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EMPIRICAL RESEARCH

Mexican-Origin Youth Participation in Extracurricular Activities: Predicting Trajectories of Involvement from 7th to 12th Grade

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Abstract The potential benefits of participation in extracurricular activities may be especially important for youth who are at risk for academic underachievement, such as low income Mexican-origin youth in the U.S. To advance understanding of factors that drive participation for this population, this study examined Mexican-origin youth's trajectories of participation in extracurricular activities across Grades 7–12 and tested theoretically-derived predictors of these trajectories. Participants were 178 adolescents (53.9 % Female, Mage = 12.28) and their mothers who separately completed in-home interviews. Youth reported the frequency of their participation across a range of extracurricular activities. Latent growth curve models of overall extracurricular activities participation, sports participation, and fine arts participation were individually estimated via structural equation modeling. The findings demonstrated developmental declines in overall participation and in sports participation. For fine arts, declines in participation in middle school were followed by subsequent increases during high school (a curvilinear pattern). Motivationally-salient predictors of participation trajectories included youth's traditional cultural values orientation (sports), the mothers' educational aspirations for the youth (sports, fine arts, overall activity), and youth gender (sports, fine arts). Overall, the results suggest variability in participation trajectories based on program type, and highlight the need for additional research to enhance our understanding of the impact of culturally-relevant predictors on participation over time.

Keywords Mexican-origin youth · Extracurricular activities · Participation · Latent growth curve analyses

Introduction

Youth participation in organized school and community-based extracurricular activities is associated with several indicators of positive youth development, including consistent school attendance and increased likelihood of high school graduation (e.g., Larson et al. 2006; Roth et al. 2010). Because extracurricular participation is associated with outcomes related to school success (e.g., Cooper et al. 1999; Roth et al. 2010), the potential benefits of participation may be especially important for youth who are at heightened risk for academic underachievement and school dropout. Low-income Mexican-origin adolescents have substantially lower rates of educational attainment compared to other racial/ethnic minority youth in the U.S. (Suárez-Orozco et al. 2008). Regrettably, they are also among those least likely to participate in extracurricular activities (Brown and Evans 2002; Feldman and Matjasko 2005; Perkins et al. 2007). Thus, an understanding of factors that facilitate Mexican-origin youth participation can potentially inform programs, practices, and policies that might also boost academic outcomes such as school engagement and graduation rates for this population.

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Researchers are just starting to examine the specific interests and experiences of Latino youth in the context of extracurricular activities (e.g., Simpkins et al. 2012). Thus, very little is known about developmental trends in their participation, such as whether their participation remains stable or drops off as Latino adolescents move through high school. Moreover, there is limited empirical evidence of factors that facilitate participation among racial/ethnic minority youth generally, and specifically among the various Latino populations in the U.S. (Fredricks and Eccles 2010; Fredricks and Simpkins 2012; Waldfogel and Lahaie 2007). The current study addressed these gaps in the literature with a specific focus on U.S. Mexican-origin youth. First, we mapped Mexican-origin youth's participation trajectories (i.e., frequency of involvement per week) across Grades 7–12 using latent growth curve modeling. Modeling participation trajectories provides an important developmental perspective for determining time points when Mexican-origin adolescents may be at greatest risk for low or declining participation. Next, we tested theoretically-informed predictors of these trajectories, including culturally-relevant predictors, to examine what drives Mexican origin adolescents' participation levels and the degree and direction of change in their participation across middle and high school.

Studying Participation Trajectories: A Developmental Perspective

We drew on a life-span development perspective (e.g., Baltes et al. 1980) to guide our investigation of extracurricular participation trajectories. This perspective suggests that individuals have developmental tasks and competencies that vary depending on their age or developmental stage. For instance, compared to children, adolescents' increased cognitive capacity (e.g., improved reasoning, information processing efficiency) should facilitate a more sophisticated processing of extracurricular experiences and how these experiences relate to their values and future goals (e.g., Williamson et al. 2014). As a result, developing adolescents can increasingly align their participation experiences with their own agenda for the future. Adolescents' participation likely also responds over time to factors such as shifts in opportunities that are available to them across middle and high school, and pulls to invest time in pursuits that are relevant to their changing developmental needs (e.g., more time with peers in middle school, preparing for jobs or college in high school). Based on these perspectives, we postulated that there would be significant change over time in extracurricular activities participation among the adolescents in our sample. However, given limited prior research with Mexican-origin youth, we did not have a priori hypotheses about the developmental course of these trajectories.

We identified only two studies that have examined extracurricular activities participation trajectories. Denault and Poulin (2009) assessed participation from Grades 7 to 10 across multiple types of extracurricular activities that included sports, fine arts, and youth clubs among French Canadian youth. These researchers found that overall participation remained stable across the high school years. In contrast, Pedersen (2005) examined linear growth trajectories for diverse inner city youth over 3 years for three extracurricular activity domains—school, religion, and team sports. Their study included a younger cohort (assessed in the final year of elementary school and the first 2 years of middle school) and an older cohort (assessed in the final year of middle school and the first 2 years of high school). They found that participation generally declined over time for school-based and team sports, and increased over time for religious activities. Overall, the findings point to the importance of examining trajectories of participation for distinct types of activities and in relation to key developmental periods. Additionally, Pedersen's (2005) study tested linear trajectories only, which may have limited their ability to capture meaningful variation in participation across middle and high school. We examined linear and non-linear growth in the current study to allow for a more comprehensive exploration of participation trajectories and possible predictors. For example, this approach allows us to map fluctuations in participation that may occur across middle and high school, beyond simple increases and decreases. In addition, we examined linear and non-linear change in participation using a composite of multiple activities and also for sports and fine arts, two of the most popular categories of extracurricular activity (e.g., See Mahoney et al. 2009).

Predictors of Participation Trajectories

Youth and Parental Aspirations

One of the leading theories on the impact of motivational beliefs is the Eccles expectancy-value theory (Wigfield and Eccles 2000). According to this theory, the most immediate predictors of participation are youth's motivational beliefs. Specifically, youth are more likely to participate if they value the activity (e.g., believe that doing this activity will be useful for something). Furthermore, individuals will adjust their beliefs based on their experiences in the activities. Prior studies support the relevance of motivational beliefs for participation in extracurricular activities, including youth's future aspirations. Dawes and Larson (2011) found that participation in diverse youth programs involved a dynamic process whereby adolescents learned about the programs' goals and opportunities for involvement, and evaluated how these fit with their personal values and interests. Sustained participation was related to

youth's perceptions that the program fit well with their values and aspirations for the future. In other words, participation was guided by their beliefs that participation would provide access to opportunities relevant to their lives. Consequently, youth may be motivated to sustain, increase, or drop activities over time depending on their future goals, including their aspirations for secondary and postsecondary education.

