Busy Today, Better Tomorrow?

Extracurriculars and Parent-child Relations as Protective Factors for Latino Adolescents

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Abstract

The present study uses survey data from a sample of 223 Latino ninth-graders. Regression models were used to investigate the potential moderating effects of extracurricular participation, parent-child cohesion, and parental school involvement on the relations between stressful life events and depression, anxiety, grades, educational values, and school effort. Experiencing stressful life events was negatively related to both psychological adjustment and academic achievement. However, the amount of time spent participating in extracurricular activities did not have a significant relation with measures of psychological well-being or academic achievement. Parent-child cohesion was significantly and positively associated with educational values, while parental school involvement positively related to both educational values and school effort. Moreover, results support a moderating effect of both intense extracurricular participation and parental-school involvement in mitigating the relation between stressful life events and depression. This study extends current literature by focusing specifically on a Latino sample. These findings offer directions for future research on the particular roles of extracurricular activities and parental school involvement as protective factors for positive development among Latino youth in the context of stressful life events.

Keywords: Latino, adolescents, stressful life events, extracurricular, parent-child relations

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Adolescence is an important turning point in development, distinguished by new experiences and substantial increases in individual autonomy. In fact, a fundamental characteristic of a healthy family is the increased flexibility of boundaries to permit for greater adolescent independence, highlighting the significance of these changes for positive development (Schaffer, 2009). This shift in family dynamics emphasizes that adolescence is a time when family factors and other social contexts are especially prone to impact youths' levels of psychosocial adjustment. For instance, extensive research has demonstrated that growing up in unstable, stressful, or dangerous conditions can greatly hinder the positive development of adolescents. Prelow and Loukas (2003) note that socioeconomically disadvantaged youth are at greater risk for encountering environmental stressors, and that such stressors are negatively related to adolescents' school achievement, mental health, and cognitive development. This heightened risk is disproportionately concentrated among ethnic minority youth who are more likely to struggle economically. Furthermore, the influences of such stressors on psychological and social adjustment often continue into adulthood (Mahoney, 2000).

Stressful life events, specifically, are associated with numerous negative effects on adolescents' development, both psychologically and academically (Leventhal & Brooks-Gunn, 2004; Levitt, Guacci-Franco & Levitt, 1994; Lima, Caughy, Nettles & O'Campo, 2010; Morales & Guerra, 2006). Often, stressful events are uncontrollable and unexpected, and also tend to occur more frequently among socioeconomically disadvantaged and ethnic minority youth when compared to economically stable and Caucasian adolescents (Fredricks & Eccles, 2010). Given the negative impact that stressful life events may have on adolescents' well-being, particularly among low-income, ethnic minority adolescents, a detailed understanding of the processes

involved in this association is imperative to help youth develop adaptively in the context of such stressors.

Stressful Life Events and Psychological and Academic Outcomes

A wealth of empirical evidence indicates that experiencing stressful life events is negatively related to psychological adjustment (Alva & Reyes, 1999; Lima et al., 2004). Stressful life events encompass uncontrollable or unexpected events that have greater potential to cause distress than everyday events, such as the death of a family member, serious illness, or peer bullying. Stressful life events can occur within various domains of daily life including an individual's health, family, school, and neighborhood. Family and neighborhood stress (e.g., conflict with family members or peers) exacerbated by poverty, community violence, and significant life transitions (e.g., moving to a new home), can elicit negative outcomes for youth, both concurrently and longitudinally. Similar relations exist for school-related stress as well (e.g., peer rejection; Morales & Guerra, 2006). McLaughlin and Hatzenbuehler (2009) found that both health-related problems and family discord were longitudinally related to anxiety in a sample of middle school adolescents. Stress regarding family discord predicted fears of instability and social concerns, while health-related stressors were related to fears of physical disease and psychological illness.

Stressful life events have the potential to negatively impact not only psychological well-being among youth, but also academic success. Though research on the role of stressful life events in adolescent academic achievement is currently lacking, some findings suggest that Latino adolescents, specifically, report lower grades and increases in behavioral problems when experiencing high levels of stressors (Alva & Reyes, 1999). During adolescence, youth begin to manage life's demands more autonomously, and may thus be especially vulnerable to the

negative impact of stressful life events. Such stressors may be particularly detrimental to academic achievement if they detract from a students' ability to focus or engage in the school setting.

Despite a scarcity of evidence in the literature for the effects of stressful life events on adolescents' academic achievement, several findings highlight this phenomenon among younger students. In a sample of fourth and fifth graders, stressful life events were negatively related to both overall GPA and later SAT scores (Levitt et al., 1994). In a longitudinal study of economically disadvantaged elementary students, Morales and Guerra (2006) investigated stressful life events within children's family, school, and neighborhood contexts. School stress was defined as experiencing peer rejection, victimization, or general school problems such as worrying about grades. School-related stress was linked to lower reading and math achievement, which the authors speculated may result from strained peer relationships and subsequent anxiety about school attendance. Among the different types of stress studied -- school, family, and neighborhood -- lower achievement had the strongest negative relationship with reported family disturbances. This suggests that family discord, when experienced in combination with other factors common in high-stress environments, may affect children's well-being even across environmental domains, such as within the school setting. These findings highlight the interconnectedness and significance of various social spheres on youths' academic achievement, whereby different sources of support (e.g., family and school) may all play a role in positive outcomes. Given the increased emphasis on academics in middle and high school, the relations observed among school-aged children may be even more salient among adolescents.

Greater Risk Among Socioeconomically Disadvantaged Youth

Socioeconomically disadvantaged youth are likely to experience significantly more stressful life events in their day to day lives than youth from economically stable families, and are thus at risk for many of the negative effects associated with experiencing such stressors (Dohrenwend, 1973; Hatch & Dohrenwend, 2007). Poor children and adolescents also tend to experience stressors in a greater variety of contexts; examples include dangerous neighborhoods, poorly staffed and supplied schools, and financially burdened households (Evans, 2004; McLoyd, 1998). Cumulative life stressors such as these, which are associated with living in low-income conditions, result in *even greater* risk for maladjustment among developing youth (Morales, 2006). For instance, children with low-income parents report lower GPA and reading achievement, less sense of belonging, and higher rates of experiencing other negative life events when compared to children with higher paid, semi-skilled or professional parents (Felner, Brand, DuBoi & Adan, 1995).

In addition to exploring these relations among adolescents, there is a need to investigate protective factors that minimize the negative effects of daily or chronic stressors for low income youth. Researchers report that maternal monitoring may serve as a protective factor against stressful life events associated with living in poverty (Felner et al., 1995; Klein & Forehand, 2000). For example, adolescents reporting higher maternal monitoring and socioemotional competence have reported fewer school-related problem behaviors, even in the context of high-risk environments (Prelow & Loukas, 2003). In this same study, maternal monitoring protected against the negative effects of a variety of risk factors among adolescents, including perceived financial stress, living in a low-income neighborhoods, and residing in a single parent home.

Where protective parenting factors are absent, however, protective factors in other domains of an adolescent's life may similarly buffer against stressful life events. Involvement in

extracurricular activities, for instance, may provide such benefits in the form of adult supervision, mentorship, and close relationships that protect against the negative impact of stressful life events (Posner & Vandell, 1999). Given the increased risk for maladjustment among low-income youth experiencing many life stressors, the present study will focus on identifying protective factors that may attenuate the negative impact of stressful life events on the academic outcomes and psychological well-being of low-income, Latino adolescents.

Stressful Life Events Among Latinos

Because ethnic minority youth disproportionately live in low-income families, they are at heightened risk for the many stressful life events with which economic disadvantage is associated. Poverty rates among Latinos, in particular, are three times greater than those of Caucasians (Prelow & Loukas, 2003). According to the most recent Census data, 25.3% of Latinos live below poverty, compared to 12.3% of Caucasians (DeNavas-Walt, Proctor, Smith & U.S. Census Bureau, 2010). The U.S. Census Bureau (2007) notes that compared to Caucasians, Latinos are more likely not only to live in poverty, but also to rent their homes and have a lower median income. Furthermore, Latino women are more likely to manage a household independently and to have had a child in the past year (U.S. Census Bureau, 2007).

