

CHARACTERISTICS AND CONSEQUENCES OF EXTRACURRICULAR
ACTIVITY PARTICIPATION OF HISPANIC MIDDLE SCHOOL STUDENTS

A Dissertation

by

VICTOR VILLARREAL

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2012

Major Subject: School Psychology

Characteristics and Consequences of Extracurricular Activity Participation
of Hispanic Middle School Students

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ABSTRACT

Characteristics and Consequences of Extracurricular Activity Participation of Hispanic
Middle School Students. (August 2012)

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School-based extracurricular activity participation has been linked to positive behavioral and academic outcomes; however, little is known about the participation and outcomes of participation of Hispanic students, a group that is historically at high risk for school failure. As such, extracurricular activity participation characteristics and outcomes of a diverse group of middle school students were examined in this two journal article dissertation. First, participation differences between students based on student racial group membership and student sex were examined. Logistic regression was used to examine participation status differences (yes or no). Analysis of variance was used to examine participation intensity between student groups. Additionally, the effects of participation on outcomes related to adolescent peer groups, belongingness, and school membership were examined. Multiple regression models were utilized for this analysis, and consideration was given to interaction effects that would indicate whether groups of students (i.e. sex and race) benefited differentially from participation.

Results indicated that, during the 7th grade, Hispanic students were significantly less likely to participate in sports-related extracurricular activities as compared to their

Caucasian peers. However, no group differences in sex or race were found for participation intensity. Furthermore, participation in sports-related extracurricular activities was related to higher feelings of school membership for Hispanic and Black, but not White, students. In addition, participation in sports was related to Black students identifying a higher percentage of their friends as displaying prosocial behavior.

Overall, the results suggested that while Hispanic students may have benefited more so than their White peers from participation, they participated at lower levels as a group.

This highlights a currently under-tapped potential for intervention.

DEDICATION

To my wife

ACKNOWLEDGEMENTS

I would like to thank my committee members for their guidance through the course of this research. I give special thanks to Dr. Gonzalez and Dr. Hughes. Both provided me with exceptional opportunities to learn and to develop as a student, researcher, and professional. I also appreciate the high expectations that they set for me, and I respect that they are professionals that lead by example.

Thanks also to my friends and colleagues in the department for making my time at Texas A&M such a great experience. Thanks to my mother and father for their continued encouragement. I am proud to call them my family and I know that I owe my accomplishments to them and to example that they have set. Finally, thanks to my best friend, my wife, for her patience and love.

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CHAPTER I

INTRODUCTION

Hispanic students represent the largest ethnic minority group in American schools, with growth expected to accelerate in the coming years (U.S. Census Bureau, 2003). Despite this growth, Hispanic students continue to demonstrate academic achievement gaps (National Center for Educational Statistics, 2009a; National Center for Educational Statistics, 2009b) that presage negative outcomes such as high rates of school dropout (Aud et al, 2011). Understanding factors that mitigate school failure among Hispanic students is thus of great importance. One noteworthy area of research involves the documented relationship between participation in school-based extracurricular activities and positive adolescent outcomes. Little, however, is known about the extracurricular activity participation experiences of Hispanic students, especially during middle school, the first opportunity for many students to participate in varied school-based activities.

This two article format dissertation addressed this gap in the literature by shedding light on the extracurricular activity participation characteristics (i.e. participation rates and intensity) of Hispanic middle school students. In doing so, it identified whether racial group differences in participation appear earlier in schooling than previously studied. The second purpose of this dissertation was to examine the effects of participation on indicators of feelings of school membership, belongingness, and peer network characteristics, variables related to positive academic outcomes. The

This dissertation follows the style of *Journal of Early Adolescence*.

utilization of a diverse sample of middle school students allowed the examination of whether groups of students benefit differentially from participation.

Benefits of Extracurricular Activity Participation

Extracurricular activities are thought to benefit students as they provide them opportunities to belong to positively-oriented peer groups. Students belonging to positive peer groups are exposed to modeling of prosocial behavior and are more likely to display these positive behaviors themselves (Eccles & Barber, 1999; Eccles, Barber, Stone, & Hunt, 2003; Feldman & Matjasko, 2005; Schaeffer, Simpkins, Vest, & Price, 2011). Extracurricular activities also afford adolescents the opportunity to develop social capital in the form of positive relationships with adult activity leaders (Denault & Poulin, 2008) and they provide a safe setting for students to acquire and practice newly learned skills, some of which may generalize in positive ways to other areas of their lives (Feldman & Matjasko, 2005; Denault & Poulin, 2008; Larson 2000; Peck, Roeser, Zarrett, & Eccles, 2008).

Regarding school-based outcomes, multiple studies demonstrate that participation in such activities is linked to higher grades, higher academic aspirations, and higher rates of high school graduation (Bartko & Eccles, 2003; Brown & Evans, 2002; Darling, 2005; Diaz, 2005; Mahoney, 2000; McNeal, 1995). Moreover, the benefits of participation are lasting, as participation is associated with attending a postsecondary institution and obtaining a postsecondary degree (Barber, Eccles, & Stone, 2001; Gardner, Roth, & Brooks-Gunn, 2008; Mahoney, Cairns, & Farmer, 2003; Zaff, Moore, Papillo, & Williams, 2003). Participation has also been associated with

decreases in less desirable behavior, such as externalizing symptoms and delinquent behavior (Barnes, Hoffman, Welte, Farrell, & Dintcheff, 2007; Mahoney & Stattin, 2000).

Participation in Extracurricular Activities

It is during middle school that a wide range of extracurricular opportunities are first made available to adolescents. It is also at this stage that participation behaviors become especially important; studies indicate that participation during this time is a predictor of participation at later stages, through the end of high school. Researchers have found that the percentage of students participating in school-based extracurricular activities decreases modestly across time or that the participation rate is mostly stable (Bohnert, Kane, & Garber, 2008; Mahoney, Schweder, & Stattin, 2002; Pederson, 2005; Simpkins, O'Donnell, Delgado, & Becnel, 2011). Numerous studies indicate that Black students are as likely to participate in most extracurricular activities as are White students (Bartko & Eccles, 2003; Pederson, 2005); on the other hand, relatively little is known about the participation rates of Hispanic students. What is known about Hispanics is that they are less likely to participate in extracurricular activities at the high school level (Brown & Evans, 2002; Davalos, Chavez, & Guardiola, 1999). While this knowledge is important, a limitation of this research is that little is known about Hispanic participation characteristics rates at earlier ages. This represents a problem in that it precludes us from knowing: (1) whether Hispanics are benefitting through participation, and (2) whether differences in participation between Hispanics and others are found only at the high school level or whether they emerge at earlier periods.

Explanations for the disparities in participation rates vary. At the broadest level, lower socioeconomic status (SES) is linked to lower participation rates (Pederson, 2005). Given that Hispanic students are more likely to come from underprivileged SES backgrounds (Aud, Fox, & Kewal-Ramani, 2010), it is no surprise that their participation rates appear lower. Hispanic generational status has also been associated with extracurricular activity participation rates, with recent immigrant status related to lower rates of participation (Peguero, 2010). Additionally, a sociocultural attribute shared by many Hispanic groups that may relate to participation is that of familism. Familism communicates that the family unit is the primary source of support. While this attribute has many protective features, it can serve as a limiting force on extracurricular participation. For example, researchers have found that high levels of familism are associated with students identifying fewer friends at school and parents' beliefs that participation will reduce family time (Halgunseth, Ispa, & Rudy, 2006; Simpkins, Vest, & Price, 2011; Vaquera, 2009).

Together, these circumstances can be reasonably assumed to lead to lower participation. Regardless, a larger question remains: does participation in extracurricular activities relate to positive outcomes for Hispanic students? Better understanding Hispanic levels of participation and whether participation matters would be of benefit in informing practice and intervention. Unfortunately, little is known about participation effects for Hispanic students. While we can surmise from limited evidence that Hispanic students also benefit from participation (Brown & Evans 2002; Davalos et al., 1999; Diaz, 2005; Melnick, Sabo, and Vanfossen, 1992b; Prelow & Loukas, 2003), too few

studies involving Hispanic samples are available. Even less is known about theorized differences in benefits of participation between Hispanic students and students of other groups. That a majority of extracurricular activity studies are limited to high school samples is further problematic given that antecedents to high school failure emerge early in an adolescent's schooling. Clearly, more work that examines diverse samples, in terms of age and ethnicity, is needed. Moreover, examining interactions between participation and these variables would clarify our understanding of important moderators of extracurricular activity outcomes.

Purpose: Study 1

In the first study, patterns of participation status and participation intensity in school-based extracurricular activities among a diverse sample of 7th grade students were examined, with a focus on that of Hispanic students. The first goal of this study was to examine whether student ethnicity predicted participation in extracurricular activities during the middle school years. It was hypothesized that Hispanic students would be less likely to participate in all extracurricular activities. The second goal of the study was to examine participation intensity (i.e. amount of time spent in activities per week). Understanding whether there are differences in participation intensity is also important in guiding intervention, as it informs whether it is enough to promote participation in general or whether it is also necessary to encourage students to spend greater amounts of time in extracurricular activities. It was hypothesized that participation intensity would also be lower for Hispanic students in all extracurricular activities. Finally, the focus on students at the middle school level is important in identifying when potential differences

in participation rates and intensity may first emerge and, in turn, guiding the focus of intervention.

Purpose: Study 2

While understanding participation characteristics of Hispanic students is important, this information is only useful to the degree that effects for Hispanic extracurricular activity participants are known. As such, the second study built upon the first by examining whether early participation matters and by assessing whether groups of students benefited differentially from participation. Specifically, the purpose of this study was to assess the effects of both sports-related and non-sports related extracurricular activity participation on outcomes related to peer network characteristics and feelings of school membership and belongingness in a racially diverse sample of middle school students. Furthermore, because the relationship between participation status and outcomes may vary by sex, race, and SES groups, these factors were taken into account. Interactions between these sociodemographic characteristics and participation on outcomes were examined.

CHAPTER II

MANUSCRIPT #1: HISPANIC MIDDLE SCHOOL STUDENT INTENSITY OF SCHOOL-BASED EXTRACURRICULAR ACTIVITY PARTICIPATION

Synopsis

Participation in school-based extracurricular activities is thought to provide broad benefits to participants. In this study, the extracurricular activity participation characteristics, including participation rate and intensity, of an ethnically diverse group of low-achieving middle school students was examined. Categories of extracurricular activities included sports and non-sports activities, such as academic clubs and band. The sample included 485 7th grade students (45% female; 26% African American, 39% Hispanic, and 35% Caucasian). Logistic regression analyses were used to examine the likelihood that students from different racial and sex groups participated (yes or no) in sports and non-sports related extracurricular activities. Analysis of variance was used to examine potential participation intensity (amount of time spent in activities) differences between groups of students. Results indicate that students from Hispanic and African American groups are less likely to participate in sports-related extracurricular activities during the 7th grade. However, no differences in participation intensity were found in participants between the different groups. This study suggests that lower extracurricular activity participation rates for Hispanics emerge during middle school, at the onset of participation opportunities.