Parents' educational aspirations for their children might also influence youth participation in extracurricular activities. Parents are socialized to view extracurricular activities as a source of opportunity for their offspring. For example, parents may view these activities as providing resources for offspring to gain markers of success and assets for future advancement, or as experiences that enrich student skills and learning (e.g., Kaufman and Gabler 2004). In this way, parents' aspirations for their children to achieve higher levels of education, including going to college, may motivate parents to offer direct and indirect support for youth participation over time. Although prior studies consistently link parental aspirations with their children's achievement behaviors (e.g., Bandura et al. 1996; Englund et al. 2004) longitudinal studies have not examined whether parental aspirations influence youth participation in extracurricular activities. This question is especially relevant for low-income Mexican-origin families because they often have high academic aspirations but may lack practical understanding, also called "funds of knowledge," needed to help their children realize these goals (Cooper et al. 1994; Moll et al. 2013). Hence, they may not interpret participation in extracurricular activities as an opportunity toward future advancement (Simpkins et al. 2011). The present study examined the impact of youth and parental educational aspirations on extracurricular participation over time, using reports from maternal caregivers as a first step in examining these predictors with a Mexican-origin sample.

Youth and Parent Cultural Values

In addition to educational aspirations, culturally-linked value orientations may also be important drivers of adolescent extracurricular participation. Culturally-linked value orientations may influence this participation because they guide attention to and interpretations of opportunities and experiences. They also organize and drive behavior congruent with those values (e.g., Larson and Rusk 2011). In the current study, we examined Mexican-origin youth's and parents' orientation toward traditional Mexican values and their orientation toward mainstream U.S. cultural values as two broadly conceived constructs. This approach is supported by accumulating evidence showing that these broad domains play an important role in shaping a wide range of developmental outcomes (Gonzales et al. 2009); prior measurement work shows that the distinct value dimensions that comprise these constructs are best represented by these two broad factors (Knight et al. 2010).

Although values have rarely been studied in relation to extracurricular activities, theoretically it has been suggested that traditionally oriented youth may be less likely to participate because of their strong orientation to the activities, needs, and influence of their own cultural group, particularly their families. For example, traditionally oriented youth may be less likely to pursue activities that require more time away from family or that impede the higher level of family obligations they may be expected to fulfill (e.g., household chores and childcare) (Simpkins et al. 2011). Traditionally oriented parents also may be less likely to support extracurricular activities for similar reasons. On the other hand, there also is evidence that Mexican–American adolescents' orientation to traditional culture and values may operate as a protective mechanism because it motivates them toward school success and other achievements that reflect well on the family (Berkel et al. 2010; Germán et al. 2009). Thus, it is possible that traditionally oriented youth may be more inclined toward these extracurricular activities out of heightened desire to succeed for the sake of the family. The current study addressed these as opposing hypotheses that have not been previously tested.

Although there has been limited research overall linking cultural *values* per se to participation in extracurricular programs, a few prior studies have found that Mexican-origin youth that are more oriented toward Anglo culture have higher rates of extracurricular participation (Davalos et al. 1999; Simpkins et al. 2011), including higher rates of participation in sports and academic activities specifically (McHale et al. 2009). Potential explanations have centered on the greater integration of these youth in mainstream peer activities or to the individualistic, achievement-oriented values associated with mainstream culture. In the present study, we examined the link between mainstream values and extracurricular participation using a composite of value dimensions identified by Mexican-origin adolescents and adults to characterize mainstream U.S. culture. These dimensions, subsequently shown to comprise a higher order mainstream values factor for Mexican origin adolescents and parents, included three value dimensions: personal achievement and competition, material success, and self-reliance. We hypothesized that youth and mothers who endorse these values as being important in their own lives may be more motivated to participate in extracurricular activities overall because they are more oriented toward the mainstream school setting and peers, and because they view these activities as possible vehicles toward success (i.e., sports scholarship, college admittance) (Kaufman and

Gabler 2004). Further, we hypothesized that adolescents from these families may be especially likely to pursue and sustain participation in activities, such as sports, that explicitly promote the mainstream value of competitiveness (Cota and Knight 1991).

The Role of Gender

The expectancy-value theory of motivation suggests that culture-based values may influence adolescents' participation by shaping their expectations and stereotypes about gender-appropriate activity and participation (Wigfield and Eccles 2000). The internalization of these messages may manifest in adolescents' extracurricular choices. For instance, boys are socialized to be more competitive—traits which may fit well with sports participation in general. Further, research on Mexican–American culture suggests that gendered expectations may be highly pronounced for this group (Cauce and Domenech-Rodriguez 2002). Gendered expectations are conveyed through parents' encouragement or directives for how girls (vs. boys) can spend their discretionary time. Research has shown that Latina girls perceive clear expectations to devote time to household-related responsibilities (Perkins et al. 2007). In fact, studies with Latino youth show that boys participate in sports more than girls (e.g., Erkut and Tracy 2002; McHale et al. 2009) and girls participate in fine arts more than boys (Borden et al. 2006).

Further, because expectations related to life aspirations and cultural values are strongly rooted in gender role expectations, these motivational factors may interact with gender in the prediction of extracurricular trajectories. For example, to the extent that the success of boys is given greater weight within Mexican–American families, the link between parental aspirations and youth extracurricular participation may be stronger for boys because their parents may be more invested in promoting and advancing their goal-oriented striving. Mainstream achievement values also may show a stronger link to male's participation in sports because sports are viewed as an appropriate means for boys to demonstrate their masculinity. Few studies have examined the interplay of gender and cultural influences on extracurricular participation to date. In a rare exception, Simpkins et al. (2011) found that gender differences in extracurricular activities were less pronounced or non-existent in more traditionally oriented Mexican-origin families, which contradict the theory that would suggest that gender differences might be more pronounced in these families. However, they also found that foreign-born youth participated in extracurricular activities at higher levels. Thus, it is possible the heightened achievement motivation of immigrant families functioned to raise participation levels overall, thus eliminating differences typically shown between boys and girls.

Clearly, the interplay of culture, gender, and extracurricular activities is complex and there is need for further study. In the current study, we examine the effects of gender on participation and the interaction of gender with aspirations and cultural values to predict these trajectories. By examining linear and quadratic trajectories, we assess whether hypothesized influences predict early level of participation as well as change in participation across two key developmental transitions. It is possible, for example, that youth in more traditional families might be more inclined toward extracurricular participation in middle school but less likely to sustain participation in high school as they start assuming more responsibilities, such as jobs to support the family. The current study tests for this possibility.

Study Goals and Hypotheses

Our first research goal was to examine trajectories of extracurricular participation among low-income Mexican-origin youth over middle and high school. Participation was assessed in the fall and spring semester of Grade 7, and again in Grades 8, 9, and, 12. The initial seventh grade assessment corresponded with the transition to middle school for all youth, and thus provides a critical assessment of participation levels at the beginning of the middle school years. This is an important educational juncture because it is often when youth in low-income communities are exposed to multiple options for school or community-based activities for the first time (Eder and Parker 1987). Because previous studies that have examined trajectories are mixed (e.g., Denault and Poulin 2009; Pedersen 2005), in that both declining and stable trends in participation have been found, we adopted an exploratory stance regarding predictions about stability versus change in participation over time.

Our second research goal was to determine whether educational aspirations and cultural values of youth and their mothers predict early extracurricular involvement and change in involvement across Grades 7 through 12. We hypothesized that youth and maternal future educational aspirations measured immediately following youth's transition to middle school would predict increased early participation and higher likelihood of sustained participation over time. Given opposing hypotheses, we took an exploratory approach in examining youth's and their mother's traditional cultural values as predictors of extracurricular trajectories. We predicted that mainstream cultural values would predict higher early participation and more sustained participation over time, particularly for sports activities. Finally, we hypothesized that gender would predict specific types of extracurricular participation, the link between aspirations and extracurricular activities would be stronger

for boys. Interactions between gender and cultural values were also tested, but specific hypotheses were not advanced given the lack of prior studies directly testing such effects.