Not only do ethnic minorities experience more stressful life events than their Caucasian counterparts, but Latino youth, in particular, are often especially prone to experiencing stressful life events (Gonzales, Tein, Sandler & Friedman, 2001; U.S. Census Bureau, 2007). Latinos are the fastest growing minority group in the United States, making the identification of protective factors against stressful life events a priority among this group (Prelow & Loukas, 2003). The Latino population also has a higher proportion of younger members to older members compared to the Caucasian population, which emphasizes the importance of this priority among Latino

youth specifically (U.S. Census Bureau, 2007). As a result of their high levels of exposure to stressful life events, Latino youth also disproportionately experience the negative consequences of these events on their psychological well-being and academic achievement. However, very little research has been conducted on stressful life events among Latino youth. Along with experiencing stressors associated with poverty and urban violence, Latino youth are likely to encounter culture-specific stressors, such as language barriers, which can intensify anxiety and depression (Alva & Reyes, 1999). Culture-specific stress may be further exacerbated when individuals can be readily identified as belonging to a certain ethnic group due to visible characteristics such as skin color or other physical features, which may cause overemphasis on minority status (Smith, 1985). Indeed, being a "visible minority" has been hypothesized to increase levels of reported stress as well as the likelihood of experiencing discrimination (Slavin, Rainer, McCreary & Gowda, 1991). In a study by Alva and Reyes (1999), stressful life events accounted for over thirty percent of the variance reported in depression and anxiety among ninth grade Latino adolescents. Additionally, stressful life events related to immigration negatively influence psychological adjustment among some youth (Slonim-Nevo, Mirsky, Rubenstein & Nauck, 2009). These and other culture-specific stressors, in addition to more general stressful life events, may further increase Latino youths' risk for psychological maladjustment. Given the prevalence of poverty, single parent homes, and potential immigration-related stressors among Latino families, the present study focuses on protective factors against the negative effects of stressful life events specifically among low-income urban Latino adolescents. To explore contributions from various social spheres in adolescents' lives, the present study will consider both the school and family contexts as potential protective factors against the negative effects of such stressful life events.

Participation in Extracurricular Activities and Psychological Adjustment

Extracurricular participation may serve as one such protective factor within adolescents' school environments. Extracurricular activities are an outlet for adolescents to form connections with other students and occupy their time in a structured and constructive environment. It is therefore important to consider the potential for extracurricular activities to serve as a protective alternative to the dangerous environment of many economically disadvantaged communities. Indeed, participation in extracurricular activities is linked to various indicators of positive adjustment. Extracurricular activities can provide an outlet for adolescents to explore interests, develop personal skills, learn to cooperate with others, engage in decision making, and build social networks (Darling, 2005; Fredricks & Eccles, 2010; Levitt et al., 1994), all of which are important developmental milestones. Moreover, interaction with peers could broaden adolescents' worldview and work to increase interpersonal communication and understanding. Fredricks and Eccles (2008) examined the influences of extracurricular activity participation on the psychological constructs of self-esteem, depression, and resiliency (defined as the speed of recovery from negative experiences, the ability to learn from one's mistakes, and success at problem-solving). In their longitudinal study, eighth grade students participating in sports and organized activities outside of school reported greater psychological resiliency and self-esteem, respectively, in eleventh grade. In addition, participation in school clubs during eighth grade was associated with greater resiliency in both the eighth and eleventh grades. However, significant decreases in depression among students participating in extracurricular activities were observed only among Caucasians; this positive outcome was absent in the African American sample. Ethnic minority status thus may play a role in the benefits derived from participation in extracurricular activities.

Research indicates that youth growing up in poorer neighborhoods are more likely to associate with deviant peers, an association linked to externalizing problems among youth (Roosa et al., 2005; Roosa et al., 2010). Structured extracurricular participation, on the other hand, has consistently been linked with positive outcomes for youth (Broh, 2002; Fredrick & Eccles, 2008; Luthar, Shoum & Brown, 2006; Posner & Vandell, 1999). Latinos, however, are less likely to participate in extracurricular activities than adolescents of other ethnic backgrounds (Darling, 2005). Moreover, most research on the impact of extracurricular involvement has been conducted on Caucasian youth. Thus, it is unknown whether extracurricular activity participation might confer similar protective benefits among Latino adolescents. The more time adolescents spend occupied in constructive and developmentally appropriate activities, the less time, theoretically, they have available to associate with deviant youth and engage in illegal activities such as drug use. Extracurricular activities occupy students' time directly after the school day during the hours they are most likely to be unsupervised and during which juvenile crime is most likely to occur (Newman, Flynn, Fox & Chriteson, 2003). Indeed, researchers have found that participation in extracurricular activities relates to less alcohol and marijuana use (Fredricks & Eccles, 2010). Specifically, structured activities have the greatest impact on lowering substance use when compared with unstructured activities (Darling, 2005). Participation in a wide range of activities, in particular, is negatively related to parents' report of youth internalizing symptoms (e.g., depressive symptomology) and externalizing behaviors (e.g., bullying; Fredricks & Eccles, 2010). Thus, participation in multiple activities can potentially increase their overall benefit. Such intense involvement may fill up even more of youths' free time, and possibly serve as a consistent alternative to negative behaviors. Simply keeping

adolescents occupied in structured, positive settings could serve as a diversion from unhealthy and potentially dangerous behaviors.

Participation in Extracurricular Activities and Academic Success

Not only does participation in extracurricular activities promote psychological well-being, but evidence suggests that it aids adolescents in academic achievement as well. Dedicating more time to participation in a number of different activities may suggest a level of commitment, which, if transferred to academics, may bolster students' academic achievement. Youth who participate in extracurricular activities report higher grades and more positive attitudes regarding school compared to youth who do not participate (Darling, 2005), both concurrently and longitudinally (Fredricks & Eccles, 2008). Further, youth who participate in extracurricular activities report stressful life events as having less negative impact on academic aspirations (Darling, 2005). Moreover, extracurricular activity participation is positively associated not only with higher grades, but also educational expectations among youth (Fredricks & Eccles, 2010; Luthar, Shoum & Brown, 2006). Thus, participating in extracurricular activities appears to bolster both objective measures of adolescents' academic achievement as well as more fundamental educational values and attitudes.

Although extracurricular activity participation positively predicts greater academic success over time, this is observed *only* among Caucasian students (Fredricks & Eccles, 2008). This suggests that ethnic minority youth may not derive the same academic benefits from extracurricular participation as those observed among other non-minority youth. However, very little research to date has explored this phenomenon among Latinos. Of the research to date, higher math and literature test scores are reported specifically among Latinos participating in extracurricular activities (Prelow & Loukas, 2003). The current study attempts to expand this

limited knowledge by investigating the relation between school-related extracurricular activities and academic adjustment, specifically among economically disadvantaged Latino adolescents.

Extracurricular Activities as Protective Factors for the Negative Impact of Stressful Life Events

Not only do extracurricular activities have direct benefits for youth, but they may also moderate the negative impact of experienced stressful life events. A review of previous research on extracurricular activity involvement points to a recent shift in the literature from a deficit model, in which prevention of specific environmental risks is the goal, to a competence model, in which positive development is the focus (Jiménez, Delgado & Suárez, 2009). Alongside the growing research on extracurricular involvement, this theoretical shift emphasizes that activities can be structured to enhance positive development among even the most at-risk adolescents, thereby serving as protective factors. For instance, risky behavior (e.g., drug use) is increasingly common within neighborhoods lacking resources (e.g. space, supervisors, etc.) necessary for organized activities (Riggs & Greenberg, 2004). However, girls living in communities with few social and physical resources, but who are also high in self-regulation, report low levels of risky behavior even with only low to moderate levels of activity involvement (Brown, Lewin-Bizen & Lerner, 2010). This suggests that involvement in organized activities, to any extent, may limit the negative impact resulting from stressful life events among some youth. Given that adolescence is a time of growing autonomy and independence, adolescents have more freedom to choose how they spend their free time than younger children. Therefore, choosing to engage in extracurricular activities rather than other deviant behaviors during the after-school hours may be especially influential on adolescents' well-being.

