

Parent Involvement in Homework: A Research Synthesis

Erika A. Patall, Harris Cooper, and Jorgianne Civey Robinson
Duke University

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.

KEYWORDS: homework, parent involvement, academic achievement, meta-analysis.

In the past decade, the importance of getting parents involved in their children's education has received considerable attention from policy makers, educators, parents, and the mass media. Central to this heightened awareness is the *No Child Left Behind Act* of 2001, in which parent involvement was identified as one of six areas requiring reform. Other national initiatives that have advocated partnerships between parents and schools include *Project Appleseed*, a nonprofit group that asks parents to sign a promise to be involved in their children's schooling, and the *National Coalition for Parent Involvement in Education*, funded by the Ford Foundation and Union Carbide. A *Time* magazine article titled "How to Make a Better Student: The Eight Secrets of Success" (Wallis, 1998) emphasized parent involvement as being a key component of efforts to enhance achievement.

Parent involvement in education can take many forms. For example, parents may be involved by communicating with the school, volunteering at school and participating in school decision making, or supporting learning at home (Epstein, 1995). To the latter end, encouraging parent involvement with homework is a strategy commonly practiced by schools and teachers in an effort to facilitate academic

achievement (Cooper, 1989; Roderique, Polloway, Cumblad, Epstein, & Bursuck, 1994). Parents agree that they have an important role in homework (Hoover-Dempsey & Sandler, 1995, 1997). Of all the types of school involvement, parents report that helping with homework is particularly effective for enhancing achievement (Epstein, 1986; Sanders, Epstein & Connors-Tadros, 1999). Parents' behavior corroborates this belief; 90% of parents report setting aside a place for homework, and 85% report checking to see that homework has been completed (U.S. Department of Education, 2005). Finally, students generally feel that when parents help, they do better in school. Balli (1998) found that 95% of students reported that they did better in school at least some of the time when they received help with homework from their parents.

Despite widespread beliefs that parent involvement in homework is linked positively with achievement, research suggests that the relationship may not be a simple one. This is because the association between parent involvement in homework and achievement may be influenced by numerous factors, such as the involvement strategy parents use, the child's age and ability level, resources in the home, and the parents' own mentoring skills. In the following section, we review theory and research addressing the effect of parent involvement in homework on achievement and achievement-related outcomes.

Review of Theory and Research Addressing the Effects of Parent Involvement in Homework

Homework can be defined as tasks assigned by schoolteachers intended for students to carry out during nonschool hours (Cooper, 1989). Research has clearly shown that students, especially adolescents, who do homework, benefit in school by exhibiting improved achievement (Cooper, 1989; Cooper, Robinson, & Patall, 2006). However, researchers have suggested both positive and negative effects of parent involvement in homework (see Cooper, 1989; Corno, 1996). Table 1 presents a list of potential outcomes of parent involvement in homework, suggested by empirical research or by theoretical formulations. These sources have also suggested that parent involvement in homework can affect both achievement outcomes and outcomes related to achievement. As such, we discuss theory and research on the effects of parent involvement separately for these distinct sets of outcomes.

Effect on Achievement

The most commonly cited benefit of parent involvement is that it can be used to accelerate learning by increasing the amount of time students spend studying and making homework study more efficient, effective, and focused. A cursory look at research on the effect of parent involvement in homework on achievement suggests mixed findings. Some studies indicate that parent involvement in homework has a positive effect. For example, quasi-experimental and longitudinal studies have been conducted on the effectiveness of the Teachers Involve Parents in Schoolwork (TIPS) program, in which interactive homework assignments that require the involvement of parents are assigned. These studies found that parent participation in TIPS significantly enhanced student writing scores (Epstein, Simon, & Salinas, 1997), as well as homework grades and class grades in science (Van Voorhis, 2003). Some correlational evidence also supports the effectiveness