Introduction

Beginning in middle school and continuing through high school, many adolescents participate in school-based, structured extracurricular activities, such as team sports and academic clubs (Fredricks & Eccles, 2008). Positive associations between involvement in such activities and outcomes across academic, behavioral, and psychological domains are well documented and suggest that extracurricular activities are beneficial to participants (Broh, 2002; Darling, 2005; Eccles & Barber, 1999; Feldman & Matjasko, 2005). Not as clear from the research, however, are participation patterns in extracurricular activities across different student groups, most notably ethnic groups. Little, for example, is known about the extracurricular activity participation experiences of Hispanic students—the largest and arguably most at risk ethnic minority group in American schools. The few studies that do examine Hispanic student participation rates suggest significantly lower rates than those of other ethnic groups; however, methodological and conceptual problems plague this body of research, calling into question the generalizability of these findings. This study seeks to address the gaps in the literature by: (a) shedding light on the extracurricular participation rates of Hispanic middle school students, an understudied group, in different types of extracurricular activities; (b) determining the participation intensity, in terms of time spent in activities, of Hispanic extracurricular activity participants; and (c) identifying whether ethnic group participation differences appear earlier than high school, as early participation is a significant predictor of later participation.

Hispanic Student Academic Achievement: A Cause for Concern

Hispanics are the fastest growing ethnic group in the United States; from 1988-2008, the Hispanic population increased from 6% to 15% while the percentage of Whites declined, with that of other ethnic groups remaining relatively stable (Aud et al., 2010). This trend is also reflected in the education system, as Hispanic students are now the largest ethnic minority group in public schools, with predictions for continued growth (Llagas & Snyder, 2003). Despite the growth, Hispanic youth continue a trend of school failure. In the most recent National Assessment of Educational Progress report, often termed the “Nation’s Report Card”, Hispanic students at both the elementary and secondary levels consistently underperformed relative to their White counterparts in areas of reading and math, important predictors of subsequent academic success and school graduation (National Center for Educational Statistics, 2009a; National Center for Educational Statistics, 2009b). In fact, as of 2009, the nationwide dropout rate for Hispanic students was about three times the dropout rate of non-Hispanic Whites and almost twice as that of African Americans (Aud et al., 2011). Consequently, Hispanics are less likely to enroll in college, twice as likely to be unemployed as are Whites and Asians, and earn the lowest average income of any ethnic group in the United States (Aud et al., 2010).

Research on factors that mitigate school failure and its adverse effects for Hispanic students has not kept up with their growing presence in schools. Not enough is known about what can buffer them, early in their schooling experiences, from negative downstream academic outcomes such as the noted staggering dropout rates. One

promising area of research focuses on the benefits of participation in school-based extracurricular activities. Briefly, extracurricular activities provide students opportunities for inclusion in positive peer groups, social capital in the form of supportive relationships with adults, and skill building opportunities, all of which may contribute to greater school connectivity, engagement, and, ultimately, success in school. In fact, a large body of research has found extracurricular activity participation to be beneficial among the White and Black student samples typically studied.

Research on the Benefits of Participation in School-Based Extracurricular Activities

Participation in school-based extracurricular activities is associated with many beneficial outcomes. Although a full review is beyond the scope of this paper, it is well-documented that participation in extracurricular activities is positively related to academic achievement, educational aspirations, commitment to school, and high school graduation (Broh, 2002; Darling, 2005; Denault & Poulin, 2009; Eccles & Barber, 1999; Feldman & Matjasko, 2005; Fredricks & Eccles, 2008; Mahoney, 2000; McNeal, 1995; Rose-Krasnor, Busseri, Willoughby, & Chalmers, 2006). Furthermore, some studies have identified benefits of participation, such as higher graduation rates, to be observed primarily among students who were at the greatest risk for school failure (Holland & Andre, 1987; Mahoney & Cairns, 1997). This is important in that identifying school contextual factors that can buffer the students at most risk for school failure is essential, and results suggest that extracurricular activities may provide that opportunity. Extracurricular activities are also thought to influence psychological well-

being; research shows a beneficial relationship between participation in such activities and levels of self-esteem, school belonging and satisfaction, resiliency, and lower levels of internalizing symptoms (Barber et al., 2001; Broh, 2002; Dotterer, McHale, & Crouter, 2007; Fredricks & Eccles, 2008; Gilman, Meyers, & Perez, 2004; Melnick et al., 1992b). Participation is also associated with lower than expected levels of risky behavior (i.e. substance abuse, sexual activity, delinquent behaviors, and criminal arrests) (Barnes et al., 2007; Darling, 2005; Eccles & Barber, 1999; Fredricks & Eccles, 2006a; Fredricks & Eccles, 2008; Mahoney, 2000; Miller, Sabo, Farrell, Barnes, & Melnick, 1998). Together, these findings bring to light protective role that participation in school-based extracurricular activities can play in the lives of adolescent students.

Participation in extracurricular activities is believed to benefit adolescents in multiple ways. Those who participate in extracurricular activities are thought to develop skills and behaviors valued by others participating in the same activity. Given that others participating in extracurricular activities are more likely to be doing well in school and are more likely to plan to attend college, participants are more likely to assimilate these characteristics from their peers and, in turn, to identify with and develop these and other prosocial and academically-oriented behaviors (Eccles & Barber, 1999). Participation in extracurricular activities may also provide adolescents with the opportunity to develop supportive relationships with adult activity leaders (Hansen, Larson, & Dworkin, 2003). Besides providing additional sources of support and guidance, these relationships are important in that they serve as additional connections to school and to the behaviors valued in the school setting (Denault & Poulin, 2008;

Feldman & Matjasko, 2005; Mahoney et al., 2002). Together, extracurricular activities provide venues that increase positive identification with school, engagement in school, and the development of prosocial and academically-oriented behavioral norms and values.

Trends of Extracurricular Activity Participation Rates

The positive opportunities provided by participation in extracurricular activities are especially important for young adolescents, as it is during middle school that a wide range of new and varied opportunities, both in and out of school, are first made available to them. It is also during this period that adolescents are faced with increased discretionary time and the choice to engage in structured and unstructured activities (Denault & Poulin, 2009). Notably, research indicates that early participation in extracurricular activities is a predictor of participation rates at later stages. For example, an investigation that followed adolescents over a four-year period showed that levels of extracurricular activity participation decreased over time; furthermore, the decrease was steeper at later years for students with lower initial levels of participation (Denault & Poulin, 2009). Others have found that the percentage of students participating in school-based extracurricular activities decreases modestly across time or that the participation rate is mostly stable (Bohnert et al., 2008; Mahoney et al., 2002; Pederson, 2005; Simpkins et al., 2011). Reasons for declines in participation across time include the possibilities that: a) extracurricular activities require greater skills and time commitment at higher grades, b) extracurricular activities become more competitive as teens get older, and c) adolescents are more likely to work as they get older (Herman, 2000;

Pedersen 2005). Consequently, youth participation levels are likely to reach a peak in early-to-mid adolescence and then decline over time.

Hispanic Student Participation Rates and Barriers to Participation

Numerous studies indicate that Black students are as likely to participate in most extracurricular activities as are White students (Bartko & Eccles, 2003; Pederson, 2005); on the other hand, relatively little is known about the participation rates of Hispanic students. What is known about Hispanics is that they are less likely to participate in extracurricular activities at the high school level than are students of other ethnic groups (Brown & Evans, 2002; Davalos et al., 1999). While this knowledge is important, a limitation of this research is that little is known about Hispanic participation rates at earlier ages. This represents a problem in that it precludes us from knowing whether differences in participation are found only at the high school level or whether they emerge at earlier periods. Understanding when differences appear is especially important when one considers, as previously noted, that early participation may lay the foundation for later participation and related beneficial outcomes.

Explanations for the findings that Hispanic high schools students participate in extracurricular activities at lower rates are varied. One of the reasons for the lower participation may be due, in part, to the economic disadvantages faced by many Hispanic students (Aud et al., 2010; Prelow & Jordan-Green, 2007). Socioeconomic status is a significant predictor of extracurricular activity participation, as parental income and education levels are positively associated with student participation (Pederson, 2005; White & Gager, 2007). Beyond SES, and worthy of study, is how Hispanic cultural

characteristics influence extracurricular activity participation. Most noteworthy of these is the Hispanic concept of familism.

When discussing Hispanics, the ideas of familism and collectivism are cited as major cultural themes. Briefly, these themes refer to the desire to maintain strong familial ties, the expectation that the family will be the primary source of support, and the commitment to the family over individual needs and desires. Consequently, individuals are interdependent and strive to make contributions and achievements that are geared towards benefitting the entire family (Woolley, Kol, & Bowen, 2009; Tyler et al, 2008). In regards to school participation in general, these cultural values shape the social interactions that students partake in at school and may limit social relationships that Hispanic students develop with their peers. For example, one study found that Hispanic students reporting high familism values were less likely to report having deviant peers, and, more relevant to the present study, were also *less* likely to report having non-familial peers in general (Roosa et al., 2011). Similarly, results of a different study indicate that Hispanic students are less likely than others to identify having friends or a “best friend” at school (Vaquera, 2009). In addition, high familism values are associated with parents being more protective of their children. This is exhibited through stronger monitoring and less unsupervised time (Halgunseth et al., 2006). In looking specifically at Hispanic youth participation in extracurricular activities, a recent study found that non-participant Hispanics were more likely to come from families with a relatively higher level of Mexican cultural orientation (Simpkins, Vest, & Price, 2011); parents with this high orientation reported that extracurricular activities interfered with

quality family time. Together these factors may conceivably serve to explain the lower extra-curricular activity participation rates among Hispanic youth. More pragmatically, Hispanic families may encounter more immediate challenges that interact with familism to limit participation by Hispanic youth in extracurricular activities.

It is not uncommon for Hispanic families to encounter challenges that interfere with parental participation in their child's education and in school involvement. For example, typical barriers facing this population include: lacking the ability to understand English, fearing participation in the school, being uninformed about the school system, and having limited education and believing that they would not have a part in school participation (Quezada, Diaz, & Sanchez, 2003). Regarding extracurricular activities, Hispanic parents have most frequently cited transportation, being a single parent, working long hours, and limited financial resources as limitations to their children's participation (Simpkins, Vest, & Price, 2011). Generational status has also been linked to lower rates of extracurricular participation. Recent student immigrants and children of recently immigrated parents are less likely to participate in school-based extracurricular activities (Peguero, 2010). These barriers may function to deter Hispanic parental involvement and often contribute to a lack of school environment understanding and thereby of the academically supportive opportunities offered to students, such as extracurricular activities. Together, this may preclude Hispanic parents from encouraging their children to participate and benefit from the opportunities that school-based extracurricular activities afford.