Given that stressful life events increase the likelihood of psychological maladjustment, the ways in which youth cope with such stressors may attenuate their overall negative impact. The commonly accepted benefits of active coping (e.g., problem solving), however, are not present in highly stressful environments (Sandler, Tein & West, 1994). Gonzales, Tein, Sandler, and Friedman (2001) hypothesize that this ineffectiveness of active coping may reflect the unique stress that disadvantaged youth face, since many stressors in low-income environments tend to be outside of their control. In uncontrollable circumstances, where active coping may not be the most useful tool, distractive coping has been suggested to be beneficial. These authors confirmed this hypothesis in a study in which they found that distractive coping, defined as engagement in another activity in order to divert attention from stressors, was related to significant declines in depression. However, after peer stress was incorporated, this association became non-significant. Although the results of this study are mixed, they do reinforce the idea that different environmental factors interact in affecting the adjustment of developing youth. Such findings suggest that extracurricular participation may serve as a "distraction" for youth reporting high levels of stress, and can protect against the risks associated with such experiences.

In line with this hypothesis, positive outcomes related to extracurricular participation are particularly pronounced among socioeconomically disadvantaged youth. One such example is the positive relation between participation in sports and having prosocial peer relationships, which has been observed among low-income youth. (Fredricks & Eccles, 2010; 2008). Of the youth engaged in extracurricular activities, those reporting the greatest number of known risk factors, have also reported lower rates of school dropout and arrest than non-participants; furthermore, if a student's social network is actively involved in extracurricular activities, adjustment problems are at *even* lower rates (Mahoney, 2000). However, the moderating effects

of extracurricular participation on dropout rates are smaller among students displaying initial behavioral and academic success (Mahoney & Cairns, 1997). Given the greater likelihood for socioeconomically disadvantaged youth to experience stressful life events, they may be the most in need of safe and organized activities through which they can form supportive relationships and constructively occupy their time. In turn, such organized activities may have greater significance for youth who have minimal exposure to positive environments. Therefore, extracurricular activity participation may serve as a protective factor for low-income youth, buffering the negative impact of the many stressful life events often associated with economic deprivation.

Parent-child Relationships as Protective Factors for Psychological Well-being and Academic Outcomes

The adolescent years, during which youth experience significant social, emotional, and physical changes, as well as increases in autonomy, do not develop solely within the school context. Rather, such changes occur in a social sphere in which home and family life are most salient (Amato & Fowler, 2002). Rather than being disconnected, the family and school contexts may complement each other in providing youth with various outlets in which to form supportive relationships and practice healthy, autonomous decision-making. Although parental involvement plays a role in many aspects of development, including the promotion of positive psychological adjustment and academic achievement, research indicates that parent-child cohesion decreases and conflict increases in the home during early adolescence (Baer, 1999; Fuligni, 1998, Gray & Steinberg, 1999). Such relational changes may be a result of youths' increased desire for independence (Smetana, 1988). Nonetheless, parental "presence," both emotional and physical, is associated with positive adjustment among adolescents, making these deteriorations in positive parent-child relationships potentially detrimental to youths' well-being (Gray & Steinberg,

1999). Given the significance of the family environment during adolescent development, the investigation of extracurricular participation and stressful life events would be incomplete without taking into account parent-child relationships. Accordingly, in addition to examining extracurricular activity participation as a buffer for the impact of stressful life events, the present study also investigates parent-child cohesion and parental school involvement as protective factors.

Parent-child cohesion. Parent-child cohesion refers to feeling a sense of connectedness with one's caregivers (Tolan, 1988). A wealth of empirical evidence underscores the positive value of parent-child cohesion for adolescents' psychological and behavioral outcomes. Youth perceiving greater cohesion report lower depressive symptomology (Houltberg, Henry, Merten & Robinson, 2011). Further, some research indicates that youth satisfaction with the level of cohesion may be one of the strongest buffers against depression (Cumsille & Epstein, 1994). Similarly, parent-child cohesion is negatively associated with anxiety across cultural groups, accounting for up to 12% of variability in reported anxiety specifically among Latino samples (Varela, Sanchez-Sosa, Biggs & Luis, 2009).

Family cohesion also protects against some externalizing problems. Problem behaviors are more commonly reported among adolescents perceiving greater family conflict, which in turn is related to greater association with deviant peers (Barrera, Biglan, Ary & Li, 2001; Tolan, 1988). Adolescents whose parents maintain levels of high support and avoid harsh punishment, on the other hand, tend to attain better grades and exhibit fewer behavior problems, although the majority of these findings are based on Caucasian, nuclear families (Amato & Fowler, 2002). Parent-child cohesion also robustly protects against marijuana use, specifically among Latino high school students (Lac et al., 2011).

Socioeconomically disadvantaged and ethnic minority youth are more prone to experiencing situations shown to detract from the benefits of parental involvement, such as living in single parent homes and immigration-related barriers (e.g., poor English language skills; Baer, 1999; Cumsille & Epstein, 1994; Powell, Son, File & San Juan, 2010; Tolan, 1988; Turney & Kao, 2009). Although decreases in cohesion are generally reported during adolescence across ethnic groups, when compared to African Americans and Caucasians, Latinos place significantly greater importance on emotional bonding, suggesting the possibility of stronger relative parent-child cohesion among Latino adolescents (Fuligni, 1998; Hampson, Beavers & Hulgus, 1990). However, findings on the levels of parent-child cohesion among Latinos have varied: while some studies suggest that Latinos report the lowest rates of cohesion (Baer, 1999), others actually report relatively high levels of support and low conflict among Latinos (Molina & Chassin, 1996).

In sum, parent-child cohesion has been linked to positive psychological and behavioral adjustment among youth of all ages and cultural groups. While adolescents may seek greater independence, connectedness at home can provide a strong foundation for positively managing potential stressors and avoiding maladjustment during such a critical developmental stage.

Parental school involvement. Just as adolescents' feelings of cohesion with parents at home can impact psychological adjustment and academic achievement, parental involvement in adolescents' school activities may also promote positive development. Since adolescents spend a substantial portion of their time in a school setting, parents' school involvement may influence youths' positive adjustment. However, there is a general decline in parental school involvement during early adolescence, often coupled with increased emphasis on youth peer relations (Carter & Wojtkiewicz, 2000; Kuperminc, Darnell & Alvarez-Jimenez, 2008; Steinberg & Silverberg,

1986). Whether engaging in extracurricular activities or interacting with other students during the school day, the school setting provides a place in which peer relations can develop. By gaining awareness of youths' social surroundings, parents who remain actively involved in their child's school life could potentially position themselves to be in a place of positive guidance and control. These ideas underlie the theory of parental school involvement as social capital, which posits that involved parents are better able to foster parent-child communication and parental monitoring, express to youth the importance of education through modeling of parent-teacher interactions, possess social control through knowledge of individuals involved in a child's life, and gain valuable information about their child (McNeal, 1999; Turney & Kao, 2009).

Socioeconomic status positively relates to both parental school involvement and knowledge about a child's academic progress, such that economically well-off parents are more likely to be involved in their children's schools (Baker & Stevenson, 1986). It has also been suggested that parents whose children exhibit greater academic achievement are more likely to become involved in the school setting (Turney & Kao, 2009). Thus, it may be that youths' academic success can promote greater parental involvement in the school setting. Moreover, immigrant parents are less likely to be involved in their children's schools (Nord & Griffin as cited in Turney & Kao, 1999). Indeed, in a nationally representative sample of parents whose children were transitioning into kindergarten, immigrant parents perceived many more barriers to their social involvement compared to Caucasians and were, therefore, less likely to initiate involvement. Among Latinos, the amount of time spent in the United States and speaking English as the primary language at home were positively associated with parental school involvement (Turney & Kao, 2009). Despite associations between parental school involvement

and positive youth outcomes, Latino parents are less likely to become involved in the school setting, reinforcing the need to further investigate the potential importance of such relationships.

