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October 2013



A Focus on Literacy and Math Achievement Outcomes and Social-Emotional Skills



Executive Summary

The Impact of Family Involvement on the Education of Children Ages 3 to 8

A Focus on Literacy and Math Achievement Outcomes and Social-Emotional Skills

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October 2013



This literature review is being funded through a grant from the Heising-Simons Foundation under Grant Number 2013-30.

Dissemination of MDRC publications is supported by the following funders that help finance MDRC public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Annie E. Casey Foundation, The George Gund Foundation, Sandler Foundation, and The Starr Foundation.

In addition, earnings from the MDRC Endowment help sustain our dissemination efforts. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Lizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. OgNeill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

The findings and conclusions in this report do not necessarily represent the official positions or policies of the funders.

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Overview

This report summarizes research conducted primarily over the past 10 years on how familiesø involvement in childrenøs learning and development through activities at home and at school affects the literacy, mathematics, and social-emotional skills of children ages 3 to 8. A total of 95 studies of family involvement are reviewed. These include both descriptive, nonintervention studies of the actions families take at home and at school and intervention studies of practices that guide families to conduct activities that strengthen young childrenøs literacy and math learning. The family involvement research studies are divided into four categories:

- Learning activities at home, including those that parents engage in to promote their childos literacy and/or math skills outside school
- Family involvement at school, including the actions and interactions that families have while in the school building
- School outreach to engage families, including the strategies that schools and teachers use to engage families and make them feel welcome
- **Supportive parenting activities,** including the nature and quality of the parent-child relationship and home environment, rule-setting, and caring behaviors

Key Findings

- Family involvement is important for young children's literacy and math skills. The majority of studies, including some randomized control trials (RCTs), demonstrate this positive link. A few studies show positive relations with social-emotional skills. The weakest association was between family involvement at school and children's outcomes.
- Parents from diverse backgrounds, when given direction, can become more engaged with their children. And when parents are more engaged, children tend to do better.
- This review also provides recommendations for additional lines of inquiry and implications to guide next steps in both research and practice. While there is still more to learn about how to connect with and support caretakersø efforts to promote childrenøs learning, what we already know from extant research can help guide this process.

More children attend preschool and all-day kindergarten than ever before, and educators are being urged by federal, state, and local institutions to use research-based or evidence-based approaches to improve their work with families and familiesø involvement with their children and the school. This review strengthens the belief that interventions to boost family involvement may be a critical piece when trying to support childrenøs early learning.

Preface

In recent years, large investments have been made in the early childhood field with the goal of positively affecting young children¢s outcomes through two areas of inquiry: (1) parenting and home visiting and (2) early childhood care and education. This commitment is underscored by President Obama¢s Early Learning Initiative, with its focus on a continuum of high-quality early learning for every child in America from birth to age 5 and its aim of õleveling the playing fieldö for children from lower-income families. The family involvement research that is summarized in this report is firmly situated at the nexus of these two important areas of work, connecting what happens in the home with what happens in the school ô while keeping the child and positive child development as the primary focus. Given this context and the increased expectation that education systems use research-based or evidence-based approaches in their work with families, the connection between home and school ô and how best to support it ô is likely a critical piece of the puzzle of how to comprehensively promote children¢s early learning.

This report on almost 100 family involvement research studies focusing on the literacy, math, and socio-emotional skills of children ages 3 to 8 is a timely contribution to the field. It presents the most rigorous empirical work that has been conducted, primarily over the past 10 years. The review finds that parents from diverse backgrounds, when given direction, can increase their involvement with their children¢s learning at home and at school and that, when parents are more involved and more engaged, children tend to do better academically and socially. More importantly, this review makes explicit recommendations for further lines of inquiry and offers several implications to guide next steps in both research and practice. While there is still much more to learn about how to connect with and support families¢ efforts to promote children¢s learning across the home and school contexts most effectively, this report is a much-needed first step.

Gordon L. Berlin President

Acknowledgments

This literature review was conducted with the Heising-Simons Foundation. We extend our sincere thanks to Holly Kreider, Program Officer, and Deanna Gomby, Executive Director, from Heising-Simons for their ongoing support and guidance.

