

## Attrition From After School Programs: Characteristics of Students Who Drop Out

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A goal of many after-school programs is to provide supervision to youths who might potentially engage in delinquent activities during the afternoon hours. By comparing students who remained in a sample of Maryland after-school programs to students who withdrew prior to the end of the school year, this study provides evidence that after-school programs are serving a lower-risk population than intended. Findings indicate that prior to dropping out of the programs, dropouts scored in the more at-risk direction on 11 out of 12 indicators examined in this study and had significantly more peer drug models and days absent from school than students who stayed in the programs. Census data indicate that dropouts came from neighborhoods characterized by higher levels of social disorganization than students who stayed in the programs. Program attendance is also related to several of the risk-factors examined. The results suggest the need for improved communication with parents and further creativity in program planning as a means of retaining high-risk students.

**KEY WORDS:** after-school programs; at-risk; attendance; attrition; prevention.

Approximately 7.5 million children in the United States between the ages of 5–14 are left without supervision during the after-school hours (<http://www.wellesley.edu>). Time spent unsupervised is associated with various negative outcomes, including academic (Woods, 1972) and emotional problems (Coleman *et al.*, 1984; Galambos & Garbarino, 1983; Guerney, 1991; Long & Long, 1982), delinquency, and drug use (Dwyer *et al.*, 1990; Richardson *et al.*, 1989, 1993).

In response to these problems, after-school programs for children and adolescents have gained popularity in recent years (<http://www.wellesley.edu>; <http://www.mott.org>; President Clinton, 1998; Farkas & Johnson, 1997; Seligson, 1999). By providing children with a monitored, often structured place to be during the at-risk hours between 2 p.m. and 8 p.m.,

after-school programs may provide a “safe haven” off the streets and might prevent juvenile delinquency, drug use, victimization, school dropout, pregnancy, and other negative outcomes associated with lack of supervision. Educators feel that after-school programs can bolster academic performance by providing additional time for instruction (Seligson, 1999).

Policy makers and practitioners believe that at-risk youth are in great need of after-school programs, but in order for such youths to reap the potential benefits, after-school programs will have to effectively recruit at-risk populations and retain them. The research on at-risk youth involvement in after-school programs is scant and findings are mixed. Findings indicate that affiliates of national youth organizations (ex. 4-H, Boy Scouts, Girl Scouts, Boys and Girls Clubs, YMCA) are successfully attracting many young participants who are either victims of violence or delinquents themselves or both (Chaiken, 1998b, p. 355). However, recreation and parks departments are primarily serving children that have not exhibited any behavior or delinquency problems (Schultz *et al.*, 1995). Very few studies examine the attrition rates in after-school programs to determine whether

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programs maintain the students initially enrolled. It is highly probable that withdrawal from after-school programs significantly reduces the number of at-risk youth and youth in general who are receiving the potential benefits such programs offer.

The present study will compare students who drop out of after-school programs with those who stay involved, determine whether after-school programs are serving students at-risk for problem behavior, and assess student reasons for withdrawal from after-school programs.

## METHODS

### Data

The data used in this study are from an ongoing evaluation of the Maryland After School Community Grant Program (MASCGRP), funded by the Safe and Drug-Free Schools and Community Program through the Governor's Office of the State of Maryland (Governor's Office of Crime Control and Prevention, 1996). Eight after-school programs participated in the evaluation of this initiative during the 1998–1999 school year. Programs served elementary and middle school children in grades 4–8 and were run by several different types of organizations, including schools, national youth-serving organizations, and grass-roots community groups. Whether these programs can be generalized to after-school programs in the rest of the nation is not known.

Demographic data on the students was gathered from registration forms completed by parents prior to the commencement of the after-school programs. The sample includes 234 students who registered, had informed parental consent, and showed up for at least 1 day of the after-school programs. Prior to withdrawals, the programs served between 19 and 47 students. On average, the students were 11.5 years old. Nearly two-thirds (61%) of the students were male; 80% were Black or non-White. Ninety-six percent of the students in this category were Black, as only seven students were of other races, including three students of Latino or Spanish American descent and four students of Indian descent. Three of the eight programs served all minority students. The target population for the after-school programs was intended to be latchkey children, but registration data<sup>3</sup> revealed

<sup>3</sup>Data taken from responses to the registration form question, "On a typical school day, how many hours is the child unsupervised after school?"

that only 40% of program participants were latchkey students, at least according to parent reports.

### Measures

#### *Measurement of Outcome Variables*

Two outcomes are explored in this study: program withdrawal and program attendance. Program withdrawal is indicated by three main sources: withdrawal forms completed by the program staff, information provided informally by program directors to the evaluators, and program attendance data. The three sources of withdrawal indicate that a total of 77 of the originally enrolled 234 students withdrew during the 1998–1999 school year, signifying a 33% withdrawal rate. Researchers from the University of Maryland conducted 5–10 min withdrawal interviews with 63 (82%) of the withdrawn students following their decision to leave the after-school programs. Face-to-face interviews were conducted during the school day and when necessary, telephone interviews were conducted after school. Responses to the open-ended question, "Why did you leave the program?" are grouped into categories for descriptive purposes.