TABLE 1
Potential effects of parent involvement in homework

Positive Effects

- Accelerates learning (cf. Epstein et al., 1997)
- Increases time spent studying
- Makes homework study more efficient, effective, and focused
- Enhances proximal achievement-related outcomes
- Improves homework completion (cf. Cooper et al., 2000)
- Improves homework performance (cf. Callahan et al., 1998)
- Promotes positive affect
- Enhances positive mood and attentiveness during homework (cf. Leone & Richards, 1989)
- Enhances enjoyment during homework (cf. Shumow, 1998)
- Improves attitudes toward homework and school (cf. Cooper et al., 1998)
- Facilitates communication between parent and child (cf. Hoover-Dempsey et al., 2001)
- Enhanced expression of parent beliefs and expectations about school
- Enhances feedback, reinforcement, or both for desired homework behavior
- Facilitates communication between parent and teacher (cf. Epstein & Van Voorhis, 2001)
- Improves behavior during homework and school (cf. Sanders, 1998)
- Enhances development of self-regulation and study skills (cf. Xu & Corno, 1998)

Negative Effects

- Interference with learning (cf. Epstein, 1988)
- Confusion of instructional techniques (cf. Cooper et al., 2000)
- Help beyond tutoring (cf. Cooper et al., 2000)
- Emotional costs and tension (cf. Levin et al., 1997)
- Increased fatigue, frustration, disappointment
- Increased tension between mother and child
- Increased pressure on student to perform well (cf. Cooper et al., 2000)
- Increased differences between high and low achievers (cf. McDermott et al., 1984)

of parent involvement in homework, suggesting that setting a place and time for homework and providing direct aid with homework are effective ways parents can enhance achievement (Deslandes, Royer, Potvin, & Leclerc, 1999; Yap, 1987). The results of other studies suggest that parent involvement in homework has a negligible or negative relationship with achievement (Epstein, 1988; Ginsburg & Bronstein, 1993). Given that a great deal of the research on the relationship between parent involvement in homework and achievement has been correlational, one potential explanation for contradictory findings is that the relationship may be bidirectional. That is, although parent involvement in homework may improve student achievement, it may be also be that low-achieving students are more likely to receive greater parent involvement. There is some evidence to support this hypothesis. Pomerantz and Eaton (2001) found that children's poor academic performance predicted heightened involvement in homework 6 months later, which predicted improved achievement over time after initial achievement was taken into

account. However, this explanation may not entirely explain contradictory results. Even in some research using more powerful experimental or longitudinal designs, null or negative effects of parental homework involvement have been found (Balli, Wedman, & Demo, 1997; Levin et al., 1997).

Finally, other studies suggest that it is the type of parent involvement that is critical. Parents engage in many different types of involvement strategies, such as providing space and materials for homework; interacting with the teacher about homework; providing general oversight or monitoring of completion; making rules about when, where, or how homework is done; responding to questions about homework and giving feedback; or actually providing direct homework instruction (Hoover-Dempsey et al., 2001). Different forms of parent involvement are likely to have distinct effects on student achievement, and these effects may even vary depending on characteristics of the student, which could explain contradictory findings in the literature. According to motivation theorists (Grolnick & Ryan, 1989; Pomerantz, Grolnick, & Price, 2005), forms of parent involvement that support the child's autonomy, as well as provide structure in the form of clear and consistent guidelines about homework, will be the most effective. However, forms of involvement that are experienced by the student as controlling will have little impact or a negative impact on motivation and achievement. Research supports this assertion. For example, a study conducted by Cooper, Lindsay, and Nye (2000) found that parent involvement in homework in the form of support for autonomy was associated with higher standardized test scores, class grades, and homework completion, although direct aid was associated with lower test scores and class grades.

Effects on Achievement-Related Outcomes

In addition to direct effects on achievement, parent involvement may have positive effects on a number of desirable achievement-related outcomes, as well as indirect effects on achievement through such variables. As would be expected, parent involvement in homework has been linked to the most proximal achievement-related measures, including improved homework persistence, understanding, performance (Callahan, Rademacher, & Hildreth, 1998; Forgatch & Ramsey, 1994; Hutsinger, Jose, & Larson, 1998; Natriello & McDill, 1986; Voelkl, 1993), and in particular, homework completion (Cooper et al., 2000). Given research suggesting that students who do homework outperform students who do not, the effect of involvement on completion rate may be one route by which parent involvement influences achievement outcomes.

Students may experience homework as more pleasant when parents are involved. When parents are involved, students report being more attentive and having a more positive mood (Leone & Richards, 1989), greater homework enjoyment (Shumow, 1998), and perceive their homework activities as less difficult and more manageable (Frome & Eccles, 1998). When homework is more enjoyable, students may get more benefit from engaging in it.

