

A Meta-Analysis: The Relationship Between Father Involvement and Student Academic Achievement

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Abstract

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.

Keywords

academic achievement, urban education, minority academic success, parent participation, parental involvement, social, urban, social, African American students, Hispanic students, adolescent, subjects, elementary school, programs, high school

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Father involvement has become one of the most debated topics in education today (Coles, 2009; Conner & White, 2006; Cowan, Cowan, Pruett, Pruett, & Wong, 2009). The discussion over paternal support for children's studies has not been limited to educators, but has also become a salient topic among parents, social scientists, and politicians (McKinney & Renk, 2008; Paquette, 2004). Although numerous educators have focused on the importance of father involvement if children are to excel in school, no meta-analysis that examines the influence of this involvement on the academic achievement and behavior of the general student population has ever been published in an academic journal. This reality largely contributes to a limited body of knowledge that exists regarding which aspects of paternal involvement help student education, and just what components of this involvement are most important (Paquette, 2004; Pianta et al., 2005).

A growing number of studies have been done that examine the impact of father involvement on the general population (Downer, Campos, McWayne, & Gartner, 2010; Jeynes, 2013; Lamb & Lewis, 2010; Palm & Fagan, 2008). A large number of these studies, however, have one of the following shortcomings that limit the benefits of each of these individual studies (Marsiglio, Amato, & Day, 2000; Pianta et al., 2005). First, most studies focus on only paternal involvement generally or on certain expressions of father involvement (Lee & Bowen, 2006; Palm & Fagan, 2008). As a result, most individual studies can offer little guidance to family members and educators regarding which aspects of father involvement are most important (Fagan & Palm, 2004; Lee & Bowen, 2006). Second, a large number of these studies have small samples that make it difficult to estimate the influence of paternal involvement on the general student population (Lee & Bowen, 2006; Palm & Fagan, 2008). Third, a large number of the studies focus on only certain groups of students in particular situations (Cowan et al., 2009; Pianta et al., 2005). Consequently, by examining the results of a single study, it may not be possible to come to develop principles about what aspects of father involvement may be helpful to the broad spectrum of students (Saracho, 2008).

History of Father Involvement Research

Research on father involvement grew out of similar research addressing the effects of parental involvement, which in turn emerged out of the analyses of the effects of family structure (Amato & Gilbreth, 1999; Hoover-Dempsey & Sandler, 1997). The personal and cultural emphasis on parental engagement is hardly new. In American history, for example, both the Pilgrims and Puritans placed a great deal of emphasis on parental involvement (Hiner, 1988; McClellan & Reese, 1988). This parental participation has been an

integral part of the rearing of children in America for much of its history (Bronfenbrenner & Morris, 1998; Jeynes, 2007a).

Parental involvement research emerged as an offspring of other types of family studies such as family structure and family functioning analysis (Bronfenbrenner & Morris, 1998; Jeynes, 2011; Roer-Strrier, 2005). Clearly, coming from a two-parent intact family is conducive to experiencing high levels of mother and father engagement—more so than coming from a single-parent family structure—but originating from this environment does not guarantee that mothers and fathers will be involved (Belsky, 2005; Jeynes, 1999).

For decades, social scientists did not aggressively study parental involvement for two reasons: (a) such a high percentage of parents in the first half of the 20th century were actively engaged in their children's education; and (b) there was an assumption that parental involvement was highly correlated with family structure (Bronfenbrenner & Morris, 1998; Jeynes, 2003a, 2003b). However, in exactly 1963, after 14 years of edging downward, the American divorce rate surged (U.S. Department of Education, 2010). This trend was significant not only in its own right but also because the changing make-up in family structure ultimately made father and mother involvement more difficult.

As a consequence of the rising tide of marital dissolutions, it was inevitable that social scientists would manifest a new interest in studying family structure (Jeynes, 2003a, 2005). Over the past few decades, social scientists have undertaken the study of parental involvement, beginning first with rather simple theories that were not strongly based on quantitative research and then eventually developing into sophisticated and holistic conceptualizations of parental involvement (Hoover-Dempsey & Sandler, 1997; Lightfoot, 2004). These more sophisticated studies differentiated between the various components of parental involvement, examined subtle aspects of parental involvement, utilized nationwide data sets, longitudinal approaches, and meta-analyses (Henderson & Mapp, 2002; Williams & Sanchez, 2012).

The Importance of Appreciating Types of Father Involvement

Beyond undertaking a meta-analysis that assesses the *overall* impact of father engagement, it is also essential to address *which aspects* of that emotional and psychological support are most important. Over the last 15 years, social scientists have more specifically sought to identify the various components of parental involvement. Hoge, Smit, and Crist (1997) attempted to define parental involvement as consisting of four components: parental expectations, parental interest, parental involvement in school, and family community. Other researchers confirm, qualify, or dispute these findings (Fagan & Palm, 2004).

The Need for a Meta-Analysis

With this research background in mind, it is patent that social scientists possess substantially more information about family structure and parental involvement than they do about father involvement (Downer et al., 2010; Jeynes, 2013). For example, Amato and Gilbreth (1999) examined the relationship between non-resident fathers and school outcomes. This, however, is very different from studying father involvement. First, many divorced and other non-resident fathers are highly involved in their children's lives, even if they are not at home. Second, a study of father involvement usually studies the level of involvement of fathers residing in the home. In addition, although there have been meta-analyses performed to estimate the effects of parental involvement and assess the elements of that engagement that contribute the most to scholastic outcomes, the same is not true for the study of father involvement (Jeynes, 2003a, 2005, 2012).

The reality is that there has never been a published meta-analysis on the influence of father involvement on pre-kindergarten through college-age children. The need for such a study is clear, especially because while there exists a consensus within the academic community about what relationship exists between parental participation on one hand and scholastic and behavioral outcomes on the other hand, the same agreement does not exist with regard to father involvement. A meta-analysis statistically combines all the relevant existing studies on a given subject to determine the aggregated results of said research. Meta-analyses are probably the single most popular type of academic article, because they enable people to grasp what the overall body of research on a given topic indicates. A meta-analysis would enable social scientists to conclude whether father involvement is associated with positive outcomes and which expressions of that involvement are most efficacious.

It is vital that social scientists determine whether father involvement really does have an impact, because already the government is beginning to operate with the assumption that it does (Downer et al., 2010; Jeynes, 2013; Lamb & Lewis, 2010). And although research has shown that parental involvement has a positive impact, it may or may not be true that father involvement in isolation is beneficial. That is, among social scientists the belief that father involvement does have a beneficial impact is far from unanimous. A meta-analysis would not only help resolve this issue but also would give insight into the aspects of paternal engagement that help the most. Some researchers believe that the frequency of father non-involvement may be greatest in urban areas, where one can argue that the stresses of life are often great (Downer et al., 2010). Therefore, this meta-analysis focuses on studies where either all of the students or most of the students are from urban areas.

Three Research Questions Addressed in This Study

Three research questions or, more specifically, three issues that are especially pertinent to parents and educators emerge.

Research Question 1: Is father involvement associated with stronger academic and behavioral outcomes?

Research Question 2: What pattern of effect sizes emerged for youth of color and those of different age groups?

Research Question 3: What types of father involvement expressions appear to help those students the most?

To answer these three key questions, it is imperative to know what the overall body of research indicates. A meta-analysis is the best method for addressing this question.

Method

Analytical Approach

Research methods and data analysis plan for the meta-analysis on father involvement. This meta-analysis examined the relationship between father involvement and pre-kindergarten–college student achievement. This meta-analysis first (Research Question 1) addressed whether there is a statistically significant relationship between father involvement and student academic outcomes. The second analysis (Research Question 2) determined whether this relationship held for youth of color and those of different age groups. The third analysis (Research Question 3) determined what specific types of father involvement help those students the most.

The procedures used to conduct the meta-analysis are outlined under this heading (Analytical Approach), and the following headings are listed below: Data Collection Method, Statistical Methods, Study Quality Rating and Effect Size Statistics, and Defining of Variables.

Each study included in this meta-analysis met the following criteria:

1. It needed to examine father involvement in a way that could be conceptually and statistically distinguished from other primary variables under consideration. For example, if a study involved nine key features, including father involvement, and the influence of father involvement could not be statistically isolated from the other features, the study was not included in the analysis.

2. It needed to include a sufficient amount of statistical information to determine effect sizes.
3. If the study used a control group, it had to qualify as a true control group and therefore be a fair and accurate means of comparison. Moreover, if the research utilized a control group at sometimes but not others, only the former comparisons were included in the meta-analysis.
4. The study could be a published or unpublished study. This was to reduce the likelihood of publication bias.

Due to the nature of the criteria listed above, qualitative studies were not included in the analysis. Although qualitative studies are definitely valuable, they are difficult to code for quantitative purposes, and any attempt to do so might bias the results of the meta-analysis.