We want to thank the authors of, and the families and children who participated in, the numerous studies that we drew on for this report. We also acknowledge a number of colleagues from MDRC who were involved in this literature review. Virginia Knox, Families and Children Policy Area Director and Senior Adviser for this work, provided valuable feedback on initial drafts of this report. Jennifer Garcia and Jennifer Somers assisted in the initial literature review and in producing detailed appendix tables.

We extend much thanks to M. Elena Lopez, Associate Director at Harvard Family Research Project, for her incredibly detailed and thorough review of this report. Her thoughts and guidance pushed our thinking in multiple ways, leading to additional emphasis on how the findings can be applied to practitioners and the field at large. We also thank Laurie Miller Brotman, Prevention Science Professor of Child and Adolescent Psychiatry and Psychiatry and the Director of the Institute for Prevention Science at the Child Study Center at New York University, for lending her expertise and providing two rounds of thoughtful comments and review.

Robert Weber edited the report, and Stephanie Cowell prepared it for publication.

The Authors

Executive Summary

Children benefit when parents and family members get involved in their learning and development. This conclusion is supported by decades of research that suggests that family engagement is positively linked to children¢s outcomes in preschool, kindergarten, and early elementary grades.

Yet it has been unclear *how* families affect their children¢s learning at home and in school and how the establishment of a partnership between families and schools can lead to positive outcomes for children. We still do not know what *aspects* of family involvement are important for children¢s learning. For example, is it better for parents to conduct early learning activities at home or at school? And what *types* of early learning activities can parents do with their children that are critical to learning and development? And in what *ways* can schools and teachers guide and encourage parents to do these things with their children?

To help answer these questions, this report summarizes the research conducted over the past 10 years on the effects of family involvement activities at home and at school on literacy, mathematics, and social-emotional skills for children ages 3 to 8. In addition, it provides new information on the impact of family involvement on these skills specifically for preschool children, and it pays special attention to the practices necessary to help prepare parents and children for the transition from preschool to kindergarten. Finally, this report identifies the gaps in knowledge that future research should address, and it discusses how to use research findings to inform and improve practice.

Several terms in this report are used interchangeably both in the field and in research. For instance, õinvolvementö and õengagementö are both used but convey the same meaning. And while we recognize that many individuals in a family may play important roles in a childøs learning at home and at school, most studies examine parents or caregivers; therefore, we use the words õfamilyö and õparentö interchangeably. Finally, in this report, õchildrenö and õstudentsö are used synonymously.

Overview of the Research

The studies reviewed in this report represent the most rigorous work conducted over the past decade on the nature and effects of family involvement on young childrengs literacy, math, and social-emotional skills. A total of 95 studies of family involvement practices as they affect young childrengs literacy and math learning and social-emotional skills are reviewed: 52 studies on literacy and 43 studies on mathematics. These include both *descriptive*, *nonintervention* (nonexperimental) studies of the actions that families take at home and at school and intervention (both experimental and quasi-experimental) studies of programs that help structure familiesø engagement in activities that could strengthen or increase young childrengs literacy and math learning.

Unfortunately, only a limited number of intervention studies have used rigorous, experimental designs. Chapter 2, on family involvement in reading and literacy activities, reports on 9 individual intervention studies and more than 120 interventions included in 8 meta-analyses. Chapter 3, on family involvement in math activities, reports on 7 intervention studies and more than 20 intervention studies included in 2 meta-analyses. These studies embrace varying standards of evidence. Although some use randomized control trials (RCTs), the vast majority of individual intervention studies do not provide enough information about analytic or methodological weaknesses, such as not using an intent-to-treat analysis or not reporting on intervention implementation or study design flaws (that might result, for example, in differential attrition). Nevertheless, these studies do provide useful guidance when determining the future directions of family involvement research. (Appendix Tables A.1 and A.2 provide details about all the reviewed studies.)