Parent involvement may lead to enhanced achievement by facilitating the communication of expectations to children and providing opportunities for reinforcement of desired homework behaviors (Hoover-Dempsey et al., 2001; Maertens & Johnston, 1972), as well as facilitating communication between parents and teachers (Epstein & Van Voorhis, 2001). Parents who are involved in homework have an opportunity to demonstrate their belief that schoolwork, homework, and learning

are important (Epstein & Van Voorhis, 2001) and to show support for what their children are learning (Balli, Demo, & Wedman, 1998; Levin et al., 1997). Research has shown that parent involvement in the form of indicating positive attitudes about homework is related to the development of positive attitudes about homework and schoolwork for the student (Cooper, Lindsay, Nye, & Greathouse, 1998). As such, parent involvement in homework has also been linked with more positive behavior during school (Sanders, 1998), suggesting that involvement may affect achievement by affecting learning during school hours as well as at home.

Parent involvement in homework may also influence long-term achievement and related outcomes by promoting the student's ability to engage in adaptive self-regulation. That is, parent involvement may promote the development of cognitive, affective, and behavioral strategies—including goal-setting; planning; and the management of time, materials, attentiveness, and emotions—necessary to achieve academic goals (Zimmerman, 2000). Research supports this assertion, suggesting that students demonstrate more effective study habits when their parents are knowledgeable about the homework task (McDermott, Goldman, & Varenne, 1984; Xu & Corno, 1998). Consequently, parent involvement may be particularly important for younger students who lack self-regulatory skills and are in the process of developing self-management and study habits.

Despite these positive benefits of parent involvement, some researchers have highlighted that involvement may lead to negative experiences for parents and students. Levin et al. (1997) found that greater maternal help with homework was related to increased fatigue, frustration, and disappointment for the mother and caused tension between mother and child, particularly when the child was a low achiever. Furthermore, emotional costs and tension between the parent and child may be compounded when parents, although believing homework is valuable, experience frustration about having inadequate skills for helping children with homework, especially older students for whom the curriculum is most challenging (Dauber & Epstein, 1993; Reetz, 1990), and have constraints in terms of their own time and energy (Hoover-Dempsey, Bassler, & Burrow, 1995; Kay, Fitzgerald, Pardee, & Mellencamp, 1994; Reetz, 1990).

Some forms of parent involvement in homework may be adaptive in that homework completion and learning are facilitated, and the development of positive attitudes and self-regulatory study skills associated with academic achievement may even be supported (Hoover-Dempsey & Sandler, 1995). However, Cooper et al. (2000) found that two thirds of parents reported engaging in some inappropriate form of involvement not expected to have a positive effect, including simply giving correct answers or completing assignments themselves. Consequently, parents engaging in these inappropriate involvement behaviors may impede learning during homework study and hinder the development of self-regulatory skills if students come to rely on their parents for correct answers or external regulation and motivation. Further, parent involvement in homework may have detrimental effects if it is self-initiated on the part of the parent without request from the child or is perceived as intrusive or controlling by the child. In analyses assessing the effect of mother's daily self-initiated involvement on success and failure the following day, Pomerantz and Eaton (2001) found that although self-initiated monitoring and help with homework did promote school success the following day, it also fostered school failure for low-achieving (but not high-achieving) children.

Finally, some educators and researchers have suggested that parent involvement may exacerbate differences between high- and low-achieving students when the achievement difference is associated with economic differences. It might be more difficult for families to be involved in homework if they are of limited economic means, if there is a single parent, or if both factors are the case (Grolnick, Benjet, Kurowski, & Apostoleris, 1997; Kronholz, 1997; McDermott et al., 1984; Odum, 1994; Scott-Jones, 1984). Still, parents who participated in the National Education Longitudinal Study in 1988 reported providing similar amounts of homework supervision, regardless of socioeconomic status (Sui-Chu & Willms, 1996).

In sum, then, research and theory suggest the relationship between parent involvement in homework and achievement or achievement-related outcomes is complex. Further, it seems reasonable to suggest that the positive and negative consequences can both occur and can even occur together. For instance, parent involvement might improve homework completion rates at the same time that it creates tension between parent and child. In this article, we use meta-analysis to examine the cumulative evidence on the relationship between parent involvement in homework and achievement, as well as a number of related outcomes. Given conflicting findings within the literature on parent involvement in homework, a meta-analysis of the literature would help answer the most basic question of whether parent involvement in homework does indeed have a beneficial effect and for what particular achievement-related outcomes. Further, factors such as the type of involvement, the subject matter of the homework, the achievement outcome assessed, and the grade or ability level of the student may all be variables that affect whether parent involvement in homework will positively influence achievement. A meta-analysis would help identify what moderators might explain the conflicting findings.

