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A Meta-Analysis: How to Best Foster the Success of African American and Latino Students with Disabilities and Those of Them in Special Education, the Place of Faith, and Other Factors

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# A Meta-Analysis: How to Best Foster the Success of African American and Latino Students with Disabilities and Those of Them in Special Education, the Place of Faith—and Other—Factors

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#### **Abstract**

A meta-analysis of thirty-five studies was undertaken to help families determine the best qualities or strategies for improving the academic and behavioral outcomes of African American and Latino children with disabilities, as well as those in special education. The study examined students in kindergarten through the twelfth grade with a variety of disabilities; these included students with learning-, behavioral-, emotional-, and physical-disabilities, and those in special education. The results indicate a few parental qualities and strategies appear to improve the chances for those in special education and students with disabilities doing better both academically and behaviorally. Perhaps most interesting is that four of the top five (and all of the top three) of the parental qualities that are particularly emphasized are by people of faith. They are 1) sending children to faith-based schools, 2) family factors, i.e., intact family structure or high parental involvement, 3) inclusion, and 4) character education have the greatest impact on student academic and behavioral outcomes. The results give real hope for raising the scholastic and behavioral results of black and Latino children in special education and for students with disabilities. The significance of these results is discussed.

Religion, particularly Christianity, has often been associated with helping children that are most in need. Students in special education and with disabilities are often regarded as the youths, on average, who are in greatest need. Special education and disabilities have been topics of increasing discussion within the academic community, especially as the number of children and adolescents with disabilities and in special education have grown in the United States and other nations around the globe (Fagan, 2003; Hinshaw & Scheffler, 2014). Given that the United States has such a large percentage of students in the special education and learning disabilities categories, it is particularly important to help families who have children with disabilities, as well as those in special education, to identify which factors could most contribute to the success of their children with this background. This is especially true among children of color, especially African Americans and Latino students.

There are a number of parental practices emphasized among Christians and other faith groups that would seem to give special needs children more hope, stability, and individual attention they need that could help them flourish more than they would otherwise. First, for example, many believing families send their children to faith-based schools that are able to give these youths a sense in purpose in life that public schools are often lacking (Jeynes, 2014). Second, Christian schools are also more likely to emphasize the salience of family factors, i.e., parental involvement and intact families (Jeynes, 2000, 2015a). Christian schools are generally the most numerous types of religious schools in the U.S. and the West . Third, Christian parents often choose to send their children to schools that teach character education (Jeynes, 2009). Fourth, religious private schools have a long history of advocating for inclusion rather than separating out special education students in ways these school leaders view as unnecessary (Lane & Kinnison, 2014; Sutton, 1993).

There are naturally other variables that can potentially affect the outcomes of students with special needs or learning disabilities. The foremost of these are described in the Methods section and examined in the Results section.

It is important to point out that although much of special education involves teaching students with disabilities of one type of another, special education can also involve simply addressing individual differences or other special needs that are not under the umbrella of disabilities (Hughes & Talbott, 2017). Similarly, there are students who have disabilities such as attention-deficit/hyperactivity syndrome (ADHD), who are not in special education and may be treated with medication as a solution, etc.

Approximately, 16% of American children are defined as having special needs (Chesmore et al., 2016). A considerable proportion of these students are those who have been diagnosed with learning or behavioral disabilities (Chesmore et al., 2016). For example, about 11% of American children have been diagnosed with ADHD. Moreover, 20% of high school *boys* have been diagnosed with ADHD. There is a great need for African American and Latino parents to know what strategies, qualities, and interventions, including ones that are connected with a faith-based worldview, work the best to raise the academic achievement levels and behavioral outcomes for special education children and adolescents, as well as those with disabilities. The results can help school leaders as well. Many times educators do not adequately consider the importance of a faith-based worldview in helping these youths. One can argue that this is particularly true for African American and Latino children and adolescents because: 1) they tend to be more religious than those of other racial groups in the United States and 2) one can argue that they are more likely to be diagnosed as having special needs or disabilities.

