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## RESEARCH-TO-PRACTICE SUMMARY

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### Early Parent Involvement and School Achievement: A Longitudinal Path Analysis

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The present study examined mechanisms within the longitudinal process whereby early parent involvement in preschool affects student achievement from kindergarten through 6<sup>th</sup> grade. Participants were 1,531 low-income, mainly African American children and their mothers, from the inner-city Chicago area. Path analysis revealed an interactive process between parent involvement, academic achievement, and children's motivation. Findings suggest that early parent involvement increases kindergarten achievement, which then affects student motivation in grade 1. Parents of the highly motivated children continued their involvement in later grades. This cycle of involvement, motivation, and achievement was found across the elementary grades (through 6th grade). Participation in CPC was positively associated with jumpstarting parent involvement during the preschool years. Our results support three policy implications: 1) Early parent involvement is critical for the success of children's education, 2) Continued parent involvement in school across the elementary school years is important for children's achievement and motivation to succeed in school and 3) Parent involvement, student motivation, and school achievement is a cyclic process that builds upon one another from preschool throughout grade school.

*Keywords:* parent involvement, student motivation, achievement

The profound gap in academic achievement between low-income African American and White children in the United States is evident by the time children begin kindergarten (Duncan & Magnuson, 2005). Not only does this gap exist by the point of school entry, but it also widens across elementary school. One solution to minimizing the identified disparities in achievement scores lies in high-quality preschool programs (Frede & Barnett, 2011).

Evidence from a number of nationally-recognized longitudinal studies of low-income or minority youth have shown that high-quality preschool programs focusing on parent involvement and engagement enhances children's educational attainment (e.g. on-time high school graduation, college attendance) and reduces the occurrence of grade repetition and placement in special education (e.g. Reynolds, Temple, Ou, Arteaga, & White, 2011; Schweinhart, Montie,

Xiang, Barnett, Belfield, & Nores, 2005). Furthermore, parents' participation in school activities has been consistently associated with achievement gains as well as enhanced socio-emotional development in children (e.g. Barnard, 2004; Fan & Chen, 2001; Jeynes, 2005; Lee & Bowen, 2006; Sheldon, 2002; Sheridan, Knoche, Edwards, Bovaird, & Kupzyk, 2010). Thus a promising pathway leading to decreases in the achievement gap lies in early parent involvement.

However, the developmental mechanisms through which parent involvement has a significant and long-term impact on children's achievement is still unknown. Given research findings indicating that there is an association between student motivation and academic achievement (e.g. Grolnick & Slowiaczek, 1994; Gonzales-DeHass, Willems, & Doan Holbein, 2005), it is possible that increased student motivation explains the effect of early parent involvement on later achievement. Yet, very little work has been done examining motivation as a potential mediator and the majority of the studies examining the association between parent involvement and children's socio-emotional development, including motivation, have primarily been cross-sectional (Nokali, Bachman, & Votruba-Drzal, 2010).

As the achievement-gap exists prior to kindergarten entry, it is imperative to focus on early parent involvement in preschool as it may provide a foundation for subsequent processes and continue to have a persistent impact on children's academic achievement longitudinally during a period when the gap in achievement is increasing between African American and White children.

Thus, the present study examined the developmental process whereby early parent involvement in preschool initiated through the Chicago Child-Parent Center program (a high-quality preschool intervention program offered in low-income neighborhoods of Chicago) influences children's later academic achievement in middle childhood. More specifically, we ask the question, "What is the process by which early parent involvement (i.e., during preschool and the kindergarten years), as a result of a high-quality preschool intervention, influences later parent involvement, childhood motivation, and achievement during the elementary school years?"

## SUMMARY OF RESEARCH METHODS

Our study utilized data from the Chicago Longitudinal Study, an ongoing prospective study of 1,539 minority children from low-income areas in Chicago who attended the Child-Parent Center (CPC) preschool program (Reynolds, 2000) and who continues to be followed. One critical focus of the CPC program is parent involvement and engagement – a minimum of 2.5 hours per week of parent involvement is required in the program. It is expected, that participation in the CPC program sets the stage for initial and continued parent involvement across childhood. We sought to test how CPC participation sets the stage for initial and continued parent involvement across childhood that then cascades to have an effect on achievement.

