Technical Appendix

Parental engagement

Moderate impact for moderate cost, based on moderate evidence

Definition

Parental engagement includes:

- approaches which aim to develop parental skills such as literacy or IT skills;
- approaches which encourage parents to support their children with, for example, reading or homework;
- the involvement of parents in school learning activities; and
- more intensive programmes for families in crisis.

The definition does not include types of parental engagement that are not specifically concerned with learning, such as attending general parenting classes which do not have any focus on the child’s learning.

Search terms: parental involvement/engagement; family literacy/numeracy programmes; parents as tutors; parental support

Evidence Rating

There are 15 meta-analyses providing evidence of the impact of parental engagement on learning outcomes. Ten of these have been published in the last ten years. The quality of the included studies for causal inference in the majority of meta-analyses is relatively weak. There is considerable variation in the pooled effects (from 0.05 to 0.65). The studies are mainly focused on primary schools and early years, though there are studies which have examined the effect on secondary pupils. Where reviews include randomised and non-randomised experimental designs, randomised studies tend to produce lower effects. Although correlational studies consistently indicate an important positive relationship, the variation in the impact of intervention studies indicates that it is challenging to develop successful approaches which improve attainment at school. Overall, the evidence found is moderate.
Cost Information

The costs of different approaches vary enormously. Parental communication interventions using text messages can cost around £6 per pupil per year whereas a term of weekly classes or workshops for parents can cost around £600 per parent. Intensive family support programmes with specially trained staff are more costly. A specialist community teacher or home/school liaison teacher who can work with a number of families at once costs about £35,000. Overall, costs per pupil are estimated as moderate.

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## Summary of effects

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### Single Studies

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### Weighted Mean

| Weighted Mean | 0.22 |

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6
Meta-analyses abstracts

1

The current review is a quantitative meta-analysis of the available empirical evidence related to parent-pre-schooler reading and several outcome measures. In selecting the studies to be included in this meta-analysis, we focused on studies examining the frequency of book reading to pre-schoolers. The results support the hypothesis that parent-pre-schooler reading is related to outcome measures such as language growth, emergent literacy, and reading achievement. The overall effect size of $d = .59$ indicates that book reading explains about 8% of the variance in the outcome measures. The results support the hypothesis that book reading, in particular, affects acquisition of the written language register. The effect of parent-preschooler reading is not dependent on the socioeconomic status of the families or on several methodological differences between the studies. However, the effect seems to become smaller as soon as children become conventional readers and are able to read on their own.

2

Parent training has been frequently touted as a measure to reduce such problems as aggression, and child abuse and neglect, as well as to enhance developmental outcomes for all children, not just those at risk for future problems or those with identified problems. The preschool years have been targeted as an opportune juncture at which to train parents in so far as parents still wield much influence and problems may be resolved before becoming entrenched. However, despite the availability of a large number of parent training studies, few conclusions have been reached regarding the basic question, "What works for whom, when?" This meta-analysis evaluated the effectiveness of parent training for children between the ages two and five as a means to enhance child outcomes and examined variables related to the differential impact of parent training. 140 effects (106 controlled, 34 single group) from 94 studies were compiled. The overall mean effect of parent training (effect size = 0.51) was positive and highly significant. Effects were maintained at approximately one year (12.6 months on average) follow up (effect size = 0.52). Greater effects were found for stand-alone PT programs and for programs with very low levels of attrition. When outcomes were limited to parent reports of child externalizing behaviour, better effects were found for: (1) referred, as opposed to community samples,
(2) individual, as opposed to group formatted programs, and, (3) children identified with externalizing behaviour problems as opposed to children with no identified problem. Mixed findings emerged when type of sample was considered, such that indicated samples obtained better outcomes than selective samples on parent reports of externalizing behaviour but significantly worse outcomes on cognitive/language measures. When the theoretical orientation of programs was considered, there was no evidence of differential effectiveness. Various instructional techniques used in parent training were not differentially effective, with the exception of some evidence of enhanced effect when a "bug-in-the-ear" device was used. This meta-analysis strengthens conclusions in the current literature, and extends our understanding of theoretically and/or clinically relevant variables associated with effective parent training.

8


This meta-analysis of 41 studies examines the relationship between parental involvement and the academic achievement of urban elementary school children. Analyses determined the effect sizes for parental involvement overall and subcategories of involvement. Results indicate a significant relationship between parental involvement overall and academic achievement. Parental involvement, as a whole, was associated with all the academic variables by about 0.7 to 0.75 of a standard deviation unit. This relationship held for White and minority children and also for boys and girls. The significance of these results is discussed.