Just as there are different categories and causes of academic gaps, so it is that within

those categories, including special education and disability gap categories, that there are different sub-categories. Hence, there are different kinds of children with disabilities. There are students that have physical-, emotional-, or learning disabilities. Often, children can be in more than one of these categories.

Patterson (2005, p. 313) notes that Heward (2003) did an excellent job when he "outlined the following federal definition regarding students with EBD" (emotional behavioral disorders) "and those with LD" (learning disabilities) "that included the following characteristics" (Heward, 2003, p. 283):

- An inability to learn that cannot be explained in intellectual, sensory, or health factors
- An inability to build or maintain satisfactory relationships with peers and teachers
- Inappropriate types of behavior or feelings under normal circumstances
- A general pervasive mood of unhappiness or depression, or
- A tendency to develop physical symptoms or fears associated with personal or school problems

Families need guidance regarding the choices and strategies they apply to helping their children with disabilities do better in school. To what degree are variables often associated with a faith-based worldview helpful to the academic and behavioral outcomes of these children? Although this study will focus on African American and Latino youngsters, it is likely that there are principles and lessons from which parents of all races and ethnicities can benefit. Fortunately, the various studies included in this meta-analysis include those factors most often mentioned for helping parents improve the outcomes of youths who are either disabled and/or in special education. They include variables associated with a faith-based world view such as whether a student attends a religious school, family factors (parental involvement and family structure), character education, and inclusion. Other variables examined include receiving additional tutoring, culturally responsive teaching, self-efficacy, and locus of control.

Enough studies have now been done examining the specific strategies, qualities, and implementation of special education and helping those with disabilities, so that it is now possible to examine this issue in a meta-analysis, with reference to African Americans and Latino families specifically.

# FOUR RESEARCH QUESTIONS ADDRESSED IN THIS STUDY

With this background in mind, the following four questions that emerge are research questions addressed in this study. More specifically, the four issues are especially pertinent to parents and their children. First, are some of the primary options available to parents overall for African American- and Latino special education students and pupils with disabilities associated with stronger academic and behavioral outcomes? Second, are there any differences in the patterns of the effects of these special education and students with disabilities strategies by grade level? Third, are there any differences in the effects for these special education strategies and students with disabilities strategies and qualities across different types of outcomes? Fourth—the primary emphasis of this study—what types of primary options available to parents appear to help those students the most? To

answer these four 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. A meta-analysis statistically combines all the relevant existing studies on a given subject in order to determine the aggregated results of said research. This study utilizes meta-analysis to examine the effects of special education- and students with disabilities strategies- on kindergarten to high school youth, addressing each of these four research questions listed.

#### **METHODS**

In this project, the research team searched 60 major data bases (Psych Info, ERIC, Sociological Abstracts, Wilson Periodicals, and so forth) to find studies examining the effects of the strategies, qualities, and interventions—including ones associated with a faith-based world view that parents need to know that might contribute to the success of kindergarten to twelfth-grade African American and Latino students with special needs or disabilities. Journal articles on improving special education- and disability outcomes to find additional research articles that addressed this issue were also searched. Although this comprehensive search yielded hundreds of articles and papers on these topics, nearly all of these articles were not quantitative in nature. The researcher obtained a total of 52 studies that addressed the relationship under study and found 35 studies that had a sufficient degree of quantitative data to include in this meta-analysis. Among the 35 studies that possessed a sufficient degree of quantitative data to include in this meta-analysis, the total number of subjects was 127,981, with an average sample size of 3,656.6. The studies all took place between 1987 and 2020, with an average of 2009.57. The average quality of the studies was 2.1 on a 0-3 scale, which is fairly high.

## ANALYTIC APPROACH

The procedures employed 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, Effect Size Statistics, and Defining of Variables.