Based on previous literature that posits parent involvement as one critical path leading to the success of children's development (Reynolds, Ou, & Topitzes, 2004), we predicted that the early parent involvement as part of the CPC preschool program initiates a cascade of influences through its effect on early achievement, later parent involvement, and children's motivation to perform well in school. Given research linking early parent involvement to achievement and motivation across a variety of periods over development, we also predicted and tested using path analysis, a cyclic process whereby early parent involvement starting in preschool, contributes to

achievement and student motivation, which then independently influence subsequent parent involvement, motivation, and achievement throughout grade school.

## MAJOR FINDINGS

Results from our study confirmed the role of parent involvement as a critical influence on successive parent involvement, student achievement, and student motivation throughout the elementary school years. Furthermore, children with parents who were highly involved performed better in school than their peers without highly involved parents.

Our study identified the process in which parent involvement has an impact on children's achievement across time. Specifically, the steps that emerged from our path analyses were:

1. CPC preschool participation predicts higher levels of parent involvement and high achievement in kindergarten.
2. Children with high achievement at kindergarten are more motivated to do well in school, and this motivation influences further parent involvement.
3. Throughout elementary school, parent involvement, student motivation, and achievement are mutually reinforcing such that involvement indirectly predicts subsequent achievement through motivation, and achievement predicts subsequent parent involvement through motivation.

Furthermore, early student achievement also plays a critical role as it provides a concrete measure of success, which reinforces the cyclic process of parent involvement-achievement-motivation. This process supports previous findings by Reynolds (1991), suggesting that both early parent involvement and early student achievement mediate the effects of early student motivation. Therefore, results from our study suggest that preschool participation, with a strong focus on early parental involvement, can serve as a catalyst that creates the foundation for increased parent involvement, motivation and achievement from preschool to 6th grade.

## IMPLICATIONS FOR PRACTICE

The children in the study sample represent a population of children whose socio-economic status puts them at risk of academic struggles. The study findings suggest that parent involvement can be a successful strategy for protecting against the socio-economic risk factors these children face in early and middle childhood. There are several implications for practice in early childhood programs:

1. *Early parent involvement is critical for the success of children's education:* Findings suggest that parents who participated in a variety of parent involvement activities such as attending programs in the CPC's parent resource room, attending school events, going on class field trips, volunteering in the classroom, receiving home visits, and others during their child's preschool years were more likely to continue to be involved in elementary school. Furthermore, this initial parent involvement in preschool was associated with higher achievement a year later, in kindergarten.

2. *Continued parent involvement in school across the elementary school years is important for children's achievement and motivation to succeed in school:* Our findings also suggest that children's achievement and motivation to achieve were positively affected by parent involvement at all stages examined in the study. By continuing to offer opportunities for involvement based on parents' needs and interests, children can benefit beyond the initial early childhood period.
3. *Parent involvement, student motivation, and school achievement is a cyclic process that builds upon one another from preschool throughout grade school:* As this cyclic process hinges upon all components – parent involvement, student motivation, and student achievement, every step is important for continued achievement in subsequent grades. Parents in our study were more likely to be involved when their children were doing well in school and when their children were motivated. This means that parents of students who are struggling in school need *persistent encouragement* to be involved. Because involvement has a positive effect on achievement and student motivation, parent involvement for low-achieving students has the greatest potential to impact multiple areas of this cascading pathways impacting student achievement.

Our findings support the notion that the provision of family support services is a key element for establishing effective early childhood programs from preschool to the early elementary grades. Although parent involvement has been found to be a core component of effective preschool programs, the findings of this study indicate the value of parent involvement strategies for enhancing the effectiveness of broader preschool-to-third grade (Pk-3) interventions. The recent nationwide promotion of the Pk-3 model provides a framework for organizing a comprehensive set of parent involvement and engagement practices. We encourage educators and policy makers to adopt and implement this Pk-3 framework that embraces the perspective of child development as a cumulative process.

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