Methods

Participants

Study data come from a longitudinal follow-up of an efficacy trial for a broadly aimed prevention and promotion program that builds youth and parent competencies to reduce multiple problems following transition to middle school among 516 Mexican-origin adolescents (Gonzales et al. 2012). Participants were 178 adolescents and their parents randomized to the control group that did not receive any of the active ingredients of the intervention. The original sample of 7th graders was recruited from four large middle schools in lower income communities in a large Southwestern U.S. city. The participating middle schools were of similar size (ranging from 982 to 1141 students) and served 7th and 8th graders only; thus, all 7th graders had recently experienced the transition from elementary to middle school at the initial assessment and most made the subsequent move to high school in 9th grade. Across all of the schools, Latino youth made up 85 % or more of the total enrollment and the percentage of students eligible for free and discounted lunch ranged from 68 to 78 %. For this sample, parent-reported mean household income was $35,942 (SD = $18,736). The majority of the students (84.2 %) resided in two-parent households. Maternal and paternal caregivers reported on their highest level of education completed, which could range from 0 (no schooling) to 20 (advanced graduate degrees). The highest level of education obtained by either parent within a family, on average, was 10.83 (or roughly high school Grade 11). By this index, slightly more than half of the families (51.8 %) included at least one parent who had completed high school. In the fall of 7th grade, the mean age of the youth was 12.28, and 53.9 % were female.

Procedures

Flyers were sent out to middle school families, after which school rosters were used to randomly select families for recruitment (see Carpentier et al. 2007). A total of 2036 families were identified through this process across the four participating schools. The families first received a letter from the school describing the intervention study, which was followed by a phone call from a recruiter who determined eligibility and invited eligible families to participate. Approximately 38 % of families were not screened (either due to inability to locate the family or refusal to be screened), 15 % were ineligible, and 47 % (n = 957) were both screened and deemed eligible based on the following criteria: 7th grade student of Mexican descent, at least one caregiver of Mexican descent willing to participate, and family willing to be randomly assigned to the 9-week intervention or a brief workshop (control condition).

Data were obtained through in home, computer-assisted interviews conducted by trained bilingual interviewers (85 % identified as Mexican origin). Youth were interviewed and administered questionnaires at five time points: fall of Grade 7, spring of Grade 7, spring of Grades 8, 9 and 12. Data from parent interviews conducted during the fall of grade 7 were used for the current study. Participants were given the option of conducting the interviews in Spanish or English; 47 % of mothers and 98 % of adolescents elected English. Interviewers read each survey question and possible response aloud to reduce problems associated with variations in literacy, and participants' responses were entered by the interviewer on laptop computers. All measures were translated and back-translated to ensure equivalence of all content (Behling and Law 2008). Each participant received monetary compensation for participation.

Youth Report of Future Educational Aspirations

Youth reported on their future educational aspirations at the first wave of data collection, during the fall of 7th grade, by answering the following question: (1) "When you think about your future, what is the highest level of education you want to attain?" (1 = *You will graduate from high school*; 5 = *You will attend graduate or professional school after college*). In fall of 7th grade, the mean for this variable was 3.76 (SD = 1.37), corresponding to somewhere between a 2 years community college degree (3) and a 4 years college degree (4).

Mother Report of Future Educational Aspirations

Parents also reported on their future educational aspirations for their child at the first data collection wave, during the fall of their child's 7th grade year. We used only mothers' reports for the current study as a sufficient number of fathers did not report on these variables to conduct proposed analyses. An average of three items were used to measure parent's future educational aspirations: for example, "How far do you want your child to go in school?" (1 = *Quit school now*; 7 = *Attend graduate or professional school after college*). Higher scores on this measure indicated high parental educational aspirations. This scale had sound reliability (alpha = .76). The mean for this variable was 5.90 (SD = 1.13), which corresponds approximately with graduation from a 4-year college.

Youth and Parent Cultural Values

To measure youth's and mothers' adherence to mainstream value orientation (MVO) and traditional Mexican value orientation (TVO) two subscales that comprise the Mexican–American Cultural Values Scale (MACVS) (Knight et al. 2010) were used, both assessed at wave 1, during the fall of the child's 7th grade year. Adolescents and their mothers answered parallel items and both were prompted that the MACVS asks their "opinion about how (they) think people should behave." Thus, responses on the MVO and TVO subscales reflect adolescents' and adults' own cultural values. Both subscales have been validated for use with adolescents and adults (Knight et al. 2010) and both were based on a five-point scale, from (1) Strongly disagree to (5) Strongly agree. The mainstream values subscale was comprised of 14 items ($Mean_{Youth\ MVO} = 3.30$; $SD = .60$; $Mean_{Maternal\ MVO} = 3.30$; $SD = .62$). Sample items include: "Parents should teach their children to compete to win" and "The most important thing parents can teach their children is to be independent from others;" Cronbach's $\alpha_{Youth\ MVO} = .77$; Cronbach's $\alpha_{Maternal\ MVO} = .79$. The traditional Mexican values subscale was comprised of 36 items ($Mean_{Youth\ TVO} = 4.27$; $SD = .40$; $Mean_{Maternal\ TVO} = 4.23$; $SD = .41$); for example: "Parents should teach their children that the family always comes first" and "It is important to work hard and do one's best because this work reflects on the family;" Cronbach's $\alpha_{Youth\ TVO} = .89$; Cronbach's $\alpha_{Maternal\ TVO} = .87$.

Youth Participation in Extracurricular Activities

The measure of extracurricular activities used in this study asked youth to report on the frequency of their participation. At each of five waves of data collection, youth were asked to report how often they participated in seven types of activities including, sports, fine arts, in- and out-of-school clubs, special activities to help with academics, and church and volunteer-based activities. Responses were coded on a nine-point scale that represents monthly average participation during that time period from 0 (Never) to 8 = (Several times each week). A total participation score was created at each wave, based on total summed reported frequency of participation across all seven areas of participation ($Mean_{Total\ ECA\ Grade\ 7} = 11.64$; $SD = 7.67$). Higher scores indicate higher frequency of participation. In addition, we were particularly interested in assessing participation in extracurricular activities that have been identified as typically offered in many schools and communities. As such, organized team sports and fine arts participation were chosen as two representative activities to examine more closely at each wave. The following item was used to measure participation in sports and fine arts, respectively: "How often do you participate in any organized team sports activities, like basketball, baseball, football, soccer, volleyball, swimming, gymnastics, or anything else?" (0 = *Never*; 8 = *Several times each week*); "Outside of your regular classes, how often do you participate in any fine arts or performing arts activities, like drama, dance, marching band, photography, or anything else?" (0 = *Never*; 8 = *Several times each week*). Higher scores indicate higher frequency of participation ($Mean_{Sports\ ECA\ Grade\ 7} = 3.90$; $SD = 3.28$; $Mean_{Fine\ Arts\ ECA\ Grade\ 7} = 2.02$; $SD = 2.93$).