Data Collection Method (Coding and Rater Reliability)

To obtain the studies used in the meta-analysis, a search was performed using every major social science research database (e.g., Psych Info, ERIC, Dissertation Abstracts International, Sociological Abstracts, etc.), totaling 60 databases, to find studies examining the relationship between father involvement and the academic achievement of children from grades pre-kindergarten through college. The search terms included father involvement, fathers, schools, family, education, paternal support, partnership, programs, communication, expectations, reading, attendance, homework, household, rules, parental style, and several other terms. Reference sections from journal articles on father involvement were also examined to find additional research articles. The e-mails were also sent to each of the Education department chairs of the over 100 Research 1 universities in the United States, asking them if there were any faculty in their department who had either recently completed or was just about to complete a study examining the effects of father involvement. Although this comprehensive search yielded hundreds of articles and papers on father involvement, nearly all of these articles were not quantitative in nature. The research team obtained a total of 101 studies that addressed the relationship under study, and found 66 studies that had a sufficient degree of quantitative data to include in this meta-analysis. Among the 66 studies that possessed a sufficient degree of quantitative data to include in this meta-analysis, the total number of subjects was approximately 105,828.

A number of different characteristics of each study were included for use in this study. These characteristics included: (a) report characteristics, (b) sample characteristics, (c) intervention type, (d) the research design, (e) the grade level or age of the students, (f) the outcome and predictor variables, (g) the length (in

weeks) of the study, (h) the attrition rate, and (i) the estimate of the relationship between father involvement and academic achievement as well as behavioral outcomes. Two coders, who had been coding for at least 10 years, coded the studies on these characteristics and had 95% agreement on their coding.

Statistical Methods and the Effect Size Statistic

Effect sizes were computed from data in such forms as t tests, F tests, p levels, frequencies, and r values via conversion formulas provided by Glass, McGaw, & Smith (1981). When results were not significant, studies sometimes reported only a significance level. In the unusual case that the direction of these not significant results was not available, the effect size was calculated to be zero.

For studies with manipulations, I used the standardized mean difference to estimate the effect of father involvement. The d index (Cohen, 1988) is a scale-free measure of the separation between two group means. Calculating the d index for any comparison involved dividing the difference between the two group means by either their average standard deviation or by the standard deviation of the control group. In the meta-analysis, I subtracted the experimental group mean from the control group mean and divided the difference by their average standard deviation. As a supplement to these analyses, the Hedges' "g" measure of effect size was used (Hedges & Vevea, 1998). Since it used the pooled standard deviation in the denominator, it customarily provided a more conservative estimate of effect size. Hedges also provided a correction factor that helped to adjust for the impact of small samples.

For studies that involved cross-sectional measures of the relationship between father involvement and the outcome variables, the following procedures were undertaken. For those studies that attempted to statistically equate students on other variables, the preferred measure of relationship strength was the standardized beta weight, β . These parameters were determined from the output of multiple regression analyses. If beta weights could not be obtained from study reports, the most similar measures of effect (e.g., unstandardized regression weights) were retrieved. Fatherhood involvement programs were not analyzed as a distinct category of study because unlike the case with parental involvement, few of the studies involved a father involvement program. Consequently, there were not enough program studies to conduct separate analyses isolating these programs.

For studies that involved cross-sectional measures but included no attempt to statistically equate students on third variables, the results from the t tests, F tests, and correlation studies provided by the researchers in the study were used. Probability values were used as a basis for computation only if the researchers did not supply any of information on the test statistics just mentioned.

Calculating average effect sizes. Two sets of statistical procedures were also used to distinguish between those analyses that included sophisticated controls (socioeconomic status, race, gender, or previous achievement) and those studies that did not. The results of these procedures are listed in different columns in the “Results” section, with the degree of statistical significance and 95% confidence intervals listed for each. An overall effect size was then determined, combining the studies that did and did not use sophisticated controls. No analyses of statistical significance were completed on the combined effect sizes, given the different structure of the studies involved. A weighting procedure was used to calculate average effect sizes across all the comparisons. First, each independent effect size was first multiplied by the inverse of its variance. The sum of these products was then divided by the sum of the inverses. Then, 95% confidence intervals were calculated. As Hedges and Vevea (1998) recommend, all the analyses were conducted using fixed-error assumptions in one analysis and applied random-error assumptions in the other.

If there was more than one effect size presented in the “Results” section, the effect size that was chosen was based on that which referred to (a) the overall sample and (b) the purest measure of father involvement. In the case of results that included clear statistical outliers, the presence of these outliers was acknowledged, and then supplemental analyses were run without such an outlier to estimate the degree to which the presence of an outlier might have affected the results.

Tests of homogeneity were completed on the father involvement studies to gain a sense of the consistency of specific father involvement measures across studies.

Study Quality Rating

Two researchers coded the studies independently for quality, the presence of randomization, and whether both the definitional criteria for father involvement and specific aspects of father involvement were met. Study quality and the use of random samples were graded on a 0 (lowest) to 3 (highest) scale. Quality was determined using the following: (a) Did it use randomization of assignment? (b) Did it avoid mono-method bias? (c) Did it avoid mono-operation bias? (d) Did it avoid selection bias? (e) Did it use a specific definition of father involvement?

We calculated inter-rater reliability by computing percentage of agreement on: the definition of father involvement, the specific components examined in each study, issues of randomization, and quality of the study. Inter-rater reliability was 97% on whether a study examined father involvement, 95% for the specific components of father involvement examined in a given study, and 91% for the quality of the study. For the specific components of quality, inter-rater agreement percentages were 94% for randomization, 94% for avoiding

mono-method bias, 92% for avoiding mono-operation bias, 90% for avoiding selection bias, and 97% for using a specific definition of father involvement.

Two supplementary analyses were done to include first, only those studies with a quality rating of 3 and second, only those studies with quality ratings of 2 to 3.

Defining of Variables

For the purposes of this study, father involvement was defined as paternal participation in the life of the child by someone who was the biological male parent of the youth in a legally recognized relationship.

Father Involvement Designed to Foster Academic Achievement: This refers to father participation that is specifically aimed to raising the educational outcomes of youth, via helping their children with schoolwork, and so on.

Father Involvement Designed to Foster Psychological Welfare: This refers to father engagement that is specifically focused on increasing the psychological well-being of youth, via helping their children become fulfilled and well-balanced human beings, for example, comforting them and advising them.

Father Involvement Designed to Positive Behavioral Outcomes: This refers to father participation that is specifically aimed at improving the behavioral outcomes of youth, as manifested in terms of school- and home-based measures, e.g., teaching them right from wrong.

Father Involvement Designed to Foster Other Healthy Results: This refers to father participation that addresses a variety of other important outcomes of youth, as manifested in terms of school- and home-based measures, for example, playing with his children.

Results

Summary of the Results

Overall, the results of the meta-analysis indicated that there is a relationship between father involvement for pre-kindergarten through 20-year-old youth as expressed in academic, psychological, and other outcomes. The results presented here used analyses based on random-error assumptions. The rationale for presenting these results rather than those using fixed-error assumptions is to utilize analyses that yielded more conservative effect sizes. As one would expect, the analyses based on fixed-error assumptions yielded somewhat larger effect sizes. The finding indicating a relationship between father involvement

and youth outcomes held for academic, psychological, and other outcomes, using both random-error assumptions and fixed-error assumptions.

The results of this study indicate the overall father involvement variable yielded a statistically significant outcome of .16 ($p < .05$), 95% CI = [.02, .30], of a standard deviation. Table 1 lists the effects sizes of the 66 studies in descending order. All but three of the effect sizes were in the positive direction, and only one was in the negative direction. The range of the effects sizes was from 1.12 to $-.11$. There were a considerable number of studies undertaken at the pre-school, elementary school, and secondary school level. The studies with the smallest samples produced the most extreme effect sizes on either end, consistent with the “funnel” pattern ideal in effect sizes (Greenhouse & Iyengar, 1994). Just under half of the studies (32 of 66) produced effect sizes between .20 and 1.12.

Table 2 summarizes the studies by average year of the study, sample size, quality of study, and the quality of the definition of father involvement. The average year of the study was 2003. About 64% of the studies took place from 2000 and afterward. The average sample size was 1,611.2. Among the categories listed the largest number of studies (27) had a sample size of between 100 and 499, although an almost equal number of studies had sample sizes of 500+ (24). The average quality of the study and the definition of father involvement in each of the studies were each toward the middle of the midpoint of the range of ratings allowable, 0 to 3. The mean quality of the studies was 1.85, with most (about 62%) of the studies being rated either 2 or 3. The mean quality of definition for father involvement for the studies was 2.52, with most (about 87%) of the studies being rated either 3 or 2. Table 3 lists the most important correlations between key variables included in the study. In the vast majority of cases, statistically significant differences did not emerge between the variables examined: date of study, effect size, quality of study, quality of study's definition of father involvement, and whether the sample was randomly selected. A statistically significant relationship emerged between the year of the study and whether a random sample was used, .20, $p < .05$. The effect size of the study was not related to any of the other variables examined. The quality of the study was related to the correlation with quality of study's definition of father involvement and whether a random sample was used.