Past Syntheses of Parent Involvement in Homework

Cooper (1989) reviewed eight studies examining the relationship between achievement and parent involvement in homework. No study was included that directly manipulated the presence versus the absence of involvement, but two studies did partially address the question of a causal impact. Cooper concluded, "There is as yet no reliable evidence on whether parent involvement in homework affects student achievement" (p. 140). Furthermore, five studies that related the amount of parent involvement to student achievement produced correlations ranging from $-.22$ to $+.44$.

Hoover-Dempsey et al. (2001) provided a narrative review of the research on parent involvement in homework. After reviewing 59 studies related to parent involvement, they concluded that although research examining the effect of parent involvement in homework on achievement produced mixed findings, homework involvement seemed to support improved achievement, as well as student attention to homework, homework completion, homework performance, attitudes toward homework and school, perceptions of competence, and self-regulatory skills.

Three recent meta-analyses by Jeynes (2003, 2005, 2007) examined the relationship between numerous types of parent involvement and achievement, including the unique effect of parent involvement in homework. Jeynes's 2003 meta-analysis of 21 studies examined the effect of parent involvement on minority children's academic achievement. It revealed a significant positive effect of involvement in homework on achievement for African American students ($\beta = .72$; p. 211). Similarly,

Jeynes's 2007 meta-analysis of 52 studies examined the relationships between various forms of parent involvement and urban secondary school student academic achievement. It revealed that involvement in homework had a significant positive relationship with achievement for urban secondary school students, but only when variables such as socioeconomic status, gender, race, and prior achievement were not controlled for ($\beta = .38$ and $\beta = .13$, *ns*; pp. 95-96). However, a different pattern emerged in Jeynes's 2005 meta-analysis of 41 studies assessing the relationship between parent involvement and urban elementary school student academic achievement. Specifically, a null relationship between parent involvement in homework and achievement was found ($\beta = -.08$; p. 254).

In sum, what we know about the effectiveness of parent involvement in homework from previous syntheses is rather limited. Cooper's (1989) meta-analysis was based on very few studies and uncovered little causal evidence. Although Hoover-Dempsey et al. (2001) provided a useful description of studies that have addressed this question, it remains difficult to determine the impact of parent involvement in homework on the basis of the narrative approach of this review. Finally, Jeynes's syntheses suggest that there may be positive effect of parent involvement in homework, but these meta-analyses are limited to particular populations and produced results somewhat inconsistent with each other. Taken together, the most basic question of whether parent involvement in homework has a positive effect on achievement remains unsettled. However, findings across these syntheses do suggest that involvement is effective under certain conditions for particular groups of individuals.

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Discussion

In this synthesis, we meta-analyzed research examining the relationship between parent involvement in homework and achievement across three discreet study designs: manipulations of parent training for homework involvement, cross-sectional data collections in which third variables were controlled, and cross-sectional data collections without controlling for third variables. Although the results varied slightly across each group of studies, several consistent findings emerged. First, consistent with the conclusions of previous reviews (Cooper, 1989; Hoover-Dempsey et al., 2001; Jeynes, 2005), across all designs, the overall effect of parent involvement in homework was small and often not significant. However, evidence also suggested that this small overall relationship between involvement and achievement may be qualified by the fact that homework involvement was not equal across all circumstances. Specifically, both causal and correlational evidence suggested that the effect of parent involvement varied with the student's age. Further, correlational evidence suggested that other variables may be important moderators, including the type of homework involvement provided by parents and the subject matter of the assignments. Further, causal evidence suggested that homework involvement may have an effect on the most proximal achievement-related outcomes, including homework completion rates and the frequency of homework problems, both of which may lead to gains in achievement over the long term.