Analytical Strategy

To test the models predicting extracurricular participation, a series of latent growth curve models were estimated via structural equation modeling in Mplus v. 6.0 (Muthén and Muthén 2007). This type of modeling allows for the examination of developmental trajectories in which an unobserved growth trajectory is estimated based on observed repeated measures (Singer and Willett 2003). There were four main analyses steps. First, to examine trajectories of youth's participation across time, a series of unconditional (i.e., no predictors) latent growth curve models were estimated (Bollen and Curran 2006; Preacher et al. 2008). Tests of nested models using −2 Log likelihood values were used to determine the best-fitting unconditional model. In cases where models lacked significant inter-individual variation in quadratic slope, residual variances of the quadratic slope were also fixed to zero to aid model convergence. Second, a series of conditional models were then estimated, with study predictors added, to explain significant variance in the intercept and slope. Wald's Chi square tests were used to test the set of predictors for significance, analogous to an F statistic in regression or ANOVA (Enders 2010).

A third step involved examining significant interactions between variables. A significant relation between a predictor and slope is an interaction with time (Curran et al. 2004). More specifically, predictor influences on a linear slope are typically associated with earlier development, whereas predictor influences on a quadratic factor generally describes later development. Thus, we plotted significant predictors of change in participation over time to better determine the nature of their functional form. We plotted focal predictors at the mean, and at one standard deviation above and below the mean, to explicate the relation between each predictor and trajectories of participation. Finally, we examined whether the effects of hypothesized youth and parent predictors on youth participation varied as a function of gender by adding each predictor × gender interaction term separately as a predictor of the latent growth curves.

Given that lower socio-economic status (SES) is related to decreased extracurricular activity participation (e.g., Bartko and Eccles 2003), all analyses were also run with SES as a covariate (highest level of education obtained by

Table 1 Correlations between study variables at Time 1 (early Grade 7)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. M future Ed. aspr.	1									
2. M-TVO	.16*	1								
3. M-MVO	.08	.56***	1							
4. C-gender	−.06	.07	.01	1						
5. C-future Ed. aspr.	.26***	.19**	.07	−.05	1					
6. C-TVO	.18*	.40***	.13^{+}	.14^{+}	.10	1				
7. C-MVO	.07	.19**	.17*	.21**	−.05	.59***	1			
8. Sports participation	.01	.11	.03	.17*	.07	.14^{+}	−.05	1		
9. Fine arts participation	−.01	.15*	.11	−.24***	.19**	.11	.01	.08	1	
10. Total participation	.03	.23**	−.01	.01	.19**	.15*	−.07	.57***	.58***	1

M maternal, *C* child, *TVO* traditional value orientation, *MVO* mainstream value orientation

Gender = (0) female, (1) male

$^{+}$ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

either parent within a family). Perhaps because much of our sample was comprised of lower SES families (e.g., in almost 50 % of families, neither parent had completed high school), study results were substantively the same and SES was not associated with activity participation in any of the models. In the interest of parsimony, trimmed results are presented without SES. Correlations between study variables at Time 1 are provided in Table 1. Models were estimated using maximum likelihood estimation with standard errors and a Chi square test statistic (when applicable) that are robust to non-normality using Mplus v. 6.0 (Muthén and Muthén 2007).

Results

Total Participation

The unconditional model for total participation followed a quadratic form and yielded a strong model fit; $X^2 = 16.95$, $df = 8$, $p = .03$, CFI = .95, SRMR = .06. The results from nested model difference tests indicated that the best fitting model had the last time score (Grade 12) free to vary. The average level of overall activity involvement across the sample in fall of Grade 7 (controlling for subsequent changes in activity across time) was 11.42. Given that our extracurricular activity scale was coded to represent monthly average participation, 11.42 can be interpreted as equivalent to approximately three times a week. Beginning in fall of Grade 7, the growth curve suggests that youth participation exhibited declines in overall participation at a rate of 3.32 per year. In other words, participation in total activities decreased by about one less attendance a week, but the decline subsequently became less steep in later grades (quadratic slope = .74; Table 2, Model 1). Significant variation was found for the intercept, linear and quadratic slopes. Conditional models were run to explain differences in initial levels of participation and rate of change over time in total participation. The results from the conditional models indicated that the aggregate of seven predictors added significantly to the model Wald's $X^2 = 44.09$, $df = 21$, $p = .002$ (see Table 2, Model 2). Specifically, in fall of Grade 7 (intercept), maternal and youth traditional value orientation both predicted higher average participation. Maternal future educational aspirations predicted change over time in total activity participation. On the linear slope, the positive effects for maternal future educational aspirations indicates that higher aspirations was associated with less steep declines in total participation across Grades 7 and 8. On the quadratic slope, the trend level negative effect for maternal future educational aspirations suggests that maternal future aspirations was associated with a slowed rate of decrease in total extracurricular involvement.

In order to fully explore the effects of maternal future educational aspirations on trajectories of total participation, we plotted participation trajectories at the mean, one standard deviation above, and below the mean of maternal future educational aspirations. As seen in Fig. 1, there were few differences in overall participation in early Grade 7 based on maternal future educational aspirations. However, across time youth with high maternal educational aspirations reported the highest frequency and youth with low maternal educational aspirations reported the lowest frequency of overall extracurricular involvement.

Organized Team Sports Participation

The unconditional model for organized sports participation yielded a strong fit; $X^2 = 7.20$, $df = 6$, $p = .30$, CFI = .99, SRMR = .04. The average level of sport involvement

Table 2 Unconditional model and effects of covariates on overall activity involvement

Effects	Model 1	Model 2
Fixed effects		
Intercept (mean)	11.42(.55)***	11.28(.52)***
Child gender		−.50(1.05)
M future Ed. aspirations		−.27(.44)
M-TVO		3.35(1.39)*
M-MVO		−1.35(1.05)
C future Ed. aspirations		.63(.38)$^{+}$
C TVO		2.83(1.37)*
C MVO		−2.23(1.20)$^{+}$
Linear slope (time)	−3.32(1.10)**	−3.49(1.04)**
Child gender		−1.05(2.02)
M future Ed. aspirations		2.37(1.15)*
M TVO		−2.86(2.95)
M MVO		.72(2.40)
C Future Ed. aspirations		−.37(.78)
C TVO		−3.23(2.74)
C MVO		3.74(2.44)
Quadratic slope (time^2)	.74(.46)	.86(.46)$^{+}$
Child gender		.69(.89)
M future Ed. aspirations		−.90(.49)$^{+}$
M TVO		.59(1.38)
M MVO		.27(1.18)
C future Ed. aspirations		.20(.34)
C TVO		.97(1.15)
C MVO		−1.40(1.00)
Random effects		
Intercept	36.70(6.29)***	30.57(5.43)***
Linear slope	69.99(24.99)**	53.64(21.60)*
Quadratic slope	11.30(4.63)*	9.81(4.30)*
−2 Log likelihood	−2755.23	−2616.35

