviations, and correlations of study variables.

Correlation analyses indicated that students who had experienced high levels of NLEs were more likely to self-report high levels of delinquent behavior compared to students who experienced few or no NLEs. The one caveat to this association was that there was not a significant association between experiencing financial-related NLEs and delinquency. NLEs were not statistically associated with levels of academic aspirations (See Table 1). Students with high levels of academic aspirations reported low levels of delinquency.

Males were more likely to self-report delinquent behaviors when compared to females. There was also a small, positive association between proportion of time spent in the United States and delinquency, suggesting that students who lived longer in the United States were more likely to engage in delinquent behaviors. Students who lived longer in the United States were also more likely to report high levels of NLEs. Younger age was associated with higher amounts of social NLEs.

Regression Analyses

Regression models were used to evaluate the unique first-order and interaction effects of the total NLEs measure and academic aspirations on delinquency (see Table 2). Being male, low levels of academic aspirations, and high levels of NLEs were associated with high levels of delinquency in the first-order effects model. The interaction term between NLEs and academic aspirations was then added to the model; however, the interaction between NLEs and academic aspirations was not statistically associated with delinquency. These results suggest that NLEs

and academic aspirations are both contributing to delinquency, but their effects are not dependent on one another.

A second series of regression models were then used to evaluate the influence of the five NLE groups (safety, health, family structure, social, and financial) and academic aspirations on delinquency (see Table 3). The first-order effects regression model demonstrated a significant relation between males and delinquency, low academic aspirations and delinquency, and high levels of safety-related NLEs and delinquency. Interaction terms between each of the five NLE groups and the academic aspirations variable were then added to the model simultaneously. The interaction terms between safety-related NLEs and aspirations and health-related NLEs and aspirations were significantly associated with delinquency (see Table 3).

Associations were probed at high and low values of academic aspirations to further assess their relations. Safety-related NLEs were positively associated with delinquency at low levels of academic aspirations ($\beta = .65, p < .001$), such that high levels of safety-related NLEs were associated with high levels of delinquency (see Figure 1). In contrast, safety-related NLEs were unrelated to delinquency at high levels of academic aspirations ($\beta = .09, p = .57$), with delinquent behaviors consistently low at high levels of academic aspirations.

As seen in Figure 2, health-related NLEs were unrelated to delinquency at low levels of academic aspirations ($\beta = -.24, p = .11$), such that delinquent behaviors were consistently high when academic aspirations were low. In contrast, at high levels of academic aspirations, health-related NLEs were positively associated with delinquency ($\beta = .42, p = .00$) such that the lowest levels of delinquency occurred when levels of academic aspirations were high and levels of health-related NLEs were low.

Discussion

The current study contributes to the literature by examining associations between NLE groups and delinquency, and by evaluating the moderating effects of academic aspirations on associations between NLEs and delinquency. Findings from this study are consistent with expectations and previous research (Halliday-Boykins & Graham, 2000; Hartinger-Saunders, Rine, Nochajski, & Wiezorek, 2012), indicating a link between NLEs, particularly safety-related NLEs, and delinquency. Moreover, results suggest that academic aspirations can be a protective factor for Latino youth that experience certain groups of NLEs. Specifically, associations between health- and safety-related NLEs and delinquency were moderated by academic aspirations.

High levels of NLEs were associated with high levels of delinquency, with safety-related NLEs most strongly related to delinquency. This is consistent with previous literature that supports the relation between safety-related NLEs, including being the victim of crime (Hartinger-Saunders et al., 2011) witnessing a crime (Hartinger-Saunders et al., 2012) and parental arrests (Farrington, Jolliffe, Loeber, Stouthamer-Loeber, & Kalb, 2001), and delinquency. Moreover, Latino youth who have experienced community violence are more likely to engage in delinquent behaviors (Peacock, McClure, & Agars, 2003) and develop psychopathology, including externalizing disorders (Gudino, Nadeem, Kataoka, & Lau, 2011).

Youth who experience safety-related NLEs are likely to experience additional stressors related to neighborhood and family violence, including financial problems, family discord, and parental legal problems (Farrington et al., 2001; Margolin et al., 2009). A reason why safety-related NLEs may be strongly linked to delinquency is because of the multiple stressors associated with safety-related NLEs, which increase the risk of developing maladaptive

behaviors. This is consistent with the cumulative stress model, which suggests that multiple stressors will lead to more negative outcomes, thus increasing the risk for externalizing problems and delinquency (Morales, & Guerra, 2006). Youth who experience safety-related NLEs may also be more likely to be involved in delinquent activities when compared to youth who experience other types of NLEs. For instance, youth who are victimized and witness violence may also be involved in victimizing others (Halliday-Boykins & Graham, 2000).