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

- 1. It needed to examine the qualities designed to aid parents in helping special education students or those with disabilities in a way that could be conceptually and statistically distinguished from other primary variables under consideration. For example, if a quality and its influence could not be statistically isolated from the other features, the study was not included in the analysis. If a study included more students than African American and Latino students, only African American and Latino students were included in the analysis.
- 2. It needed to include a sufficient amount of statistical information to determine effect sizes. That is, a study needed to contain enough information so that test statistics, such as those resulting from a t-test, analysis of variance, and so forth, were either provided in the study or could be determined from the means and measures of variance listed in the study.
- 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 some times 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 metaanalysis.

# DATA COLLECTION METHOD (CODING AND RATER RELIABILITY)

In order 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, Wilson Periodicals, Sociological Abstracts, and so forth), totaling 60 data bases, to find studies examining the relationship between strategies and qualities of special education efforts and students with disabilities strategies and the academic and behavioral outcomes of youth from grades kindergarten to high school seniors. The search terms included special needs, special education, disability, disabilities, disabled, religion, religiosity, faith-based, faith-based schools, character education, moral education, parents, families, learning disabilities, emotional disabilities, behavioral disabilities, inclusion, strategies, teaching techniques, African Americans, Latinos, tutoring, and several other terms. Reference sections from journal articles on special education and students with disabilities were also examined to find additional research articles.

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) that special education and disabilities strategies and qualities were examined, (h) the attrition rate, and (i) the estimate of the relationship between parental special education and disabilities strategies and qualities with student outcomes. Two coders, who had been coding for at least 10 years, coded the studies on these characteristics and had 96% agreement on their coding of the following study characteristics:

#### Report Characteristics

Each study entry began with the name of the author of the study. Then the year the study was recorded, followed by the type of research report. Research reports were defined either as a journal article, book, book chapter, dissertation, master's thesis, government document, school or private report, conference paper, or other type of report.

#### Sample Characteristics

This included the number of students sampled, their locations, and how they were selected, e.g., via random selection, stratified random selection, or via advertisement. *Intervention Type* 

The experimental or procedural manipulation used, if any, was recorded to determine the effects of strategies to help special education- and disabled- students with respect to student outcomes.

#### Research Design

The studies in this meta-analysis were categorized into three basic types of designs. First, the studies were noted that employed some type of manipulations to assess the effects

of strategies to help special education- and disabled- students.

The second type of design included studies that took cross-sectional measures of the effect of qualities that could contribute to the success of African American and Latino special education pupils and those students within these groups with disabilities, without utilizing any type of manipulation.

The third type of design involved the calculation of a correlation coefficient between these qualities that could contribute to the success of these special needs- and disabled-pupils and student educational outcomes.

For studies that employed a manipulation to measure the effects of these strategies or qualities designed to help these students with disabilities, the following were recorded: (a) the length, frequency, duration, and total number of training sessions, (b) the method of training (workshop, individual meetings, phone calls, videotape, email communication, or newsletter), (c) the type of behavioral or achievement-related outcome measure (e.g., standardized achievement test, non-standardized achievement test, class grades, or teacher ratings), (d) the unit of analysis (individual student or classroom) at which the effect size was calculated, and (e) the magnitude of the relationship between these qualities and strategies designed to help students with disabilities and pupil outcomes.

For the cross-sectional studies and correlation studies, if it was available, the following were also recorded: (a) the socio-economic status of participants in the sample, and (b) the types of behavioral and academic measures that were used.

The Length (in Weeks) of the Special Education and Disabled Student Assessment

This was particularly important because secondary analyses were performed to determine if there was a relationship between the length of special education programs and the effects that emerged in various studies.

The Grade Level or Age of the Students

This was coded, including means and standard deviations when they were available. *The Outcome and Predictor Variables* 

Those from each study were coded to include the different ways that achievement was measured.

Attrition Rate

When available, the attrition rate of each study was coded.

The Estimate of the Relationship Between a Given Parental Strategy to Increase Student Achievement and Behavior for Students with Disabilities and the Outcome.

The process of the effect size estimation is described in the next section.

#### STATISTICAL METHODS AND THE EFFECT SIZE STATISTICS

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 and his colleagues (Glass et al., 1981). When results were not significant, studies sometimes reported only a significant level. In the unusual case that the direction of these not significant results was not available, the effect sizes were calculated to be zero.