Effect Sizes for Father Involvement Overall (Research Question 1)

Table 4 lists the effect sizes that emerged for father involvement as a whole, addressed under Research Question 1. Statistically significant effect sizes emerged for father involvement. The effect size for the overall father

Table 1. Studies Included in the Meta-Analysis Listed by Author, Year of Study, Type of Document, Sample Size, and Other Characteristics.

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Cohn, Cowan, and Pearson (1992)	Journal article	27	27 families taken from a larger longitudinal study	Ages 3-5	Examined children's behavior	1.12	—
Palmer (2004)	Dissertation	467	Examined children of couples where both the male and female were present	Grades 5-8	Academic achievement	1.01	—
Deklyen, Bierbaum, Speltz, and Greenberg (1998)	Journal article	160	Examined fathers of pre-school children with and without clinic-referred behavior problems	3.5-5.5 years	Examined behavior problems in boys	0.99	—
Liang and Sugaward (1996)	Journal article	74	Examined children from a wide range of ethnic and socioeconomic backgrounds	Ages 3-6	Examined IQ	—	0.86
Bernadett-Shapiro, Ehrensaft, and Shapiro (1996)	Journal article	47	Examined children living in two-parent families	Grade 1	Examined psychological outcomes	0.80	—
Deklyen, Speltz, and Greenberg (1998)	Journal article	106	Focused on involvement measures that addressed father's use of time	3.5-5.5 years	Examined psychological measures	—	0.61
Fagan (2000)	Journal article	73	Examined African American and Puerto Rican families	9 months to 2 years	Behavior of children	—	0.54
Straud (1988)	Dissertation	59	All the families were Mexican American families	Grades K-3	Academic achievement	0.53	—

(continued)

Table 1. (continued)

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Curtner-Smith, Bennett, and O'Rear (1995)	Journal article	51	Examined children enrolled in day care centers. All the couples but one were in their first marriage	Ages 4-5	Examined psychological and behavioral variables	—	0.52
Downer and Mendez (2005)	Journal article	85	Students who participated in Head Start	Ages 3-5	School readiness and other cognitive outcomes	—	0.51
Cooper (2009)	Journal article	122	Examined relationship between African American fathers and their daughters	Grades 6-8	Academic achievement	0.48	0.26
Belsky (1998)	Book chapter	123	People in the study were largely White middle class. All of the families were working families.	Ages 2-3 years	Psychological and emotional assessments	0.44	—
Mayill-Evans and Harrison (2001)	Journal article	92	Examined Canadian children	Age 4	Examined children's language development	—	0.42
Denham et al. (2000)	Journal article	69	Data taken at two later points after the initial launch and data collection in this longitudinal study	Ages 7 and 10 years	Examined psychological measures	—	0.42
Cugmas (1998)	Journal article	90	European study	Ages 6-7	Examined psychological outcomes	0.38	—

(continued)

Table 1. (continued)

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Somers, Chiodo, Yoon, Rater, and Barton (2011)	Journal article	390	Conducted a longitudinal study that followed them since birth	Age 14	Examined academic and psychological outcomes	—	0.34
Pouget, Serbin, Stack, and Schwartzman (2011)	Journal article	138	Students were participants in a longitudinal study of Canadian families	Ages 6-10	Behavioral problems	—	0.34
Brooks-Gunn, Guo, and Furstenberg (1993)	Journal article	251	Entirely African American sample	Age 19	Examined the school drop-out rate	—	0.33
Hung (2005)	Journal article	261	Examined Taiwanese children	Grade 6	Examined a variety of educational outcomes	—	0.32
Edgebeen (2008)	Conference paper	5,494	National Study of Adolescent Health	Ages 11-18	Depression and delinquent behavior	—	0.29
Rodney and Mupier (1999)	Journal article	433	African Americans in a Mid-Western city	Ages 13-17	Academic and behavioral measures	0.29	—
Day and Padilla-Walker (2009)	Journal article	349	Compared father involvement and mother involvement, longitudinal survey	Ages 10-14	Psychological measures, including internalization	0.28	—
McBride, Schoppe-Sullivan, and Hol (2005)	Journal article	1,334	36% African Americans and 64% White	Ages 5-12	Academic achievement	—	0.27
Al-Yagon (2011)	Journal article	205	36% African Americans and 64% White	Ages 8-10	Psychological and behavioral measures	—	0.27

(continued)

Table 1. (continued)

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Henry (1974)	Dissertation	100	Kindergarten male students	Grade K	Boys' reading achievement	0.27	—
Keown and Woodward (2002)	Journal article	67	Includes 33 hyperactive children and 34 non-hyperactive children	Ages 4-5	Psychological and behavioral measures	0.26	—
Kim and Rohrer (2002)	Journal article	245	Examined Korean American adolescents	Grades 6-12	Examined academic achievement	0.25	—
Weiss and Krappman (1993)	Conference paper	116	Examined students from an inner city primary school	Grades 2-5	Examined social factors	0.25	—
Chuang and Su (2009)	Journal article	126	Recruited from churches and other places	Age 1	Behavior and values	0.23	—
Aroma and Powers (2003)	Journal article	1,583	Examined Mexican American, African American, and Caucasian students	Grades 9-12	Examined psychological and sociological factors	0.28	0.22
Coley and Medeiros (2007)	Journal article	647	Sample drawn from sample called, "Welfare, children, and Family," 53% African American, 38% Hispanic, and 9% White	Ages 10-14	Behavioral problems	—	0.20
Fagan and Yookyang (2012)	Journal article	8,400	Examined Early Childhood Longitudinal Birth Cohort	Age 2	Cognition	0.20	0.12
Bryant and Zimmerman (2003)	Journal article	679	All students were African American	Grade 9	Academic achievement, substance abuse, and psychological well-being	0.18	—

(continued)

Table 1. (continued)

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Kerns and Barth (1995)	Journal article	54	Included a very diverse student sample	Age 41-51 months	Examined student behavior	0.18	—
Gniewosz and Noack (2012)	Journal article	1,014	Used the Longitudinal Development in School Context	Grades 5-6	Examined academic values	0.18	0.17
Melby (1993)	Conference paper	393	Defined father involvement as involving a number of different components	Grade 7	Examined academic competence	0.17	—
Dubowitz et al. (2009)	Journal article	855	All the children were African American	Age 6	Examined both academic and psychological outcomes	0.19	0.16
Buchel and Duncan (1998)	Journal article	974	Examined Germans and foreign residents of Germany	Ages 12-14	Educational attainments	0.13	—
Richards, Gitelson, Peterson, and Hurtig (1991)	Journal article	139	Stratified random sample of high school seniors	Ages 17-18	Self-esteem and ego development	0.13	—
Honora and Rolle (2002)	Journal article	14,404	Used the National Education Longitudinal Survey	Grade 8	Examined school violence	0.12	—
Cookston and Finlay (2006)	Journal article	2,387	Used data from the National Longitudinal Study of Adolescent Health	Ages 12-18	Delinquency and depression	0.24	0.12
Jackson (1999)	Journal article	188	Examined current and former welfare recipients	Ages 3-4	Expressions of love and problem behavior	—	0.11

(continued)

Table 1. (continued)

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Loeb, Horst, and Horton (1977)	Conference paper	98	Examined 51 girls and 47 boys living in two-parent families	Grades 4-5	Examined psychological outcomes	0.11	—
Regnerus and Luchies (2006)	Journal article	2,347	Used data from the National Longitudinal Study of Adolescent Health	Ages 12-18 (Grades 7-12)	Sexual behavior	0.14	0.11
De Anda (2001)	Dissertation	164	Examined Mexican American youth	Grades 7-8	Academic achievement and problem behavior	—	0.11
Cho and Campell (2011)	Journal article	1,774	Examined Koreans	Grades 4-12	Academic achievement	0.09	—
Amato (1994)	Journal article	471	Data from Marital Instability Over the Life Course	Ages 19 and above	Self-esteem and happiness	—	0.08
Nord and West (2001)	Research report	16, 145	Examined the NHES	Grades 10-12	Examined both academic and behavioral measures	—	0.08
Goncy and van Dulmen (2010)	Journal article	9, 148	Used data from the National Longitudinal Study of Adolescent Health	Ages 12-18 (Grades 7-12)	Alcohol use and "risky" behavior	0.08	—
McBride, Dyer, Liu, Brown, and Hong (2009)	Journal article	390	Study was undertaken using the Child Development data set of the Panel Study of the Income Dynamic	Ages 7-10	Academic Achievement	—	0.07

(continued)

Table 1. (continued)