The family involvement research on both literacy and math were divided into four categories to reflect how parents support their childrengs learning in a variety of ways and in different settings (Epstein, 2011; Epstein et al., 2009):¹

- Learning activities at home. These studies focused specifically on the home
 activities that parents engage in to promote literacy, math, or both (or more
 general academic activities). These activities may also occur wherever children learn with their parents, such as in libraries, museums, and family resource centers.
- 2. **Family involvement at school.** These studies examined the actions and interactions that parents and other family members have while at the school building (for example, during an open house or parent-teacher conference, while participating in the classroom, or volunteering).
- 3. School outreach to engage families. These studies examined the strategies and practices that schools and teachers use to engage families and make them feel welcome. Special attention was paid to the processes that schools used to prepare preschool children and families for the move to kindergarten.
- 4. Supportive parenting activities. These studies examined activities that parents conduct to support their children

 development and well-being, including the nature and quality of the parent-child relationship; parenting activities, such as setting rules at home; and caring behaviors that characterize the

¹Epstein, J. L. (2011). School, family, and community partnerships: Preparing educators and improving schools (2nd ed.). Westview Press.

Epstein, J. L., Sanders, M. G., and Sheldon, S., Simon, B. S., Salinas, K. C., Jansorn, N. R. (Rodriquez), Van Voorhis, F. L., Martin, C. S., Thomas, B. G., Greenfield, M. D., Hutchins, D. J., and Williams, K. J. (2009). *School, family, and community partnerships: Your handbook for action* (3rd ed.). Thousand Oaks, CA: Corwin Press.

home environment in general. This is in contrast to parentsø conducting specific literacy or math activities at home with their children.

Research Results

Across the studies reviewed, we were able to draw two main conclusions. First, the majority of studies ô including some RCTs ô demonstrate that family involvement is positively linked to children¢s literacy and math skills in preschool, kindergarten, and the early elementary grades. A few studies also show increases in children¢s social-emotional skills. The weakest link was between family involvement at school and children¢s outcomes.

Second, the most rigorous studies that use random assignment show that parents from diverse backgrounds, when given direction, can become more engaged with their children on literacy and math activities ô and that their children can increase their reading and math skills, on average, more so than children whose parents are operating without support or direction.

These studies demonstrate that family-focused intervention has small-to-moderate effects on children¢s learning. Note, however, that the study designs varied and that only five studies demonstrating positive effects also employed the gold standard from which to draw causal conclusions: random assignment. Eight other studies had comparison groups but not random assignment and also demonstrated positive results, providing additional, yet cautious, confidence in the conclusions. Importantly, these conclusions indicate that there is much more to be learned in the field of family involvement and early childhood, and they point to the need for more rigorous work in this area.

Implications for Improving Practice

Although more research is needed to fully understand family involvement, its impact on young children¢s early reading and math skills and readiness for school, and the implications for practice, a number of lessons are emerging that can immediately inform the field.

The studies in this review indicate that, with guidance, many parents ô across all socio-economic, educational, and racial or ethnic backgrounds ô are interested in and able to conduct learning activities at home with their young children. Parents and their children engaged in a host of activities (including shared book reading, dialogic reading, home tutoring, and family conversations), and these activities were related to positive results for children¢s vocabulary, listening comprehension, rates of word reading, story comprehension, and other reading skills.

Similarly, when parents and their children are engaged in various math-related activities 66 such as counting, playing with shapes and puzzles, money math, and addition and subtraction 66 such activities are associated with positive results on children¢s math knowledge and skills across a variety of assessments.

The interventions that were both sustained and targeted were the most effective. Interventions that lasted for longer periods of time and that were clearly defined in relation to outcomes that logically flow from a theory of change were associated with greater gains in achievement.

Many preschools and elementary schools are implementing involvement activities with families to strengthen children¢s reading and math skills and to improve the transition process from preschool to kindergarten. Appendix B summarizes a few of the hundreds of activities that have been implemented by practitioners in schools in the National Network of Partnership Schools (NNPS) at Johns Hopkins University and that are reported in annual books of Promising Partnership Practices.

But the connection between research findings and their practical implications can be strengthened even further to promote greater and more equitable parental involvement. Some parents conduct activities that support and increase their young children¢s learning without any encouragement, but the studies in this review demonstrate that all parents can be more involved in literacy and math activities. Parents may not be aware of which activities to conduct and how to conduct them to support their young children¢s literacy and math skills and school behaviors, so schools and teachers need to take an active role in engaging all families. Preschools and elementary schools, community groups, and leaders must be intentional about including families as an integral part of their school or program philosophy. This outreach is important for all parents ô and especially so for those whose children are most at risk of having learning problems.