The lack of school involvement documented among immigrant and ethnic minority parents is important to consider given the positive outcomes that such involvement reportedly fosters. Parental involvement is positively associated with academic achievement, especially global measures such as GPA (Fan & Chen, 2001). When compared with other parenting behaviors such as home supervision and parental expectations for adolescents' academic progress, parental participation in school-related activities has the strongest relations with academic achievement (Fan & Chen, 2001). Among Latino middle school students specifically, parental school involvement is linked with more adaptive school behavior, greater overall school satisfaction, more time spent working on homework, and higher grades (Woolley, Kol & Bowen, 2009). Parental involvement also contributes to a sense of school belonging, teacher expectations for student academic achievement, and higher grades among Latino high-school students, suggesting that adolescence may be an especially important time for parents' involvement in their children's education (Kuperminc, et al., 2008). Although Latino parents are less likely to become involved, evidence suggests that their involvement in youths' academic context may be beneficial for positive adjustment.

Current Study

Given the numerous stressful life events faced by many low-income Latino youth, it is vital to understand the influences of extracurricular participation and parent-child relationships on their psychological well-being and academic success. With this knowledge, an effort can be made to make such resources available to aid Latino youth. To date, the literature on extracurricular participation and parent-child relationships has not focused specifically on Latino

youth. This gap exists despite research suggesting a greater likelihood for Latinos to experience significant life stressors, as well as being less likely to engage in potential protective behaviors. Therefore, this study investigates the roles of these constructs in buffering the negative impact of stressful life events among economically disadvantaged Latino adolescents.

Specifically, the current study examines the moderating roles of participation in extracurricular activities, parent-child cohesion, and parental school involvement in mitigating the negative outcomes associated with stressful life events. In light of previous literature, five main hypotheses will be investigated: (1) Stressful life events will be negatively related to both psychological well-being and academic success; (2) Intense participation in extracurricular activities will be positively related to both psychological well-being and academic success; (3) Strong parent-child relations, specifically parent-child cohesion and parental school involvement, will positively relate to both psychological well-being and academic success; (4) Intense participation in extracurricular activities will moderate the relation between stressful life events and psychological well-being, as well as the relation between stressful life events and academic achievement; and (5) Parent-child relations will moderate the relationship between stressful life events and psychological well-being, as well as the relation between stressful life events and academic achievement. Figure 1 displays the hypothesized model.

Method

Participants

Participants were 223 ninth-grade students with a mean age of 14.5 (*SD* = .69); sixty-one percent of the sample was female. Homes spanned 28 different census tracts, representing a geographically diverse sample. Participants attended one of three different high schools in two impoverished Northeastern cities. Of the three high schools, one was a parochial school attended

by 85 students from our sample. Thirty-one percent of Latinos from this school district live below the poverty line, and 68% of the total school population was eligible for free or reduced lunches (U.S. Census Bureau, 2007). The remaining two high schools were public schools. One of the public schools was separated into two programs, each tailored to students' specific career interests: one area of study focused on math, science, and technology, while the other focused on health and human services. Ninety students in our sample attended this high school; forty-three of whom attended the math, science, and technology program. Students in this high school lived in the same census tracts as students in the parochial high school. Seventy-seven percent of students from the math, science, and technology program, and 82% from the health and human services sector were eligible for free or reduced lunched. Forty-eight students from another public school participated in the study. Ninety-six percent of the student population was eligible for free or reduced lunches, and thirty-five percent of Latinos in this school district live below the poverty line (U.S. Census Bureau, 2007).

All study participants identified themselves as Latino. Seventy-six percent of participants were born in the United States. In our sample, 60.5% reported Dominican origin, while 17% were of Puerto Rican origin. Other reported origins include Argentinean, Colombian, Mexican, and Cuban. At least some Spanish was spoken by 94% of participants at home, and 9% reported speaking *only* Spanish in the home.

Procedure

Ninth grade students attending each high school received recruitment letters and consent forms to take home. All study materials were translated into Spanish and back-translated to ensure accuracy. Both Spanish and English versions were given to students. Participating students who had received parental consent completed a self-report survey in a quiet classroom

during the regular school day. Participants had the option of taking the survey in either English or Spanish, and bilingual research assistants were available to answer participants' questions. Seven students chose to complete the questionnaire in Spanish. Students were offered several breaks while completing the survey, which took approximately two hours. All students received a $30 gift card to a local movie theatre or shopping mall as a token of appreciation for their participation.

Measures

Stressful life events. The Multicultural Events Schedule for Adolescents (MESA; Gonzales, Gunnoe, Jackson & Samaniego, in press) was administered to evaluate participants' exposure to 67 stressful life events during the past year. Stressors measured in this section included family trouble or change, family conflict, peer hassles, school hassles, economic struggles, perceived discrimination, language conflict, injury, and parental embarrassment (e.g., "your parent(s) acted badly in front of your friends"). A sample item from this measure is, "Family members, relative, or step-parents moved in or out of your house." Participants indicated whether each stressful event had (1) or had not (0) occurred within the past year. Scores were summed and ranged from 0 to 67. Higher scores reflected a greater number of experienced stressful life events.

Extracurricular participation. Participants were asked how many times per week they participated in six different activities and whether participation lasted more than 10 hours per week. Given the commonly accepted benefit of structured extracurricular activities specifically, participation in organized sports, music/art lessons, school clubs/organizations, volunteer work, support from a tutor/mentor, and religious activities were included in this measure. To gauge the time intensity with which students engaged in extracurricular activity, youth reported how many

activities required 10 or more participation hours per week. Students indicated whether they did (1) or did not (0) participate in each of the six activities for more than 10 hours per week. Students' responses were summed, yielding a composite score ranging from 0 to 6, with higher scores reflecting intense participation (10 hours or more) in a greater number of extracurricular activities. Fifty-eight percent of respondents did not participate in any activities intensely (at least 10 hours per week), 28.4% participated in one activity, 11.7% participated in two, 1.2% participated in three, and .6% participated in four of the six activities intensely each week.

Parent-child relations.

Parent-child cohesion. Parent-child cohesion was assessed using the Family Adaptation and Cohesion Evaluation Scales II Inventory (FACES II; Olson, Russell & Sprenkle, 1983; Fuligni, 1998). Individual measures for mother-child cohesion and father-child cohesion included 10 items each, with responses ranging from (1) almost never to (5) almost always. Items for both mother-child and father-child cohesion scales were identical, including statements such as, "My mother and I are supportive of each other during difficult times," and, "My father and I feel very close to each other." The mean scores for mother-child and father-child cohesion were summed to create a composite score of parent-child cohesion, with higher scores indicating greater parental-child cohesion. Cronbach's alpha for the mother-child cohesion scale was .86, and .87 for father-child cohesion. Cronbach's alpha for the composite measure was .62.

Parental school involvement. Parental school involvement was assessed using a 5-item measure previously used with a sample of Hispanic Americans (Steinberg & Silverberg, 1986; Steinberg, Lamborn, Dornbusch & Darling, 1992). Each item response ranged from (1) never to (4) often, and gauged how often parents engaged in school-related interactions such as helping

with homework or attending school events. Mean scores were calculated, with higher scores indicated a higher frequency of involvement. Cronbach's alpha was .75.

Psychological adjustment.

Depression. The Child Depression Inventory (CDI; Kovacs, 1981), which has well-established validity and reliability, assessed depressive symptoms among participants. Questions asked about depressive symptoms experienced in the two weeks prior to completing the survey. This measure consists of 26 items; one item addressing suicidality was removed per school request. Each item includes three statements from which to choose. A sample group of statements is (0) I have fun in many things, (1) I have fun in some things, and (2) Nothing is fun at all. Participants' responses were summed, with a total score ranging from 0 to 52, and higher scores indicating more depressive symptoms. Cronbach's alpha in our sample was .86.

