

Evaluating the School Performance of Elementary and Middle School Children of Incarcerated Parents

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Abstract

Children of incarcerated parents are at significantly increased risk of negative long-term outcomes. With about 1% of the adult population incarcerated, the United States has millions of children at risk for these negative effects. Although research on children of incarcerated parents is increasing, it is still unclear whether they are at an additional risk for poor school performance as a specific result of parental incarceration above that associated with their social and economic status. This study examined whether a link exists between parental incarceration and the educational performance of offspring in an urban, southeastern location. Analyses revealed a trend in lower annual test scores for children with incarcerated parents when compared with children in single-parent households of similar socioeconomic status. Children with incarcerated parents were also 3.7 times more likely to be raised by a caregiver with less than a high school education. The findings of this study will be useful in helping schools, communities, and service organizations more accurately identify high-risk students and formulate effective intervention programs for these children. This study also demonstrated a successful cooperation with an established mentoring organization in order to access a traditionally "invisible" study population. Studying children of the incarcerated is difficult due to confidentiality and stigmatization concerns; however, working with a trusted, successful community organization provided a means to overcoming these barriers.

Introduction

Children of incarcerated parents are perhaps the greatest casualty of war in the War against Drugs over the past two decades. The emphasis placed on stringent punitive measures had an unanticipated effect. These children are vulnerable to a number of issues that increase their risk for poor academic performance, including school mobility, truancy, and insufficient adult support. They are also believed to be more likely to experience emotional disturbances and stress responses that impact cognitive development, and ultimately, school performance.

Prior to this study, little empirical evidence had been analyzed to understand the implications of parental incarceration on children, particularly on school performance. Hence the following two research questions were investigated:

1. Will children of incarcerated parents show an overall significantly poorer level of school performance as compared to the comparison group?
2. What factors present in the lives of children with incarcerated parents (particularly parental incarceration) significantly predict poorer individual school performance during elementary and middle school years?

Methodology

Accessing children of prisoners for research purposes can be difficult due to privacy concerns. A number of partnerships with the following key stakeholders had to be established in order to obtain the necessary data for this study:

- Community mentoring program, particularly focused on mentoring children of prisoners
- State education system
- Local nonprofit and for-profit supporters

A study sample was identified through a well-established, local community organization which had a mentoring program specifically for children of prisoners (n=79), as well as, a mentoring program for children in single-parent households (n=95). This allowed for study of the population of interest, as well as, access to a very similar group of children (living in the same neighborhoods and attending the same schools) for comparative analyses. Although achieving ideal participation was still a challenge, some families were more open to participation due to the relationship of trust previously established with the community organization.

A cross-sectional survey collecting the following information, as well as, consent to access school records, was administered: race/ethnicity, gender, school mobility, extracurricular activity, events of parental incarceration, single-parent household status, number of household moves, number of primary caregivers, relation of child to caregiver, primary caregiver education, number of other adults living in household, annual household income, access to medical care, counseling services received, prior residence with incarcerated parent, and age during parents' incarceration. In return for a completed survey and consent form, each child received a stuffed backpack donated by Office Depot.

Annual test scores for each participant was obtained from the Tennessee Department of Education.

Data Analyses

Research Question 1: Independent samples t-tests of annual test scores between participants experiencing and not experiencing parental incarceration were conducted. Pearson's Chi-Squares and odds ratios assessed the independent variables among the two groups.

Research Question 2: Chi-square analyses of independent variables and annual test scores began the process of determining factors predicting school performance. Linear regressions using remaining variables produced a final model predicting school performance.

Results

Research Question 1

Due to a large proportion of the comparison group reporting parental incarceration, the total sample was reorganized as "Ever" versus "Never" experiencing parental incarceration.

A trend in poorer TCAP performance among children that experienced parental incarceration was observed when compared to a similar "at-risk" group.

Table 1
Tests of Summed TCAP Scores by Experience of Parental Incarceration

Year of Testing	Parental Incarceration		M	SD	t	p
	Status	Size (n)				
07-08 Scores	Yes	66	1,336	97	-0.821	0.414
	No	39	1,353	98		
06-07 Scores	Yes	66	1,323	92	-1.177	0.243
	No	35	1,347	98		
05-06 Scores	Yes	55	1,300	116	-2.085	0.042
	No	26	1,354	103		
03-04 Scores	Yes	31	1,252	122	-1.452	0.154
	No	19	1,298	100		
02-03 Scores	Yes	23	2,390	158	-1.891	0.07
	No	12	2,495	131		