Implications for Future Research

Regardless of the type of family involvement and the methodological design of these studies, the results reveal critical insights that can direct future research:

- More studies are needed that specifically identify which family involvement practices and which school outreach strategies are most effective for all students and families, specific subgroups of students and families, and at varying grade levels. In addition, studies should examine fathersø (and mothersø) roles in family involvement, potential moderators to ascertain whom or under what conditions interventions are effective, and the mechanisms by which family involvement works to influence childrenøs learning. Finally, more research óó particularly, experimental work óó needs to report on the fidelity of implementation of a program or intervention model.
- More well-designed, rigorous experimental studies are needed that examine immediate and cumulative effects of family involvement interventions. The literature review found few experimental studies compared with nonexperimental studies, and, even within the experimental ones, there were

varying levels of evidence with (unreported) analytic or methodological weaknesses. In addition, most studies paid minimal attention to measuring fidelity of implementation to the intended model of family involvement. Ideally, future experimental studies would use random assignment and an intent-to-treat analysis; would report on fidelity of implementation; and would include theoretically linked child outcome measures, which would provide stronger evidence of a positive impact of specific family involvement activities on particular child outcomes. Finally, studies should examine both immediate and *cumulative effects* of interventions across age and grade levels.

- involvement changes as children develop and how that may relate to specific outcomes. Studies based on cross-sectional data can demonstrate the relationship between family involvement and children¢s outcomes at one point in time, but longitudinal studies can measure *change* in family involvement and the dynamics between family involvement and outcomes over time. The studies reviewed in this report show not only that family involvement does matter at one point in time but also that positive *change* in family involvement is associated with better outcomes.
- More research should examine the link between family involvement and both math and social-emotional skills. Compared with literacy studies, fewer studies examined the effects of family involvement on math, and even fewer focused on social-emotional skills. Often, measures of children@s social-emotional skills were casually added onto studies without a strong theoretical rationale, which dilutes the importance of these kinds of critical skills that help children understand and control their feelings and get along with peers and teachers.
- Future studies should examine how to expand and scale up the research-tested programs and practices of family involvement with children on reading and math activities. The ultimate goal is to understand how to scale up good practices that will help a significantly large number of parents become involved in productive, feasible, and fun ways to help their children¢s learning and development. We need more studies that examine the processes necessary to scale up effective interventions, moving the conduct of treatment and control group practices from researchers¢ tight controls to real-world tests of teachers¢ practices.
- Studies should align specific family involvement activities as well as
 measures of them with explicit child outcomes. Many studies illustrate
 that highly specific measures of family involvement are more likely linked to
 positive child outcomes, in contrast to studies that use composite measures of

family involvement, which tend to confound the separable types of involvement (Epstein, 2011). For example, studies that examine whether parents are engaged in guided reading and math activities help to produce specific results for students in reading and math. Conversely, composite outcome measures (such as combined reading and math test scores) tend to obscure an understanding of whether and which family involvement actions contribute to particular learning outcomes.

 Studies should pay more attention to the transition from preschool to kindergarten. Several nonintervention studies indicate that specific, well-planned strategies and welcoming practices not only help children and their parents adjust to a new school but also are associated with better child outcomes.

Conclusion

More children attend preschool and all-day kindergarten than ever before, and the strong push for universal preschool education by various policymakers suggests that the number will continue to increase.

Educators are being urged by federal, state, and local institutions to use research-based or evidence-based approaches to improve their practices around family involvement so that they can produce positive results for all children. This review strengthens the position that interventions to bolster family involvement are likely to be part of the solution when the goal is to improve children¢s early learning. It offers several important recommendations ô for both researchers and educators ô that guide the next steps in an important policy agenda of promoting children¢s development and learning.

About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC& staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program& effects occur. In addition, it tries to place each project& findings in the broader context of related research ô in order to build knowledge about what works across the social and education policy fields. MDRC& findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

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