Purpose

It is well documented that youth benefit from participation in extra-curricular activities via engagement and connectedness with school. In the present study, patterns of participation status and participation intensity in school-based extracurricular activities among an ethnically diverse, academically-at risk sample of middle school students were examined, with a focus on the participation of Hispanic students. The first goal of this study was to examine whether student ethnicity predicted participation in extracurricular activities during the middle school years. It was hypothesized that Hispanic students would be less likely to participate in both sports related and non-sports related school-based extracurricular activities. This study goal is significant in that Hispanic student samples are understudied in this area. Moreover, the focus on students at the middle school level is important in identifying when potential differences first emerge and, in turn, guiding the focus of intervention. The second goal of the study was to examine participation intensity (i.e. amount of time spent in activities per week) in addition to participation status. While participation intensity is sometimes overlooked or lumped in with studies of participation status in general, understanding whether there are differences in participation intensity is also important in guiding intervention. It informs whether it is enough to promote participation in general or whether it is also necessary to promote higher levels of participation. Based on extant studies, it is hypothesized that participation intensity would also be lower for Hispanic students in both sports and non-sports related extracurricular activities.

Methods

Participants

Participants were drawn from a larger sample of students participating in a longitudinal study examining the impact of grade retention on academic achievement. Participants were originally recruited from one of three school districts in Texas across two sequential cohorts in first grade, during the fall of 2001 and 2002. Children were eligible for the study if they: a) scored below the median score on a state-mandated, district-administered test of literacy; b) spoke either English or Spanish; c) were not receiving special education services; and d) had not been previously retained in first grade. At the time of initial eligibility in the study, consent forms were received for 784 students. Of this larger sample, students were included in the present study if they were in the 7th grade during the 2007-08 or 2008-09 school years and had not attrited from the study.

Of the resulting sample, 485 students had data on extracurricular activity participation; the other students either chose not to participate in the study or data was not collected for them because their whereabouts were unknown. Attrition analyses based on archival variables-including performance on a district literacy test, age, sex of student, ethnicity, eligibility for free or reduced-price lunch, and bilingual class placement- suggested that there were no differences on the measured variables between those students with extracurricular activity data and those without that data.

Of the participating students, 54.8% % were male; the ethnic composition was 24.9% African-American, 39.1% Hispanic, and 36.0% Caucasian. The average age of

the students in this sample was 12.57 (SD = .37). The economically disadvantaged status for students was based on whether or not they received free or reduced price lunch at school; 63.13% of the student participants were economically disadvantaged. Table 1 provides additional participant information.

Table 1
Ethnicity and sex of student participants

	Black	Hispanic	White	Total
Male (N)	67	99	100	266
Female (N)	61	91	67	219
Total (N)	128	190	167	485

Table 2
Student profiles for each of three major districts

	District 1	District 2	District 3
Ethnicity			
Black	24.4%	13.7%	39.3%
Hispanic	47.8%	16.0%	38.7%
White	26.6%	60.8%	17.2%
Asian/Pacific Islander	0.3%	9.1%	4.6%
American/Alaskan Native	0.2%	0.2%	0.2%
At-Risk	61.3%	31.6%	45.8%
Economically Disadvantaged	72.4%	30.0%	55.0%
LEP	17.4%	6.3%	13.7%

Although students had moved to many different schools during the span of the longitudinal study, a majority of the students in the present study remained within one of the three initial recruitment districts: 51.1% attended District 1, 25.6% attended District 2, and 10.4% attended District 3 at the time of data analysis. A student profile for each of these districts is presented in Table 2; the remaining participants had moved and attended a district outside of those utilized in the initial recruitment process.

Procedures

Demographic information (student age, sex, and ethnicity) and school information (district, school, teacher, and grade level) were collected from archival information available from school-reported rosters. Data on student participation in extracurricular activities was obtained during individual interviews conducted by trained research staff. Students were interviewed once during the academic year and were compensated for their participation.

Measures

Extracurricular Activity Involvement. Participants' involvement in school-based extracurricular activities was assessed during individual interviews conducted by trained research assistants. Students were asked to indicate whether they participated in a school-based activity within each of five different extracurricular activity domains during the after-school hours or on weekends. If students indicated that they did participate in an activity within each category, they were asked to estimate the number of hours per week that they spent in that activity. The activity categories assessed were sports (i.e. football, baseball, cheerleading), fine arts (i.e. band, drama club), academic

clubs (i.e. UIL, NHS, Spanish club), government (i.e. student council, class council), and service clubs (i.e. tutoring, environmental awareness group). The different activities were then collapsed into two broad categories: sports and non-sports (including fine arts, academic clubs, government, and service clubs). Sports and non-sports activities were analyzed separately as the literature suggests that antecedents to activity choice between these categories and subsequent outcomes related to these categories may be different (Eccles & Barber, 1999; Holland & Andre, 1987; McNeal, 1995). As such, much of the literature in this area distinguishes between sports and other activity types.

Participation in extracurricular activities was measured in two ways.

‘Participation status’ measured whether or not students participated in an activity within each activity category (i.e. yes or no). ‘Participation intensity’ measured the amount of time, in hour per week, which students spent in activities within each activity category.

Statistical Analyses

Participation Status. To examine participation status (whether students participated in each type of extracurricular activity or not), logistic regression analyses were conducted for participation in each of the two extracurricular activity categories. In each of these analyses, the predictors were two ethnic contrasts, sex, and economic status. The first ethnic contrast compared the Hispanic group to the White group (Black= 0, Hispanic = -1, White = 1) and the second ethnic contrast compared the African-American group to the White group (Black = -1, Hispanic = 0, White = 1). Females were coded as 0 and males as 1. Additionally, all pairwise interactions between these variables were included in the analyses.

Intensity. Analysis of variance (ANOVA) was conducted on participation intensity for both extracurricular activity categories; in this case, participant ethnicity, sex, economic status, and the interaction between these variables were examined. For this analysis, non-participants were removed from the data analysis. Including non-participants (those students who did not participate at all in an extracurricular activity) would confound the results because they would likely be affected more by the differences between participants and non-participants than by differences among participants who participated at different levels of intensity. Thus, to better examine participation intensity, only the data of those students who participated in an activity was analyzed. This left 243 participants in sports-related activities and 124 participants in non-sports activities. All data analyses were performed using the Statistical Package for Social Sciences (SPSS) version 17.

Results

Initial analyses focused on the participation rates of students in sports and non-sports activities. Participation percentages, based on student ethnic group and sex, for each activity are presented in Table 3. Overall, 50.6% of students participated in sports-related extracurricular activities; fewer students, 25.8%, participated in non-sports related activities. Further analyses focused on how student variables (sex, ethnicity, and economic status) were related to participation rates and to participation intensity.

Participation Rates

Logistic regression analyses were conducted to assess the impact of a number of factors on the likelihood that students would report that they participated in school-based

extracurricular activities. The model contained four predictors: participant sex, economic status, and two ethnic group contrasts. As previously noted, the first ethnic contrast compared the Hispanic group to the White group and the second ethnic contrast compared the African-American group to the White group. The interaction effects for these variables were also examined; however, they were not included in the final analyses models or in the presentation of results as they were not statistically significant.

Table 3

Percentage of students participating in extracurricular activities

Group	Sports	Non-sports
African-American		
Female	38.3	26.7
Male	53.2	25.8
Total	45.9	26.2
Hispanic		
Female	37.8	27.8
Male	49.0	21.0
Total	43.7	24.2
Caucasian		
Female	57.4	29.4
Male	65.0	26.0
Total	61.9	27.4
Total		
Female	44.0	28.0
Male	56.1	24.1
Total	50.6	25.8

Sports Participation Rates. The first analysis examined the likelihood that students participated in sports-related extracurricular activities. The full model containing the previously identified predictors was statistically significant, $\chi^2(4, N = 480) = 19.24, p < .001$, indicating that the model was able to distinguish between students who reported participating in sports and those that did not. As shown in Table 4, the two ethnic contrasts as well as the student sex variable made a unique statistically significant contribution to the model. Overall, Hispanic students (43.7%) and African American students (45.9%) were both less likely to participate in sports activities than were White students (61.9%). Moreover, female students (44.0%) were less likely than male students (56.1%) to participate in sports related activities. This difference was less

Table 4

Summary of logistic regression analyses for variables predicting student participation in extracurricular activities

Variable	Extracurricular Activity							
	Sports				Non-sports			
	B	SE	B	Wald χ^2	B	SE	β	Wald χ^2
Contrast 1	-0.628	0.275	0.534	5.209*	-0.055	0.306	0.947	0.032
Contrast 2	-0.727	0.252	0.483	8.320**	-0.159	0.281	0.853	0.320
Female	-0.45	0.188	0.638	5.756*	0.212	0.21	1.236	1.015
Econ Status	-0.018	0.231	0.982	0.006	0.04	0.257	1.041	0.025

Note. Contrast 1 compares African American and White Students. Contrast 2 compares Hispanic and White students. * $p < .05$; ** $p < .005$.

pronounced than the ethnic group differences reported, but it was statistically significant. The economic status of students in this analysis was not predictive of student participation in sports-related extracurricular activities.

Non-sports Participation Status. The second logistic regression examined the likelihood of student participation in non-sports related extracurricular activities. While the activity type is different in this analysis, the model was the same as that used in the analysis previously discussed. In this case, the model was not statistically significant, indicating that the predictors could not distinguish between students who reported participating in non-sports activities from those who reported not participating in non-sports activities. The results of this analysis are presented in Table 4. As indicated in the table, none of the selected variables (sex, economic status, or student ethnic contrasts) were predictive of differences in participation rates in non-sports extracurricular activities.

Participation Intensity

To further examine participation characteristics, intensity, the actual amount of time that students spent in these activities, was examined. Descriptive analyses of the participation intensity of these students are presented in Table 5. A three-way between subjects analysis of variance was conducted to compare the effects of student ethnicity, sex, and economic status on the intensity of weekly participation in extracurricular activities. In both sports and non-sports participation, none of the main effects (ethnicity, sex, economic status) in the model were significantly related to the intensity

of student participation in extracurricular activities. Student participants did not tend to differ in intensity based on the predictor variables.