Furthermore, higher academic aspirations were associated with lower levels of delinquency. This is consistent with previous literature that supports this association (Carroll et al., 2009; Henry et al., 2012). More importantly, academic aspirations play a particular role in the associations between health-related and safety-related NLEs and delinquency. With regard to safety-related NLEs, the highest levels of delinquency occurred when academic aspirations were low and safety-related NLEs were high. With regard to health-related NLEs, the lowest levels of delinquency occurred when health-related NLEs were low and academic aspirations were high.

There are many reasons why academic aspirations moderated safety-related and health-related NLEs. For students who experience safety-related NLEs, academic aspirations may create a sense of control and predictable future (Carroll et al., 2009; Williams & Bryan, 2013). This may be particularly important for students who have unstable home environments or have been the victim of crime or violence. Additionally, focusing on academic goals may also help students to avoid engaging with delinquent peers. Similarly, students who experience health-related NLEs may find that aspirations create a sense of stability for the future (Carroll et al., 2009; Williams & Bryan, 2013). These students may invest more time in academic goals rather than in delinquent activities, which may make their future more unpredictable. They may also

avoid delinquent behaviors that could jeopardize their health, such as substance use and physical fights.

Academic aspirations did not moderate the relationships between financial-related, family structure-related, and social-related NLEs and delinquency. Academic aspirations may not have moderated the relationship between these NLEs and delinquency because academic aspirations do not create the same sense of control as they do for students who experience safety and health-related NLEs. It was hypothesized that students who experience financial-related NLEs would pursue high aspirations in order to escape negative environments. Also, these youth may know the consequences of delinquent behavior in being hired for a job, and therefore avoid delinquent activities. However, these reasons may not account for the reality of the financial burden associated with attending college. Students who experience financial NLEs may not have the resources to pay for college, so academic aspirations may not be meaningful and protective against delinquency. Attaining a job directly after high school may appear more beneficial to these students rather than paying for college.

It was also hypothesized that students who have experienced family-related NLEs would develop healthy relationships with teachers and find validation in their schoolwork. However, it is also likely that students will associate with delinquent peers when they have varying levels of family support (Aaron & Dallaire, 2010; Haas, Farrington, Killias, & Sattar, 2004). Students who experience family structure-related NLEs may be attracted to groups of delinquent peers as social support after experiencing family structure-related NLEs. Furthermore, due to the nature of these NLEs (e.g., “parental separation”, “a new adult moved into the house”, “someone in family died”) students may have difficulty trusting adults, and therefore not develop positive

relationships with teachers and school staff who encourage students to attain high academic aspirations. Instead, students who experience these NLEs may turn to delinquent peers.

Finally, it was hypothesized that students with high levels of social NLEs would find social support in school from teachers and other students, which in turn would deter them from seeking this support from delinquent peers. However, students with high levels of social-related NLEs may not have a stable source of social support. Students with high levels of social-related NLEs also may not have high academic aspirations because of their residential instability (i.e., “started going to a new school,” “family moved”), and therefore be less likely to develop strong relationships with teachers who encourage applying to college. Another reason may be that these students feel rejected (e.g., “death of a close friend,” “breakup with boyfriend/girlfriend”), or have been rejected by peers, and may become involved with delinquent peers who may feel isolated as well (Laird, Jordan, Dodge, Pettit & Bates, 2001). Further research examining other potential moderators (e.g., peer relationships) for these NLEs is warranted.

Limitations

Results of the current study must be viewed in the context of its limitations. The measures used in this study have not been specifically validated in Latino samples. As a result, behaviors included in the delinquency scale may not comprise all behaviors considered delinquent in the Latino culture. Similarly, items on the Negative Life Events Questionnaire may not be as relevant to Latino youth as they are to Caucasian youth born in the United States. There are many culture-specific NLEs, such as discrimination, not assessed with the current measures. It may be that academic aspirations are a moderator for cultural-specific NLEs rather than the types of NLEs evaluated in the current study. Further study using culturally-validated measures in examining these associations would be beneficial. Furthermore, Latino Youth are a

heterogeneous population, representing various countries. Additional research on academic aspirations as a protective factor may consider the impact of similar and different cultural values of individual countries represented among Latino youth living in the United States. The academically-focused charter school in the current study may attract students who hold high academic aspirations. Over 40% of students in the sample stated that they planned to attend a 2 or 4-year college. This contrasts with national statistics on Latino high school completion and dropout rates (Cataldi, Laird, & Kewal-Ramani, 2009). Therefore, the results of this study may not be generalizable to all Latino youth.