Program attendance is measured as a proportion of total possible days in attendance, calculated by dividing the total days the student was present in the program by the total number of days the student could have been in attendance from commencement to leaving or completing the program. For the entire sample ( $N = 234$ ), the average proportion of days in attendance for the school year was 77%. On average, the students who remained in the programs for the entire year ( $N = 157$ ) attended 87% of the days, and the students who withdrew from the programs ( $N = 77$ ) attended 57% of the program days.

#### *Indicators of At-Risk Status*

At the beginning of the 1998–1999 school year, 193 out of the 234 registered students (82%) completed the "What About You" (Gottfredson, 1991) survey. The eight indicators of student at-risk status available from responses to the "What About You" (Gottfredson, 1991) include: rebellious behavior ( $\alpha = .82$ ), delinquent behavior ( $\alpha = .81$ ), last year variety of drug use ( $\alpha = .72$ ), last month frequency of drug use ( $\alpha = .90$ ), attachment to school ( $\alpha = .73$ ), commitment to education ( $\alpha = .64$ ), peer drug models ( $\alpha = .81$ ), and parental supervision ( $\alpha = .61$ ). A scale measuring students' social skills was computed

Table 1. Comparison of Stayers and Dropouts on Individual, Family, and Neighborhood Level Predictors

Pretest measures	Program dropouts			Program stayers			Exp(B)
	Mean	SD	N	Mean	SD	N	
Age	11.60	1.35	68	11.50	1.43	137	1.09
% White	.21	.41	75	.19	.40	156	1.14
% Male	.61	.49	77	.61	.49	157	1.02
% Middle school	.74	.44	75	.64	.48	157	1.63
Higher scores desirable							
Attachment to school	.69	.21	57	.71	.22	107	.71
Commitment	.76	.20	59	.78	.17	108	.42
GPA (1997-1998)	2.31	.73	44	2.48	.77	109	.74
Parental supervision	.76	.19	58	.80	.20	110	.39
Social skills	1.37	.30	61	1.39	.31	136	.85
Lower scores desirable							
Delinquent behavior	.41	.5	58	.35	.48	114	1.31
Peer drug models	.81	.89	58	.50	.71	119	1.65**
Days absent (1997-1998)	2.18	.82	40	1.65	1.02	106	1.79**
Last-month frequency of drug use	.17	.38	58	.09	.29	120	2.06
Last-year variety of drug use	.14	.35	59	.10	.30	122	1.44
Rebellious behavior	.39	.30	50	.41	.32	106	.81
Social disorganization	.23*	1.12	70	-.11	.92	144	1.42*

\* $p < .05$ . \*\* $p < .01$ .

from responses to the Social Skills Rating System (SSRS)-Elementary Level Student Form (Gresham & Elliott, 1990;  $\alpha = .91$ ). The SSRS was completed by 181 (77%) of the registered students.

School attendance data from the 1997-1998 academic year was obtained for 146 (62%) of registered students and class grades were obtained for 153 (65%) of registered students.

Several studies have used census data to test whether community factors affect behavior, and results indicated that census indicators of social disorganization were related to crime (Gottfredson *et al.*, 1991; Sampson *et al.*, 1997), out-of-wedlock births and dropping out of high school (Brooks-Gunn *et al.*, 1993). In this study, a neighborhood is defined as a census block group. Census block group data from the 1990 Census of Population and Housing (U.S. Bureau of the Census, 1990), which correlates highly with 1998 census estimates of the same characteristics, was matched to 214 (91%) student addresses. Twelve variables indicating characteristics of students' neighborhood status were derived from aggregations of the census data.<sup>4</sup> Using factor analysis, one-factor was

extracted, which explained 65% of the common variance in the 12 census variables. Using the regression method for computing factor scores, a factor score measuring social disorganization was computed using these 12 variables.

## RESULTS

During the 1998-1999 academic year, 77 (33%) of the initially registered students dropped out of the eight programs. The dropout rates ranged from 11% in one program to 53% in another.

Table 1 compares students who stayed in after-school programs throughout the 1998-1999 school year ("stayers") with students who dropped out of the programs prior to the end of the school year ("dropouts") on student, family, and neighborhood level indicators of at-risk status measured at the beginning of the year. The table shows pretest means and standard deviations as well as the log odds ratios for program dropouts and program stayers. Eleven out of the 12 comparisons between dropouts and stayers indicate that higher-risk students were more likely to drop out. Statistically significant differences between stayers and dropouts emerged on measures of the presence of peer drug models, the number of days the

<sup>4</sup>The following variables were calculated as the proportion of individuals in the block group displaying each characteristic: welfare, poverty, divorce, female unemployment, male unemployment, low level male employment, low level female employment, low level professional/managerial employment, low family income, low educational attainment, and low level of nonpublic

school enrollment. Female-headed households are measured as the ratio of female-headed households to total households.

students were absent from school during the 1997–1998 school year, and the social disorganization in their home neighborhoods. Dropouts reported more peer drug models and more days absent from school than stayers ( $p < .01$ ). Dropouts' neighborhoods are characterized by significantly higher levels of social disorganization than stayers' neighborhoods ( $p < .05$ ).