Summary of Studies on Causal Relationships

Studies that randomly assigned parents to training or no-training conditions provided the strongest evidence from which to infer the causal effects of parent involvement in homework. The results of these randomized experiments suggest that parent training had a significant positive impact on (a) homework completion rates and (b) the frequency of problems with homework. With Cohen's (1988) measure of distribution overlap (U_3) as a means to express the size of these effects, the average student who had a parent trained to be involved with homework had a higher homework completion rate than did about 61% of students without a trained parent. Students of trained parents also had fewer homework problems, such as refusing to do homework, being frustrated by homework, complaining about homework, or being sent to the office for poor homework behavior. Even more striking than the effect of training for involvement on completion, the average

student whose parents were trained to be involved with homework had fewer homework problems than did about 80% of students whose parents were not trained. Further, studies using multivariate techniques to control for confounded variables provided additional support for the positive impact of parent involvement on homework completion rates. Five regression coefficients derived from two studies were all positive, and two reached statistical significance. These results are consistent with conclusions drawn from a previous review of the relationship between parent involvement in homework and achievement from Hoover-Dempsey et al. (2001), in which it was suggested that involvement may have a greater effect on proximal measures of achievement.

Across training programs, parents were trained to be involved in homework through a variety of involvement strategies. However, because of the small number of studies that examined homework completion rate and homework problems, we could not conduct moderator analyses for these outcomes. Consequently, it remains difficult to determine what specific characteristics of training programs led to greater homework completion rates and fewer homework problems. Still, it is interesting to note that the training program that primarily emphasized monitoring homework completion was the only one to have a negative impact on homework completion rates (Tamayo, 1992). Other programs included an emphasis on improving the learning environment, helping students improve homework habits, and supervising the homework process (Doering, 1993; Kiesner, 1997; Meteyer, 1998). This pattern is similar to that found for correlational evidence, in which monitoring was the only form of involvement to have a negative relationship with achievement, whereas all other forms had a positive relationship, and in particular, setting rules about homework had the largest association with achievement.

With regard to direct measures of achievement, findings from studies that randomly assigned parents to training or no-training conditions suggested little or no positive effect of training. Findings from all manipulated study designs provided fairly consistent evidence that the effect of training parents for homework involvement has at best a slightly positive overall impact on achievement. Quasi-experimental studies demonstrated the greatest positive effect of parent training on achievement; in fact, this was the only set of studies in which parent training was manipulated to show a significant overall effect. However, methodological flaws render this set of studies less trustworthy than the studies described earlier. Similarly, the range of estimated coefficients derived from studies using multiple regression, path analysis, or structural equation modeling revealed inconsistency in the direction of their links involving parent involvement.

There is some encouraging news with regard to achievement measures, however. When we examined subgroups of students, the randomized experiments did reveal a reliable positive effect of parent training in homework involvement on the achievement outcomes for students in elementary school, Grades 2 through 5. The size of the effect for elementary school students suggests that the average elementary school student whose parents were trained to be involved in homework performed better than about 59% of students whose parents were not trained. This effect was similar in magnitude to the effect found when random-error assumptions were used, but in this analysis the effect was not significantly different from zero. Thus, the generality of any inference regarding this positive causal effect is restricted to experiments similar to those included in the meta-analysis.

Summary of Studies on Correlations

The strength of the overall correlation between parent involvement in homework and achievement was very small and significant only under fixed effects. However, it would be ill advised to interpret this generally weak overall relationship as indicating no causal effect of parent involvement on achievement. Rather, it seems plausible to assume that the simple correlation might be conflating two causal relationships with opposite effects. That is, generally speaking, the experimental results suggest a possible positive effect of appropriate parent involvement on homework achievement for young students. However, the simple correlation would also be influenced—but in an opposite direction—if poor achievement caused more parent involvement in homework, either through self-initiated behavior by the parent or through teacher requests. This conflation of effects illustrates why the interpretation of correlations as indicators of causal effects can be misleading.

Where simple associational studies may hold the most value is in the tests of variables that moderate the size of correlations. The moderator tests on correlations (Table 12) revealed three robust moderators—the grade level of the student, the type of parent involvement, and the subject matter—and these analyses contained five of the six subgroup correlations that also proved different from zero under both fixed- and random-effect assumptions. We will limit our speculations to only these three moderators that permitted the most robust generalization.