Table 5

Average hours per week spent in extracurricular activities

Group	Sports (SD)	Other (SD)
African-American		
Male	7.70 (4.17)	3.23 (2.58)
Female	5.46 (3.60)	3.47 (3.16)
Total	6.78 (4.07)	3.35 (2.84)
Hispanic		
Male	6.66 (4.00)	3.00 (3.08)
Female	5.49 (3.41)	3.39 (2.21)
Total	6.18 (3.80)	3.21 (2.62)
Caucasian		
Male	6.80 (3.55)	3.58 (2.65)
Female	5.89 (4.71)	2.77 (2.22)
Total	6.46 (4.03)	3.23 (2.48)
Total		
Male	6.96 (3.84)	3.30 (2.75)
Female	5.65 (4.00)	3.21 (2.47)
Total	6.44 (3.95)	3.25 (2.61)

Note. This data excludes those students who did not participate in an extracurricular activity.

Taken together, the results of this study indicate that there was a difference in participation rates in sports-related activities based on student sex and student ethnicity; males were more likely to participate in sports than females, and White students were more likely to participate in sports than were Hispanic or African American students. Economic status was not statistically significantly related to participation status. There were no sex, economic status, or ethnicity differences in student participation rates in non-sports extracurricular activities. Furthermore, the results of the analyses of variance suggest that there are no statistically significant differences in participation intensity based on sex, ethnicity, or economic status for participating students. In other words, there are ethnic and sex differences in student participation rates; however, once students become participants, there are no differences in participation intensity.

Discussion

As Hispanic students continue to make up an increasingly larger percentage of the school population, it is important to identify factors that may mitigate their historically poor academic achievement and school performance. One potential salve is participation in school-based extracurricular activities. To identify whether Hispanic students were benefiting from such activities, this study examined the extracurricular activity participation patterns of an ethnically diverse group of middle school students. The age group studied further allowed inferences to be made about when participation differences begin to emerge. While there were no differences between student ethnic group participation in non-sports related activities, the analyses revealed that Hispanic and African American students were less likely to participate in sports-related

extracurricular activities than were White students. In examining participation intensity, it was found that there were no group differences. Economic status and the interaction variables between were not significantly related to participation status or intensity.

Sports vs. Non-sports Participation Rates

Overall, about half of the student in this study participated in sports events; less than that, about one-fourth, participated in non-sports activities at the seventh grade level. These results are in line with other studies that have found that students tend to participate in sports activities at higher rates than they do in other types of activities (Walston, Rathbun, & Germino-Hausken, 2008). Furthermore, analyses revealed that female students were less likely to participate in sports than were males; no sex differences were found in participation rates in non-sports related activities. This result is in line with other studies that have activities in which students participate to vary by sex. Particularly, females are less likely to participate in sports events (Dumais, 2009).

Group Differences in Participation Rates

In regards to group differences in participation rates, the first hypothesis that Hispanic students would participate at lower rates than their non-Hispanic White peers was supported. Hispanic students, relative to the White ethnic group, participated at lower levels in sports related extracurricular activities at the seventh grade level. These results add to the findings that Hispanic high school students participate at lower rates in extracurricular activities (Brown & Evans, 2002; Davalos et al., 1999). Unique to this study is that it adds to the body of work by demonstrating that differences in participation rates begin early, at the middle school period, the first time that students are

faced with a large amount of discretionary time and with the exposure to extracurricular activities.

Implications of lower participation for Hispanic students are manifold and significant. Hispanic students are arguably the most at-risk ethnic group of students in our schools, and the finding that they participate less in activities that are shown to promote school connectedness, commitment to school, and academic achievement, is discouraging. Even more discouraging, this study found that the non-participation trend emerges early, at the onset of extracurricular activity participation opportunities. This finding is especially problematic when one considers the fact that early participation is predictive of later participation (Bohnert et al., 2008; Denault & Poulin, 2009; Mahoney et al., 2002; Pederson, 2005). This finding suggests that Hispanic students, by not participating in school-based extracurricular activities, are more likely to miss immediate and downstream opportunities for further school engagement, connectedness, and opportunities to belong to social groups that may buffer them against maladaptive peer influences and promote school success.

Reasons for non-participation are complex and any one explanation must be considered in the context of overlapping and competing possibilities. These may include: a) strong commitment and/or pressure to the family (e.g., familism) that may reveal itself through missed opportunities to engage with school peers, b) cultural barriers that limit the home-school relationship and communication, and c) an increased likelihood of coming from an economically disadvantaged background. In a recent study focused on understanding Mexican origin youths participation in organized

activities, some of the parents identified financial barriers, little knowledge of available extracurricular activities, and a desire to not want to take away from quality family time as being factors in the nonparticipation of their children (Simpkins et al., 2011).

Schools can attempt to address some of these issues by strengthening home-school relationship. In regards to extracurricular activities, the opportunities available to students should be explicitly explained to parents, in the appropriate language. It is important to describe these opportunities in ways that emphasize the academic and social benefits of participation. Additionally, when appropriate, opportunities with assistance in the cost of attending extracurricular activities should be made available to parents. More frequent and helpful communication between the home and school settings may make the discussion of enrolling students in extracurricular activities easier to initiate and to complete (Woolley et al., 2009)

Group Differences in Participation Intensity

Contrary to the second hypothesis, that Hispanic students would participate with less intensity, the results of the study revealed that there were no group differences in participation intensity amongst extracurricular activity participants. This result was found for participants in both sports and non-sports related extracurricular activities. This suggests that once students are engaged and actively participating in extracurricular activities, group differences in the time spent in these activities are not significant. This is an important finding and should be used to further guide the focus of the promotion of participation in extracurricular activities. In this case, it makes sense to advocate enrollment in extracurricular activities, especially for those groups of students, such as

Hispanics, identified as being less likely to be participants. However, the results do not suggest the promotion of higher levels of participation for the students already involved in these activities.

Limitations

As with most studies, the present study has limitations. One of the main limitations is that only two extracurricular category types were examined in the final data analyses. While the interviews asked about multiple activity types, it was necessary to collapse them into two categories because of the low participation rates in some of the categories. While the categories ultimately analyzed in this study here have been utilized in the past (Eccles & Barber, 1999; Fredricks & Eccles, 2006b), it would be interesting to examine possible differences between a greater amount of activities, representing a greater diversity in settings. Another major limitation of this study is that data on student motivations for participating or not participating in school-based extracurricular activities was not available. As such, it is impossible to know why the participation patterns of this sample of students emerged as it did, both within and between the ethnic groups studied. Future studies should include student motivations about participation as well as looking at participation rates and outcomes. Another limitation of this study is that the participations were, initially, considered low-achieving students. While this potentially influences participation patterns and the generalizability of results, it is important to consider that low-achieving students are at particular risk for poor outcomes and the identification of school contextual factors that mitigate failure in this group is necessary.

Future Studies

Future studies looking at extracurricular activity participation rates among youth should continue to examine how participation rates relate to school-related outcomes. Finding positive associations between participation rates and academic outcomes has important policy implications for schools. Additionally, the current research can be further built upon by addressing methodological limitations that limit the generalizability of much of the published studies in this area. Namely, most studies that show that extracurricular activities are positively related to valued outcomes tend to be based on cross-sectional data collected at one-time period, so they preclude conclusions that can be drawn about causality.

In regards to the findings of this study, it would be especially beneficial to research whether all students benefit equally from participation in extracurricular activities or whether some groups may benefit from participation more so than others. While an empirical question, one could reasonably assume that high risk groups (e.g., economically disadvantaged) might benefit more (e.g., feelings of belongingness; connectedness) from participation. Future studies should focus on identifying those groups that might benefit most from activity participation so that those activities with the most impact are made more readily available to these students. Likewise, it would be beneficial to examine school contextual variables in addition to the individual-level variables included in this and similar studies. For example, an examination of school size and school-wide SES characteristics would further clarify the settings which are most beneficial for participants.

Additionally, the examination of the participation patterns of Hispanic students was the focus of this study. In this case, Hispanic students were compared to a White reference group of students. It would be helpful to further examine possible differences within the Hispanic population, as the Hispanic ethnic group is further varied by country of origin as well as generational status and acculturation levels. In fact, a recent study suggests that while country of origin or economic status may not play a part in the extracurricular activity participation status of Hispanic students, cultural orientation does (Simpkins et al., 2011). Future studies with more diverse Hispanic samples should continue to delve into within group differences in participation and related outcomes. Additionally, while this study utilized a sample of low-achieving students, future studies should take into account the experiences of a broader set of students at the middle school level, as differences in achievement may influence participation characteristics.

CHAPTER III

MANUSCRIPT #2: DOES SCHOOL-BASED EXTRACURRICULAR ACTIVITY PARTICIPATION INFLUENCE BELONGINGNESS AND PEER NETWORK CHARACTERISTICS IN MIDDLE SCHOOL HISPANIC STUDENTS?

Synopsis

Participation in school-based extracurricular activities in a diverse group of at-risk middle school students was examined for effects on multiple outcomes related to feelings of school membership, belongingness, and peer network characteristics. The study took into account important sociodemographic variables, including sex, socioeconomic status, and race. Additionally, the study took into account the outcomes measured at multiple time points and the effects of the interactions of sociodemographic variables and participation. The most important predictors of outcomes at grade 7 were the prior corresponding measures of the outcome, obtained during the preceding year. Neither participation in sports-related extracurricular activities nor participation in non-sports related extracurricular activities had significant main effects on outcomes. However, there were significant interactions between student racial group and sports participation; sports participation was related to some positive outcomes for Hispanic and African American students but not for White students. Results suggest that early participation in extracurricular activities matters for students at a higher risk for school failure, and it indicates that the benefits of participation are more salient from some groups of students than they are for others.

Introduction

Hispanic students now represent the largest ethnic minority group in American schools, with growth relative to other ethnic groups expected to accelerate (U.S. Census Bureau, 2003). Despite increasing numbers, Hispanic students continue to demonstrate a well-documented academic achievement gap when compared to their non-Hispanic White peers (National Center for Educational Statistics, 2009a; National Center for Educational Statistics, 2009b). The achievement gap presages negative down-stream consequences such as higher rates of retention, suspension/expulsion, and school dropout (Aud et al, 2011). Understanding how to mitigate factors that impede achievement among Hispanic students is thus of national policy importance. One noteworthy area of research involves the documented positive relationship between participation in school-based extracurricular activities and important adolescent outcomes. Little, however, is known about these relationships among Hispanic youth. As such, the purpose of this study is to examine the effects of extracurricular activity participation on indicators of school membership, belongingness, and peer network characteristics in a racially diverse sample of middle school students and to examine whether groups of students benefit differentially from participation.