Associations between program attendance and at-risk indicators are presented in Table 2. Pearson's  $r$  correlations indicate that higher levels of parental supervision, having peer drug models, being absent from school in 1997–1998, last month drug use, last year variety of drug use, and social disorganization of a student's neighborhood are all significantly associated with program attendance. Parental supervision is associated with increased program attendance, whereas peer drug models, days absent from school, last month drug use, last year variety of drug use, and social disorganization are significantly associated with decreased program attendance.

Withdrawal interviews indicated the main reason students withdrew from the after-school programs was because they found the programs boring (33%). The second highest reason for dropout was due to student relocation. Twelve (19%) of the dropouts relocated or moved away from the after-school program area. The third highest reason for dropout was transportation problems. Nine (14%) students reported leaving the programs because they were unable to get a ride home after the program. Transportation

problems were mainly an issue in programs that did not provide transportation to the students after the program.

## DISCUSSION

Research and theory suggest that after-school programs might provide an effective mechanism to reduce juvenile delinquency, drug use, victimization, school dropout, pregnancy, and other negative outcomes associated with lack of supervision during the afternoon hours. After-school programs have the potential to achieve these outcomes if they are successful at attracting and retaining in the programs youth who are prone to engage in these behaviors. This study found evidence that withdrawal and poor attendance in after-school programs results in programs serving a lower-risk population than originally intended. Findings indicate that prior to dropping out of the programs, dropouts scored in the more at-risk direction in 11 out of the 12 indicators examined in this study and had significantly more peer drug models and days absent from school than students who stayed in the programs throughout the school year. Additionally, analyses of census data indicated that dropouts came from neighborhoods characterized by higher levels of social disorganization than students who stayed in the programs. Analyses of attendance data indicate that students attend more days of after-school programs when they have higher levels of parental supervision. Students are less likely to attend programs when they have peer drug models, high levels of school absences in the previous school year, and use drugs. Additionally, students who reside in socially disorganized areas have lower attendance at after-school programs. This finding provides evidence that despite policy-makers efforts to expand after-school programming in the inner-cities and for at-risk youth overall, these children are less likely to be spending their discretionary time in structured, safe after-school programs than their less at-risk peers.

After-school programs will have to make extra efforts to maintain students who are most at-risk. Screening students prior to their involvement in the after-school program may provide information regarding the likelihood of student withdrawal or non-attendance. As indicated in this study, school records from the prior school year offer evidence of risk for dropout and nonattendance. With prior knowledge of student behavior, programs should target extra support and attendance incentives such as pizza parties, grab bag treats, or gift certificates to local businesses

Table 2. Associations Between Program Attendance and Individual, Family, and Neighborhood Level Predictors

Predictor	$r$
Age	-.05
Race (White)	.02
Gender (male)	.03
Grade level (middle school)	-.10
Attachment	.11
Commitment	.10
GPA (1997–1998)	.05
Parental supervision	.17*
Social skills	-.09
Delinquent behavior	-.11
Peer drug models	-.22**
Days absent (1997–1998)	-.33**
Last month frequency of drug use	-.12*
Last year variety of drug use	-.17*
Rebellious behavior	-.02
Social disorganization	-.33**

Note.  $N$ s range from 146 for days absent (1997–1998) to 234 for gender.

\* $p < .05$ . \*\* $p < .01$ .

toward students most likely to dropout. Developing communication with parents may help to improve attendance rates. Notifying parents when students are absent from the program is a means of protecting the safety of youth and improving parental knowledge of children's actions.

The fact that a third of the dropouts reported being bored in the programs implies that after-school programs will not be able to recruit students initially or maintain long-term enrollment unless they engage the participants in activities that hold their interest. Research indicates that high sensation seekers are at greater risk of using drugs, and, like the students in this study, are also at risk of becoming bored by prevention programs (Donohew *et al.*, 1994; Palmgreen *et al.*, 1991). Fortunately, programs can be designed to meet the needs of these individuals. Chaiken (1998b) contends that programs must provide opportunities for status, peer group approval, independence, and tests of physical, personal, and social endurance. Programs need to provide a "hook" which initially attracts participants (such as sports), but also need to meet the interests of the participants in the long run (Acosta & Holt, 1991; Chaiken, 1998a,b). Student involvement in programming may help retain enrollment, attendance, and retention by providing new, innovative ideas for activities. Not until after-school programs are successful at targeting and retaining the intended population will studies of their full prevention potential be possible.

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