

ED 401 019

PS 024 739

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 TITLE Role of Parent Expectations in the School Success of At-Risk Children.  
 PUB DATE Aug 96  
 NOTE 12p.; Paper presented at the Biennial Meeting of the International Society for the Study of Behavioural Development (14th, Quebec City, Quebec, Canada, August 12-16, 1996).  
 PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)  
 EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Academic Achievement; Blacks; Childhood Attitudes; \*Elementary School Students; Grade 6; \*High Risk Students; Intermediate Grades; Longitudinal Studies; Mathematics Achievement; \*Parent Aspiration; \*Parent Attitudes; Parent Influence; Reading Achievement  
 IDENTIFIERS African Americans; \*Parent Expectations

## ABSTRACT

This study explored the relationship of parents' educational expectations to the academic achievement of inner-city children at risk of school failure. A group of 745 sixth-grade African American children, who had complete information on parent variables and child outcome measures, were selected from a larger data set from the Chicago Longitudinal Study investigating the academic adjustment of 1,539 children. These children from low-income families graduated from Chicago's government-funded kindergarten program in 1986, and were comparable to the original sample on sex, parent education, and socioeconomic status. Parents reported educational expectations for their children's future success on a 7-point Likert scale in 1990-1992, when children were in grade 4-6. Children reported their perceptions of parent expectations during the same period. The child outcome measures were reading and mathematics achievement scores on the Iowa Tests of Basic Skills measured in 1992. Results indicated that parent expectations were moderately correlated with children's educational achievement for math and reading. Parent expectations added significant variance to reading and math achievement. Children's perceptions of parent expectations also added significant variance to reading and math achievement. Parent expectations had a substantial direct effect on grade six reading and math achievement. Children's perceptions of parent expectations also had significant direct effect on both the outcomes. (KDFB)

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Role of Parent Expectations in the School Success of At-Risk Children

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Poster presented at the XIVth Biennial ISSBD conference, Quebec city, Canada, August 12-16, 1996.

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PS 024739

### Abstract

This study explores the relationship of parents' educational expectations with the academic achievement of inner-city children at-risk of school failure. A group of 745 sixth grade African-American boys and girls, who had complete information on parent variables and child outcome measures, were selected from a larger data set of Chicago Longitudinal Study (Reynolds & Bezruczko, 1993) that investigated the academic adjustment of 1539 children. These low income mostly black children graduated from Chicago's government-funded kindergarten program in 1986, and were comparable to the original sample on several attributes such as sex, parent education, and socioeconomic status. Parents reported educational expectations for their children's future success on a seven-point Likert type scale in 1990-92, when children were in grade 4-6. Children reported their perceptions of parent expectations during the same period. The child outcome measures were reading and math achievement scores (Iowa Tests of Basic Skills) measured in 1992. Results indicated that parent expectations were moderately correlated with their children's educational achievement ( $r = .27$  for math,  $.33$  for reading). Parent expectations added significant variance to reading and math achievement (6.3% and 3.7%, respectively). Children's perceptions of parent expectations also added significant variance to reading (2.8%) and math achievement (2.3%, Table 3). Parent expectations had a substantial direct effect on grade six reading and math achievement ( $\beta = .16$ , and  $.25$ , respectively). Children's perceptions of parent expectations also had significant direct effect on both the outcomes ( $\beta = .17$  for reading, and  $.15$  for math achievement).

### Introduction

Parent beliefs and educational expectations are considered an important component in the school success of children (Alexander & Entwisle, 1988). Family characteristics such as parent expectations, socioeconomic status, race, and background characteristics of parents and children have been found to influence children's academic success (Boocock, 1972). These characteristics have been related to the degree to which parents set high goals for themselves and their children (Boocock, 1972). Researchers have postulated that high parent expectations lead children to set high standards for their education and to make greater demands on themselves from an early age that result in their high achievement. Parent beliefs about children's abilities are reported to have an even greater influence on children's achievement attitudes than previous achievement (Parsons, Adler, & Kaczala, 1982; Phillips, 1987).