Functions and Benefits of Extracurricular Activities

Academic clubs, individual or team sports, and performance clubs, such as drama or band, are typical examples of school-based extracurricular activities. Such activities generally include regular participation schedules, rule-guided engagement, direction by adult activity leaders, an emphasis on skill development, and voluntary participation

(Larson, 2000; Mahoney & Stattin, 2000). Extracurricular activities are thought to encourage healthy development because they provide opportunities for students to belong to positively-oriented peer groups. This serves as a protective mechanism in that students belonging to these positive groups are exposed to modeling of prosocial behavior (Barber et al., 2001), and they are more likely to display these positive behavior themselves (Eccles & Barber, 1999; Eccles et al., 2003; Feldman & Matjasko, 2005; Schaeffer, Simpkins et al., 2011). Extracurricular activities may also afford adolescents the opportunity to develop social capital in the form of positive relationships with adult activity leaders (Denault & Poulin, 2008). Such contact provides adolescents with a source of school-based mentorship that is thought to facilitate further engagement in school (Denault & Poulin, 2008). Participation in extracurricular activities may also provide a safe setting for students to acquire and practice newly learned skills (e.g., improved social skills), some of which they may generalize to other areas of their lives (Feldman & Matjasko, 2005; Denault & Poulin, 2008; Larson 2000; Peck et al., 2008).

From a theoretical perspective, multiple theories provide useful frameworks in understanding the benefits of participation in extracurricular activities. At the broadest level, Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979) provides a general context in which to consider the processes occurring during participation in such activities. According to ecological systems theory, adolescents' individual propensities, interacting between and within multiple systems in the surrounding environment, shape their development. In this vein, extracurricular activities, as a specific system and through the provision of interactions with adults and with peers embedded in schools,

shape behavior and reactions of others to that behavior in a reciprocal manner. Social learning theory (Bandura, 1977) further underscores the mechanisms through which participation in extracurricular activities has its benefits by exploring the reciprocal nature of influence within social systems. From this perspective, one can reasonably assume that socialization that occurs within one's peer group acts to shape behavior as it structures what individuals do with their time and the kinds of values and collective behaviors to which they are exposed and learn to identify with (Eccles & Barber, 1999; Eccles et al., 2003; Feldman & Matjasko, 2005; Schaeffer et al, 2011). Adolescent participants in school-based extracurricular activities are more likely to have an academically and prosocially-oriented peer group; thus, they are more likely to be exposed to modeling of school-valued behaviors and are more likely to be reinforced for demonstrating such behaviors.

In sum, extracurricular activity participation may be seen as increasing levels of school connectedness/attachment, identification, and involvement. As students identify with positively-oriented peer groups, they enhance adaptation and conformity to school expectations. Students who develop these higher feelings of belongingness will likely come to value and align themselves with school-relevant goals (Finn, 1989). In fact, higher feelings of school belonging and membership have been associated with greater school attendance, higher grades, greater time spent on homework, and better social-emotional adjustment (Goodenow, 1993; Hagborg, 1994; Hagborg, 1998). School belonging is also significantly associated with valuing schoolwork, school motivation, expectancy of success, and self-reported effort (Goodenow & Grady, 2003).

Research on the effects of extracurricular activity participation indicates that it is related to mostly positive outcomes. In relation to academics, multiple studies demonstrate that participation in such activities is linked to higher grades, higher academic aspirations, and higher rates of high school graduation (Bartko & Eccles, 2003; Brown & Evans, 2002; Darling, 2005; Davalos et al., 1999; Diaz, 2005; Dotterer et al., 2007; Eccles & Barber, 1999; Mahoney, 2000; McNeal, 1995). In one study, higher graduation rates were observed primarily among students who were at the greatest risk for dropping out (Mahoney & Cairns, 1997). Moreover, the benefits of participation are shown to endure, as participation is positively associated with attending a postsecondary institution and obtaining a postsecondary degree (Barber et al., 2001; Gardner et al., 2008; Mahoney et al., 2003; Peck et al., 2008; Zaff et al., 2003). Participation in school-based extracurricular activities has also been associated with decreases in less desirable behavior, such as externalizing symptoms and risky and delinquent behavior (Barnes et al., 2007; Cooley, Henriksen, Nelson, & Thompson, 1995; Fredricks & Eccles, 2006b; Mahoney & Stattin, 2000). While some studies indicate that participants in sports-related activities are more likely to use alcohol (Eccles & Barber, 1999; Fredricks & Eccles, 2006a), the majority report positive adolescent outcomes.

Extracurricular Activity Participation Rates

While sometimes offered in elementary school, it is not until middle school that extra-curricular activity participation rates accelerate for many, though not all, youth. During this period, research documents that many students participate in at least one

type of extracurricular activity. For example, 60% of 8th grade students participated in sports, 41% in drama or music, and 32% in other types of school clubs (Walston et al., 2008). What's more, early participation patterns seem especially important. Findings from multiple longitudinal studies reveal that levels of participation remain mostly stable or decline modestly from this late middle school period on through to the end of high school (Denault & Poulin, 2009; Pederson, 2005).

When examining variability across ethnic groups, research generally shows that participation rates between White and Black students are similar, with Black students as likely as White students to participate in most extracurricular activities (Mahoney & Cairns, 1997; Marsh & Kleitman, 2003; Pederson, 2005). Studies show, however, that participation rates are statistically lower for Hispanic high school students (Brown & Evans, 2002; Davalos et al., 1999; Darling, 2005; Feldman & Matjasko, 2007). Additionally, recent evidence indicates that the decreased level of Hispanic participation emerges before high school; differences in participation rates between Hispanics and others appear as early as 7th grade (Villarreal, Gonzalez, & Hughes, 2010), suggesting that later differences in participation may be attributed to earlier differences. This finding was with the current longitudinal sample.

Explanations for the disparities in extracurricular activity participation rates vary. At the broadest level, the extant literature suggests that lower familial socioeconomic status (SES) is linked to lower participation rates (Pederson, 2005; White & Gager, 2007). In this regard, low SES is associated with limited economic resources to fund participation and with student attendance at poorer schools that may offer fewer

extracurricular opportunities. Moreover, lower SES is related to lower academic skills that may, in turn, limit participation eligibility. Given that Hispanic students are traditionally more likely to come from underprivileged SES backgrounds (Aud et al., 2010), it is no surprise that their participation rates appear lower. Hispanic generational status has also been associated with extracurricular activity participation rates, with recent immigrant status related to lower rates of participation (Peguero, 2010). Recent immigrants express lower levels of familiarity and comfort with the navigation of the school system, resulting in a limited understanding of additional opportunities available to students (e.g., participation in sports). That recent immigrants are likely to have limited English proficiency further complicates this matter and creates additional barriers between home and school interactions.

Among Hispanics, sociocultural factors may also play a role in mediating the likelihood of participation. One attribute shared by many Hispanic groups that may relate to participation is that of familism. Familism communicates to children and youth that the family unit is the primary source of support. While the desire to maintain strong familial ties has many protective features, such as the desire to focus on the betterment of the family as a whole (Woolley et al., 2009), it can also serve as a limiting force on extra-curricular participation. For example, high levels of familism are associated with: (a) students identifying fewer friends at school, (b) parents' beliefs that extracurricular activities will interfere with family time, and (c) parents' communicating a higher desire for increased monitoring of their children (Halgunseth et al., 2006; Simpkins, Vest, & Price, 2011; Vaquera, 2009).

Taken together, the presence of such limiting forces, economic and otherwise, can reasonably be associated with lower participation rates for Hispanic students. Nevertheless, a larger question remains: does participation in extracurricular activities relate to positive, school-related outcomes for Hispanic students? Knowing both Hispanic student levels of participation and whether participation matters would be of benefit to policy makers, educators, and youth alike, especially in regards to informing intervention. Unfortunately, little is known and what is known has conceptual and methodological limitations.

Limitations in the Research

A notable limitation of this body of research is the paucity of studies that include Hispanic student participants. With few exceptions, most samples studied are either White or compare White and Black students. From the limited evidence available, we can surmise that Hispanic students also benefit from extracurricular activity participation (Brown & Evans 2002; Davalos et al., 1999; Diaz, 2005; Melnick et al., 1992b; Prelow & Loukas, 2003). However, there are too few studies involving Hispanic samples to draw convincing conclusions about the effects of extracurricular activity participation among Hispanic youth. Even less is known about potential differences in benefits of participation between Hispanic students and students of other ethnic groups. Likewise, another notable limitation is that few studies have utilized samples specifically comprised of students at a higher-risk for school failure. The focus on such a sample is critical as it is this group of students that stands to gain most from the beneficial effects of participation. These problems are further exacerbated by the limited age range

studied. That a majority of extracurricular activity studies are limited to high school samples is problematic given that antecedents to high school failure (e.g., academic disengagement and feeling isolated from school) emerge early in an adolescent's schooling. Clearly, more work that examines diverse samples, in terms of age and ethnicity, is needed. Furthermore, examining interactions between participation and these variables would clarify and disentangle important moderators of extracurricular outcomes.

Another limitation in this body of work stems from the over interpretation of what are non-causal methodologies. Many of these studies erroneously go beyond the data by making the assumption that the positive relationships found are causal; that is, participation in extracurricular activities leads to positive outcomes (Hunt, 2005). However, from these works, it is not clear whether participation contributes to outcomes or whether participants and nonparticipants differ on important attributes beforehand (Holland & Andre 1987). In fact, researchers have found that certain individual-level characteristic differences (i.e. SES, sex, age, academic achievement) between participants and non-participants uniquely predict positive outcomes (Darling, 2005; Davalos et al., 1999; Denault & Poulin, 2009; Eccles & Barber, 1999; Feldman & Matjasko, 2005; Larson, 2000). Likewise prior levels of functioning on measured outcomes are oftentimes the strongest predictors of later functioning in those same outcomes. For example, a study of the effects of extracurricular activity participation on externalizing and internalizing symptoms found that those symptoms themselves were highly stable across time (Bohnert et al., 2008). Not accounting for these variables may

lead to an inflated estimate of the strength of the relationship between extracurricular activities and outcomes (Fredricks & Eccles, 2006b).

Studies that adjust for selection factors between participants and nonparticipants and that also consider prior levels of functioning more adequately test the association between participation and adolescent outcomes (Darling, 2005; Fredricks & Eccles, 2006a; Larson, 2000). Some of these studies have shown positive but small and reduced effect sizes as compared to results obtained from analyses that examine only one point in time (Fredricks & Eccles, 2006b; Fredricks and Eccles, 2008; Fredricks & Eccles, 2010; Marsh, 1992; Melnick, Sabo, and Vanfossen, 1992a). Others have shown mostly non-significant relationships (Bohnert et al., 2008; Hunt, 2005; Shulruf, Tumen, & Tolley, 2008). Taken together, the existing works on extra-curricular activities, while informative, show an incomplete picture. Studies that employ a diverse sample, examine the interplay between sociodemographic variables and outcomes, and adjust for outcomes across time are needed to clarify the relationship between extracurricular activity participation and outcomes. In addition, it is important to examine how extracurricular activity participation is beneficial, in particular, to low-achieving students, as it is low-achieving students who are at the greatest risk for school failure.