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Flouri (2005)	Journal article	582	Study was undertaken in the United Kingdom and examined both White and Indian children	Ages 11-19	Examined psychological and prosocial behavior	—	0.07
Dumka, Gonzales, Bonds, and Millsap (2009)	Journal article	318	Mexican origin students	Age 12	Classroom and overall student behavior	—	0.06
Killos (2004)	Dissertation	562	Used data collected from the NICHD	Grades 1-6	Academic, behavioral, and social measures	—	0.06
Fletcher, Steinberg, and Seller (1999)	Journal article	1,117	Sample from nine high schools in Wisconsin and California	Grades 9-12	Examined academic, misconduct, psychological, and social measures	0.06	—
Root and Rubin (2010)	Book chapter	125	Tried to have roughly equal samples of four groups of fathers and mothers with sons and daughters, respectively	Ages 3-5	Psychological measures	0.06	—
Hsu, Zhang, Kwok, Li, and Ju (2011)	Journal article	8,108	Examined Taiwanese students	Grade 7	Academic achievement	—	0.05
Furstenberg, Morgan, and Allison (1987)	Journal article	227	Data drawn from National Survey of Children	Ages 11-16	Children who had experienced parental marital dissolution	—	0.05
Thomas, Farrell, and Barnes (1996)	Journal article	503	About 28% African American and 72% White	Ages 13-16	Heavy drinking and illicit drug use	—	0.05

(continued)

Table 1. (continued)

Study and year	Type of document	Sample size	Sample characteristics	Grade or age of students	Outcome variable	Effect size without sophisticated controls	Effect size with sophisticated controls
Flouri and Buchanan (2002)	Journal article	3,728	British cohort	Age 16	Predictor of trouble with the police	—	0.04
Tam (2009)	Journal article	461	Students from Hong Kong	Grades 3-5	Various measures of academic achievement and psychological well-being	—	0.04
Skalotis (2010)	Journal article	15,770	Used the LSYPE	Ages 13-14	Studied young adolescents in the United Kingdom	—	0.04
Tylicki (2004)	Dissertation	65	School was from the Southeast, United States	Ages 4-6	Academic achievement	0.03	—
Harris and Marmor (1996)	Journal article	748	Used National Survey of Children in the examination of longitudinal data and focused on 748 students who lived in a two-parent home during all three waves of the study	Ages 7-22	Examined emotional outcomes	0.04	—
Bhanot and Jovanovic (2009)	Journal article	165	Study undertaken in Illinois	Grades 5-8	Academic attitudes by students	—	0.00
Greene and Moore (2000)	Journal article	690	Examined children in welfare families	Ages 3-5	Examined school readiness	—	0.00
Culp, Schadle, Robinson, and Culp (2000)	Journal article	25	Sample taken from families that were both intact and career families	Grades K-1	Behavioral outcomes	-0.11	—

Note. NHES = National Household Education Survey; NICHD = National Institute of Child Health and Development; LSYPE = Longitudinal Study of Young People in England.

Table 2. Means for Measures Assessing the Quality of Study, Whether a Random Sample Was Used, Year of Study, and Sample Size for the 46 Studies Included in the Meta-Analysis.

	M	% distribution	Range
Year of study	2003	2010s = 9 2000s = 33 1990s = 20 1970s-1980s = 4	1974-2012
Sample size	1611.2	1,000+ = 15 500-999 = 9 100-499 = 27 1-99 = 15	25-15,770
Quality of study	1.85	3 = 21 2 = 20 1 = 19 0 = 6	0-3
Quality of study's definition of father involvement	2.52	3 = 36 2 = 22 1 = 8 0 = 0	1-3
Random sample	1.41	3 = 20 2 = 8 1 = 17 0 = 21	0-3

involvement variable was .16 ($p < .05$), 95% CI = [.02, .30], of a standard deviation, which was statistically significant at the .05 level of probability, when no sophisticated controls were used. The effect size fell short of statistical significance, .13, ($p = n.s.$), when sophisticated controls were used. When American assessments of father involvement were the focus of the study, the effect sizes for father involvement when sophisticated controls were not used (.16, $p < .05$), 95% CI = [.02, .30], and when they were used (.17, $p < .05$), 95% CI = [.03, .31], were both statistically significant. When foreign assessments of father involvement were addressed, the effect size for father involvement when sophisticated controls were not used (.15, $p < .05$), 95% CI = [.01, .29], was statistically significant. Nevertheless, when these controls were used, the effect size was not statistically significant (.05, $p = n.s.$).

Another set of analyses focused on studies rated high in quality. The effect sizes, in these results, were slightly different than when no quality adjustments were made. When only those studies rated 3 (on a 0-3 scale) were included, the effect size was .18 ($p < .05$), CI = [.03, .33], for those studies

Table 3. Correlations Between Measures Assessing the Quality of Study, Whether a Random Sample Was Used, Year of Study, and Sample Size for the 46 Studies Included in the Meta-Analysis.

	Correlation with year of the study	Correlation with effect size of the study	Correlation with quality of the study	Correlation with quality of study's definition of father involvement	Correlation with whether a random sample was used
Year of study	—	-.07	.09	.12	.20*
Effect size from study	-.07	—	-.04	-.09	-.06
Quality of study	.09	-.04	—	.31***	.53***
Quality of study's definition of father involvement	.12	-.09	.31***	—	.28*
Random sample	.20*	-.06	.53***	.28*	—

* $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

Table 4. Effect Sizes for Father Involvement With 95% Confidence Intervals in Parentheses.

Type of father involvement and academic variables	Effect size without sophisticated controls	Effect size with sophisticated controls	Overall effect size
General father involvement			
Overall	.16* (.02, .30)	.13	.15 ^a
Overall in the United States	.16* (.02, .30)	.17* (.03, .31)	.16 ^a
Overall in the foreign nations	.15* (.01, .29)	.05	.10
Studies with high-quality rating issues			
Studies with quality ratings of 3	.18* (.03, .33)	.15* (.01, .29)	.16 ^a
U.S. studies with quality ratings of 3	.18* (.03, .33)	.19* (.04, .34)	.18 ^a
Studies with quality ratings of 2-3	.17* (.02, .32)	.12	.15 ^a
U.S. studies with quality ratings of 2-3	.17* (.02, .32)	.16* (.02, .30)	.16 ^a

^aConfidence intervals tabulation not undertaken for combined effect size because of difference in sample distributions for the two sets of studies.

* $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

that did not utilize sophisticated controls and .15 ($p < .05$), $CI = [.01, .29]$, when they did utilize sophisticated controls. When only studies using American samples were used, the effect size was also .18 ($p < .05$), $CI = [.03, .33]$, for those studies that did not utilize sophisticated controls, but it was .19 ($p < .05$), $CI = [.04, .34]$, when it did utilize sophisticated controls. When those studies rated 2 to 3 (on a 0-3 scale) were included, the effect size was .17 ($p < .05$), $CI = [.02, .32]$, for those studies that did not utilize sophisticated controls and .12 ($p = n.s.$) when they did utilize sophisticated controls. When only studies using U.S. samples were used, the effect size was also .17 ($p < .05$), $CI = [.02, .32]$, for those studies that did not utilize sophisticated controls, and .16 ($p < .05$), $CI = [.02, .30]$, when it did utilize sophisticated controls.

Effect Sizes for Father Involvement by Race and Age (Research Question 2)

Table 5 lists the effect sizes that emerged for father involvement, addressed under Research Question 2. The effects for children of color were somewhat larger than for the remainder of the sample, in the cases of all the studies (American and foreign) combined. For children of color, the effect size for

Table 5. Effect Sizes for Father Involvement Among Specific Groups With 95% Confidence Intervals in Parentheses.

Type of father involvement and academic variables	Effect size without sophisticated controls	Effect size with sophisticated controls	Overall effect size
General father involvement among children of color			
Overall among children of color	.20** (.06, .34)	.14 (.01, .27)	.17 ^a
Overall in the United States among children of color	.22** (.07, .37)	.17* (.03, .31)	.19 ^a
Overall in the foreign nations among children of color	.13	.07	.10
General father involvement among different age groups			
Studies involving youth ages 1-10	.19* (.03, .35)	.17* (.01, .33)	.18 ^a
Studies involving youth 1-10 in the United States	.20* (.03, .37)	.21* (.02, .40)	.20 ^a
Studies involving youth ages 11-20	.14* (.03, .25)	.14* (.01, .27)	.14 ^a
Studies involving youth ages 11-20	.15* (.02, .28)	.15* (.01, .33)	.15 ^a

^aConfidence intervals tabulation not undertaken for combined effect size because of difference in sample distributions for the two sets of studies.

* $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

the overall father involvement variable was .20 ($p < .05$), CI = [.06, .34], of a standard deviation, which was statistically significant at the .05 level of probability, when no sophisticated controls were used. When sophisticated controls were used, the effect size was not statistically significant, .14, ($p = n.s.$). When American assessments of father involvement for children of color were the focus of the study, both the effect sizes for father involvement when sophisticated controls were not used (.22, $p < .05$), CI = [.07, .37], and when they were used (.17, $p < .05$), CI = [.03, .31], were statistically significant. When foreign assessments of father involvement for children of color were addressed, the effect sizes averaged the same as for the overall sample of foreign studies, .10, but neither of the two effects was statistically significant.