For studies with manipulations, we used the standardized mean difference to estimate the effect of qualities that could contribute to the success of African American and Latino students with disabilities, as well as those in special education. 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, we 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 (Cooper et al., 2019). Since it employed 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 the strategies and qualities to guide parents to help students with disabilities or are in special education, 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, b. 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.

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. A weighting procedure was used to calculate average effect sizes across all the comparisons. First, each independent effect size was 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. 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 (Hedges & Vevea, 1998). As one would expect, the analyses based on fixed-error assumptions yielded somewhat larger effect sizes.

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 the variable affecting special education and disabled students. 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 in order to estimate the degree to which the presence of an outlier might have affected the results.

Tests of homogeneity were completed on the variable affecting special education and students with disability measures to gain a sense of the consistency of strategies and qualities scales across studies.

#### RESEARCH QUESTIONS

This meta-analysis examined the relationship between the parental- qualities and strategies that best helped African American and Latino special education- and disabled-kindergarten to high school pupils increase their academic achievement and behavioral outcomes. This meta-analysis first (Research Question #1) addressed whether there is a statistically significant relationship between these qualities and strategies with African American and Latino special education- and disability- student outcomes overall. The next analyses focused on whether there is a statistically significant relationship between these

parental qualities and strategies and these African American and Latino students' academic achievement by the grade level of the pupils (Research Question #2). The third analysis addressed the effects of strategies designed to help special education and disabled pupils that families should consider on specific measures of achievement and behavior (Research Question #3). The final analysis addressed which strategies and qualities, of which parents should be aware, worked most effectively, which is the primary focus of this study (Research Question #4).

# STUDY QUALITY RATING

Two researchers, with at least ten years of experience, coded the studies independently for quality, the presence of randomization, and whether the definitional criteria for students with disabilities 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: did it use randomization of assignment, did it avoid mono-method bias, did it avoid mono-operation bias, did it avoid selection bias, and did it use a specific definition of special education and disabled students. We calculated inter-rater reliability by computing percentage of agreement on the definition of special education and disabled students, the specific components examined in each study, issues of randomization, and quality of the study. Inter-rater reliability was 100% on whether a study examined special education and students with disabilities, 94% for definitions of the best qualities or strategies for improving the academic and behavioral outcomes of African American and Latino children with disabilities, and 94% for the quality of the study. For the specific components of quality, inter-rater agreement percentages were 97% for randomization, 91% for avoiding mono-method bias, 94% for avoiding monooperation bias, and 94% for avoiding selection bias.

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

#### DEFINING OF VARIABLES

For the purposes of this study, the primary variables under study were defined as the following.

*Special Education*. Schooling students with disabilities, individual differences, and other special needs in a way that acknowledges their individual differences and needs.

*Disability*. A physical, mental, cognitive, or developmental condition that impairs, interferes with, or limits a person's ability to engage in certain tasks or actions, or participate in typical daily activities and interactions (Merriam-Webster Dictionary, 2021).

Learning Disabilities. Any of various conditions (such as dyslexia or dysgraphia) that interfere with an individual's ability to learn and so results in impaired functioning in language, reasoning, or academic skills (such as reading, writing, and mathematics) and are thought to be caused by difficulties in processing and integrating information.

*Emotional Disabilities*. A disability that impacts a person's ability to effectively recognize, interpret, control, and express fundamental emotions (Wikipedia, 2021).

*Behavioral Disabilities*. A pattern of disruptive behavior in children that causes problems in school, at home, and interactions with people.

*Physical Disabilities*. A limitation of a person's physical functioning, mobility, dexterity, or stamina.

*Family Factors*. Levels of parental involvement or the intact nature of parental family structure.

*Inclusion*. An educational paradigm in which students' disabilities spend most or all of their time with general education students.

Religious Schools. Whether a student attends a public or private religious school.

Good Friends and Support. A supportive set of loved ones.