Purpose

Considering the implications of mounting demographic changes in the United States, identification of extracurricular activities as a pathway to greater school membership, belongingness, and positive peer networks for Hispanic students at an early age would be important in its implications for curbing later school failure. While studies

suggest that Hispanics participate at lower levels in these activities, this information is only useful to the degree that positive effects for Hispanic extracurricular activity participants are known. The present study contributes uniquely to this literature by examining whether early participation matters and by assessing whether groups of students benefit differentially from participation.

Specifically, the purpose of this study was to assess the effects of both sports-related and non-sports related extracurricular activity participation on outcomes related to peer network characteristics and feelings of school membership and belongingness in a racially diverse sample of middle school students. Furthermore, because the relationship between participation status and outcomes may vary by sex, race, and SES groups, these factors were taken into account. The research questions for the study are:

1. Which sociodemographic variables predict positive adolescent outcomes? It is hypothesized that neither sex nor student racial group membership will uniquely predict outcomes; however, lower SES is expected to be related to fewer positive outcomes.
2. After taking prior levels of functioning into account, will sports and non-sports extracurricular activity participation predict positive outcomes? First, it is expected that the outcome variables measured at grade 6 will be the most significant predictor of the outcomes at grade 7. Additionally, it is hypothesized that both sports and non-sports participation will be positively related to outcomes even after taking this into account.

3. Do the relationships between extracurricular activity participation and outcomes vary across student sex, race, and SES groups? No significant interaction effects are hypothesized between student sex and the outcomes; however, it is hypothesized that students from the Hispanic and African American groups will benefit more from participation than White students. Students from the lower SES group are expected to benefit more from participation than those from the higher SES group.

Methods

Participants

Participants were drawn from a larger sample of children participating in a longitudinal study examining the impact of grade retention on academic achievement. Participants were originally recruited from one of three school districts in Texas across two sequential cohorts in first grade during the fall of 2001 and 2002. At the time of initial eligibility in the study, consent was received for 784 students. From this group, students were included in the present study if they had not attrited from the study, were in the 6th grade during the 2006-07 or 2007-08 school year, and were not retained the following year. Additionally, participants were only included in the present study if they had data at both the 6th and 7th grades. This resulted in a sample size of 471 students; the other students either chose not to participate in the study or data was not collected for them because their whereabouts were unknown.

Of the participating students, 54.6% were male; the ethnic composition was 25.1% African-American, 39.5% Hispanic, and 35.5% Caucasian. During the 6th grade,

the average age of the students in this sample was 12.57 (SD = .37). The economically disadvantaged status for students was based on whether or not they received free or reduced price lunch at school; 66.0% were economically disadvantaged. A majority of the students in the current study remained within one of the three initial recruitment districts: 52.9% of the participants attended District 1, 25.7% of the participants attended District 2, and 10.4% of the participants attended District 3. The remaining students had moved and attended a district outside of those utilized in the initial recruitment process. A student profile for each of the original districts is presented in Table 6.

Table 6
School district student profiles

	District 1	District 2	District 3
Ethnicity			
African American	24.4%	13.7%	39.3%
Hispanic	47.8%	16.0%	38.7%
White	26.6%	60.8%	17.2%
Asian/Pacific Islander	0.3%	9.1%	4.6%
American/Alaskan Native	0.2%	0.2%	0.2%
At-Risk	61.3%	31.6%	45.8%
Economically Disadvantaged	72.4%	30.0%	55.0%
LEP	17.4%	6.3%	13.7%

Procedures

For this analysis, data was collected when students were in the 6th and in the 7th grades. Demographic information (age, sex, and ethnicity) and school information (district, school, teacher, and grade level) was collected from school-reported rosters. Additionally, using an established protocol, research staff conducted individual interviews during which student participants were presented with several questionnaires. Students received a small compensation for their participation.

Measures

Extracurricular Activity Involvement. Adolescent involvement in school-based extracurricular activities was assessed during structured individual interviews led by trained research assistants. Students were asked to indicate whether they participated in an activity within each of five different activity domains during the after-school hours or on weekends. The activity domains assessed were sports (i.e. football, baseball, cheerleading), fine arts (i.e. band, drama club), academic clubs (i.e. UIL, NHS, Spanish club), government (i.e. student council, class council), and service clubs (i.e. tutoring, environmental awareness group). If students indicated that they participated in an activity within each category, they were asked to estimate the number of hours per week that they spent in that activity. For the purposes of data analysis, the initial categories were then collapsed down to two categories. These included sports and non-sports (fine arts, academic clubs, government, and service clubs) related extracurricular activities. This was done because few students participated in the various non-sports related activities, and the very low participation resulting before collapsing the categories made

data analysis imprecise. Additionally, much of the literature in this area distinguishes between sports and other activity types because it suggests that antecedents to activity choice between these categories and subsequent outcomes related to these categories are different (Eccles & Barber, 1999; Holland & Andre, 1987; McNeal, 1995).

Psychological sense of school membership. The Psychological Sense of School Membership scale (PSSM; Goodenow, 1993) is an 18-item questionnaire of school membership that is intended to assess students' perceived acceptance, feelings of inclusion, respect, and encouragement for participation in school life. Students were asked to indicate the degree to which they agreed or disagreed with each of 18 statements along a 5-point Likert-type scale (1=not at all true; 5=very true). Sample items include: 'I feel like a real part of my school'; 'People here notice when I am good at something'; and 'Other students in this school take my opinions seriously'. Goodenow (1993) found internal consistency for the PSSM ranging from .71 to .88 for middle school students. Hagborg (1994) reported an internal consistency value of .88 for both middle and high school student samples. For the present sample, internal consistency for data collected at grade 6 was .88, and that for data collected at grade 7 was .89.

Self-Perception Profile for Adolescents. The Self-Perception Profile for Adolescents (SPPA; Harter, 1988) is a multidimensional self-report measure designed to assess the perceived competency or adequacy of adolescents in several areas. Overall, the SPPA contains 45 items; for each item, examinees are given a choice between two statements (e.g., "Some teenagers find it hard to make friends, but for other teenagers

it's pretty easy to make friends") and then are asked to decide whether the chosen statement is "Sort of true for me" or "Really true for me." The SPPA items are rated on a four-point scale, with higher scores indicating stronger self-adequacy perceptions. A score for each area measured is obtained by averaging the responses of 5 corresponding items. Harter (1988) reported internal consistencies ranging from .74 to .93 for each of the SPPA subscales. For the purposes of this study, two of the subscales were examined. *Close Friendships*, a measure of one's ability and success in establishing and maintaining close friendships with others, was examined. Internal consistency for the Close Friendships subscale for this study was .74 at grade 6 and .77 at grade 7. *Social Acceptance*, a measure of one's social acceptance by peers, was also examined. Internal consistency for the Social Acceptance subscale for this study was .70 at grade 6 and .75 at grade 7.

Student report of peer behaviors. To assess peer network characteristics, questions adapted from Mahoney and Stattin (2000) and Shann (2001) were utilized. During an interview, students were asked to name peers they spent time with outside of the classroom and to answer questions describing their peers' behavior in prosocial and antisocial areas. The interview included a total of 7 questions describing peers' behaviors, to which participants responded 'yes' or 'no.'

Peer Prosocial Orientations. Three items described positive peer academic orientation (i.e., Does peer plan to go to college?; Does peer get along with teachers and other adults?; Is peer doing well in school?). A peer academic orientation composite score was created using responses on the 3 academic orientation items. First, the

percentage of friends performing each behavior was calculated for each academic orientation item. Then, the peer academic orientation composite score was computed by finding the mean of these items. It represents the percentage of academically and prosocially-oriented behaviors of one's self-identified peers.

Antisocial Friend. Four items described peer deviancy (i.e., Does peer regularly smoke or chew tobacco?; Is peer often out on the town at night?; Has peer ever been caught by the police?; and Has peer skipped school?). The peer antisocial composite score was created by recoding the peer antisocial sum score into a dichotomous variable that indicates if participants have at least one peer who partakes in at least one deviant activity. In other words, the peer antisocial variable was coded as "1" if participants reported at least one friend engaging in at least one deviant act.

Data Analysis Strategy

Participation rates in each of the extracurricular activity types were computed for the entire sample and were also computed across sex and racial groups. Correlations between study variables were also computed. To assess the potential effect of participation time in each of the two types of extracurricular activities during the 7th grade and the outcomes of interest during the 7th grade, separate multiple regression analyses were performed for each of the five outcome variables. The outcomes included the following: school membership, social acceptance, close friendships, percent of prosocial friends, and antisocial friend. Sociodemographic variables (sex, SES, and race) were entered. Racial group membership was examined through the use of dummy codes. The Caucasian group was selected as the reference group and two dummy

variables were created: one contrasted African American students against Caucasians and the other contrasted Hispanic students against Caucasians. The prior level of functioning for each outcome was entered in the analyses. The data for the prior level of functioning was collected during the preceding year, when students were in the 6th grade. Extracurricular activity participation for each activity type (sports and non-sports) was also entered as two separate predictors. Finally, product terms between each of the extracurricular activity participation measures and sex, SES, and racial group membership were entered to test for -interactions. The Activity*Sex and Activity*SES interactions were non-significant in all analyses, so final models were estimated without these interactions.

Results

Participation Rates

The percentage of students participating in extracurricular activities during the 7th grade is presented in Table 7. Overall, 61.8% of the 7th graders in the study participated in at least one type of extracurricular activity; 38.2% did not participate in any extracurricular activity. A closer examination of participation by activity type revealed that about half of the students participated in sports-related extracurricular activities. Fewer students, 25.3%, participated in non-sports related extracurricular activities. These included activities such as band, theater arts, student government, and service clubs. Finally, 28.9% participated in both types of extracurricular activities. Male students were more likely to participate in sports-related activities than were female students, 55.6% of males did so as opposed to 44.4% of females. Additionally, African-

American students (44.9%) and Hispanic students (44.1%) were less likely to participate in sports than were Caucasian students (61.7%). Correlations for study variables are presented in Table 8.