9


A meta-analysis is undertaken, including 52 studies, to determine the influence of parental involvement on the educational outcomes of urban secondary school children. Statistical analyses are done to determine the overall impact of parental involvement as well as specific components of parental involvement. Four different measures of educational outcomes are used. These measures include an overall measure of all components of academic achievement combined, grades, standardized tests, and other measures that generally included teacher rating scales and indices of academic attitudes and behaviours. The possible differing effects of parental involvement by race and socioeconomic status are also examined. The results indicate that the influence of parental
Parental involvement overall is significant for secondary school children. Parental involvement as a whole affects all the academic variables under study by about .5 to .55 of a standard deviation unit. The positive effects of parental involvement hold for both White and minority children.

10


This meta-analysis of 51 studies examines the relationship between various kinds of parental involvement programs and the academic achievement of pre-kindergarten-12th-grade school children. Analyses determined the effect sizes for various parental involvement programs overall and subcategories of involvement. Results indicate a significant relationship between parental involvement programs overall and academic achievement, both for younger (pre-elementary and elementary school) and older (secondary school) students as well as for four types of parental involvement programs. Parental involvement programs, as a whole, were associated with higher academic achievement by .3 of a standard deviation unit. The significance of these results is discussed.

11


A meta-analysis was undertaken, including 66 studies, to determine the relationship between father involvement and the educational outcomes of urban school children. Statistical analyses were done to determine the overall impact and specific components of father involvement. The possible differing effects of paternal involvement by race were also examined. The results indicate that the association between father involvement and the educational outcomes of youth overall is significant statistically. Paternal involvement, as a whole, yielded effect sizes of usually just under 2 of a standard deviation unit. The positive effects of father involvement held for both White and minority children.

12


Extant research on parental involvement in education has been conducted largely without respect to which parent is involved. The implicit assumption is that family–school relationship frameworks function similarly for fathers and mothers. Although there is a growing body of research examining fathers’ involvement in education, this assumption has not been tested. In this meta-analysis, we
examined the relative strength of the association between educational involvement of fathers versus mothers and achievement of school-age children (kindergarten to 12th grade). The association of involvement with achievement over time (i.e., longitudinal studies) was stronger than for cross-sectional studies. Parental involvement in education was positively associated with student achievement and the relation between involvement and achievement was equally strong for fathers and mothers, although mothers’ mean levels of involvement were higher than fathers’. Moderator analyses across the different types of involvement suggested that school-based involvement and intellectual enrichment at home was more strongly related to achievement for mothers than for fathers, although there were no differences in mean levels of involvement.

This meta-analysis reviewed research on summer reading interventions conducted in the United States and Canada from 1998 to 2011. The synthesis included 41 classroom- and home-based summer reading interventions involving children from kindergarten to Grade 8. Compared to control group children, children who participated in classroom interventions, involving teacher-directed literacy lessons, or home interventions, involving child-initiated book reading activities, enjoyed significant improvement on multiple reading outcomes. The magnitude of the treatment effect was positive for summer reading interventions that employed research-based reading instruction and included a majority of low-income children. Sensitivity analyses based on within-study comparisons indicated that summer reading interventions had significantly larger benefits for children from low-income backgrounds than for children from a mix of income backgrounds. The findings highlight the potentially positive impact of classroom- and home-based summer reading interventions on the reading comprehension ability of low-income children.

This volume is part of the final report of the National Evaluation of Family Support Programs and details findings from a meta-analysis of extant research on programs providing family support services. Chapter A1 of this volume provides a rationale for using meta-analysis. Chapter A2 describes the steps of preparation for the meta-analysis. Chapter A3 describes the 260 programs or interventions represented in the meta-analysis examines their representativeness by comparing them with 167 family support programs that were not evaluated, describes characteristics of the studies included in
the analysis, and compares them with excluded studies. Chapter A4 describes the analytic approach to answering the central research questions regarding the impact of family support services on selected child and adult outcomes and the program or treatment characteristics related to impacts. Chapter A5 details the findings of the meta-analysis. The analysis revealed that programs providing family support services had small but statistically significant average short-term effects on child cognitive development and school performance, child social and emotional development, child health, child safety, parent attitudes and knowledge, parenting behaviour, family functioning, parental mental health and health risk behaviours, and economic well-being. Associated with stronger child outcomes were programs that targeted special needs children. Associated with less strong child outcomes were programs that used home visiting as their primary method of working with parents. Programs with the largest parent effects focused on developing parents' skills as effective adults.