Another limitation of this study is the use of data from a single time point. As such, causal associations cannot be drawn. Future research should examine the long-term effects of NLEs and academic aspirations on delinquency in order to better understand risk factors and interventions for youth who experience certain NLEs. It is also possible that some NLE items and delinquency items are interrelated. For instance, financial NLEs may be related to delinquency items about stealing. Similarly, youth who have been victimized may also be involved with delinquent behaviors related to physical violence. In this way, it may be difficult to demonstrate the unique effects of some NLEs on delinquency with this potential overlap. However, we note that correlations between NLEs and delinquency were only moderate, suggesting unique constructs. Delinquency items may have also reflected behaviors commonly performed by females, rather than males. Females are more likely to be relationally and covertly aggressive, which has implications for the types of delinquent behaviors they may commit (Goldweber & Cauffman, 2012). While males may engage in behaviors such as physical aggression, females may display behaviors such as lying, shoplifting, or social exclusion (Card, Sawalani, Stucky, & Little, 2008). Only two items on the measure of delinquency assessed for

physical aggression, and remaining items assessed behaviors that are more covert such as stealing, substance use, and skipping school. Therefore, the delinquency measure used in the current study may not reflect the full range of aggressive and delinquent behaviors of both males and females. Finally, this study only uses a single item to assess for academic aspirations. Additional data on students' aspirations may be needed in order to form stronger conclusions on the moderating effects of academic aspirations on NLEs. Likewise, academic aspirations are different from actual academic attainment. The effects of the study may not be as large because the study only examines the former.

Implications and Future Directions

Findings indicate that Latino youth who experience health- and safety-related NLEs may benefit from interventions that encourage academic goal-setting for delinquency prevention. Interventions should target students who experience these NLEs and assess their level of academic aspirations. When academic aspirations are low, interventions may use social support from teachers and work toward improving the relationships between teachers and students (Brewster & Bowen, 2004). Interventions may also support students in setting smaller goals that lead to graduation (Morisano, Hirsh, Peterson, Pihl, & Shore, 2010). For Latino students in particular, academic assistance (i.e., tutoring and mentoring, as well as afterschool programming) can prevent high school drop-out (Behnke, Gonzalez, and Cox, 2010). Interventions may also aim to reduce the effects of traumatic stress resulting from experiencing NLEs. Traumatic stress may have effects on academic performance (Dyregrov, 2004). Therapeutic techniques such as Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) have been shown to be effective in decreasing symptoms of traumatic stress and increasing ways to cope with the effects of the trauma (Black, Woodworth, Tremblay, & Carpenter, 2012). Programs targeting students'

academic aspirations could use components of TF-CBT such as cognitive coping techniques, relaxation exercises and processing reminders of the trauma. Therefore reducing the negative impact of traumatic stress may in turn help to increase the desire to graduate or pursue a college education.

While academic aspirations may be helpful in offsetting delinquency, students who are unable to attend college may not hold these aspirations. Undocumented students may not set goals to attend college if enrollment, scholarships, and financial aid are only available to documented students. Therefore, the findings of this study may hold implications for policies on allowing undocumented students entrance into college. Doing so could help to increase their academic aspirations and consequently offset the progression of delinquency.

Future studies may consider the effects of gender on academic aspirations. Latina females may be socialized to value starting a family and financially assisting their family of origin over pursuing a higher education (Martinez, 2013). Therefore, there may be cultural barriers against holding high academic aspirations for Latina females. At the same time, females may connect with other students and teachers more easily than males, and positive peer relations in school are associated with higher levels of academic goal setting and achievement (Witkow & Fuligni, 2010). Further research can help to understand the impact of both gender and the socialization of Latina youth on academic aspirations.