Table 5 also lists the effect sizes that emerged for father involvement by age group, addressed under Research Question 2. Numerically speaking, the effects for children aged 1 to 10 were somewhat larger than children aged 11 to 20, in the cases of all (American and foreign) the studies combined. It should be noted that although this pattern emerged at all levels, these differences were not statistically significant. For children aged 1 to 10, the effect

size for the overall father involvement variable when no statistically significant controls were used was .19 ($p < .05$), $CI = [.03, .35]$. When sophisticated controls were used, the effect size was also statistically significant, .17 ($p < .05$), $CI = [.01, .33]$. For youth aged 11 to 20, the effect size for the overall father involvement variable when sophisticated controls were not used was .14 ($p < .05$), $CI = [.03, .25]$. When sophisticated controls were used, the effect size was also statistically significant, .14 ($p < .05$), $CI = [.01, .27]$. When American assessments of father involvement for children aged 1 to 10 was addressed, the effect size for the overall father involvement variable with no sophisticated controls was .20 ($p < .05$), $CI = [.03, .37]$. When sophisticated controls were used, the effect size was also statistically significant at .21 ($p < .05$), $CI = [.02, .40]$, standard deviation units. For American youth aged 11 to 20, the effect size for the overall father involvement variable, when sophisticated controls were not used, was .15 ($p < .05$), $CI = [.02, .28]$. When sophisticated controls were used, the effect size was also statistically significant, .15 ($p < .05$), $CI = [.01, .20]$.

Specific Aspects of Father Involvement (Research Question 3)

Table 6 lists Research Question 3 and the effect sizes for studies that examined the various components of father involvement. These figures do not distinguish between studies that either did or did not utilize sophisticated controls, because of the smaller number of studies in each of these categories versus the other analyses used in this study. Father involvement that was designed to foster positive behavioral outcomes yielded an effect size of .20 ($p < .05$), $CI = [.02, .38]$. Father involvement that was designed to foster positive psychological outcomes, .17, $CI = [.02, .32]$, $p < .05$, and other healthy outcomes also produced a statistically significant effect size, .22, $p < .05$, $CI = [.03, .41]$. The father's participation that was designed to ameliorate academic outcomes did not yield statistically significant effects, .14 ($p = n.s.$).

Test of Homogeneity

Tests of homogeneity for father involvement indicated that the measures were relatively homogeneous when sophisticated controls were used and when sophisticated controls were not included. Each of the specific father involvement variables did indicate homogeneity including: father involvement that was designed to foster positive behavioral outcomes ($\chi^2 = 3.18$, $p = n.s.$), father involvement that was designed to foster positive psychological

Table 6. Effect Sizes for Types of Father Involvement With 95% Confidence Intervals in Parentheses.

Type of father involvement and academic variables	Effect size without sophisticated controls	Effect size with sophisticated controls	Overall effect size
Types of father involvement			
Involvement designed to foster academic achievement	—	—	.14
Involvement designed to foster psychological welfare	—	—	.17* (.02, .32)
Involvement designed to foster positive behavioral outcomes	—	—	.20* (.02, .38)
Involvement to foster other healthy outcomes	—	—	.22* (.03, .41)

* $p < .05$. ** $p < .01$. *** $p < .001$. **** $p < .0001$.

outcomes ($\chi^2 = 2.96$, $p = \text{n.s.}$), father's participation that was designed to ameliorate academic outcomes ($\chi^2 = 2.55$, $p = \text{n.s.}$), and other healthy outcomes ($\chi^2 = 3.20$, $p = \text{n.s.}$).

Discussion

Limitations of Study

The primary limitation of this meta-analysis, or any meta-analysis, is that it is restricted to analyzing the existing body of literature. Therefore, even if the researcher conducting the quantitative integrations sees ways the studies included could have been improved, there is no way to implement those changes. A second limitation of a meta-analysis is that the social scientist is limited to addressing the same research questions addressed in the aggregated studies.

Effect Sizes for Father Involvement

The results of meta-analysis suggest that father involvement is related to positive outcomes among youth. This is true generally and was not especially enhanced or diminished by the quality of the study. This finding also applies to specific categories of outcomes. The vast majority of the effects that

emerged from this study were statistically significant, indicating that father involvement enjoyed relationships with the other variables under study that were consistent and of a certain size. It is interesting to note that the effect sizes for father involvement were, however, a good deal smaller than other meta-analyses have typically found for parental involvement (Jeynes, 2003b, 2005, 2007b, 2012). Moreover, the effect sizes for father involvement tended to be less than half than those that emerged from parental engagement meta-analyses (Jeynes, 2003b, 2005, 2007b, 2012). Typically, overall parental involvement effect sizes were in the .50 to .75 standard deviation range, dependent on the age level of the children (Jeynes, 2005, 2007b). The fact that father involvement effect sizes were smaller than those found for parents is to be expected to some degree, because addressing the influence of fathers specifically naturally leaves out the contribution of mothers. In addition, it also does not include the influence of mothers and fathers working together jointly (Marsiglio et al., 2000).

To whatever degree one would expect that fathers would have no greater impact on children than mothers, the reader would naturally expect that father engagement would yield less than half the effect size of parental participation (Klimes-Dougan, 2010; Palm & Fagan, 2008). And clearly, joint parenting is associated with more substantial outcomes than either fathering or mothering alone (Marsiglio et al., 2000). Therefore, one might anticipate outcomes for father involvement to be substantially less than those that consider an aggregation of both joint and singular expressions of family support (Fagan & Palm, 2004; Wallerstein & Lewis, 1998). Admittedly, some have also propounded the notion that mothers have a greater impact on children than do fathers (McKinney & Renk, 2008; Rubin, 2010). Consequently, one would anticipate that the measures for father involvement might amount to substantially less than what one finds for broader parental measures, perhaps even about a quarter of those for parental measures (Klimes-Dougan, 2010; McKinney & Renk, 2008). And interestingly enough, father involvement effects were typically about one quarter the amount found for parent involvement in comparable meta-analyses (Jeynes, 2003a, 2005, 2007b).

To be sure, propounding the notion that mother involvement will have a greater impact than father involvement is fraught with potential controversy (McKinney & Renk, 2008; Rubin, 2010). First, some family scientists might view such a notion as sexist, and demeaning to men or politically incorrect (Benatar, 2012; Gony & van Dulmen, 2010). Second, such a view has all kinds of ramifications regarding the average efficacy of a father-only family structure versus a mother-only father structure. Under this assumption, the father-only family structure would generally be considerably inferior for the child (Lamb & Lewis, 2010; Rubin, 2010). Third, to the extent the social

science research indicates that mothers and fathers tend to participate in the child's lives in different ways, it suggests that the types of mother engagement are typically more important than those generated paternally (Rubin, 2010). Fourth, it overlooks the possibility that even if mother involvement yields greater results, this may have more to do with the extent to which fathers are willing to get involved rather than anything inherently less salient about father engagement (Fagan & Palm, 2004; Lamb & Lewis, 2010).

Effect Size Differences for American and Foreign Samples

One of the most intriguing results from the study was that father involvement appeared to produce stronger effects in American samples than it did in foreign samples. One possible explanation for this pattern, and perhaps, the most plausible, is that father involvement is emphasized in the United States more than it is in other places around the world (Flouri & Buchanan, 2002; Mau, 1997). Most of the studies completed on foreign soil took place in Asia, Latin America, or Europe. Given that father engagement is more of an emphasis in the United States than in at least two and perhaps three of those continents, it may well be that the results of the meta-analysis simply reflect this fact (Flouri & Buchanan, 2002). It is only logical that in those places where a nation emphasizes the primacy of father engagement are going to yield larger effect sizes than in areas where the paternal presence is not as salient. For example, fathers working from the home or "stay-at-home dads" are rare in Asia, Latin America, and even in Europe (Jeynes, 2006, 2010). For this reason, including the foreign samples in calculating the overall effect sizes for father involvement may understate the real impact of father involvement.

It is also true that parental involvement status is a much more advanced science in the United States than it is in any other portion of the world (Jeynes, 2011, 2012; Mau, 1997). If one examines the number of such studies that social scientists have undertaken around the world, the large majority have taken place in the United States (Jeynes, 2011, 2012). It is conceivable that, as a result, American studies do a better job of assessing the actual expressions of father participation.

Effects of Father Involvement by the Age of the Children

The results of the meta-analysis in many respects complement others that have been undertaken on parental involvement (Jeynes, 2003b, 2005, 2007b, 2012). Those studies indicate that family engagement has more of an impact on younger children rather than older children. The results are very similar to

the parental involvement studies that indicate that the effect size for parental involvement is .75 for elementary school youth and .53 for secondary school children. There are several reasons why involvement by parents generally and by fathers specifically is likely to have a greater impact on younger children than it has for older youth. First, children are most impressionable when they are young (Fagan & Palm, 2004; Jeynes, 2007b). Second, during the adolescent and pre-adolescent years youth become much more affected by peer pressure than in earlier stages of development (Cohn, Cowan, Cowan, & Pearson, 1992; Jeynes, 1999). Concurrent with the rise of peer pressure comes an ensuing decline in the youth's openness to parental input (Skalotis, 2010). Consequently, the effects of mother and father involvement are generally lighter. Third, as the self-concept of young people develops, they may become less convinced that they can procure real change and progress (Bronfenbrenner & Morris, 1998; Jeynes, 2003b). If, for example, as students have developed a protracted reputation for poor grades and behavior, by the time they are in their teenage or pre-teenage years they will be less likely to believe they can establish a proclivity to excel in these areas (Bronfenbrenner & Morris, 1998; Jeynes, 1999).