*Character Education*. A school curriculum that included an emphasis on certain core values that the overwhelming majority of people believe you should live by, e.g., love, honesty, compassion, and responsibility.

*Culturally Responsive Teaching*. An instructional approach that especially considers a child's cultural background when teaching content.

Locus of Control and Self-Efficacy. A sense by an individual that one can, with adequate effort, cope with circumstances in that person's life.

Academic Achievement. How students performed in school as defined by GPA, standardized tests, or less standardized measures such as teacher ratings.

*School Behavior*. How students behaved as measured by whether they were truant, suspended from school, got in fights with children, etc.

As was shared earlier, it is important to point out that although much of special education involves teaching students with disabilities of one type of another, special education also can involve addressing simply individual differences or other special needs that are not under the umbrella of disabilities (Hughes & Talbott, 2017). Similarly, there are students who have disabilities such as ADHD who are not in special education and may be treated with medication as a solution, etc. Hence, because special education and disabilities are distinct, but also overlapping concepts, it is wise to examine the two as just that. In other words, the variables will include separate measures for special education and disabilities, but also a combined variable, because there is also considerable overlap.

#### RESULTS

#### Summary of the Results

Overall, the results of the meta-analysis indicated that there is a relationship between the qualities or strategies examined to help parents improve the academic and behavioral outcomes of African American and Latino children in special education or with disabilities.

Table 1 lists each of the thirty-five studies, the grades examined, and the effect sizes of the overall model of variables designed to help youths with either learning disabilities or who are in special education. The results were designed to give an overall sense about what the effects of the strategies examined designed to help these African American and Latino students is having.

Table 1 lists the effects sizes of the 35 studies in descending order. All the effect sizes were in the positive direction, although four of the studies yielded effect sizes that were below .10. The range of the effects sizes was from 1.38 to .04.

# Table 1

Studies Included in the Meta-Analysis Listed by Author, Year of Study, Sample Size, and a Variety of Other Characteristics

Study and Year (identified by	Distinctions of Study	Grade or Age of	Effect Size without	Effect Size with Sophisticated
lead authors)		Students	Sophisticated Controls	Controls
Clements, 2012	Examined students with "learning" and "intellectual" disabilities	Grade 7	1.38	
Decker et al., 2007	Examined 3 Urban Schools in a Midwestern State	Grades K-6	1.31	
Black, 2011	Examined Math and Reading Tests	Grades 3-4	1.03	
Burke et al., 2020	Examined Latino Students	Elementary & Secondary School	.89	
Bean & Sidora- Arcoleo, 2012	Special education African American students in Memphis	Grade 7	.85	
Carter et al., 2005	Examined Effectiveness of Tutoring	High School	.82	
Patterson 2005	All African American students	Ages 9-11	.82	
McMahon et al., 2016	Examined Urban African American & Latino Students	Grades K-12	.81	.81
Meany-Walen et al., 2014	Latino and African American children	Grades K-3	.78	
Bardon, et al., 2008	Midwestern	Grade 3	.65	

	0, 1			
	Study on			
	African			
	American	~ .		
Gonzalez &	Latino and Africar		.61	
Cramer, 2013	American	11-12		
	Adolescents			
Welch, 2016	Examined	Grades	.48	
	African	K-12		
	American			
	Students			
Wu et al., 2004	Examined	Grades K-5		.45
	Early			
	Childhood			
	Longitudinal			
	Study			
Bean, 2012	Special	Grade 7	.42	
, ,	education			
	African			
	American			
	students in			
	Memphis			
Nega, 2014	Male and	Grade 8	.40	
11084, 2011	Female	Grade 0	. 10	
	African			
	American			
	Adolescents			
Gregory et al., 1987	Examined	Grades	.38	
Gregory et al., 1707	Family	9-12	.50	
	Structures and	9-12		
	Types of Schools			
Bradshaw et al.,	Focused on	Grades K-2		.35
· · · · · · · · · · · · · · · · · · ·		Grades K-2		.55
2012	Behavioral			
C 2000	Disabilities	IZ 10	22	
Greene, 2008	Study in	K-12	.32	
D 1 1 0	Florida	TT' 1		21
Brucbacher &	Examined	High		.31
McMahon, 2018	African	School		
	American &			
	Latino			
D : 0 5:	Students	T. 10	25	
Ruiz & Figueroa,	Examined	K-12	.25	
1995	Optimal			
	Learning			
	Environment			
Boughan, 1996	Maryland	Grades	.24	
	Study	K-12		