15

The acquisition of emergent literacy for young children who are ethnic-minority, low-income or non-English speaking is threatened by myriad social risks. Given the need for empirically-supported interventions for these groups, a comprehensive literature review was undertaken, involving both a descriptive review and a meta-analysis. The 31 selected published articles each satisfied criteria for being an intervention study involving caregivers in its delivery to children between the ages of two to six years. A meta-analysis was conducted using a subset of 14 studies that utilized an experimental or quasi-experimental design. This two-pronged review demonstrated significant limitations in the generalizability of this literature to these important groups of children. Future directions for advancing intervention development are presented.

18

The impact of parental involvement in a child’s growth and development is generally accepted (Sheldon, 2003). However, educators, parent groups, and policy makers continue to debate the issue of whether or not parental involvement has a beneficial effect on the academic achievement of children (Epstein, 2001). A key element in these debates is how parental involvement is defined (Epstein, Sanders, Simon, Salinas, Jansorn, & Voorhis, 2002). Therefore, it is important to understand how parent involvement is defined before conclusions are drawn on the impact of parental involvement. In addition, it is important to understand what aspects of parent involvement have the greatest impact.
and whether the impact is consistent across children characteristics such as socioeconomic status, race, and the child’s grade level, age and gender. During the past several decades, there have been numerous primary studies investigating various aspects of parent involvement and the effect it has on children’s learning. The No Child Left Behind Act (NCLB) has served to focus attention on the need and importance of parent involvement in their child’s education. This systematic review synthesizes findings from this research. For this review, parent involvement is defined as the active engagement of a parent with their child outside of the school day in an activity which centers on enhancing academic performance. This review is intended to provide evidence to policymakers about the level of investment in parental involvement, to educators that can guide the development of parent involvement programs for their school improvement plans, and to researchers in designing studies to rigorously investigate the effectiveness of parent involvement for improving elementary school children’s academic performance in schools.

19


New emphasis is being placed on the importance of parent involvement in children’s education. In a synthesis of research on the effects of parent involvement in homework, a meta-analysis of 14 studies that manipulated parent training for homework involvement reveals that training parents to be involved in their child’s homework results in (a) higher rates of homework completion, (b) fewer homework problems, and (c) possibly, improved academic performance among elementary school children. A meta-analysis of 22 samples from 20 studies correlating parent involvement and achievement-related outcomes reveals (a) positive associations for elementary school and high school students but a negative association for middle school students, (b) a stronger association for parent rule-setting compared with other involvement strategies, and (c) a negative association for mathematics achievement but a positive association for verbal achievement outcomes. The results suggest that different types of parent involvement in homework have different relationships to achievement and that the type of parent involvement changes as children move through the school grades.

22

Sénéchal, M., & Young, L. (2022)

This review focuses on intervention studies that tested whether parent–child reading activities would enhance children’s reading acquisition. The combined results for the 16 intervention studies,
representing 1,340 families, were clear: Parent involvement has a positive effect on children’s reading acquisition. Further analyses revealed that interventions in which parents tutored their children using specific literacy activities produced larger effects than those in which parents listened to their children read books. The three studies in which parents read to their children did not result in significant reading gains. When deciding which type of intervention to implement, educators will have to weigh a variety of factors such as the differences in effectiveness across the different types of intervention, the amount of resources needed to implement the interventions, and the reading level of the children.

24

Van-Steensel, R., McElvany, N. Kurvers J. & Herppich S. (2011)

This meta-analysis examines the effects of family literacy programs on children’s literacy development. It analyses the results of 30 recent effect studies (1990–2010); covering 47 samples, and distinguishes between effects in two domains: comprehension-related skills and coder-related skills. A small but significant mean effect emerged (d = 0.18). There was only a minor difference between comprehension- and coder-related effect measures (d = 0.22 vs. d =0.17). Moderator analyses revealed no statistically significant effects of the program, sample, and study characteristics inferred from the reviewed publications. The results highlight the need for further research into how programs are carried out by parents and children, how program activities are incorporated into existing family literacy practices, and how program contents are transferred to parents.

25

Washington State Institute Public Policy (2014)

In "parents as tutors" programs, teachers meet with parents in person and maintain contact over the phone to train and encourage parents to engage in planned, structured academic activities with their children at home, usually in the form of one-on-one reading tutoring. This review does not include the impact on children's academic achievement from parent involvement in general; only school-based programs are included.

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