Grade Level

Consistent evidence from both experimental and correlational studies suggests that parent involvement in homework had desirable effects for elementary school students. Because younger students appear to have less developed study habits (Dufresne & Kobasigawa, 1989), parent involvement may serve as an opportunity not only to learn academic content but also to internalize and develop study skills and effective forms of self-management modeled by parents. In addition, involvement in homework may be effective for achievement in elementary school in part because parents have greater mastery of the subject matter covered in the early grades (Cooper, 2001).

The analyses using both correlational and experimental studies showed that middle school students generally may not benefit from parent involvement in homework. Parents may need to be aware of the developmental stage of their child when engaging in involvement in homework and adjust their type of involvement accordingly. For example, adolescence is a time when young people attempt to develop some level of independence and autonomy from their parents in many domains (Erikson, 1968; Gutman & Midgley, 2000; Hill & Holmbeck, 1986). Further, the transition to middle school is an especially difficult period for many children (Carnegie Council on Adolescent Development, 1995; Gutman & Midgley, 2000), during which an increase in parent-child conflict often occurs (Laursen, Coy, & Collins, 1998). Thus, although providing guidelines for homework behavior or providing direct help with homework may be an effective form of involvement for elementary students, as students reach adolescence, it may be important that parents gradually withdraw from the homework process and shift their involvement more to support of the child's own autonomous efforts.

It is also important again to consider the possibility that the negative correlation in middle school is actually caused by a strong achievement decline in school performance during the transition to middle school (Simmons & Blyth, 1987; see also Eccles et al., 1993, for review). Consequently, the observed negative association may be due to a decline in achievement among middle school students causing more parent involvement, differentially for those students experiencing the greatest decline.

One surprising finding was the significant positive correlation between parent involvement in homework and achievement for high school students. We might speculate that parent involvement during the high school years may be effective because parents' provision of assistance becomes highly specialized. That is, parents may become directly involved in homework only when they have particular expertise to share with their child. Thus, although homework involvement occurs less frequently as students grow older (Eccles & Harold, 1996; Epstein & Lee, 1995; Hoover-Dempsey & Sandler, 1997; Stevenson & Baker, 1987), it is likely to be more effective when it does occur. This pattern of results was partially inconsistent with previous reviews by Jeynes (2005, 2007), in which parent involvement in homework had no relationship with achievement among urban elementary school students but had a significant positive relationship with achievement among urban secondary school students. The inconsistency between the results of this meta-analysis and those of Jeynes may be explained by the fact that Jeynes included only studies using urban student populations and combined middle school and high school students in his analyses of secondary students, whereas this meta-analysis distinguished between middle school and high school students.

Type of Parent Involvement

Consistent with hypotheses were the findings that although the overall effect of parental homework involvement on achievement was generally small or nonexistent, various forms of involvement were differentially effective. Setting rules about when and where homework should be done had the strongest positive relationship with achievement. Setting rules entails clearly communicating expectations, providing guidelines, and reinforcing behavior when rules are followed. Consequently, this strategy may be a particularly effective way to increase the time students attend to homework tasks, the effectiveness of how that time is used, or both. Further, this involvement strategy may have long-term achievement benefits to the extent that homework rules may become internalized by the child over time and help the student develop self-regulation skills. Although this finding is based on correlational evidence, it seems implausible that the student's achievement would be causing this type of parent involvement, that is, higher academic achievement causing parents to set homework rules. Of course, it is still possible that the relationship is spurious—perhaps, for example, as family socioeconomic status goes up, so does the likelihood both that parents set rules and that children achieve better in school.

The other two specific forms of parent involvement produced significant relationships with achievement (under fixed-effect assumptions) in opposite directions. Parent monitoring of homework was negatively related to achievement whereas direct aid was positively related. In line with the time-on-task perspective, parents' provision of instruction may make homework study more effective by facilitating

greater understanding. In contrast, monitoring strategies used in isolation, without clear guidelines, reinforcement, or instruction during which desired behaviors can be modeled, may be experienced as controlling rather than informative.