Fourth, children typically possess a greater desire to please when they are young than when they are older (Saracho, 2008). Fifth, parents tend to spend less time with their offspring in the later years of child development than in younger years. Much of this is generated by the adolescents themselves, as they explore the world around them and interact with others (Bronfenbrenner & Morris, 1998). Sixth, youth may become less resolute in their determination to be focused during their adolescent years, when they often face an unparalleled number of social distractions (Ringo, 2011).

The Effects of Father Involvement in the Lives of Children of Color

Once again, the results for father involvement are quite similar to those that have emerged for parental engagement, when applied to children of color. Numerically speaking, the effects for father involvement are generally somewhat higher for this specific group of youth than for the general population of children included in this study. For American children of color, the effects of father involvement were .22 ($p < .01$) when sophisticated controls were not used and .17 ($p < .05$) when sophisticated controls were used. These findings were, on average, somewhat higher than the respective effects that emerged for the overall American samples included in this study. As in the case of parental involvement comparisons, the elevated number for children of color was sometimes different to a statistically significant degree and sometimes not. Nevertheless, the clear numerical differential is undeniable.

The question arises as to why the association between father involvement and positive educational and psychological outcomes is stronger for children of color than for other youth. There are several leading possibilities. First, it may be that involved fathers of color are more intensely engaged than their White counterparts. Second, the results may reflect a family structural phenomenon. That is, when an African American or Latino father is present, the contrast between fathers who are active participants in their children's lives and those who are not is great and tangible (Jeynes, 2003a). Third, families of color might encourage their children to be more dependent on family resources rather than move toward earlier independence, which might be more typical in White families.

Father Involvement Effect Sizes for Different Expressions of This Engagement

The results of this meta-analysis suggest that father involvement may be associated with better outcomes for some measures than others. Judging by the results of the meta-analysis, it appears, for example, that father engagement has a greater association with child behavioral outcomes and psychological measures than they do with academic achievement. There are at least two reasons why this set of results may have emerged. First, various families rely most on paternal interventions when it comes to matters of youth behavior, more so than in the case of school outcomes. Positive psychological outcomes may also be the result of this same phenomenon (Aroma & Powers, 2003). Fathers often have a rather high percentage of the responsibilities for helping mold the major behavioral outcomes for their offspring. In contrast, the same is typically not true for academic outcomes (Fagan & Palm, 2004; Jeynes, 1999, 2003a).

Second, it may be that youth have a greater ability to monitor themselves and control behaviors related to school outcomes than they do proper and inappropriate behaviors. To the extent that this is true, father involvement may be more necessary and effective where youth have greater vulnerability (Bryant & Zimmerman, 2003). Because this is a relatively new finding, social scientists will need to undertake further research on this issue before they can reach any definitive conclusions.

Conclusions and Recommendations for Further Research

Overall, this meta-analysis supports the notion that there is a relationship between father involvement and a host of positive outcomes. As one would

expect, the effect sizes that emerged for father involvement were considerably smaller than what emerged for comparable studies examining parental involvement (Jeynes, 2003b, 2005, 2007b, 2012). This is a result that one would especially expect given that this meta-analysis did not include variables that sought to capture a combination of father- and mother-involvement variables. Hence, the effects for father involvement were almost certainly understated. Nevertheless, the researchers involved in this study believed that there was more to be gained by obtaining more conservative values for father involvement by excluding joint mother–father efforts than by including the latter. Including these mixed measures would have created several disadvantages including: (a) clearly overstating the effects of father involvement; (b) becoming embroiled in the debate of how much of the influence of co-parenting contributions are due to the maternal influence and how much are due to the paternal role; and (c) most studies that examine father involvement do not include such a variable and therefore there would be challenges in undertaking such an analysis.

With this conservative set of estimates in hand, this study may help advance the notion that many fathers should be more appreciated than they currently are. And therefore, it would seem warranted that people might ponder a further appreciation of fatherhood not only in society generally but also in the willingness to study it more in the research community.

One of the most intriguing findings of this study is that father involvement appears to have more salient effects in the United States than it does in other nations. Aside from the points already addressed in the “Discussion” section regarding this topic, one wonders whether this points to a higher potential for the influences of father engagement than has been heretofore believed.

Recommendations for Further Research

Father involvement is a less developed area of research than parental engagement. Therefore, the need for further research in this discipline is at least as great as for parental involvement as a whole. Three lines of father involvement research are particularly important. First, the vast majority of research that has been done on father participation has focused on the influence of voluntary father participation. As salient as this is, it is also productive that one has a sense of what the overall effects of father involvement programs are (Jeynes, 2012). Various layers of society, i.e., government, education, religion, and social services have developed father involvement programs (Horn, 2001). What is not clear is whether these programs are ameliorative and can really improve the academic, social, and behavioral outcomes of children (Downer et al., 2010; Jeynes, 2010, 2012).

Second, additional longitudinal studies on father involvement are also necessary. Although some researchers have undertaken a longitudinal approach, American society would benefit by knowing more about what specific benefits of fatherhood accrue at specific points in children's lives (Rodgers & Rose, 2002). Third, as more studies on father involvement become available over the years, it will be helpful for additional meta-analyses on father involvement to be done, which will provide additional information on the various components and expressions of father involvement. A greater knowledge of father involvement will be of immense help to not only schools and the academic community but also to society as a whole.

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References

- Amato, P. R. (1994). Father-child relations, mother-child relations and offspring psychological well-being in early adulthood. *Journal of Marriage and Family, 56*, 1031-1042.
- Amato, P. R., & Gilbreth, J. G. (1999). Nonresident fathers and children's well-being: A meta-analysis. *Journal of Marriage and Family, 61*, 557-573.
- Al-Yagon, M. (2011). Fathers' coping resources and children's socioemotional adjustment among children with learning disabilities. *Journal of Learning Disabilities, 44* (6), 491-507.
- Aroma, C., & Powers, A. G. (2003). Parental attachment, self-esteem, and antisocial behaviors among African American, European American & Mexican American adolescents. *Journal of Counseling Psychology, 50*, 40-51.
- Belsky, J. (1998). Paternal influence and children's well-being: Limits of, and new directions for understanding. In A. Booth & A. C. Crouter (Eds.), *Men in families: When do they get involved? What difference does it make?* (pp. 279-294). Mahwah, NJ: Lawrence Erlbaum.
- Belsky, J. (2005). Intergenerational transmission of warm-sensitive-stimulating parenting: A prospective study of mothers and fathers of 3-year-olds. *Child Development, 76*, 384-396.
- Benatar, B. (2012). *The second sexism: Discrimination against men and boys*. Hoboken, NJ: Wiley-Blackwell.
- Bernadett-Shapiro, S., Ehrensaft, D., & Shapiro, J. L. (1996). Father participation in childcare and the development of empathy and sons: A empirical study. *Family Therapy, 23*, 77-93.

- Bhanot, R. T., & Jovanovic, J. (2009). The links between parent behaviors and boys' and girls' science achievement beliefs. *Applied Developmental Science, 13*, 42-59.
- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Learner (Eds.), *Handbook of child psychology, vol. 1: Theoretical models of human development* (pp. 993-1028). Hoboken, NJ: John Wiley.
- Brooks-Gunn, J., Guo, G., & Furstenberg, F. F. (1993). Who drops out of and who continues beyond high school? A 20 year old follow-up of black urban youth. *Journal of Research on Adolescence, 3*, 271-294.
- Bryant, A. L., & Zimmerman, M. A. (2003). Role models and psychological outcomes among African American adolescents. *Journal of Adolescent Research, 18*, 36-67.
- Buchel, F., & Duncan, G. J. (1998). Do parents' social activities promote children's school attainments? Evidence from German socioeconomic panel. *Journal of Marriage and Family, 60*, 95-108.
- Cho, S., & Campbell, J. R. (2011). Differential influences of family processes for scientifically talented individuals' academic achievement along developmental stages. *Roeper Review, 33*, 33-45.
- Chuang, S. S., & Su, Y. (2009). Do we see eye to eye? Chinese mothers' and fathers' parenting beliefs and values for toddlers in Canada and China. *Journal of Family Psychology, 23*, 331-341.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohn, D. A., Cowan, P. A., Cowan, C. P., & Pearson, J. (1992). Mother's and father's working models of childhood attachment relations, parenting styles, and child behavior. *Developmental Psychopathology, 4*, 417-431.
- Coles, R. L. (2009). *The best kept secret: Single black fathers*. Lanham, MD: Rowan & Littlefield.
- Coley, R. L., & Medeiros, B. L. (2007). Reciprocal longitudinal relations between nonresident father involvement and adolescent delinquency. *Child Development, 78*, 132-147.
- Conner, M. E., & White, J. L. (2006). Fatherhood in contemporary black America, invisible, but present. In M. E. Conner & J. L. White (Eds.), *Black fathers, an invisible presence in America* (pp. 3-16). Mahwah, NJ: Lawrence Erlbaum.
- Cookston, J. T., & Finlay, A. K. (2006). Father involvement and adolescent adjustment: Longitudinal findings from Add Health. *Fathering: A Journal of Theory, Research, and Practice About Men as Fathers, 4*, 137-158.
- Cooper, S. M. (2009). Associations between father-daughter relationship quality and the academic engagement of African American adolescent girls: Self-esteem as a mediator? *Journal of Black Psychology, 35*, 495-516.
- Cowan, P. A., Cowan, C. P., Pruett, M. K., Pruett, K., & Wong, J. J. (2009). Promoting father's engagement with children: Preventative interventions for low-income families. *Journal of Marriage and Family, 71*, 663-679.
- Cugmas, Z. (1998). The correlation between children's personal behavior characteristics and indicators of children's attachment to their mother and father respectively. *Early Childhood Development and Care, 143*, 65-78.