Much of the existing research, however, has been conducted on White-middle class samples. Recent understanding of the significance of the diverse contextual realities (such as ethnicity, race, SES) of special populations suggests the need to study these populations. As Scott-Jones (1984) indicated, “much more research is needed on family processes correlated with achievement in various socioeconomic and racial groups” (p. 292) and “more descriptive research is needed on the typical family experience of children in different socioeconomic and racial groups” (p. 293). Such investigations on different populations, especially on those that are more likely to be at risk and most likely to benefit from intervention efforts, are warranted to make need based interventions more effective and meaningful. Reynolds (1992) has suggested that the effects of preschool may be dependent on a complex network of factors and intervening variables experienced after the intervention has ended. Therefore, malleable factors that shape parent expectations and the processes by which their expectations are communicated to influence the school success of children need to be examined.

Additionally, studies that bring together parents’ and children’s perspectives together are sparse. To be successful, children need to know that their parents think highly of them and expect them to do well in school. However, low perceived parent expectations may have a negative impact on children’s performance. The present study attempts to address some of these questions.

### Research Questions

- (a) Do parents’ educational expectations influence the school success of at-risk children?
- (b) Are parent expectations and children’s perceptions of these expectations mediators of the effects of early educational intervention and sociodemographic factors?

## Method

The study sample included 745 boys and girls who had complete information on expectations variables, selected from a larger data set (1,539) of the Chicago Longitudinal Study (Reynolds & Bezruczko, 1993) of school adjustment. These children participated in the government-funded early intervention programs in 26 schools of Chicago. The sub-sample was comparable to the original sample on socioeconomic status, sex of the child, parent education, parent expectations, and children's perceptions of parent expectations (Table 1).

Parents rated their expectations for the child's future success ("How far in school do you think your child will get") on a seven-point Likert type scale during 1990-92. Children rated their perceptions of parent expectations (CPPE, "My parents expect me to do well in school") on a four-point scale (1 = strongly agree, 4 = strongly disagree) during the same period. The child outcome measures were reading and math achievement scores (Iowa Tests of Basic Skills) measured in the spring of 1992 (grade 6). The internal consistency of these tests was .93 and .95 respectively. Parent surveys and school records provided sociodemographic information.

## Results

Table 2 shows the correlations between parent expectations and school success of children. Parent expectations for their children's educational success had the highest correlations with the child outcomes in grade six ( $r = .27$  for reading and  $.33$  for math). Children's perceptions of parent expectations had the next highest correlations with both outcomes ( $r = .23$  and  $.22$  respectively). Preschool-plus- follow-on intervention was also positively correlated with both reading and math achievement ( $r = .21$  and  $.24$ , respectively).

Results of hierarchical regression analysis explain variation in the expectations variables. This analysis was conducted to determine the independent contribution of parent expectations, children's perceptions of those expectations, and their mediated effects. Sociodemographic variables were entered first, followed by parent expectations, and then children's perceptions of parent expectations. Results indicated that parent expectations added significant variance to reading and math achievement. However, they contributed more variance to math achievement (6.3%) than reading achievement (3.7%). Children's perceptions of parent expectations also added significant variance to reading (2.8%) and math achievement (2.3%, Table 3).

A summary of direct (unmediated), indirect (mediated), and total effects is presented in Table 4. Parent expectations had a substantial direct effect on grade six reading and math achievement ( $\beta = .16$ , and  $.25$ , respectively). Similarly, children's perceptions of parent expectations also had significant direct effect on both the outcomes ( $\beta = .17$  for reading, and  $.15$  for math achievement). Sociodemographic variables, namely, lunch subsidy, sex of the child, and preschool-plus-follow-on intervention also had substantial direct effect on reading and math achievement in grade six, in addition to mediated effect through parent expectations. These results indicated that these variables have extensive influence on grade six school outcomes that are partially attributable to parent expectations. However, the effects of parent education were taken into account through parent expectations.