One important area for future research in this line of work, from a prevention and intervention perspective, is examining additional factors that contribute to having high academic aspirations. Factors, such as family SES (Davis-Kean, 2005; Morrissey, Hutchinson, & Winsler, 2014) or the family's importance of education (Spera, Wentzel, & Matto, 2007), may contribute to academic aspirations and these factors may be important to consider in understanding

mechanisms by which academic aspirations offset delinquency. In particular, parental involvement in their students' education may be important in increasing aspirations. For Latino youth, parental involvement is especially helpful when it includes discussions about future goals and parental engagement in school volunteer opportunities (Ceballo, Maurizi, Suarez, & Aretakis, 2014). Providing ways for parents to become more involved in academic goal-setting and school activities may help to increase aspirations. Educating parents on the college application process may help college enrollment become more feasible for students. This is particularly important for parents of students who did not attend college and may be unfamiliar with the process of applying. Additionally, research examining the exact role of peer delinquency in these associations, and whether academic aspirations can prevent the influence of delinquent peer affiliation, is an important next step for this line of research.

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Table 1. Descriptive Statistics and Correlations

	1	2	3	4	5	6	7	8	9	10	11
1. Gender	-	-	-	-	-	-	-	-	-	-	-
2. Age	-.10	-	-	-	-	-	-	-	-	-	-
3. Proportion of time in the U.S.	.09	-.08	-	-	-	-	-	-	-	-	-
4. Delinquency	-.17*	-.01	.21*	-	-	-	-	-	-	-	-
5. Academic Aspirations	.34**	-.13	-.01	-.20*	-	-	-	-	-	-	-
6. Negative Life Events	.15	-.10	.30**	.42**	.09	-	-	-	-	-	-
7. NLE Health	.11	-.09	.19*	.34**	-.04	.71**	-	-	-	-	-
8. NLE Safety	.11	-.04	.31**	.43**	.11	.80**	.50**	-	-	-	-
9. NLE Financial	.10	-.04	.16	.13	.12	.57**	.25**	.35**	-	-	-
10. NLE Family Structure	.11	-.04	.20*	.33**	.08	.77**	.40**	.50**	.31**	-	-
11. NLE Social	.08	-.22*	.18*	.29**	.04	.75**	.49**	.47**	.25**	.45**	-
Mean	-	16.3	.76	3.33	5.09	7.90	1.29	1.70	.90	1.82	2.16
Std. Deviation	-	1.5	.27	3.27	1.10	5.04	1.07	1.60	1.08	1.63	1.47

Note. Gender (1 = Males; 2 = Females). * $p < .05$, ** $p < .01$

Table 2. Regression Models Predicting Delinquency

Predictor	First-order Effects		Interaction Effects	
	β	<i>SE</i>	β	<i>SE</i>
Gender	-.20*	.09	-.20*	.09
Age	.01	.08	.01	.08
Proportion of Time Spent in United States	.04	.08	.04	.08
Negative Life Events (NLE)	.45***	.09	.45***	.09
Academic Aspirations	-.20*	.09	-.19*	.09
NLE x Academic Aspirations	-	-	-.01	.09

Note. Gender (1 = Males; 2 = Females). * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3. Regression Models Predicting Delinquency by NLE Group

Predictor	First-order Effects		Interaction Effects	
	β	<i>SE</i>	β	<i>SE</i>
Gender	-.24**	.09	-.23**	.09
Age	.00	.09	.00	.08
Proportion of Time Spent in United States	-.02	.09	-.05	.09
Academic Aspirations	-.21*	.09	-.23*	.09
Financial NLE	-.12	.09	-.11	.09
Health NLE	.13	.10	.09	.10
Social NLE	.10	.10	.13	.10
Safety NLE	.33**	.12	.37**	.11
Family NLE	.16	.10	.16	.09
Financial NLE x Aspirations	-	-	.04	.09
Health NLE x Aspirations	-	-	.33**	.11
Social NLE x Aspirations	-	-	-.11	.11
Safety NLE x Aspirations	-	-	-.28*	.12
Family NLE x Aspirations	-	-	.00	.10