Subject Matter

Finally, in experimental studies, parent involvement in homework had positive effects on both mathematics and verbal subject matter (though nonsignificantly so), and in correlational studies, involvement had a positive relationship with achievement in verbal subject matter but a negative relationship with achievement in mathematics. Although this latter relation is again causally ambiguous, it serves to highlight the potential importance of considering limitations in parent mentoring skills. Inadequate helping skills and use of instructional strategies that conflict with those the teacher uses in class might attenuate the relationship between parent involvement in homework and achievement. That is, involvement in mathematics homework may be more difficult for parents because it is less likely that they have received recent exposure to material covered in mathematics homework and therefore may encounter difficulty when attempting to assist their children with math homework. Second, the greater variety of instructional strategies used to teach mathematics may provide for more opportunities for parents to interfere with learning when the instructional techniques parents use differ from those being used at school. Reading and language arts, on the other hand, may require less specific subject matter skill. Still, we must also entertain the possibility of a reverse causal process to explain the pattern of results among correlational studies: Children who struggle more with mathematics may seek the intervention of their parents (or parents may be asked by teachers to intervene) more often than occurs in language-related skill areas.

Limitations to Generalizability

Among experimental studies manipulating parent training for homework involvement, analyses testing for the effect of publication bias and data censoring revealed little evidence to suggest that the strategies we used to locate studies for the synthesis produced a biased representation of results. Still, other limitations to the generalizability of the synthesis findings need to be made clear.

First, the duration of interventions meant to enhance the quality and frequency of parent involvement in homework was generally very brief, and the effects of such interventions have been tested preponderantly on measures of immediate achievement outcomes. Therefore, it is not possible to make claims about the effect of parent training during an extended time or on long-term achievement. Similarly, it is not possible to make claims regarding the long-term effect of involvement on other achievement-related outcomes, including homework completion rates and frequency of homework problems. However, the studies using naturally occurring parent involvement did use longer time frames, and these were consistent with the experimental findings for the general outcomes that involvement improved completion rates and reduced problems. It is important that future research create interventions that persist for an extended time and provide multiple opportunities to instruct and support parents so that training fidelity is high and sustained.

With regard to subject matter, our database contained too few correlations involving subjects other than math, reading, and language arts, such as science and

social studies, to include these in the meta-analysis. Therefore, the effect of parent involvement remains unknown for these subject areas. In addition, few studies examined the effect of parent involvement on achievement with homework grades or nonstandardized (unit) test scores as the outcome measure. This is particularly problematic because we would expect that involvement might have its greatest impact on these more proximal measures of achievement rather than with class grades or standardized test scores. Consequently, our understanding is limited about the effects of involvement and how they might spread from specific and proximal measures to general and distal measures.

Further, few studies exist that examine the effectiveness of parent involvement for students of various cultural backgrounds, socioeconomic statuses, or levels of ability. Most studies failed to report these characteristics of their sample, and those that examined broad samples of students rarely looked for moderating effects of student individual differences. However, results from previous meta-analyses (Jeynes, 2003, 2005, 2007) suggest that parent involvement may be particularly effective for minority students. Research should continue to explore this possibility.

Finally, it is also important to keep in mind that synthesis-generated evidence should not be misinterpreted as supporting statements about causality (see Cooper, 1998). When groups of effect sizes are compared within a research synthesis, regardless of whether they come from simple correlational analyses or from experiments using random assignment, the synthesis can only establish an association between a moderator variable and the outcomes of studies, not a causal connection. Thus, when different study characteristics are found to be associated with the effects of an intervention or the size of a correlation, these findings should be used to direct future research to examine these factors by means of a more controlled design, so that their causal impact can be appraised.

Future Research

Most important, we want to emphasize that the continued gathering of correlational estimates of the involvement-achievement relationship is of limited value. Because the likelihood exists that both causal directions exist in nature, such studies will only add more ambiguity to an already ambiguous database. Instead, more useful will be (a) carefully conducted ethnographic studies that provide detailed longitudinal descriptions of what happens in the parent-child interactions surrounding help with homework and (b) studies that introduce parent involvement in homework as an exogenous intervention, randomly assign parents to conditions, and analyze the data at the same unit of analysis as the manipulation. In particular, future studies should make attempts to isolate the effect of involvement in homework by grade level and explore potential explanations for differential effects. A first step may be qualitative studies that compare the kinds of help given and the reasons parents become involved at each grade level. Future studies should explore whether the dissimilar nature of the involvement across developmental stages may explain the differential effect of homework involvement between students at different grade levels. Further, the finding that parent involvement in homework had a negative relationship to achievement of middle school students presents a particular dilemma. It is critical that future research explore the motivation behind and nature of parent involvement during this developmental stage.