#### Additional analyses

Addition of prior achievement (grade three reading and math outcome) in the regression analysis indicated that it contributed significant variance to reading and math achievement (46.8% and 56%, respectively, Table 3). Although parent expectations and children's perceptions of parent

expectations (added in step three and four) contributed significant variance, the magnitude of their contribution was much lower than the earlier analysis without prior achievement (Table 3).

Subsequently, prior achievement was added in the model as a primary mediator of early intervention and the influence of prior variables (sociodemographics). The preliminary analyses indicated grade three achievement to be a strong mediator of the effects of these variables. It had a substantial direct as well as indirect effect on grade six reading and math achievement, and completely transmitted the effects of lunch subsidy, and preschool-plus-follow-on intervention. As expected, parent expectations mediated the effects of parent education and had direct immediate effect on math achievement. There is a need to further investigate models that focus on the processes that may influence at-risk children's school achievement.

### Conclusions

These results support the view that parent expectations and children's perceptions of these expectations play a role in the children's school success. Parent expectations as well as children's perceptions of these expectations were significantly correlated to children's school outcomes. Children's participation in preschool-plus-follow-on intervention seems to be longitudinally linked to parent expectations and children's perceptions of those expectations that help to transmit the effects of intervention as well as contribute to children's school success in subsequent years. However, the processes by which the effects of intervention and educational expectations are transmitted to school outcomes are complex and need further examination. The results underscore the need to promote communication between home and school to ensure that the parents are aware of the children's early school achievement.

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Table 1.  
Mean and (Standard Deviations) of Selected Variables for Study Sample and Full Sample

Variables	Study sample (N = 745)	Full sample (N = 1539)
Parent education	.58 (0.49)	.58 (0.49)
Sex of the child ( 1:girl)	.54 (0.50)	.51 (0.50)
Family size (number of children)	2.49 (1.68)	2.49 (1.69)
Lunch subsidy (1=full)	1.23 (0.54)	1.23 (0.57)
Parent expectations	2.29 (1.03)	2.29 (1.03)
Child's perception of parent expectations (CPPE)	3.82 (0.46)	3.81 (0.46)

Table 2.

Correlation of Parent Expectations, Child's Perception of Parent Expectations, and Sociodemographic Variables with Child Outcomes (grade 6)

	Reading Achievement	Math Achievement
Parent expectations	.27*	.33*
Child's perceptions of parent expectations (CPPE)	.23*	.23*
Sex of the child	.14*	.11*
Parent education	.17*	.18*
Lunch subsidy	-.15*	-.17*
Preschool plus follow-on	.21*	.24*
Prior achievement (grade 3)		
Reading	.75*	.71*
Math	.71*	.82*

\* Significant at .05 level

Table 3.

Variance Contribution from Hierarchical Regression Analysis for Child Outcomes in Grade 6.

Step entered and variables	Reading achievement (%)	Math achievement (%)
A. Expectations as mediators		
1. Sociodemographics*	10.4**	11.7**
2. Parent expectations (PE)	3.7**	6.3**
3. Child's perceptions (PE)	2.8**	2.3**
B. Prior achievement and expectations as mediators		
1. Sociodemographics*	10.4**	11.7**
2. Prior achievement	46.8**	56.0**
3. Parent expectations (PE)	0.03**	0.09**
4. Child's perceptions (PE)	0.02**	0.01**

\* Variables: sex, parent education, lunch subsidy, and participation in preschool-plus-follow-on intervention.

\*\* Significant at .01 level

Table 4.  
Standardized Effects on Grade 3 Reading and Math Achievement

Variable	Direct effect	Indirect effect	Total effect
<b>Reading Achievement</b>			
Sex	.12*	.02	.14*
Parent education	-	.05	.05
Lunch subsidy	-.11*	-.01	-.12*
Intervention	.16*	.01	.17*
Parent expectations	.16*	.02	.20*
CPPE	.17*	-	.17*
<b>Math Achievement</b>			
Sex	.09*	.03	.12*
Parent education	-	.07*	.07*
Lunch subsidy	.12*	.01	.13*
Intervention	.19*	.02	.21*
Parent expectations	.25*	.02	.27*
CPPE	.15*	-	.15*

\* Significant at .05 level



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