Anxiety. The "What I Think and Feel" Scale, a revision of The Children's Manifest Anxiety Scale (Reynolds & Richard, 1978), gauged participants' feelings of general anxiety. This 28-item measure asked participants how often they experience a range of anxiety symptoms; each item is rated on a scale from (1) never to (5) most of the time. The general anxiety score was a sum of three subscale means including psychological anxiety (10 items), worry/over-sensitivity anxiety (11 items), and concentration anxiety (7 items). Scores for each individual subscale range from (1) never to (5) most of the time. The general anxiety composite score used in the current study ranges from (3) never to (15) most of the time. Higher scores indicate greater frequency of general anxiety. For this sample, Cronbach's alpha was .94.

Academic achievement.

Grades. A single-item asked students to self-report average grades from their most recent report card. This item was scored on a scale used to represent grade point average and ranged from (1) 1.0 to (7) 4.0.

Educational values. A six-item measure assessed participants' educational values. Questions addressed both the reported value on current academic success as well as the importance of continuing education beyond high school. A sample item is, "How important is it to you that you do well in school?" Each item was rated on a scale ranging from (1) not important at all to (5) extremely important. Responses were averaged and higher scores indicated stronger educational values. Cronbach's alpha for this measure was .84 in this sample.

School effort. A six-item measure assessed school effort, with three items designed specifically for this study. A sample item gauging school effort is, "How often do you study before a quiz or test?" An item designed for this study and added to the overall school effort score is, "How often do you work as hard as you can on school work?" Students responded on a scale from (1) never to (5) almost always. Higher scores indicate greater school effort. For this sample, Cronbach's alpha was .64.

Results

Preliminary Analyses

Bivariate correlations among all variables are displayed in Table 1. As expected, stressful life events were significantly correlated with various negative outcomes. There were high and significant correlations between stressful life events and both depression and anxiety. Furthermore, stressful life events were negatively correlated with all three measures of academic achievement: grades, educational values, and school effort. Students' sex was significantly associated with depression and anxiety, such that girls were more likely to exhibit these

symptoms. Students' sex was also significantly correlated with grades, such that girls reported higher grades on average than boys. Depression and anxiety were highly and significantly correlated with one another, suggesting significant overlap between these two constructs. Depression was negatively associated with all measures of academic achievement among students: grades, educational values, and school effort. Parent-child cohesion was positively and significantly associated with parental school involvement. School effort was positively and significantly associated with grades and educational values, pointing to a possible relation between exerted effort and yielded results.

Primary Analyses

To test the study's hypotheses, five separate ordinary least squares linear regression models were analyzed. These five models predicted each outcome (depression, anxiety, grades, educational values, and school effort) from a measure of time intensity spent participating in extracurricular activities. In the first step of each model, demographic control variables were entered including sex, age, and three school dummy variables. For statistical control purposes, the high school with two career-specific programs was evaluated as two separate schools. At the second step of these models, the predictor variables for stressful life events, parent-child cohesion, parental school involvement, and extracurricular activity participation were entered. Table 2 presents the results for each hypothesis, specifically investigating the role of participating in extracurricular activities for an extensive amount of hours each week. Table 2 shows that the second model accounted for 22% of the variance in depressive symptoms, 29% in anxiety symptoms, 20% in grades, 29% in educational values, and 26% in school effort, significantly more than the control models in all cases.

To examine the moderating effects of parent-child relations and extracurricular participation, the interactions for parent-child cohesion X stressful life events, parental school involvement X stressful life events, and intense participation X stressful life events were entered in the third step of the model. In this model, both depressive and anxiety symptoms were significantly related to sex, such that girls experienced more symptoms. Sex was significantly associated with academic constructs, with girls attaining higher grades and upholding stronger educational values. In support of the first hypothesis, stressful life events were positively and significantly related to both depression and anxiety symptomology. Stressful life events were also negatively and significantly related to all three measures of academic achievement, grades, educational values, and school effort. The second hypothesis was not supported. The number of extracurricular activities in which students intensely participated did not have a significant relation with measures of psychological well-being or academic achievement. The results partially supported the third hypothesis that stronger parent-child relations would be associated with increased psychological well-being and academic achievement. Parent-child cohesion was significantly associated with educational values, and parental school involvement positively related to educational values and school effort.

Hypotheses four and five were partially supported by the results. Parental school involvement significantly moderated the relationship between stressful life events and depressive symptoms, such that the relation between stressful life events and depressive symptoms was significantly weaker among adolescents who reported higher levels of parental school involvement, as seen in Figure 2. The moderating effect of parental school involvement approached significance in the relation with anxiety symptomology as well. Parent-child cohesion, however, did not moderate the relation between stressful life events and measures of

psychological well-being or academic achievement. Extracurricular activity participation significantly moderated the relation between stressful life events and depressive symptomology. Figure 3 depicts this interaction and shows that the association between stressful life events and depressive symptoms was weaker among youth who intensively participated in more extracurricular activities. The third model, as a whole, accounted for 27% of the variance in depressive symptoms and 31% of the variance in anxiety symptoms, accounting for significantly more variance than the previous main effects model for depressive symptoms only. The third model accounted for 20%, 31%, and 28% of the variance in grades, educational values, and school effort respectively, although not significantly more than the previous main effects models.

Discussion

The present study investigated the role of extracurricular activity participation and parent-child relationships as moderators of the negative associations between cumulative stressful life events and both psychological and academic outcomes (Morales & Guerra, 2006; Prelow & Loukas, 2003). Specifically, contextual influences on adolescent outcomes in two different, yet equally important, spheres were considered: school and home life (Fan & Chen, 2001; Fredricks & Eccles, 2008; Lac et al., 2011; Newman et al., 2003). This study enriches the literature by examining the roles of such relationships specifically among low-income Latino adolescents, the fastest growing minority population in the United States (Ennis, Rios-Vargas, Albert & U.S. Census Bureau, 2010). Latino adolescents experience various life stressors and their resulting negative consequences at significantly higher rates than other ethnic minority and Caucasian populations, making this study especially critical to identifying protective factors within this specific demographic (Dohrenwend, 1973; Prelow & Loukas, 2003).

In support of our first hypothesis, stressful life events were significantly and negatively associated with psychological well-being and academic achievement, such that youth reporting higher levels of stress also had higher levels of depressive and anxiety symptoms and lower grades, educational values, and school effort. These results echo related research highlighting the wide-ranging negative impact of stressful life events among youth (Morales & Guerra, 2006; Levitt et al., 1994). Increased independence during adolescence, coupled with an environment consistently marked by uncontrollable or unexpected events, may challenge youths' well-being and academic success, potentially accounting for this finding (Fredricks & Eccles, 2010; Smetana, 1988). As Latino adolescents are especially likely to live in stressful environments, they may be more prone to experiencing the negative psychological and academic outcomes revealed in this study.

Results failed to support the second hypothesis: extracurricular participation was not significantly related to increased psychological well-being or academic success. Several authors hypothesize a threshold to the benefits of extracurricular participation, whereby a cut off exists after which excessive time spent in different extracurricular activities may actually detract from potential academic gains (Fredricks & Eccles, 2010; Mahoney, Harris & Eccles, 2006). This may be due to heavily involved youth having less time or energy available to commit to their academics. However, overwhelmingly, empirical findings have not supported a negative relationship between time commitment to participation and positive adjustment (Darling, 2005; Fredricks & Eccles, 2008; Levitt et al., 1994; Luthar, Shoum & Brown, 2006; Mahoney, 2000). Hence, in light of previous research, the present results may reflect an idiosyncratic trend within our specific sample. On the other hand, the majority of previous research on the benefits of extracurricular participation has been conducted with Caucasian, suburban youth. Future

research on this topic among Latino adolescents is needed to clarify the impact of extracurricular activity participation on their psychological well-being and academic success.

