

Family Socioeconomics and Neighborhood Conditions as Predictors of Out-of-School Time Activity Participation

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Introduction

One key issue for practitioners, policy makers, and researchers interested in out-of-school time (OST) is youth participation rates. Practitioners, for example, want to know how to attract and sustain participation to maximize the potential benefits to those participating. With scarce resources, policy makers need to know what youth face the greatest barriers to participation and in what activities are at-risk youth least likely to participate so that policy intervention may be appropriately targeted. From a research perspective, empirical questions about OST participation are moving toward examinations of youth within their developmental context, with a focus on how characteristics of youth, their families, and their communities may be interdependent in determining who does and who does not participate in OST opportunities.

The goal of the primary study was two-fold:

1. First, we examined differences in OST participation across family socioeconomic conditions (i.e., parent education and family income) and neighborhood conditions (i.e., affluence and safety). Our aim in this first set of analyses was to identify the direct, and unique, contributions of these factors to OST participation.
2. Second, we examined the potential mediating effects of neighborhood affluence and safety for associations between family socioeconomics and OST participation. Our aim in this second set of analyses was to determine whether family characteristics were indirectly related to OST participation as a function of the neighborhoods that families live within. In other words, is there evidence consistent with a chain of events whereby: parent education and family income are important selection factors in determining neighborhood residence and, in turn, the conditions of these neighborhoods into which families select are then predictive of OST participation?

The Present Study

Data for the present study were taken from the Panel Study of Income Dynamics-Child Development Supplement (PSID-CDS), a longitudinal study of a subset of children and parents who participated in the larger PSID. Participants included youth who were in junior high or high school (grades 6-12) during the 2002-2003 school year.

Table 1
Sample Demographics

Demographic Indicator	% (M(SD))
Child Characteristics	
Female	46.8
African American	42.9
European American	46.3
Latino American	6.3
Grade	9.6 (1.8)
Family Characteristics	
Family Size	4.3 (1.2)
Parent Education (yrs)	13.0 (3.3)
Income (5-year Average)	\$55,600 (52,416)
Caregiver Employed	72.1
Two-parent Home	74.7

Table 2
Constructs and Measures

Construct	Measure
Child and Family Demographics	
	Primary Caregiver Report
Out-of-School Activities	Primary Caregiver Report (e.g., "Was child a member of any programs or groups in the community in the last 12 months?")
Neighborhood Affluence	U.S. Census (Composite of tract-level median income, percent residents with BA or higher, and percent residents in professional or managerial jobs)
Neighborhood Safety	Interviewer Observation Report (Composite of 4 items, e.g., "Are there drug related paraphernalia in the street or on the sidewalk?")

Results

Statistical analyses were conducted in two steps:

1. OST Activities were regressed on family income, parent education, neighborhood affluence, and neighborhood safety using maximum-likelihood logit estimation.
 - In all models, standard errors were adjusted for: (1) nesting of participants in families (i.e., siblings) and neighborhoods and (2) sampling weights.
 - In addition, the following covariates were estimated in all models: ethnicity, child age, child gender, child school (i.e., public versus other), family size, caregiver partner status, and employment status of the primary caregiver (i.e., part-time versus unemployed and full-time versus unemployed).
2. The potential mediating effects of neighborhood conditions were estimated by:
 - First, regressing neighborhood affluence and safety on family income and caregiver education using OLS regression with adjustment for nesting, sampling weights, and study covariates.
 - Second, estimating the product of the coefficients linking family income and caregiver education with neighborhood conditions and, in turn, neighborhood conditions with OST activity participation.

The results for the first step of our analytic plan are displayed in Table 3. The results for the second step of our analytic plan are displayed in Table 4.

Table 3
Family Socioeconomic and Neighborhood Predictors of OST Activity Participation

	Community Program		Community Center		Tutoring Program		Athletics		Lessons		Religious Activities	
	OR	CI	OR	CI	OR	CI	OR	CI	OR	CI	OR	CI
Parent Education	1.10	.96-1.25	1.14	1.02-1.28	1.01	.93-1.08	1.07	.98-1.16	1.09	1.01-1.18	1.04	.96-1.11
Family Income	1.00	.96-1.04	1.01	.97-1.05	1.01	.97-1.06	1.10	1.02-1.18	1.06	1.01-1.11	1.02	.98-1.07
Neighborhood Safety	.89	.55-1.45	.90	.60-1.36	.97	.69-1.36	1.57	1.11-2.23	1.57	1.12-2.21	1.50	1.04-2.15
Neighborhood Affluence	1.18	.87-1.61	1.31	1.01-1.70	1.04	.80-1.34	.96	.73-1.26	1.14	.90-1.44	.91	.70-1.17

Note. Bolded odds ratios were statistically significant ($p < .05$). All models included the following covariates: ethnicity, child age, child gender, child school (i.e., public versus other), family size, caregiver partner status, and employment status of the primary caregiver (i.e., part-time versus unemployed and full-time versus unemployed).

Family socioeconomics were significantly associated with three of five OST activities such that youth with more educated parents were more likely to participate in community centers and lessons compared with youth with less educated parents and youth with higher family incomes were more likely to participate in athletics and lessons compared with youth with lower family incomes.

Neighborhood conditions were significantly associated with four of the six OST activities such that youth in more affluent neighborhoods were more likely to participate in community centers than youth in less affluent neighborhoods and youth in safer neighborhoods were more likely to participate in athletics, lessons, and religious activities than youth in more dangerous neighborhoods.

Table 4

Indirect Effects via Neighborhood Conditions

Indirect Effect on OST Participation	Sobel z	p
Family Income → Neighborhood Safety → Lessons	2.25	.02
Family Income → Neighborhood Safety → Athletics	2.21	.03
Family Income → Neighborhood Affluence → Community Center	2.16	.03



Above and beyond direct relations, family income was indirectly linked with OST activity participation via neighborhood conditions. In other words, higher-income youth were more likely to live in safer and more affluent neighborhoods and were, thereby, more likely to participate in lessons, community centers, and athletics than youth in families with lower incomes.

Discussion

In the present study, family socioeconomics and neighborhood conditions were directly associated with youth OST participation such that youth with more educated parents, higher family incomes, and living in safer and more affluent neighborhoods were more likely to participate in OST activities, although there were no participation differences for community or tutoring programs. In addition, family income was indirectly associated with participation through neighborhood safety and affluence. In other words, higher participation rates in lessons, athletics, and community centers by youth with higher family incomes compared with their peers with lower family incomes was explained, in part, by the fact that these higher-income youth lived in safer and more affluent neighborhoods. In light of these results, interventions aimed at increasing participation in OST activities by disadvantaged youth may be most likely to succeed if both family-level and neighborhood-level needs are addressed.

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