TVO traditional value orientation, *MVO* mainstream value orientation

$^{+}$ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

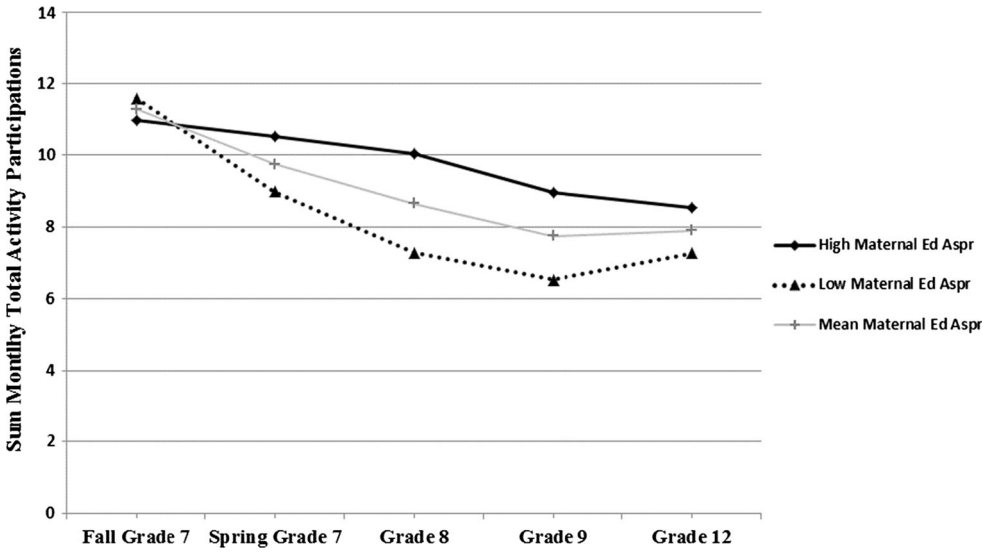

Fig. 1 Interaction between time and grade 7 maternal educational aspirations for youth on total activity participation

Table 3 Unconditional model and effects of covariates on sports involvement

Effects	Model 1	Model 2
Fixed effects		
Intercept (mean)	3.74(.22)***	3.71(.22)***
Child gender		−1.08(.42)*
M future Ed. aspirations		.14(.17)
M-TVO		.51(.50)
M-MVO		−.01(.41)
C future Ed. aspirations		.02(.15)
C-TVO		1.22(.44)**
C-MVO		−.88(.37)*
Linear slope (time)	−.84(.21)*	−.85(.21)***
Child gender		−.15(.42)
M future Ed. aspirations		.45(.18)*
M-TVO		−.15(.52)
M-MVO		.15(.42)
C future Ed. aspirations		.02(.14)
C-TVO		−1.01(.49)*
C-MVO		.30(.38)
Quadratic slope (time^2)	.09(.04)	.09(.04)*
Child gender		.07(.08)
M future Ed. aspirations		−.09(.03)**
M-TVO		.02(.09)
M-MVO		−.03(.08)
C future Ed. aspirations		.00(.02)
C-TVO		.15(.09)$^+$
C-MVO		−.04(.07)
Random effects		
Intercept	4.56(.99)***	3.83(.99)***
Linear slope	2.27(1.35)$^+$	1.26(1.29)
Quadratic slope	.07(.05)	.04(.04)
−2 Log likelihood	−2009.21	−1923.76

TVO traditional value orientation, *MVO* mainstream value orientation

$^+$ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

across the sample in the fall of Grade 7 was 3.74 which, again given our scaling based on monthly average participation, is equivalent to approximately once a week (see Table 3, Model 1). Beginning in grade 7, the growth curve suggests that youth participation in sports gradually declined at a rate of about one less attendance a month (−.84), and the rate of decline became less steep thereafter, as indicated by the positive quadratic slope (.09). Significant variation was found for the intercept and linear slope. Conditional models were run to explain differences in initial levels of participation and rate of change over time.

The results from the conditional models indicated that the aggregate of the seven independent variables predicted differences in level of participation and change over time; Wald's $X^2(21) = 52.85$, $p < .001$. Youth gender, mainstream values orientation and traditional values orientation significantly predicted levels of sports participation in the fall of Grade 7 (intercept); specifically, males were more heavily involved in sport activities than females at this time point. Youth with a more traditional values orientation were more heavily involved in sports during the fall of Grade 7 and youth who were more oriented to mainstream values were less involved in sports during the fall of Grade 7 (see Table 3, Model 2).

Youth's traditional Mexican values in the fall of Grade 7 also predicted the rate of change in participation over time. Specifically, across Grades 7 and 8, high traditional Mexican values predicted steeper declines in sport activity participation, but across Grades 9 through 12, high traditional Mexican values predicted less steep declines (at a trend level) than low values. Additional plotting was carried out to explicate the effects of youth's traditional Mexican values in early Grade 7 on the linear and quadratic slopes. Specifically, we plotted sports participation trajectories at the mean, and one standard deviation above and below the mean of youth traditional Mexican values orientation. The results for youth traditional Mexican values orientation are described in Fig. 2. The results indicate that youth with mean, low, and high levels of youth traditional Mexican values had different levels of sports participation in early Grade 7. Youth who were classified as high on TVO started with the highest levels of sport involvement, but experienced sharp declines until Grade 9, at which point they levelled off. Youth with low traditional Mexican values, on the other hand, started with the lowest levels of sports participation and remained stably low until Grade 8, at which point they demonstrated declines in participation. Youth with mean levels of traditional Mexican values, though, demonstrated a stable, gradual decline in sports participation across the 3 years.

The results also indicate that maternal future educational aspiration was a significant predictor of sports participation over time. The results showed a significant linear effect suggesting that across Grades 7 and 8, higher maternal future educational aspirations were associated with increases in youth participation. Significant quadratic effects indicate that at later grades (across Grades 9 and 12) higher maternal future educational aspiration was associated with steeper declines in youth participation. Additional plotting was carried out to explicate the more complex effects of maternal educational aspirations on the linear and quadratic slopes. Figure 3 describes the effect of maternal future educational aspirations on sport. The results indicate that youth with mean, low, and high levels of maternal future educational aspirations were relatively similar in their sports participation in the fall of Grade 7. However, participation *across time* was highest among youth with high

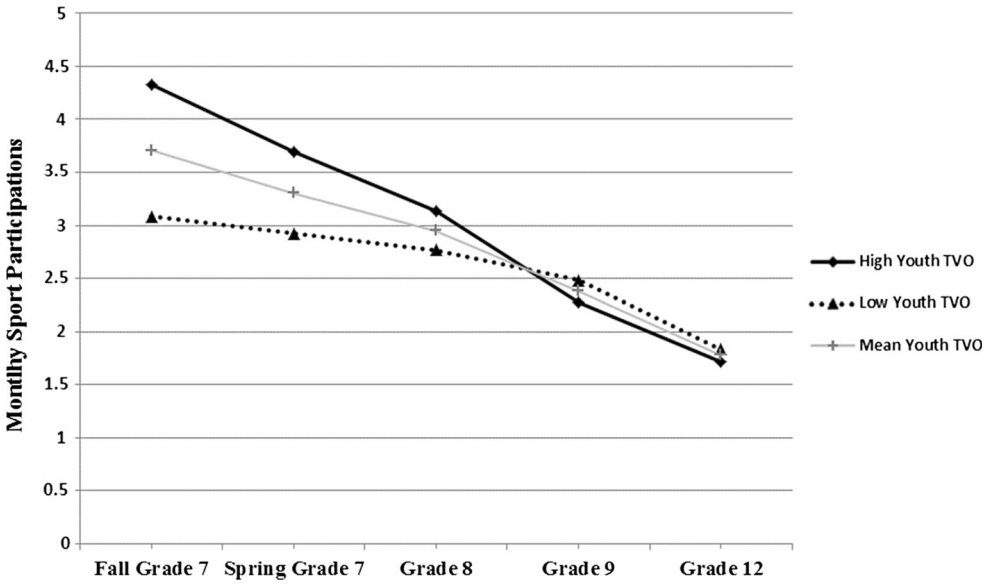

Fig. 2 Interaction between time and grade 7 youth traditional value orientation on youth sports participation. *Note TVO* traditional value orientation