High parent-child cohesion and parental school involvement were expected to relate positively to psychological well-being and academic outcomes. Results partially supported this third hypothesis. Parental school involvement was related to educational values and school effort. This aligns with the theory of parental school involvement as a form of social capital, in which the importance of education and social networking can be modeled through parent-teacher relationships (Turney & Kao, 2009). If children observe parents' effort to make their education a priority, such values can reinforce the importance of their own academic achievement, as well as maintain a sense of accountability between the school and home settings. Parent-child cohesion also positively related to youths' educational values, further supporting the link between the home and school contexts. Children who feel closer to their parents may be more likely to uphold expressed educational values and work towards a level of academic achievement to meet parental satisfaction. Cohesion also negatively related to depressive symptomology, a commonly observed association in the literature (Cumsille & Epstein, 1994; Houltberg et al., 2011). Although past research indicates a negative relationship between parent-child cohesion and anxiety, this was not supported in the current study (Varela et al., 2009). The present sample included primarily economically disadvantaged youth, and given the increased likelihood for adolescents facing economic hardship to encounter a wide array of stressors, cohesion may not sufficiently protect against anxiety-invoking situations despite offering support to cope with such emotions after the fact. Of particular interest, while parental school involvement related to adolescent outcomes only within the school domain, parent-child cohesion was significantly related to depression as well as academic outcomes, emphasizing cohesion as particularly

important in promoting positive development across various domains in the lives of Latino youth.

The fourth hypothesis, which predicted a moderating effect of parent-child relationships on the negative relations between stressful life events and psychological well-being and academic achievement, was only partially supported. Parental school involvement significantly moderated the relationship between stressful life events and depression and approached significance in moderating the relationship between stressful life events and anxiety. These moderating effects are depicted in Figure 2, which shows that higher levels of parental school involvement mitigated the negative relation between stressful life events and depressive symptomology. Although previous literature shows various academic benefits for youth whose parents are involved in the school setting, the relation between such involvement and psychological benefits has not thoroughly been investigated (Fan & Chen, 2001; Woolley, Kol & Bowen, 2009). Parental school involvement may reinforce a level of availability and support for youth, offering a sense of security especially important in high stress environments. Parental school involvement tends to decrease during adolescence, and is significantly lower still among many socioeconomically disadvantaged, ethnic minority, and immigrant families (Baker & Stevenson, 1986; Carter & Wotkiewicz, 2000; Kuperminc, Darnell & Alvarez-Jimenez, 2008). Thus, these results suggest that investigating ways in which promoting school involvement among parents can bolster psychological well-being in adolescents may be especially important for low-income Latino families.

Parent-child cohesion did not significantly moderate any relations between stressful life events and either psychological well-being or academic achievement. This is surprising, given the wealth of data supporting positive psychological and academic outcomes among youth

reporting high levels of cohesion (Cumsillle & Epstein, 1994; Houltberg, Henry, Merten & Robinson, 2011; Lac et al., 2011). In this sample, parent-child relationships did not protect against negative outcomes associated with stressful life events. Thus, it appears that while parent-child cohesion may offer direct benefits for youths' psychological well-being and academic success, it does not provide further protective effects to compensate for the negative impact of stressful life events. This indicates that aside from a secure family life, supplementary support may be necessary to maximize positive development among socioeconomically disadvantaged ethnic minority youth.

The final results of this study reveal that one such source of supplementary protective support may come from participation in extracurricular activities. Indeed, the fifth hypothesis, which predicted moderating effects of extracurricular activity participation on the negative relations between stressful life events and both psychological well-being and academic achievement, was partially supported. Extensive participation in extracurricular activities moderated the impact of stressful life events on depressive symptomology, such that youth who participated in more extracurricular activities intensively experienced a weaker impact of stressful life events on depressive symptoms. These findings extend prior research by highlighting that extracurricular activity participation not only promotes positive development among Latino adolescents, but also buffers the negative impact of stressful life events. Figure 3 shows that this moderating effect made the difference between clinical and non-clinical levels of reported depressive symptomology among Latino adolescents. Youth engaging in the greatest number of activities intensively experienced a significantly weaker association between stressful life events and depressive symptoms. Thus, a positive school experience may be critical in

shaping Latino youths' positive development, specifically within the context of stressful life events.

The results from the present study must be considered in light of some limitations. First, the Latino sample consisted mostly of youth of Dominican and Puerto Rican origin, thus limiting the potential to generalize current findings to the Latino population as a whole. Secondly, this study was cross-sectional, precluding causal inferences. Longitudinal studies examining these relations among Latino adolescents are needed to highlight a clearer pathway by which stressful life events may be moderated by protective factors such as parent-child relationships and extracurricular activity participation. In addition, results arise from five statistical tests, thereby increasing the likelihood of Type I errors. After conducting a Bonferoni correction, the moderating effect of intense participation on the negative relation between stressful life events and depressive symptomology becomes non-significant ($p > .01$), raising the possibility that such relations emerged simply due to chance. Therefore, the validity of these results would benefit from replication in future studies.

When assessing the role of extracurricular activities in protecting against stressful life events, it is also important to consider a potential selection bias. Selection bias, in this instance, refers to the likelihood that the students choosing to participate in extracurricular activities are those who are already doing well. In such a case, positive results may reflect preexisting differences in skill and adjustment among participants. Indeed, behaviors resulting in extracurricular participation are generally consistent throughout the elementary years. Posner and Vandell (1999) reported that third graders with higher grades and better emotional adjustment, in the fifth grade, were more likely to participate in activities that are structured and academically focused. In the fifth grade, participation in activities more likely to result in

problematic behavior, such as hanging out with friends or other unstructured activities, is commonly reported among youth who already displayed problem behaviors in the third grade (Posner & Vandell, 1999). Thus, while extracurricular activity participation may indeed promote positive youth development, a selection bias may at least in part contribute to this relation. Although a possible limitation to the current findings, this does highlight the importance of seeking longitudinal data regarding extracurricular participation to rule out the potential effects of selection bias. Moreover, innovative techniques in causal inference should be employed in future studies to help disentangle the effects of selection biases versus genuine effects of extracurricular participation. For instance, researchers have used propensity score approaches to account for selection effects in assessing the impact of students' part-time employment on outcomes (Monahan, Lee & Steinberg, 2011). This approach is aptly suited to evaluating the impact of extracurricular involvement on positive youth development in light of potential selection effects.

The results presented in this study offer important directions for future research, as well as information that may be useful in the promotion of positive youth development among Latinos, the largest growing youth population in the United States (Prelow & Loukas, 2003; U.S. Census Bureau, 2007). The current findings suggest that different social spheres, namely the school and family life, both play important roles in aspects of positive development among Latino adolescents. Prior findings in the literature indicate that there is substantial variability in the benefits that adolescents derive from extracurricular activities. Levels of participation vary between groups of adolescents and Latino youth are least likely to participate (Darling, 2005). Sports, in particular have generated great debate in terms of their influence on youth adjustment (Eccles & Barber, 1999). Socioeconomically disadvantaged ethnic minority students have

reported poorer developmental outcomes when participating in coached sports, in comparison with Caucasians, who showed poorer adjustment when participating in unstructured activities (Posner & Vandell, 1999). These results suggest that youth may vary in the types of extracurricular activities that are most beneficial for them, especially in light of their socioeconomic contexts. Interscholastic, structured sports that increase participants' breadth of social connections have been suggested to offer increased benefits compared to less structured sports (Broh, 2002). Activities providing greater access to supportive relationships may be especially important among low-income adolescents living in high stress environments. Given that these results support greater benefits among youth reporting more time intensive participation, particular emphasis should be placed on the context in which extracurricular participation is measured. Specifically, it may be intensive commitment to activities, rather than general participation, which elicits positive outcomes among participating low-income youth. However, further research in this area may benefit from focusing on which *specific* types of activities yield the strongest positive relationships with adjustment and academic achievement among Latino adolescents.

Given the potential protective effects of extracurricular activities on positive youth development, it may be important to promote activity participation from an early age. This also offers new directions for future research to investigate precisely how extracurricular activity participation may buffer against the negative effects of experiencing stressful life events. Research focusing on specific aspects of extracurricular participation such as social network building or coping strategies, may offer a deeper understanding of how positive adjustment can be promoted among youth. There is some support for the importance of parental involvement, suggesting that schools serving primarily Latino populations may be better able to promote

positive adjustment among students by fostering greater parental involvement in school. A closer examination of participation may offer insight on how such a protective factor may also buffer against other related contextual risk factors such as community violence or home conflict, since the underlying processes may be similar.