Table 7

Percentage of 7th grade students participating in extracurricular activities (N=470)

Race	Sex	Sports-related	Non-sports related	Participating in one activity	Participating in both activities
African-American	Female	37.9%	25.9%	50.0%	27.6%
	Male	51.7%	26.7%	61.7%	33.3%
	Total	44.9%	26.3%	55.9%	30.5%
Hispanic	Female	38.6%	27.3%	53.4%	25.0%
	Male	49.0%	20.4%	57.1%	24.5%
	Total	44.1%	23.7%	55.4%	24.7%
Caucasian	Female	57.4%	29.4%	76.5%	20.6%
	Male	64.7%	26.3%	70.7%	40.4%
	Total	61.7%	27.5%	73.1%	32.3%
Total	Female	44.4%	27.6%	59.8%	24.3%
	Male	55.6%	24.1%	63.4%	32.7%
	Total	50.5%	25.7%	61.8%	28.9%

Table 8
Correlations among study variables

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. School Membership (grade 6)	-															
2. School Membership (grade 7)	.58**	-														
3. Social Acceptance (6)	.45**	.38**	-													
4. Social Acceptance (7)	.36**	.53**	.56**	-												
5. Close Friendships (6)	.35**	.26**	.59**	.34**	-											
6. Close Friendships (7)	.32**	.48**	.39**	.58**	.39**	-										
7. % Prosocial Friends(6)	.35**	.31**	.17**	.11*	.21**	.09*	-									
8. % Prosocial Friends (7)	.20**	.36**	.10*	.14**	.19**	.19**	.31**	-								
9. Has Antisocial Friend (6)	-.18**	-.14**	-.15**	-.07	-.12**	-.12**	-.28**	-.12**	-							
10. Has Antisocial Friend (7)	-.11*	-.17**	-.00	.011	-.03	-.11*	-.15**	-.30**	.26**	-						
11. Sex (Female =0; Male=1)	-.15**	-.11*	-.04	-.05	-.20**	-.22**	-.08	-.11*	.13**	.08	-					
12. SES	.04	-.02	.00	-.01	-.07	-.11*	-.03	-.11*	.05	.10*	.02	-				
13. Race (Hispanic=1)	-.02	-.10*	-.03	-.06	-.03	-.11*	.03	-.10*	.06	.06	-.03	.32**	-			
14. Race (African American=1)	.08	.09	.06	.08	-.05	.02	-.03	-.03	-.04	-.04	-.04	.26**	-.47**	-		
15. Sports (hours/week)	.11*	.26**	.18**	.22**	.08	.15**	.10*	.19**	-.03	.02	.16**	-.03	-.10*	-.04	-	
16. Other (hours/week)	.01	.06	-.05	.01	-.01	.03	.02	.06	.05	.04	-.02	-.01	-.03	.01	.05	-

* $p < .05$; ** $p < .01$.

Table 9

Summary of simultaneous regression analysis for variables predicting 7th grade participation outcomes

Variable	School membership			Social acceptance			Close friendship			% prosocial friends			Has antisocial friend		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Prior outcome	.55***	.04	.54	.47***	.03	.53	.31***	.04	.33	.32***	.05	.29	.26***	.05	.24
Sex	-.09	.05	-.06	-.05	.04	-.05	-.21***	.05	-.17	-.04*	.02	-.11	.05	.05	.05
SES	-.04	.06	-.03	-.02	.05	-.02	-.08	.06	-.07	-.02	.02	-.05	.10	.06	.10
Af Am.	.05	.08	.03	.07	.06	.05	.03	.08	.02	-.03	.02	-.08	-.06	.07	-.05
Hispanic	-.07	.07	-.05	.01	.06	.01	-.06	.07	-.05	-.04*	.02	-.13	-.01	.06	-.01
Sports	.01	.01	.08	.01	.01	.11	.01	.01	.08	.00	.00	.04	.01	.01	.10
Other	-.02	.02	-.05	-.01	.02	-.03	-.01	.02	-.02	.01	.01	.06	-.02	.02	-.06
Sports*Hisp.	.03*	.01	.12	.01	.01	.04	.02	.01	.08	.01	.00	.11	-.01	.01	-.07
Sports*Af.Am	.03*	.02	.10	.00	.01	.00	.01	.02	.02	.01*	.00	.11	-.02	.01	-.08
Other*Hisp.	.05	.03	.09	.03	.03	.07	.04	.03	.08	.01	.01	.04	.04	.03	.10
Other*Af.Am.	.04	.03	.06	.02	.03	.03	-.01	.03	-.01	-.02	.01	-.10	.04	.03	.08
R^2		.395			.335			.212			.172			.092	
F		27.22***			20.92***			11.15***			8.46***			4.17***	

Note. Outcomes measured during 7th grade; prior outcome level measured at 6th grade.

Note. The African American and Hispanic groups are contrasted with the Caucasian reference group.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Sociodemographic main effects

As previously noted, sociodemographic variables, including students sex, racial group, and SES, were included in the regression analyses. Males rated themselves lower on close friendships ($\beta = -1.74, t(468) = -4.014, p < .001$). In regards to the prosocial orientation of one's friends, males also reported friends with a lower prosocial orientation ($\beta = -1.08, t(459) = -2.452, p < .05$). Additionally, Hispanic students reported that their friends exhibited a lower prosocial orientation ($\beta = -.127, t(459) = -2.203, p < .05$). There were no main effects for any of the sociodemographic variables in regards to the antisocial friends, social acceptance, or psychological sense of school membership outcomes. Results are presented in Table 9.

Simple effects analyses of participation

To address the second research question, as to whether extracurricular activity participation affects outcomes after accounting for prior scores outcomes, Table 9 shows the results of separate multiple regression analyses for both sports and non-sports activity participation. After taking into account the sociodemographic effects of sex, race, and SES as well as the prior level of functioning, neither sports or non-sports participation had significant simple effects on any of the measured outcomes. However, as predicted, the prior level of each outcome was the most significant predictor in the analyses.

Participation interaction analyses

To address the third research question as to whether or not the relationships between extracurricular activity participation and outcomes would vary across student

sex, SES, and race, interactions between participation status and these variables were explored. As previously noted, interactions between activity participation and SES, as well as interactions between activity participation and sex, were not significant and were removed from the final analyses. However, there were racial group differences between the relationship of sports participation and feelings of school membership. As these interactions were significant, it was reasonable to examine the simple slopes of these relationships. There was a positive relationship between sports participation and school membership for Black ($\beta = .103, t(470) = 2.237, p < .05$) and Hispanic students ($\beta = .119, t(470) = 2.372, p < .05$), but not for White students. Likewise, there were racial group differences between the relationship of sports participation and percentage of friends identified as prosocial. There was a positive relationship between sports participation and friends' prosocial orientation for Black students ($\beta = .111, t(459) = 2.022, p < .05$) but not for White or Hispanic students. There were no significant interaction effects for the close friendships, social acceptance, or antisocial friend outcomes. These results are also presented in Table 9.

Discussion

The present study assessed the effects of both sports-related and non-sports related extracurricular activity participation on outcomes related to peer networks, belongingness, and feelings of school membership in a diverse sample of middle school students. Specific research questions included: (1) which sociodemographic variables predict positive adolescent outcomes?; (2) do sports and non-sports extracurricular activity participation predict positive outcomes?; and (3) do the relationships between

extracurricular activity participation and outcomes vary between student sex, race, and SES groups? This study contributes uniquely to the literature by examining whether early participation matters and by assessing whether groups of students, including Hispanics, benefit differentially from participation.

It was hypothesized that sociodemographic characteristics would be uniquely predictive of different adolescent outcomes; particularly, lower SES was expected to be associated with poorer outcomes. However, this hypothesis was not supported. Conversely, females reported higher ratings of close friendships and reported having more prosocially-oriented friends. Also, Hispanic students reported a lower prosocial orientation for their peers. It was also hypothesized that grade 6 levels of performance on the measured outcomes would be most predictive of corresponding outcomes at grade 7. This was true for all outcomes measured, as prior outcomes themselves were the most highly predictive variable. These results are similar to those of other studies in the extracurricular activity literature that have found that outcomes measured at multiple time points are highly stable (Bohnert et al., 2008; Darling, 2005; Fredricks & Eccles, 2006b).

Of greater interest, it was hypothesized that simple effects of participation in sports and non-sports extracurricular activities would be predictive of all outcomes measured. This hypothesis was not supported, as the results of this study indicate that neither sports nor other participation predicted any outcome. While this finding was unexpected and contradicts much prior theorizing and research in this area, it is important to note that most studies in this area measure associations at a single point in

time, thus negating or failing to take into account previous performance levels on the outcomes of interest. Studies that employ longitudinal designs and control for self-selection factors and prior outcome levels find statistically significant relationships; however, effect sizes tend to be quite small (Broh, 2002; Darling, 2005). Others find mostly nonsignificant relationships between participation and outcomes (Hunt, 2005; Shulruf et al., 2008). The results of the present study are in line with this research base. While participation in extracurricular activities is considered important, extracurricular activities make up only one part of the broader context of adolescent development.

Finally, it was hypothesized that the relationship between activity participation and outcomes would be moderated by SES, sex, and racial group membership. Specifically, ethnic minority students and those coming from lower SES backgrounds were expected to benefit more from participation. In contrast to studies showing that benefits of extracurricular activity participation are greater for students from lower SES backgrounds (Marsh, 1992; Marsh & Kleitman, 2002), the present study failed to document interaction effects for participation and SES on outcomes. Likewise, no interaction effects between sex and participation were found. On the other hand, in regards to race, this hypothesis was supported in two instances. First, there was a positive relationship between sports participation and higher feelings of school membership for Black and Hispanic students; this relationship was non-significant for White students. Second, there was a positive relationship between sports participation and the prosocial orientation of friends for Black students only. Sports teams typically consist of many individuals, inherently provide students with opportunities to participate

in larger peer networks, and allow members to consistently spend extended amounts of time together. Sports participation has also been associated with higher perceived popularity, higher acceptance, decreased feelings of social isolation, and greater public recognition at many schools (Barber et al., 2001; Eder & Parker, 1987; Melnick, Vanfossen, & Sabo, 1988), more so than other types of clubs. This may be why positive interactions were found for sports but not for non-sports activities.

Sports participation, as previously noted, was related to increases in feelings of school membership for students from the Hispanic and African American groups. Minority youth are often disadvantaged in regards to social capital, so participation in extracurricular activity networks may be especially important to them in providing them opportunities to develop social capital in the school setting (Goza & Ryabov, 2009). This result is in line with the more general findings of other studies that have identified extracurricular activity participation as being positively related to feelings of school attachment and membership (Brown & Evans, 2002; Diaz, 2005; Dotterer et al., 2007; Fredricks & Eccles, 2006b). School membership refers to feeling valued by teachers, valued by the school, and being attached to the school. It comes from a student recognizing him or herself as having meaningful connections to the school that they attend. When students feel a sense of attachment to school, they are less likely to engage in socially and personally destructive behaviors and are more likely to engage in conforming social behavior (Diaz, 2005), behavior that is predictive of school engagement and, ultimately, to school graduation (Finn, 1989).