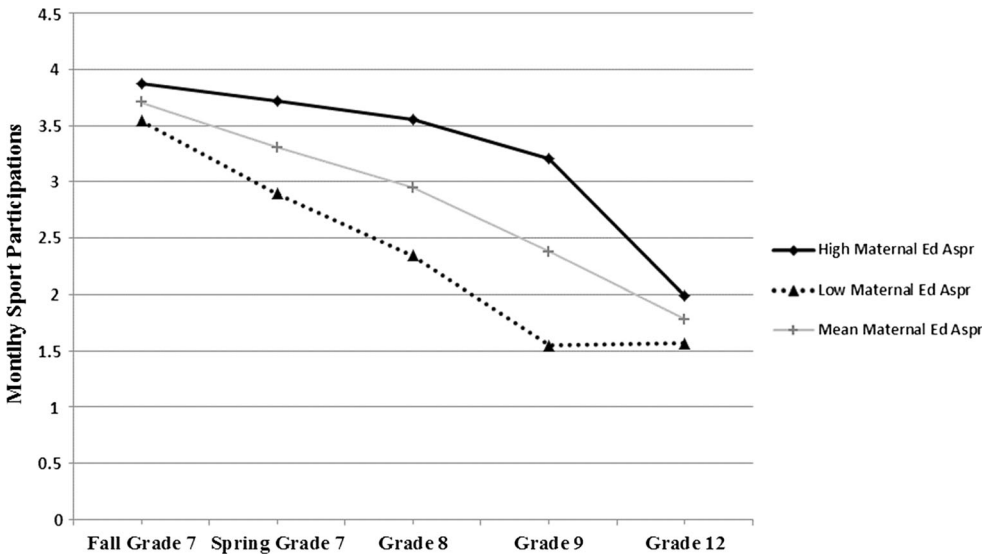

Fig. 3 Interaction between time and grade 7 maternal educational aspirations for youth on youth sports participation

levels of maternal future educational aspirations, followed by youth with mean, and then low maternal future educational aspirations. Additionally, by Grade 12, participation was similar for all three levels of maternal future educational aspirations.

Fine Arts Participation

The unconditional model for fine arts participation also had a strong fit and followed a quadratic form; $X^2 = 8.93$, $df = 9$, $p = .44$, CFI = 1.00, SRMR = .06. However, unlike sports participation, results from nested model difference tests indicated that the best fitting model for fine arts participation had time residuals free to vary and the residual variance of the quadratic slope variance fixed to zero. The average level of fine arts involvement across the sample in the fall of Grade 7 was 1.72, which is equivalent to approximately twice a month (see Table 4, Model 1). In the fall of Grade 7, the growth curves suggest that youth participation in fine arts declined at a rate of about one less attendance every 2 months (−.47), and the rate of decline also became less steep thereafter, as indicated by the positive quadratic slope (.10).

For the unconditional model, significant variation was found for the intercept, but not for the linear slope. However, conditional models typically improve fit and, as such, independent variables often explain variability in change over time in models that have no unconditional variability in slope (e.g., Modecki et al. 2013). Thus, conditional models were run to explain differences in level and rate of

Table 4 Unconditional model and effects of covariates on fine arts involvement

Effects	Model 1	Model 2
Fixed effects		
Intercept (mean)	1.72(.19)***	1.71(.18)***
Child gender		1.07(.38)**
M future Ed. aspirations		−.13(.17)
M-TVO		.50(.52)
M-MVO		.29(.34)
C future Ed. aspirations		.29(.12)*
C-TVO		.75(.48)
C-MVO		.12(.38)
Linear slope (time)	−.47(.17)**	−.45(.17)**
Child gender		−.31(.41)
M future Ed. aspirations		.30(.17)$^{+}$
M-TVO		−.51(.54)
M-MVO		−.19(.38)
C future Ed. aspirations		−.16(.16)
C-TVO		−.09(.55)
C-MVO		−.16(.39)
Quadratic slope (time^2)	.10(.03)**	.10(.03)**
Child gender		.03(.08)
M future Ed. aspirations		−.07(.03)*
M-TVO		.13(.10)
M-MVO		.01(.07)
C future Ed. aspirations		.03(.03)
C-TVO		−.03(.10)
C-MVO		.05(.07)
Random effects		
Intercept	2.35(.64)***	1.92(.55)***
Linear slope	.16(.13)	.13(.12)
Quadratic slope		
−2 Log likelihood	−1933.23	−1848.50

TVO traditional value orientation; *MVO* mainstream value orientation

$^{+}$ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

change over time. Results from the conditional models indicated that the addition of all seven predictors in aggregate significantly contributed to the model; Wald's $X^2 = 35.59$, $df = 21$, $p = .02$ (see Table 4, Model 2).

Gender (being female) and higher youth future educational aspirations predicted higher average Grade 7 fine arts involvement in the fall (intercept). On the quadratic slope, the significant negative effect for maternal future educational aspirations suggests that high aspirations were related to relative decreases in fine arts participation in later years in comparison to lower maternal aspirations. To unpack the significant effect of maternal future educational aspirations on change in fine-art participation over time, we plotted participation trajectories at the mean, plus one standard deviation above and below the mean. Figure 4 summarizes the form of this interaction. High levels of maternal future educational aspirations predicted a relatively stable pattern of participation across Grades 7–12. However, youth with low maternal future educational aspirations had variable levels of fine arts participation across time, with the highest participation in early Grade 7 and Grade 12, but the lowest involvements at Grade 8.

Interactions Between Gender and Predictors of Participation

We also tested whether the effect of any of the hypothesized predictors interacted with gender to predict extracurricular participation. There were no significant interactions between gender and educational aspirations or between gender and cultural value orientations on the intercept or slope of any of the participation variables.

Discussion

School and community-based extracurricular activities offer experiences that can support adolescents' achievement of important developmental tasks and milestones, such as engaging with school and graduating. This support may be particularly beneficial to low income Mexican-origin adolescents who are at increased risk for school disengagement and dropout. Unfortunately, to date there has been limited research to offer explanations about what promotes participation in extracurricular activities among low income Mexican-origin adolescents, either in the short term or over time (e.g., Feldman and Matjasko 2005; Perkins et al. 2007). To fill this gap, the current study characterized trajectories of participation intensity (i.e., frequency of participation per month) over the middle and high school years among Mexican-origin youth. In addition to youth gender, this study also examined educational aspirations and cultural values of the youth and their mothers as predictor of these participation trajectories. Importantly, our use of models that explored linear and quadratic trajectories allowed us to gain more insight into the influence of these predictors across both middle and high school.