The present study adds to a limited literature highlighting the role of time-intensive extracurricular participation and parent-child relations on the negative impact of stressful life events among Latino adolescents. A closer examination of these protective factors, coupled with an increased emphasis on engagement in extracurricular activities and parental school involvement as more central components of the Latino adolescent experience, may play a crucial role in promoting positive development among Latino youth.

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Table 1

Summary of Variable Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Sex	----													
2. Age[a]	-.007	----												
3. School 1[b]	-.24***	.05	----											
4. School 2	.14*	.07	-.25***	----										
5. School 3	-.08	.07	-.26***	-.27***	----									
6. SLE	.04	.06	-.03	.09	-.04	----								
7. Parent-Child Cohesion	-.14*	.05	.19**	-.04	-.09	.08	----							
8. Parent School Involvement	-.12	.01	.06	-.11	-.05	-.04	.44***	----						
9. Intense Participation	-.11	.11	.13	.02	.008	.07	.09	-.02	----					
10. Depression	.18**	.09	-.12	.05	.10	.28***	-.03	-.11	.02	----				
11. Anxiety	.37***	-.01	-.07	.13*	-.20**	.34***	-.03	-.10	-.02	.58***	----			
12. Grades	.20***	-.12	-.15*	.08	.006	-.30***	-.06	-.03	-.15†	-.21**	-.07	----		
13. Educational Values	.01	-.003	.05	-.01	.03	-.26***	-.04	.01	.08	-.28***	-.13†	.26***	----	
14. School Effort	.11	.000	-.07	.11	.02	-.24***	-.10	-.13†	-.10	-.35***	-.13†	.39***	.53***	----

Note. Ns range from 159 to 223.
*$p < .05$ (2-tailed). **$p < .01$ (2-tailed). ***$p < .001$(2-tailed), †marginally significant (p = .06).
[a]male = 0, female = 1.
[b]dummy coded school variables compared to parochial.

Table 2

Linear regressions examining the moderating effects of time-intensive participation, parent-child cohesion, and parental school involvement.

Predictor Variables	Depression		Anxiety		Grades		Educational Values		School Effort	
	β	SE B	β	SE B	β	SE B	β	SE B	β	SE B
Step 1										
Constant	2.78	11.67	7.39*	3.19	4.62***	1.29	5.19	1.00	4.71***	1.16
Sex[a]	2.69*	1.17	1.60***	.32	.33*	.13	.14	.10	.20	.12
Age	.31	.81	-.09	.22	-.13	.09	-.06	.07	-.07	.08
School Dummy 1[b]	-.29	1.58	-.11	.43	-.17	.18	.14	.14	-.14	.16
School Dummy 2	2.48	1.45	.61	.40	.16	.16	-.11	.13	.04	.15
School Dummy 3	2.67	1.55	-.78	.43	.12	.17	.11	.13	.003	.16
F	2.72* (5, 152)		8.40*** (5, 152)		3.06* (5, 149)		1.14 (5, 150)		1.17 (5, 150)	
R^2	.08		.22		.09		.04		.04	
Step 2										
Constant	2.22	11.11	6.99*	3.15	4.18**	1.25	5.12***	.88	4.30***	1.05
Sex	2.25*	1.10	1.54***	.31	.33	.12	.20*	.09	.23*	.10
Age	.38	.77	-.07	.22	-.10	.09	-.06	.06	-.04	.07
School Dummy 1	-.17	1.52	.06	.43	-.21	.17	.11	.12	-.15	.14
School Dummy 2	1.88	1.37	.55	.39	.24	.16	-.02	.11	.08	.13
School Dummy 3	2.55	1.48	-.67	.42	.08	.17	.12	.12	.02	.14
Stressful life events	.14**	.05	.05**	.01	-.02***	.006	-.02***	.004	-.02***	.005
Cohesion	-1.08**	.35	-.17	.10	-.04	.04	.07*	.03	.04	.03
School involvement	-.59	.84	.16	.24	.10	.10	.19**	.07	.24**	.08
Intense participation	.35	.66	.04	.19	-.08	.07	.07	.05	-.033	.06
F	4.63*** (4, 148)		6.56*** (4, 148)		4.03***(4, 145)		6.75***(4,146)		5.83***(4, 146)	
R^2	.22		.29		.20		.29		.26	
ΔR^2	.14***		.07**		.11**		.26***		.23***	
Step 3										
Constant	-1.28	10.91	6.48*	3.16	4.11**	1.27	5.24***	.89	4.23***	1.06
Sex	2.25*	1.09	1.57***	.32	.32*	.13	.21*	.09	.21†	.11
Age	.65	.75	-.03	.22	-.10	.09	-.07	.06	-.04	.07
School Dummy 1	-.57	1.50	-.03	.43	-.21	.17	.11	.12	-.12	.15
School Dummy 2	.89	1.30	.38	.30	.23	.16	.01	.11	.08	.14
School Dummy 3	2.26	1.45	-.72	.42	.09	.17	.14	.12	.02	.14
Stressful life events	.16**	.05	.05**	.01	-.02***	.006	-.02***	.004	-.02***	.005
Cohesion	-.91	.35	-.14	.10	-.04	.04	.06*	.03	.03	.03
School involvement	-.95	.83	.08	.24	.09	.10	.20**	.07	.26**	.08
Intense participation	.52	.66	.06	.19	-.07	.08	.08	.05	-.04	.06
Cohesion X SLE[c]	.04	.03	.01	.01	-.001	.004	-.001	.003	-.005	.003
Involvement X SLE	-.22**	.07	-.04†	.02	-.001	.009	.01	.006	.001	.007
IP[d] X SLE	-.14*	.07	-.02	.02	-.005	.008	0	.005	.003	.006
F	4.55*** (3, 145)		5.34*** (3, 145)		3.02** (3, 142)		5.22*** (3, 143)		4.54*** (3, 143)	
R^2	.27		.31		.20		.31		.28	
ΔR^2	.05*		.02		.003		.01		.01	