- Culp, R. E., Schadle, S., Robinson, L., & Culp, A. M. (2000). Relationships among paternal involvement and young children's perceived self-competence and behavioral problems. *Journal of Child and Family Studies, 9*, 27-38.
- Curtner-Smith, M. E., Bennett, T. L., & O'Rear, M. O. (1995). Fathers' occupational conditions, values of self-direction, and conformity and perceptions of nurturant and restrictive parenting in relation to young children's depression and aggression. *Family Relations, 44*, 299-305.
- Day, R. D., & Padilla-Walker, L. M. (2009). Mother and father connectedness and involvement during early adolescence. *Journal of Family Psychology, 23*, 900-904.
- De Anda, M. E. (2001). Mexican-American youth's deviant peer association and problem behavior: Parent engagement as a moderator. *Dissertation Abstracts International: Section B, 62*(2), 1072.
- Deklyen, M., Biernbaum, M. A., Speltz, M. L., & Greenberg, M. T. (1998). Fathers and preschool behavior problems. *Developmental Psychology, 34*, 264-275.
- Deklyen, M., Speltz, M. L., & Greenberg, M. T. (1998). Fathering and early onset conduct problems: Positive and negative parenting father-son attachment and the marital context. *Clinical Child and Family Psychology Review, 1*, 3-21.
- Denham, S. A., Workham, E., Cole, P. M., Weissbrod, C., Kendziora, K. T., & Zahn-Waxler, C. (2000). Prediction of externalizing behavior problem from early to middle childhood: The role of parental socialization and emotion expression. *Development and Psychopathology, 12*, 23-45.
- Downer, J. T., Campos, R., McWayne, C., & Gartner, T. (2010). Father involvement and children's early learning: A critical review of published empirical work from the past fifteen years. In W. Jeynes (Ed.), *Family factors and the educational success of children* (pp. 64-105). New York, NY: Routledge.
- Downer, J. T., & Mendez, J. L. (2005). African American father involvement and preschool children's readiness. *Early Education and Development, 16*, 317-340.
- Dubowitz, H., Black, M., Cox, C. E. M., Kerr, M. A., Litrownik, A. J., Radhakrishna, A., . . . Runyan, D. K. (2009). Father involvement and children's functioning at age 6 years: A multisite study. *Child Maltreatment, 6*, 300-309.
- Dumka, L. E., Gonzales, N. A., Bonds, D. D., & Millsap, R. E. (2009). Academic success of Mexican origin adolescent boys and girls: The role of mothers' and fathers' parenting and cultural orientation. *Sex Roles, 60*, 588-599.
- EGGEBEEN, D. (2008, October). *Do fathers uniquely matter for adolescent well-being?* Paper presented at the Conference on Gender and Parenting, Institute for American Values, New York, NY.
- Fagan, J. (2000). African American & Puerto Rican American parenting styles, parental involvement & Head Start's social competence. *Merrill Palmer Quarterly, 46*, 592-612.
- Fagan, J., & Palm, G. (2004). *Fathers and early childhood programs*. Clifton Heights, PA: Delmar.
- Fagan, J., & Yooukyang, L. (2012). Effects of fathers' and mothers' cognitive stimulation and household income on toddler's cognition variations by family structure

- and child risk. *Fathering: A Journal of Theory, Research, and Practice About Men as Fathers*, 10, 140-158.
- Fletcher, A. C., Steinberg, L., & Seller, E. B. (1999). Adolescents' well-being as a function of perceived in parental consistency. *Journal of Marriage and Family*, 61, 599-610.
- Flouri, E. (2005). Father's involvement and psychological adjustment in Indian & White British secondary school age children. *Child and Adolescent Mental Health*, 10, 32-39.
- Flouri, E., & Buchanan, A. (2002). Father involvement in childhood and trouble with police in adolescence: Findings from the 1958 British cohort. *Journal of Interpersonal Violence*, 17, 689-701.
- Furstenberg, F. F., Jr., Morgan, S. P., & Allison, P. D. (1987). Paternal participation and child's well-being after marital dissolution. *American Sociological Review*, 52, 695-701.
- Glass, G. V., McGaw, B., & Smith, M. L. (1981). *Meta-analysis in social research*. Beverly Hills: Sage.
- Gniewosz, B., & Noack, P. (2012). What you see is what you get: The role of the early adolescent's perceptions in the intergenerational transmission of academic values. *Contemporary Educational Psychology*, 37, 70-79.
- Goncy, E. A., & van Dulmen, M. H. M. (2010). Fathers do make a difference: Parental involvement and adolescent alcohol use. *Fathering: A Journal of Theory, Research, and Practice About Men as Fathers*, 8, 93-108.
- Greene, A. D., & Moore, K. A. (2000). Nonresident father involvement and child wellbeing among young children in families on welfare. *Marriage & Family Review*, 29, 159-180.
- Greenhouse, J. B., & Iyengar, S. (1994). Sensitivity analysis and diagnosis. In H. Cooper & S. Iyengar (Eds.), *Handbook of research synthesis* (pp. 383-398). New York, NY: Russell Sage Foundation.
- Harris, K. M., & Marmer, J. K. (1996). Poverty, paternal involvement and adolescent well-being. *Journal of Family Issues*, 17, 614-640.
- Hedges, L. V., & Vevea, J. L. (1998). Fixed- and random effects models in meta-analysis. *Psychological Method*, 3, 486-504.
- Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: Southwest Educational Development Laboratory.
- Henry, B. V. (1974). *Father to son reading: Its effect on boys reading achievement* (Doctoral dissertation, Syracuse University). Available from Dissertation Abstracts International. (7513990)
- Hiner, N. R. (1988). The cry of Sodom enquired into: Educational analysis in seventeenth century New England. In B. E. McClellan & W. J. Reese (Eds.) *The social history of American education*. (pp. 3-22). Urbana: University of Illinois Press.
- Hoge, D. R., Smit, E., & Crist, J. T. (1997). Four family process factors predicting academic achievement for sixth and seventh grade. *Educational Research Quarterly*, 21(2), 27-42.

- Honora, D., & Rolle, A. (2002). A discussion of the incongruence between optimism and academic performance and its influence on school violence. *Journal of School Violence, 1*(1), 67-81.
- Hoover-Dempsey, K., & Sandler, H. (1997). Why do parents become involved in their children's education? *Review of Educational Research, 67*, 3-42.
- Horn, W. F. (2001). Turning the hearts of fathers: Faith-based approaches to promoting responsible fatherhood. In J. Fagan & A. J. Hawkins (Eds.), *Clinical and educational interventions with fathers* (pp. 191-214). Binghamton, NY: Haworth Press.
- Hsu, H., Zhang, D., Kwok, O., Li, Y., & Ju, S. (2011). Distinguishing the influences of father's and mother's involvement on adolescent academic achievement: Analyses of Taiwan Educational Panel Survey Data. *Journal of Early Adolescence, 31*, 694-713.
- Hung, C. (2005). Family background, parental involvement, and environmental influence on Taiwanese children. *Alberta Journal of Educational Research, 51*, 261-276.
- Jackson, A. (1999). The effects of nonresident father involvement on single black mothers and their young children. *Social Work, 44*, 156-166.
- Jeynes, W. (1999). The effects of religious commitment on the academic achievement of black and Hispanic children. *Urban Education, 34*, 458-479.
- Jeynes, W. (2003a). The effects of black and Hispanic twelfth graders living in intact families and being religious on their academic achievement. *Urban Education, 38*, 35-57.
- Jeynes, W. (2003b). A meta-analysis: The effects of parental involvement on minority children's academic achievement. *Education and Urban Society, 35*, 202-218.
- Jeynes, W. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education, 40*, 237-269.
- Jeynes, W. (2006). Standardized tests and the true meaning of kindergarten and pre-school. *Teachers College Record, 108*, 1937-1959.
- Jeynes, W. (2007a). *American educational history: School, society & the common good*. Thousand Oaks, CA: Sage.
- Jeynes, W. (2007b). The relationship between parental involvement and urban secondary school student academic achievement: A meta-analysis. *Urban Education, 42*, 82-110.
- Jeynes, W. (2010). The salience of the subtle aspects of parental involvement and encouraging that involvement: Implications for school-based programs. *Teachers College Record, 112*, 747-774.
- Jeynes, W. (2011). *Parental involvement & academic success*. New York, NY: Taylor & Francis.
- Jeynes, W. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education, 47*, 706-742.
- Jeynes, W. (2013). Father involvement, African Americans, and reducing the achievement gap. In J. Pattnaik (Ed.), *Father involvement across the globe* (pp. 71-87). Amsterdam, The Netherlands: Springer.