Note. Gender (1 = Males; 2 = Females). * $p < .05$, ** $p < .01$, *** $p < .001$

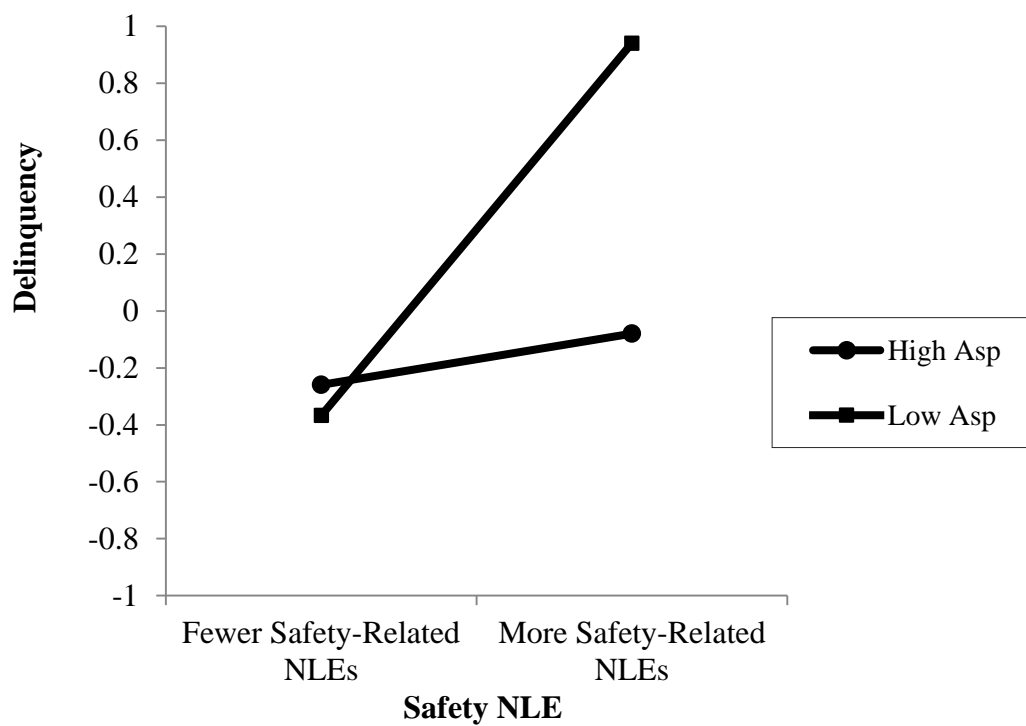


Figure 1. Association between safety-related NLEs and delinquency at high and low levels of academic aspirations.

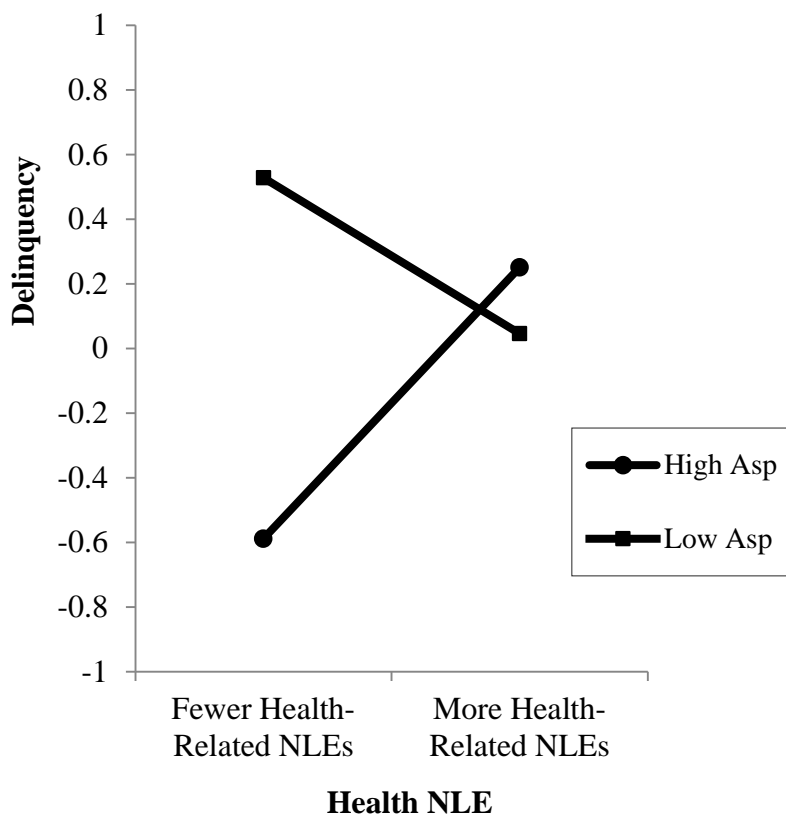


Figure 2. Association between health-related NLEs and delinquency at high and low levels of academic aspirations.