2x2 tables revealed the significant associations between the study group and the following independent variables:
 -Number of caregiver changes (p = 0.000, OR = 1.018)
 -Caregiver education level (p = 0.001, OR = 3.683)

Table 2
2 x 2 Tables of Independent Variables by Experience of Parental Incarceration

Variables	N	%	Fisher's Exact Test*	Odds Ratio*
Income	157	0.252	0.701	1.209
Race/ethnicity	167	1.915	0.195	0.511
School mobility	167	0.151	0.679	0.851
Activities	163	0.813	0.489	1.584
# of caregivers	167	29.91	0.000*	0.108
Relation to caregiver	141	4.331	0.038	1.4
Overall caregiver education	155	0.456	0.564	1.455
Counseling received	155	3.387	0.079	0.536
Medical care	167	1.233	0.267	0.667
Single-parent household	89	1.332	0.374	3.467
Gender	166	0.633	0.486	0.778
Household moves	163	0.74	0.446	0.66
# adults in household	150	1.11	0.365	1.459
Caregiver education level	148	11.319	0.001*	3.683

Research Question 2

Chi-square analyses were conducted using all the variables to begin the process of discerning which factors could potentially predict test performance in this population, resulting in the following eight factors: race, gender, school mobility, caregiver education, income, access to medical care, parental incarceration, and mobility among households.

Linear regression analyses were conducted using the remaining eight variables to develop a model of factors present in the lives of children of incarcerated parents which may predict performance on the annual examinations, which are called the Tennessee Comprehensive Achievement Program (TCAP).

The most parsimonious model explained 25% to 31% of the variance in TCAP scores and was significant in all years tested. It is represented as follows:

$$TCAP \text{ Level of Proficiency} = 0.37(\text{Income}) - 0.32(\text{School Mobility}) = 0.19 (\text{Caregiver Education})$$

Discussion

The fact that poorer performance is observed in the study population when compared to a group that is already documented to perform more poorly than the general population is remarkable and merits further study. As no other empirical investigation of annual test scores among children of incarcerated parents currently exists in the literature, a replication of this study could provide additional insight as to the status of this particularly vulnerable population of children. The performance of this study group may have been elevated due to the fact that their caregivers may have been more supportive of educational activities (as evidenced by their involvement in the mentoring program and this research study) and the group tended to be less transient than expected. Furthermore, some of the more severe families most likely were not included in this study due to their unwillingness to participate or an inability to contact the family through the latest contact information in their file.

Results revealed that children with incarcerated parents were nearly four times more likely to be living with a caregiver without a high school diploma. This raises the children at further risk of receiving inadequate educational support within the home. The results also showed that within a population of low socioeconomic status, poverty still stood out as one of the main predictors of performance on the annual examinations along with school mobility and caregiver education.

A number of strategies could be used to address the issue and potentially improve the children's performance.

In-Home Interventions

Several studies support the idea that an engaging, safe learning environment within the home can offset some of the negative impacts due to parental incarceration, low caregiver education levels, and poverty. An in-home visitation program could be implemented to educate caregivers on this fact, as well as, provide them with the skills and resources (through training) they need to create this ideal environment. The intervention could be accomplished in tandem with other agencies implementing home visitation services, such as Child Welfare and Head Start, among others. Incarcerated parents returning into the home could also be educated on the topic to enable them to continue providing a positive, learning environment inside the home.

Another way to indirectly improve the situation is to enable the caregivers and parents to increase their own educational attainment by obtaining GED certification and/or a college degree. Again, caregivers may benefit from being linked with previously existing community resources that provide these services. An ideal service would provide education classes for caregivers with tutoring for the children simultaneously. If an increase in education leads to an increase in income, the children would benefit educationally on two fronts.

Changes to the Education System

A national debate on education reform is currently in progress; however, some changes could be made to specifically support children with incarcerated parents. Increased social and cultural learning could be provided to all educational personnel to enhance their ability to work with the vulnerable population. Already existing tools, such as IEPs, could be modified to provide the children with increased support in their educational activities. School districts could also invest in clinicians to provide emotional and mental support and therapy which would improve the students' ability to focus and learn inside the classroom.

Multi-Systemic Approach

This study bolsters the argument that the different societal systems cannot function independently, but must consider the impact they have on each other. Specifically, the systems of criminal justice and corrections function under policies and procedures that impact our neighborhoods and educational systems. Our educational systems should consider the impact of criminal justice and corrections on its students before generalizing educational policies to the entire student body. Previous research suggests that a systemic approach in the rehabilitation of families and social organization would be more effective than current methods that target individuals. Children should be identified upon the incarceration of a parent in order to provide the intervention and support needed.

Demographics