- Keown, L. J., & Woodward, L. J. (2002). Early parent-child relations and family functioning of preschool boys with pervasive hyperactivity. *Journal of Abnormal Child Psychology*, *30*, 541-553.
- Kerns, K. A., & Barth, J. M. (1995). Attachment and play: Converging across components of parent-child relationships and their relations to peer competence. *Journal of Social and Personal Relationships*, *12*, 243-260.
- Killos, L. F. (2004). *Does dad matter? The role of biological residential father involvement in predicting changes in pre-adolescent academic, behavioral, and social development* (Doctoral dissertation, University of Virginia, Charlottesville). Available from Dissertation Abstracts International. (UMI No. 3305893)
- Kim, K., & Rohner, R. P. (2002). Parental warmth, control, and involvement in schooling; predicting academic achievement among Korean American adolescents. *Journal of Cross Cultural Psychology*, *33*, 127-140.
- Klimes-Dougan, B. (2010). Emotion socialization in adolescence: The roles of mothers and fathers. In A. K. Root & S. A. Denham (Eds.), *Focus on gender: Parent and child contributions to the socialization of emotional competence* (pp. 85-99). San Francisco, CA: Jossey-Bass.
- Lamb, M., & Lewis, C. (2010). The development and significance of father-child relationships in two-parent families. In M. Lamb (Ed.), *The role of father in child development* (5th ed., pp. 94-153). Hoboken, NJ: Wiley.
- Lee, J., & Bowen, N. K. (2006). Parent involvement, cultural capital, and the achievement gap among elementary school children. *American Educational Research Journal*, *43*, 193-218.
- Liang, S., & Sugaward, A. T. (1996). Family size, birth order, socioeconomic status, ethnicity, parent-child relation, and preschool children's intellectual development. *Early Child Development and Care*, *124*, 64-79.
- Lightfoot, D. (2004). Some parents just don't care. *Urban Education*, *39*, 91-107.
- Loeb, R. C., Horst, L., & Horton, P. J. (1977, March). *Family interaction patterns associated with self-esteem in preadolescent girls and boys*. Paper presented at Lehigh University in Bethlehem, PA.
- Marsiglio, W., Amato, P., & Day, R. D. (2000). Scholarship on fatherhood in the 1990s and beyond. *Journal of Marriage and Family*, *62*, 1173-1191.
- Mau, W. (1997). Parental influences on the high school students' academic achievement: A comparison of Asian immigrants, Asian Americans, and white Americans. *Psychology in the Schools*, *34*, 267-277.
- Mayill-Evans, J., & Harrison, M. J. (2001). Parent-child interactions, parenting stress, and development outcomes at 4 years. *Child Health Care*, *30*, 135-150.
- McBride, B. A., Dyer, W. J., Liu, Y., Brown, G. L., & Hong, S. (2009). The differential impact of early father and mother involvement on later student achievement. *Journal of Educational Psychology*, *101*, 498-508.
- McBride, B. A., Schoppe-Sullivan, S. J., & Hol, M. (2005). The mediating role of fathers' school involvement on student achievement. *Applied Developmental Psychology*, *26*, 201-216.
- McClellan, E. B., & Reese, W. J. (1988). *The social history of American education*. Urbana: University of Illinois Press.

- McKinney, C., & Renk, K. (2008). Differential parenting between mothers and fathers: Implications for late adolescents. *Journal of Family Issues, 29*, 806-827.
- Melby, J. N. (1993, March). *Family context of academic competence*. Paper presented at Biennial Meeting of the Society for Research in Child Development in New Orleans, LA.
- Nord, C. W., & West, J. (2001). *Fathers' and mothers' involvement in their children's schools by family type and resident status* (National Household Education Survey, Statistical Analysis Report). Rockville, MD: Westat.
- Palm, G., & Fagan, J. (2008). Father involvement in early childhood programs: Review of the literature. *Early Child Development and Care, 178*, 745-759.
- Palmer, D. L. (2004). The structural of maternal and paternal involvement and adolescent well-being. *Journal of Family Issues, 17*, 614-620.
- Paquette, D. (2004). Theorizing the father-child relationships: Mechanisms and developmental outcomes. *Human Development, 47*, 193-219.
- Pianta, R. C., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, C., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science, 9*, 144-159.
- Poungnet, E., Serbin, L. A., Stack, P. M., & Schwartzman, A. E. (2011). Fathers' influence on children's cognitive and behavioral functioning: A longitudinal study on Canadian families. *Canadian Journal of Behavioral Studies, 43*, 173-182.
- Regnerus, M. D., & Luchies, L. B. (2006). The parent-child relationship and opportunities for adolescents' first sex. *Journal of Family Issues, 27*, 159-183.
- Richards, M. H. B., Gitelson, I., Peterson, A. C., & Hurtig, A. C. (1991). The adolescent personality in girls and boys: The role of mothers and fathers. *Psychology of Women Quarterly, 15*, 65-81.
- Ringo, T. (2011). In practice from distinction to distraction. *Chief Learning Officer, 10*(3), 24-26.
- Rodgers, K. B., & Rose, H. A. (2002). Risk and resiliency factors among adolescents: Who experience marital transitions. *Journal of Marriage and Family, 64*, 1024-1037.
- Rodney, H. E., & Mupier, R. (1999). Behavioral differences between African American male adolescents with biological fathers and those without biological fathers in the home. *Journal of Black Studies, 30*(10), 45-61.
- Roer-Strrier, D. (2005). Fatherhood and immigration: Challenging the deficit theory. *Child & Family Social Work, 10*, 315-329.
- Root, A. K., & Rubin, K. H. (2010). Gender and parents' reaction to children's reaction to children's emotion during the preschool years. In A. K. Root & S. A. Denham (Eds.), *Focus on gender: Parent and child contributions to the socialization of emotional competence* (pp. 51-64). San Francisco, CA: Jossey-Bass.
- Rubin, K. H. (2010). Gender and parents' reaction to children's reaction to children's emotion during the preschool years. In A. K. Root & S. A. Denham (Eds.), *Focus on gender: Parent and child contributions to the socialization of emotional competence* (pp. 51-64). San Francisco, CA: Jossey-Bass.

- Saracho, O. (2008). Fathers' and young children's literacy experiences. *Early Child Development and Care, 178*, 837-852.
- Skalotis, E. (2010). Changes in parental involvement in secondary education: An exploration study using the longitudinal study of young people in England. *British Educational Research Journal, 36*, 975-994.
- Somers, C. L., Chiodo, L. M., Yoon, J., Ratner, H., & Barton, E. (2011). Family disruption and academic functioning in urban, black youth. *Psychology in the Schools, 48*, 357-370.
- Strand, D. (1988). *The effects of paternal teaching strategies, childcare involvement, and select father-child variables, and the academic performance of Mexican-American children* (Doctoral dissertation, University of California at Santa Barbara). Available from Dissertation Abstracts International. (50-02-366)
- Tam, V. C. W. (2009). A comparison of fathers' and mothers' contributions in the prediction of academic performance of school age children in Hong Kong. *International Journal of Psychology, 44*, 147-156.
- Thomas, G., Farrell, M., & Barnes, G. M. (1996). The effects of single mother families and nonresident fathers on delinquency and substance abuse in black and white adolescents. *Journal of Marriage and Family, 58*, 884-894.
- Tylicki, M. B. (2004). Father involvement and children's academic and social development. *Dissertation Abstracts International: Section A, 64*(8), 2781.
- U.S. Department of Education. (2010). *Digest of education statistics*. Washington, DC: Author.
- Wallerstein, J. S., & Lewis, J. (1998). The long-term impact of divorce on children: A first report from a 25-year study. *Family and Conciliation Courts Review, 36*, 368-383.
- Weiss, K., & Krappman, L. (1993, March). *Parental support and children's social integration*. Paper presented at the Biennial Meeting of the Society for Research in Child Development in New Orleans, LA.
- Williams, T. T., & Sanchez, B. (2012). Parental involvement (and uninvolvement) at an inner city school. *Urban Education, 47*, 625-652.

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