This synthesis also pointed to the distinct impact of different forms of parent involvement in homework on academic achievement. Clearly, future research should employ interventions that distinguish between types of parent involvement, not simply encourage involvement per se or present multiple forms of involvement as an undifferentiated package of interventions. One of the most striking relationships revealed by this synthesis was the positive correlation found between parents' use of homework rule setting and academic achievement. A closer look at individual studies shows that rule setting has generally been defined as a multiple component strategy, including deciding when and where children are to complete homework. Future research should make attempts to refine the rule-setting construct, as well as other broad forms of involvement, to better identify what particular elements of involvement in homework may be most effective for what types of students, and when.

Attempts should also be made to assess nonachievement measures that have been largely neglected in the literature, including student attitudes, motivation, study habits, and homework problems. For example, theoretically, one way parent involvement in homework may affect achievement is by first affecting motivation. Little or no research has been conducted to assess motivation as either an outcome of involvement or mediator of the relationship between involvement and achievement. Similarly, future research should directly assess whether the more abstract mediators suggested throughout this article—such as time on task, attentiveness, communication of expectations and guidelines, reinforcement, motivation, and improved self-regulation—account for the relationship between parent involvement in homework and achievement.

Evidence of Policy Statements in Light of New Evidence

Based on the results of this research synthesis, we might suggest several guidelines for educators and education policy makers regarding parent involvement in homework. First, on the basis of the strongest evidence, we might suggest the following:

1. Schools and teachers should encourage parent involvement through Grade 5 for the purposes of improving achievement and homework completion rates and decreasing problems with homework.
2. Parent involvement in homework should be encouraged for high school students when parents have a particular and relevant expertise, for the purpose of improving achievement.

With less surety, we might suggest the following:

1. Parent involvement in homework may also be encouraged for middle school grades for the purposes of improving homework completion rates and decreasing problems with homework. However, this recommendation should be considered with caution in light of the lack of an involvement effect on achievement among middle school students and until we have a better understanding of the dynamics of assistance for students in these grade levels.
2. Schools and teachers may want to encourage particular forms of parent involvement. Specifically, setting rules about when and where homework should be done may have the most beneficial effects for students.

3. When involving parents directly in mathematics homework, special attention should be paid to ensuring that parents have the requisite skills to be effective mentors.

Finally, in districts and schools that wish to emphasize parent involvement in homework, it may be necessary to consider resource-intensive efforts to increase not only the amount, but also the quality of parent involvement in homework. For example, districts and schools might consider providing workshops to teach parents how to be involved in homework and to provide support for parent questions about involvement. Districts and schools might also consider adopting a contract system in which parents are asked to agree to be involved in homework. Districts, schools, and teachers should consider utilizing the Internet, developing Web pages that provide general information to parents about how to be involved in homework as well as specific information about nightly homework assignments. And these efforts may need to be sustained for long periods, following students as they progress through grade levels, for the efforts to have their desired effect.

Conclusion

Students who do homework have better school outcomes than students who do not (Cooper, 1989; Cooper et al., 2006). Our findings suggest that parent involvement in homework could affect student success by having a positive impact on homework completion and by reducing student problems with homework. Yet the effect of parent involvement on achievement was negligible to nonexistent, except among the youngest students. Clearly, it is important to consider the developmental stage of the student when parents become involved in homework. Further, different forms of parent involvement in homework may have different effects. Finally, parent's skills in the subject area may be an important mediator of the effect of helping. Each of these moderating influences suggests it is time for the study of parent involvement in homework to begin testing hypotheses grounded in psychological and educational theory. The findings of this research synthesis provide some guidance for future investigations that will be both useful and illuminating of the underlying social and psychological dynamics of parent help with homework.

Note

¹Information was collected on several additional variables, including at-risk status, student ability, gender, and ethnicity. However, because of a lack of reporting or a lack of variation across categories, no analyses were conducted on these variables.

References

- References marked with an asterisk indicate studies included in the meta-analysis.
- *Albright, M. I. (2004). *Parent involvement in spelling homework and children's achievement: A multi-level analysis*. Manuscript submitted for publication.
 - *Anderson, J. R. (2000). An exploratory study of the relationship between selected children's perceptions of maternal acceptance and their reading achievement. (Doctoral dissertation, Michigan State University, 2000). *Dissertation Abstracts International*, 62, 343.