The study findings generally showed declining trajectories of participation in extracurricular from 7th to 12th grade for low-income Mexican–American youths. However, these effects followed a quadratic form, rather than a linear form, indicating there were ebbs and flows in participation, rather than strict declines. We also found support for the predictive effects of future educational aspirations and cultural values on adolescents' participation trajectories. Notably, however, the effects of both

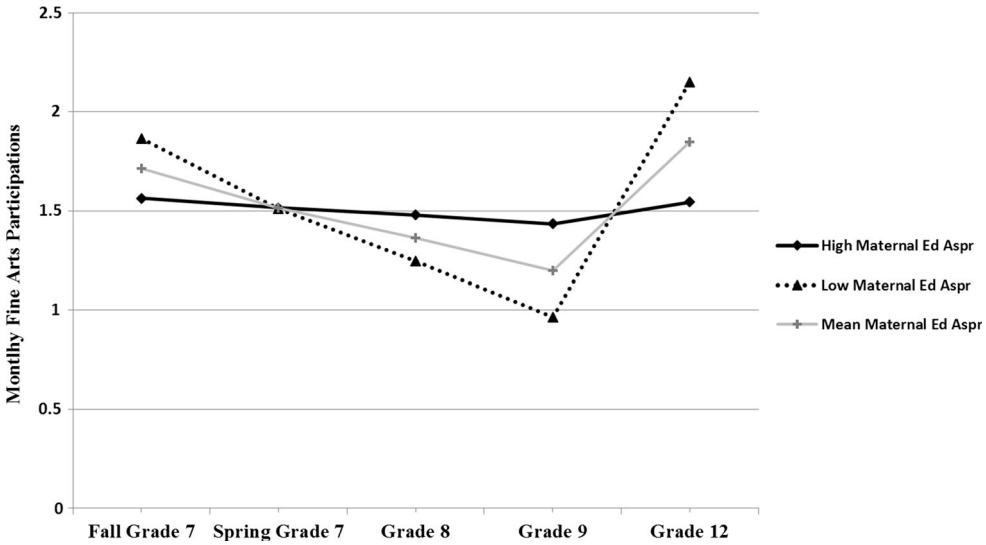

Fig. 4 Interaction between time and grade 7 maternal educational aspirations for youth on fine arts participation

future educational aspirations and cultural values varied across the three activity subtypes for which trajectories were modeled—overall, sports, and fine arts participation. As expected, sports and fine arts participation differed by gender, but gender did not interact with any of the other predictors to explain early participation or change in participation over time. Our finding that the effects of aspirations and values on participation did not depend on a youth's gender may be because only certain aspects of Mexican–American cultural values may differentially influence extracurricular participation for boys and girls. This topic may be worthy of consideration within future research, along with several other ideas informed from our findings below. In the following sections, we discuss these findings in more detail. To provide an anchor for interpreting participation trajectories, we begin with a discussion of early participation levels in the 1 year of middle school (7th grade), followed by a discussion of the nature of the trajectories and their predictors across Grades 7–12.

Early Participation Patterns

Initial Levels of Participation in 7th Grade

The available literature suggests that youth are generally exposed to a great number and variety of extracurricular activities in middle school—often for the first time. Participation is often at its highest level at this time as youth begin experimenting with extracurricular options (Eder and Parker 1987). For example, participation in multiple sports is more common and more accessible in middle school because school teams include youth with varying ability levels, as compared to high school where sports teams are geared toward the most skilled youth. High school students also have other competing interests such as jobs that may intrude on extracurricular activities, particularly as the students approach graduation. Consistent with this conceptualization, we found the highest rates of overall extracurricular participation in 7th grade (almost three times per week, on average). The pattern of highest intensity of participation in Grade 7 was echoed in trajectories for sports (approximately once per week) and fine arts (twice per month) as well. These findings are important because a body of research suggests that frequent exposure to positive extracurricular contexts may serve as a protective factor for at-risk youth (e.g., Modecki et al. 2014; Zarrett et al. 2009). As one example, Roeser and Peck (2003) found that engagement in positive extracurricular activities more than once a week improves the likelihood of graduation for adolescents at risk for academic underachievement. Therefore, our findings are encouraging because they suggest that many Mexican-origin youth are participating in a developmentally supportive context, and at reasonably high levels on average, that may be especially important for countering the declines in school engagement that frequently occur for these youth.

Gender differences emerged only in the intensity of early participation in sports (higher rates for boys) and fine arts (higher rates for girls). These differences may be due to adolescents' gendered choices and to the gendered socializing they receive from others (Updegraff et al. 2007). In addition to confirming prior research that has found these same trends (e.g., Borden et al. 2006; Erkut and Tracy 2002), these findings highlight why it is advantageous to distinguish activity types when conducting research on extracurricular activities. Additionally, although the gender effects on sports participation is not surprising, it raises the issue of whether girls may be particularly disadvantaged by their reduced involvement. Organized sports have been associated with positive motivational beliefs about, and involvement in,

physical activity across the lifespan (e.g., Dawes et al. 2013; Eccles and Wigfield 2002). Sports participation has also been linked to school engagement and positive educational outcomes (e.g., Mahoney and Cairns 1997; Marsh and Kliettman 2002) that could benefit Mexican–American female students. At the same time, there is some evidence that sustained involvement in sports also exposes youth to high risk behaviors (e.g., Modecki et al. 2014; Larson et al. 2006). Indeed, scholars have called for more research that examines the unique experiences of Latina and Latino youth (e.g., Cammarota 2004), and our results echo the need for further understanding of how gender shapes developmental trajectories of Latina and Latino youths.

Predictors of Initial Levels of Participation

The current findings revealed higher levels of extracurricular participation by youth when they and their mothers had a strong connection with traditional Mexican cultural values. Youth's traditional values were associated with higher levels of overall extracurricular activities and higher levels of sports in 7th grade. Maternal traditional values also predicted higher levels of total activity. However, there was no evidence that a mainstream values orientation contributed to greater participation in these extracurricular options. In fact, mainstream values were related to less sport involvement in 7th grade. These findings thus support prior evidence that traditional cultural ties are protective for Mexican-origin youth and potentially motivate them to engage in activities that will reflect well on the family and support their future success (Berkel et al. 2010; Germán et al. 2009). Although this is a well-established finding with respect to academic outcomes (Fuligni et al. 2005), we extend this finding here to adolescents' extracurricular participation as well. In doing so, we also refute the hypothesis that traditionally oriented youth and families are less inclined toward extracurricular activities that require time away from family. Youth's educational aspirations predicted greater involvement in 7th grade fine arts, but were not otherwise related to early levels of participation or subsequent changes in participation across time. However, maternal educational aspirations predicted the pattern of change over time across each of the extracurricular outcomes, as further discussed below.

Trajectories of Participation: Patterns and Predictors

Developmental patterns of change in participation over time were similar for our measure of overall activities as well as for sports and fine arts. Namely, youth participation was highest in 7th grade and showed a steep decline thereafter in middle school. This decline continued during high school, but the rates of decline were less steep. Overall participation was highest for sports and lowest for fine arts. However, there was significant variation in growth patterns that were associated with the predictors of participation that we examined in this study, in terms of youth traditional values and maternal future educational aspirations assessed in 7th grade.