The result that Hispanic and Black students benefit more so than White students in this area has important implications for the promotion of participation in extracurricular activities. In this case, it is those students who are more likely to be at risk for subsequent academic failure that appear to be in a position to gain more from participation opportunities. Moreover, the implications of this finding are especially important when one considers that Hispanic students, beginning in middle school and continuing through high school, are less likely to participate in school-based extracurricular activities (Darling, 2005; Feldman & Matjasko, 2007; Villarreal et al., 2010). While this combination of trends appears particularly negative, results bring to light an under tapped opportunity for intervention.

Sports participation was also related to African American students identifying more prosocially oriented behaviors in their peers. This result is in line with previous studies that have identified extracurricular activity participation as being related to positive peer networks in the general samples studied (Eccles & Barber, 1999; Eccles et al., 2003). In this regard, extracurricular participation can have downstream benefits by facilitating youths' connections to school by linking them to supportive peers and adults, contributing to their identity as valued members of the school community (Eccles & Barber, 1999; Eccles et al., 2003). As discussed in social learning theory, it is suggested that this leads to individuals adopting prosocial behaviors and attitudes themselves, including a higher value of education, higher academic aspirations, and continued friendships with positive peers (Eccles & Barber, 1999; Fredricks & Eccles, 2008; Mahoney & Cairns, 1997).

The fact that these interactions were found at such an early period, during middle school, is important considering that the shift to middle school begins a period of transition in which patterns of adaptation are being reorganized, transformed, and set for future behavior (Mahoney & Cairns, 1997). In addition, it is important to consider that disengagement from school occurs over an extended period of time, and those who become committed to dropping out in high school would, at later years, not be expected to extensively participate in any aspect of school, including extracurricular activities. As such, it is especially important to intervene at an earlier stage, before it becomes more difficult to change a student's course. Since participation for Hispanic and Black students was found to be beneficial at such an early stage, it is early, during middle school, that intervention attempts should be made to get students involved in these activities for the potential to shape participation in later years and its associated outcomes. Finally, it is important to note that the sample in this study consisted of students more likely to be at risk for academic failure, as they performed low in a measure of reading ability when they were first recruited into the study. In this case, a portion of this at-risk group of students benefited from participation. This is a strength of this study in that suggests an avenue for positive outcomes for students likely to be at risk for school failure.

Limitations

This study has important implications for policy and practice in the provision and availability of extracurricular activities, but this study design does not allow for causal inferences to be made as it is not longitudinal. Long-term studies that begin early in

middle school, take selection factors into account, and track the outcome variable across time are necessary in continuing to move this field further. Another limitation of this study is that extracurricular activity categories were collapsed from five down to two. While comparing sports to non-sports extracurricular activities is frequently employed in research in this area, it would be helpful to undertake a more nuanced examination of the effects of different activity types. Another limitation of this study is that the sample of students was, during initial recruitment, considered low achieving as they scored below average on a test of literacy. While this factor may influence student participation and outcome, and may limit the generalizability of the results, it is important to consider that it is low-achieving students who are at particular risk for poor school outcomes. Finally, it is important to consider that school contextual variables, in addition to the individual-level variables included in this study, may influence the relationship between extracurricular activity participation and outcomes. Future studies that examine contextual variables such as school size and school ethnic group composition would expand the literature by continuing to more clearly identify what situations are most beneficial for participants.

Future Studies

The literature has identified those students who are less likely to participate in extracurricular activities and it has identified global and differential benefits of extracurricular activity participation. The next step is to reduce the barriers that prevent certain groups of students from participating. Thus, future studies should focus on identifying and addressing concrete reasons for differences in school-based

extracurricular activity participation. Likewise, there is a need to examine the exclusionary criteria of extracurricular activity participation. Students at most schools must meet certain academic standards in order to be allowed to participate in extracurricular activities. Some schools, because of this and similar criteria, are inadvertently creating a situation whereby those students who may benefit most from participation are those students who are not allowed to participate. Studies that examine the costs and benefits to students of such common exclusionary criteria are necessary in informing best practices surrounding the availability of these activities. While the benefits of extracurricular activity participation in this study were small, it is important to continue examining characteristics of participants and activities in order to identify for whom the impact of extracurricular activity participation may be enhanced, and it is important to ensure that opportunities are made available to them.

CHAPTER IV

CONCLUSIONS

As Hispanic students continue to make up an increasingly larger percentage of the school population, it is important to identify factors that may mitigate their historically poor academic achievement and school performance. One mitigating source is participation in school-based extracurricular activities. The purpose of this two article format dissertation was to explore participation by Hispanic students in school-based extra-curricular activities. This was followed by an examination of the benefits, or lack thereof, of participation to feelings of school membership, belongingness, and peer networks.

Study 1

The purpose of this study was to examine the extracurricular activity participation patterns of a racially diverse group of middle school students. The young age group studied allowed inferences to be made about when participation differences begin to emerge. It was hypothesized that Hispanic students would participate at lower rates in both sports and non-sports related extracurricular activities; likewise, it was hypothesized that Hispanic student participation intensity would also be lower in both extracurricular activity types. While there were no differences between student ethnic group participation in non-sports related activities, the analyses revealed that Hispanic and African American students were less likely to participate in sports-related

extracurricular activities than were Caucasian students. In examining participation intensity, no group differences were found.

Implications of lower participation rates for Hispanic students are significant. Hispanic students are arguably the most at-risk ethnic group of students in our schools, and the finding that they participate at lower rates in activities that are shown to promote school connectedness, commitment to school, and academic achievement, is discouraging. Even more discouraging, this study found that the non-participation trend emerges early, at the onset of extracurricular activity participation opportunities. This result extends the previous findings that Hispanic high school students participate at lower rates in extracurricular activities (Brown & Evans, 2002; Davalos et al., 1999) and supports the general idea that early participation is predictive of later participation (Bohnert et al., 2008; Denault & Poulin, 2009; Mahoney et al., 2002; Pederson, 2005). Reasons for non-participation are complex and multiple explanations must be considered. These may include: a) strong commitment and/or pressure to the family (e.g., familism) that may reveal itself through missed opportunities to engage with school peers, b) cultural barriers that limit the home-school relationship and communication, and c) an increased likelihood of coming from an economically disadvantaged background.

However, the value of these participation results are only significant to the extent that we understand the benefits of participation for Hispanic students and, more importantly, whether different student groups benefit differentially from participation.

Research in this area is very limited, so the second study of this dissertation was aimed at addressing this issue.

Study 2

The second study assessed the effects of both sports-related and non-sports related extracurricular activity participation on outcomes related to peer network characteristics, belongingness, and feelings of school membership in a sample of middle school students. Research questions of particular interest in this study included: (1) does sports and non-sports extracurricular activity participation predict positive outcomes?; and (2) do the relationships between extracurricular activity participation and outcomes vary by student sex, race, and SES groups? This study contributes uniquely to the literature by examining whether early participation matters and by assessing whether groups of students, including Hispanics, benefit differentially from participation.

It was hypothesized that main effects of participation in sports and non-sports extracurricular activities would be significantly related to all outcomes measured. The results of this study indicated that neither sports nor other participation predicted any outcome. While this finding was unexpected and contradicts much research in this area, it is important to note that studies that employ longitudinal designs and control for self-selection factors find statistically significant relationships; however, effect sizes tend to be quite small (Broh, 2002; Darling, 2005). Others find mostly non-significant relationships (Hunt, 2005; Shulruf et al., 2008). The results of the present study are in line with this research.

Furthermore, it was hypothesized that the relationship between activity participation and outcomes would be moderated by SES, sex, and racial group membership. In contrast to other studies (Marsh, 1992; Marsh & Kleitman, 2002), the present study failed to document interaction effects for participation and SES on outcomes. Likewise, no interaction effects between sex and participation were found. In regards to race, the hypothesis was supported in two instances. First, there was a positive relationship between sports participation and feelings of school membership for Black and Hispanic students, but not for White students. Second, there was a positive relationship between sports participation and percentage of prosocial friends for Black students only. Sports participation has been associated with higher perceived popularity, acceptance, and public recognition (Barber et al., 2001; Eder & Parker, 1987; Melnick et al., 1988), more so than participation in other types of activities. This may be why positive interactions were found for sports but not for other activities.

As previously noted, sports participation was related to increases in feelings of school membership for students from the Hispanic and African American groups. This result is in line with the more general findings of other studies that have identified extracurricular activity participation as being positively related to feelings of school attachment and membership (Brown & Evans, 2002; Diaz, 2005; Dotterer et al., 2007; Fredricks & Eccles, 2006b). This is significant in that students that feel a sense of attachment to school are more likely to engage in conforming social behavior (Diaz, 2005), behavior that is predictive of school engagement and, ultimately, to school graduation (Finn, 1989). Furthermore, the result that Hispanic and Black students

benefit more so than White students in this area has important implications, as it is those students who are historically more likely to be at risk for subsequent academic failure that appear to be in a position to gain more from participation opportunities.

Sports participation was also related to African American students identifying a larger portion of their peers as being prosocial. This result is in line with previous studies that have identified extracurricular activity participation as being related to positive peer networks in the general samples studied (Eccles & Barber, 1999; Eccles et al., 2003). In this regard, extracurricular participation can have benefits by facilitating youths' connections to school by linking them to supportive peers and adults, contributing to their identity as valued members of the school community and leading individuals to adopt prosocial behaviors and attitudes (Eccles & Barber, 1999; Mahoney & Cairns, 1997).

Finally, the fact that these interactions were found at such an early period, during middle school, is important considering that the shift to middle school begins a period in which patterns of future behavior and adaptation are being set (Mahoney & Cairns, 1997). Additionally, it is important to consider that disengagement from school occurs over an extended period of time, and those who become committed to dropping out at later years would not be expected to extensively participate in any aspect of school, including extracurricular activities. As such, it is especially important to intervene at an earlier stage, before it becomes more difficult to change a student's course.

Summary

Overall, the results of the first study of this dissertation demonstrated that lower rates of Hispanic student extracurricular activity participation emerge early in school, when opportunities are generally first made available. These differences in participation are likely to continue through a student's schooling. Based on the extant literature, this finding suggests that Hispanic students, by not participating in school-based extracurricular activities, are likely to miss the immediate and downstream benefits afforded by the school engagement and academic success that extracurricular activities provide. Moreover, the results of the second study, to some degree, further highlight the implications of the first. While they participated at lower rates, Hispanic and African American students benefited more so than Caucasian students from extracurricular activity participation, particularly in the area of school membership. While this combination of trends appears particularly negative, results bring to light that participation in extracurricular activities is a currently under-tapped opportunity for intervention. As such, it is important to continue to examine what types of extracurricular activities provide beneficial outcomes to adolescents and for whom those benefits are likely to be more pronounced.

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