

Symposium Title: Features of after-school programs that promote development: Type, quality, and content

Paper Title: Relationships with after-School program staff: Supporting (versus hindering) children's adjustment and achievement

Educators and policy makers have turned to after-school programs as one way to improve academic achievement and to reduce problem behaviors. There is a lack of agreement, however, about the components of after-school programs that are necessary to accomplish these goals. Systematic research on this issue has been remarkably limited. In this paper we consider two aspects of staff-child relationships – staff-child conflict and the staff's beliefs about child rearing -- in relation to student outcomes. We hypothesized that lower levels of staff-child conflict and less authoritarian beliefs would be associated with more positive child outcomes at school and at home.

The sample consists of all of the participants in the 10-site NICHD Study of Early Child Care (SECC) who were enrolled in formal after-school programs in first grade ( $n = 137$ , 49% male, 22% single-parent households, 20% minority race/ethnicity). Two-thirds of these programs were school-based; others were located at child care or community centers. Staff who had primary responsibility for the study children reported (a) the quality of their relationship with the study children and (b) their beliefs about child rearing. Mothers reported how many hours per week children attended the after-school program; on average, they attended 10.3 hours per week or about 2 hours per day. These aspects of after-school program experience were considered in relation to six child developmental outcomes that were assessed at the end of first grade: reading achievement and math achievement measured on the Woodcock-Johnson-Revised achievement battery, behavior problems (maternal report and first grade teacher report), and social skills (maternal report and teacher report).

A series of hierarchical multiple regressions were conducted (see Table 1). In Model 1, the child outcome in first grade was regressed on child gender, family structure, maternal education, the quality of maternal parenting (observed in first grade), the instructional quality of the first grade classroom (observed), the emotional climate of the first grade classroom (observed), and the child's performance at 4½ years on the outcome in question. Model 1 significantly predicted all six measures of child functioning at the end of first grade, with the strongest predictor being child performance at 4½ years.

In Model 2, the block of after-school variables (staff-child conflict, staff authoritarian child-rearing beliefs, and the amount of time the child spent at the program each week) was added to Model 1 to determine if after-school experience accounted for significant variance over and above the child, family, and school factors. The after-school program block was significantly associated with reading achievement, math achievement, and behavior problems as reported by both mothers and teachers at the end of first grade (see Table 1). Less conflictual relationships with program staff predicted higher reading and math achievement, and fewer problem behaviors according to both mothers and teachers. Less authoritarian child-rearing beliefs predicted higher mathematics achievement.

These analyses underscore the potential of relationships with program staff to support (and to hinder) student adjustment and academic achievement.

Table 1. Center-Based After-School Programs

	CBCL-Total Problems (Mother report)	CBCL-Total Problems (Teacher report)	Social Skills (Mother report)	Social Skills (Teacher report)	WJR Letter-Word	WJR Applied Problems
Block I	$F(7,119)=16.00,$ $p=.000$	$F(7,105)=8.92,$ $p=.000$	$F(7,119)=10.74,$ $p=.000$	$F(7,101)=5.04,$ $p=.000$	$F(7,118)=7.09,$ $p=.000$	$F(7,118)=12.41,$ $p=.000$
	Beta	Beta	Beta	Beta	Beta	Beta
Boys (1=yes)	-.040	-.012	.035	.066	-.031	.157 *
Single parent (1=yes)	.115	.139	-.102	-.178	-.008	-.031
Mother's education	.058	-.252**	.086	.184	.035	.214*
Mother positive caregiving	-.048	-.045	.014	.047	.023	-.100
Classroom instructional quality	.038	-.091	-.002	.203	.139	.122
Classroom emotional quality	-.124	-.059	-.090	-.204	-.074	-.097
Child functioning at 54-m	.667***	.420***	.596***	.349***	.487***	.560***
Block II	$F(3,116)=4.02,$ $p=.009$ $\Delta R=.049$	$F(3,102)=2.89,$ $p=.039$ $\Delta R=.049$	ns	ns	$F(3,115)=2.27,$ $p=.084$ $\Delta R=.039$	$F(3,115)=2.98,$ $p=.034$ $\Delta R=.042$
	Beta	Beta	Beta	Beta	Beta	Beta
Program staff authoritarian beliefs	.006	.102	.110	-.039	-.064	-.158*
Staff-child conflictual relationship	.183**	.236**	-.113	-.226*	-.202*	-.170*
Hrs/wk program	.134*	.053	-.005	-.016	-.062	-.051
Overall	$F(10,116)=13.26,$ $p=.000$ Adjusted $R^2=.493$	$F(10,102)=7.45,$ $p=.000$ Adjusted $R^2=.366$	$F(10,116)=8.11,$ $p=.000$ Adjusted $R^2=.361$	$F(10,98)=4.19,$ $p=.000$ Adjusted $R^2=.228$	$F(10,115)=5.81,$ $p=.000$ Adjusted $R^2=.278$	$F(10,115)=10.02,$ $p=.000$ Adjusted $R^2=.419$

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