Beginning with youth's traditional value orientation, results indicated that traditional values were linked with a higher intensity of sports participation at the start of the trajectory, followed by a steeper decline thereafter in middle school. These findings indicate that although more traditionally oriented youth engage at higher levels initially, perhaps responding more enthusiastically to new opportunities available to them at the start of middle school when sports opportunities increase, they are then more likely to show sharper declines over time compared to less traditionally oriented youth. It bears speculating that this pattern of more pronounced decline may reflect a mismatch between the competitive value of sports and the more cooperative orientation of these youth. Children who are socialized to embrace Mexican (traditional) culture appear to develop more cooperative interpersonal styles (Cota and Knight 1991) that may be counter to the competitive orientation that is often required in organized sports as youth move into higher grades (e.g., Fredricks and Eccles 2010). However, it should be noted that, although they show a sharper decline in participation in extracurricular activities, youth who embrace traditional cultural values at higher levels ultimately reduced their participation to levels similar to that of youth who report low endorsement of traditional values. Thus, it seems the effects of traditional values are primarily a function of initially greater engagement in 7th grade sports among more traditional youth which is then followed by a sharper decline or correction to levels more typical among other youth.

Maternal future educational aspirations, the other factor that emerged as a significant predictor of change in participation across time, had a different impact depending on the participation outcome that was modeled. For trajectories of overall extracurricular activities that were based on youth participation in multiple types of activities (including but not limited to sports and fine arts), higher maternal future educational aspirations predicted less steep declines in participation across middle school. One explanation for these findings is that these youth may receive greater direct and indirect support to remain engaged in activities because their parents have a strong investment in their children's future success. However, this trend differed when we focused more specifically on the effects of maternal future educational aspirations on sports and fine arts, once again illustrating the benefits of focusing on distinct types of extracurricular activities. In the area of sports, higher maternal future educational aspirations were predictive of less steep declines in sports participation during the middle school years.

However, during high school, higher maternal future educational aspirations were subsequently associated with relatively steeper declines in sports participation. Once again, these findings must be interpreted within the context of the overall pattern of heightened levels of sports participation in 7th grade for our sample.

Finally, by examining participation trajectories as a function of youth's traditional values, our findings demonstrate that youth who report the lowest levels of traditional values are at risk for consistently diminished levels of participation over time. These youth were less engaged in sports early and across middle school, and by the time they transitioned to high school, their participation levels had dropped and remained low. As it is unlikely that traditional values are related to athletic abilities, these findings likely reflect a pattern of increased engagement and bonding with school for youth who retain traditional cultural ties and relative vulnerability for those who do not (Berkel et al. 2010; Gonzales et al. 2008).

The overall effect of maternal educational aspirations for fine arts was to keep youth at fairly stable levels of participation across middle and high school. Specifically, average maternal future educational aspirations was associated with a relatively stable pattern of fine arts participation over time; they were neither prone to significantly increase nor decrease across middle and high school. However, when mothers reported low aspirations for their youth, these youth showed a pattern of decreasing fine arts participation in middle school, but a steep increase in the latter years of high school. This pattern was the one exception that we found in the overall trend of decreasing extracurricular participation in high school. One explanation for this trend could be that, during middle school, parents' support may be a particularly critical ingredient behind youth participation. That is, youth who transition to a new school setting may need an extra push to try new activities. Participation in these activities may also require resources (time, money). Research suggest that youth's participation is impacted by personal beliefs as well as by parental beliefs and support (e.g., Fletcher et al. 2000; Huebner and Mancini 2003; Wigfield and Eccles 2000). Thus, even though a child in middle school may have the interest, low support from parents may cause participation to decrease during the developmental period when children rely heavily on parents. The upward swing in participation during high school may reflect the fact that older youth tend not to rely on parents as much in high school. As these youth develop interests in fine arts across high school, increasing rates of participation could reflect the decision-making power of older teens. Also, parents who do not hold high future educational aspirations for their children may also be more inclined to support creative activities that could help youth thrive in non-academic activities or non-college paths as they approach graduation.

Limitations and Implications

Several of the key findings from this study have important implications for practice and future research. First, the pattern of participation trajectories that we found highlights the importance of middle school as a key time for youth to engage with extracurricular opportunities. Youth report their highest levels and their steepest declines at this age, with limited evidence that they are likely to increase involvement in activities at later stages. Given the importance of school engagement in middle school for setting youth on positive academic trajectories, and the role of extracurricular activities for establishing prosocial connections, avoiding deviant peer contexts, and developing interests and initiative that are also critical at this stage, efforts are needed to ensure that Latino youth have access and support to engage with a wide range of extracurricular options in middle school.

Our findings also addressed competing hypotheses that have been advanced about Latino youth and extracurricular participation. Specifically, our findings provide consistent evidence that traditional values *promote* rather than hinder extracurricular engagement of Mexican origin youth. Thus, support for traditional culture and attempts to align extracurricular opportunities with Mexican values (e.g., familism) may be one way to increase participation for this population. Our findings further enrich the literature by describing the longitudinal impact of maternal aspirations in the context of extracurricular activities, where these connections have received little attention (e.g., Englund et al. 2004). These findings could serve as a point of departure for future research that may include examining age-based differences (i.e., in middle vs. high school) in how youth perceive and interpret their parents' involvement (i.e., conveying aspirations and expectations) and how this shapes their participation intensity. Emphasis on the link between extracurricular activities and school success may also be important in appealing to parental aspirations for their child. Emphasizing this link may help Latino families that may lack social and educational capital to make the connection between extracurricular activities and outcomes that are valued in Mexican-origin families, such as high school graduation.

This study's notable strengths include a longitudinal design, a diverse Mexican-origin sample, and its use of latent growth curve modeling to capture trajectories of participation over time. Our focus on multiple extracurricular activities' outcomes also allowed a more nuanced understanding relative to studies that only examine total extracurricular participation. Future research that identifies specific types of sports or fine arts activities, in addition to other types of activities, could further extend these findings. Moreover, our examination of cultural influences on extracurricular participation was not exhaustive and future

research could explore whether specific aspects of Mexican–American cultural values, such as traditional gender roles, influence adolescents' participation over time. In addition, whether a young person's parent is U.S. born versus foreign born and whether the primary language spoken at home is English or Spanish are two cultural factors that could interact with motivational features explored here. Finally, person-centered analytic methods that identify participation profiles and how profiles of participation change over time are additionally important to pursue (Pedersen 2005).

Conclusions

This longitudinal study examined the participation of Mexican-origin youth in extracurricular programs over middle and high school. Our results suggest that trajectories of participation for these youth tend to decline over time and that theoretically-relevant factors (i.e., traditional cultural values orientation and educational aspirations) have an impact on the pace of decline. These results are important for adding to bodies of work that seeks to highlight specific individual and contextual factors that shape participation in extracurricular activities. Indeed, over the last decade there has been increasing attention given to understanding how extracurricular programs can support youth's positive development. Similar attention to how culturally-relevant factors might shape participation among Mexican-origin and other racial/ethnic minority groups are important to ensure that extracurricular programs are made accessible and meaningful to vulnerable youth.

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Conflicts of interest The authors report no conflict of interests.

Author contributions NPD conceived of the study, participated in its design, contributed to interpretation of the results, drafted the manuscript, and coordinated all work on the manuscript. KM also participated in the conception of the study, carried our data analysis and interpretation of results, and helped to draft the description of the results. NG contributed to the design of the study and interpretation of results, and with critical revisions of the manuscript for important intellectual content. LD helped with critical revisions of the manuscript for important intellectual content. RM provided guidance on the implementation and presentation of data analytic methods and results. With the exception of RM (deceased May 7, 2014), all authors read and approved the final manuscript.

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