*** $p < .001$, ** $p < .01$,* $p < .05$; †marginally significant ($p = .06$)

[a]male = 0, female = 1

[b]dummy coded school variables compared to parochial school

[c] SLE = Stressful life events

[d] IP = Intense participation

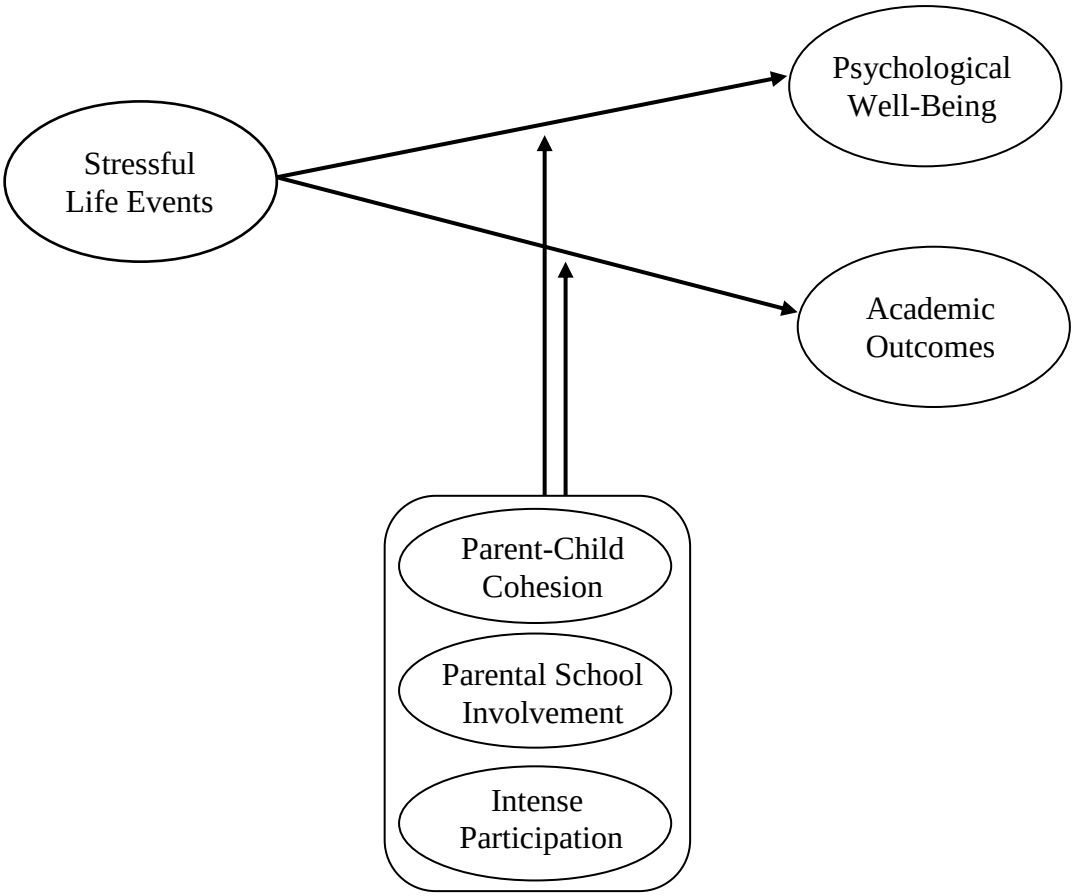

Figure 1. Hypothesized model for current investigation.

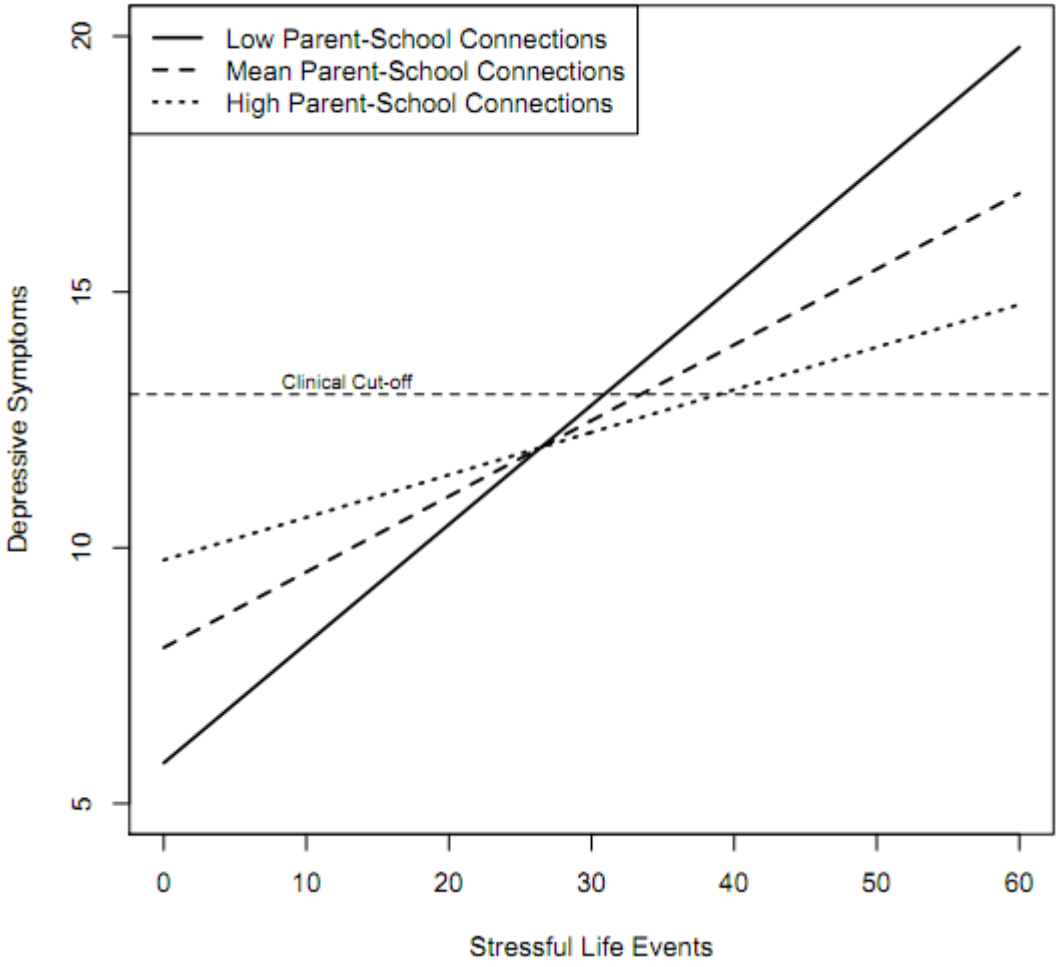

Figure 2. Moderating effects of parental school involvement on the negative outcomes associated with stressful life events and depression.

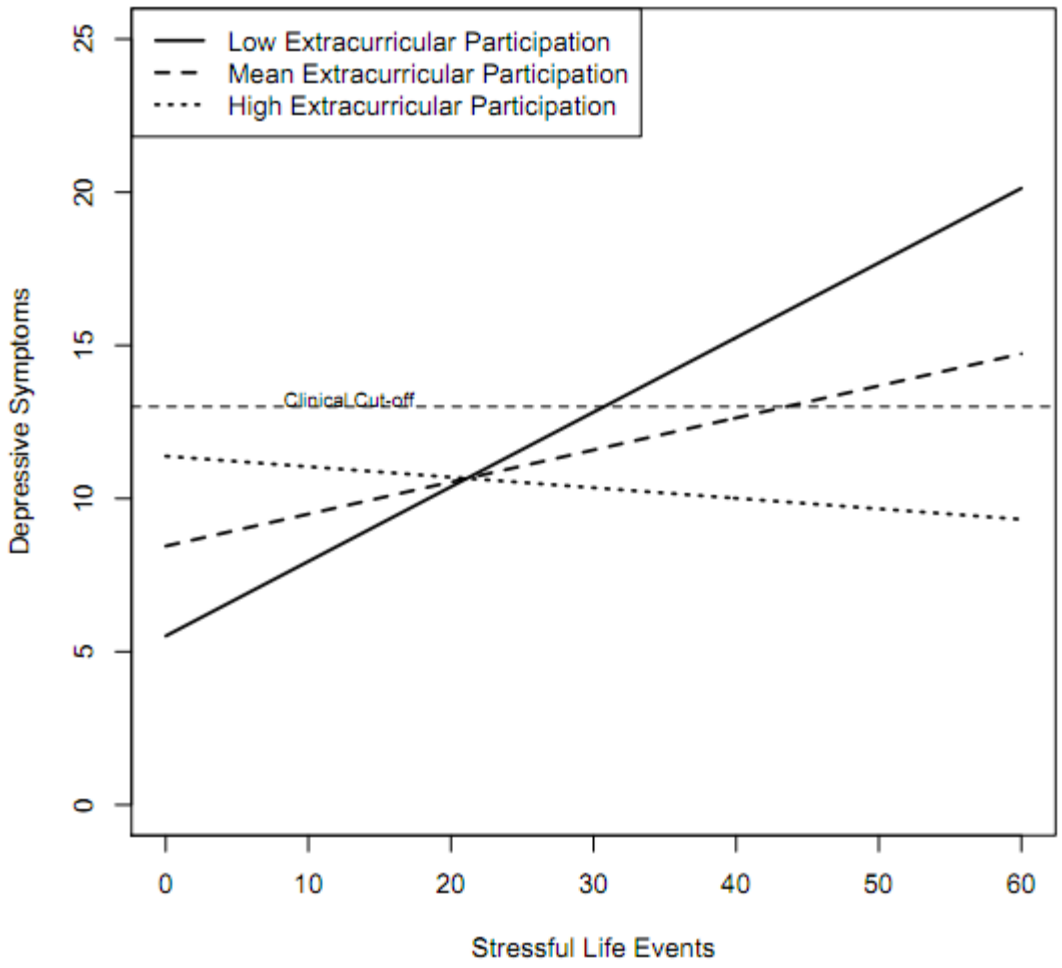

Figure 3. Moderating effects of extracurricular participation on the negative outcomes associated with stressful life events and depressive symptomology.