Dunah Course 0	Examined	Crodes 25	21	
Bunch-Crump &		Grades 3-5	.21	
Lo, 2017	African			
	American			
T 0 C 1 1	Male Students	G 1	20	
Lo & Cartledge,	Examined	Grades	.20	
2000	African	2 & 4		
	American			
	Make Students			
Lo et al., 2011	Examined	Grades 3-5	.20	
	African			
	American			
	Male Students			
Darney et al., 2013	Eleven Year	Grade 12		.20
	Longitudinal			
	Study by Johns			
	Hopkins			
	University			
Thompson, 2016	Examined	Middle	.18	
	African	School		
	American			
	Students			
Shumate et al.,	Examined	Grade 8	.16	
2012	Latino	Grade 6	.10	
2012	Students in			
	North Carolina			
Johnson, 2018	Examined	Middle	.14	
Johnson, 2010	African	School	.14	
	American	School		
	Students in			
	South Carolina			
Eggar 2002		Grades 6-7	.12	
Esser, 2002	Tutoring	Grades 0-7	.12	
	Program			
	focused on			
	Reading			
D 11 . 1	Outcomes	G 1 K 2		10
Bradshaw et al.,	Focused on	Grades K-2		.12
2012	Behavioral			
0 11 1 1	Disabilities	G 1		1.1
Cavendish et al.,	Longitudinal	Grades		.11
2012	Study	9-11		
Cochran et al., 1993	Tutoring	Ages 7-12	.08	
	Program			
	focused on all			
	African			
	American			
	Students			
Dawkins, 2010	Examined	High	.07	

	Three	School		
	Academic			
	Subjects			
Phillips, 2013	Examined	Secondary	.06	
	Urban African	School		
	American	Students		
	Students			
Williamson,	Examined	Grade 10	.04	
Campbell & Lo,	African			
2009	American			
	Students			

Table 2

Correlations between Measures Assessing the Quality of Study, Whether a Random Sample was Used, Year of Study, and Sample Size for the 35 Studies Included in the Meta-analysis

	Correlation with Year	Correlation with Effect	Correlation with	Correlation with Whether a Random
	of the Study	Size of the Study	Quality of the Study	Sample was Used
Year of Study		03	04	.03
Effect Size from Study	03		04	04
Quality of Study	04	04		.22*
Whether a Random sample was used	.03	04	.22*	

<sup>\*</sup>p<.05; \*\*p<.01; \*\*\*p<.001

Table 2 presents the results of the correlation analyses that examined if there was any relationship between the quality of the study, the year of the study, the effect size, and the age of the students that were examined. Nearly all of the combinations of the relationships examined were near zero and not statistically significant. The one exception was a statistically significant relationship between the quality of the study and whether a random sample was used. That one exception was .22 (p<.05) and is to be expected, because whether a random sample was used in a given study was one measure of study quality.

Tests of homogeneity for special education indicated that the measures were relatively homogeneous when sophisticated controls were used ( $X^2$ =3.01, p=n.s.) and when sophisticated controls were not included ( $X^2$ =2.95, p=n.s.). Tests of homogeneity for disabilities indicated that the measures were relatively homogeneous when sophisticated controls were used ( $X^2$ =3.31, p=n.s.) and when sophisticated controls were not included ( $X^2$ =3.43, Y=n.s.).

Table 3

Effect Sizes for Qualities and Strategies for Special Education Students and Those with Disabilities with 95% Confidence Intervals in Parentheses

Type of Overall Special Education and Student with Disabilities Quality or Strategy	Effect Size Without Sophisticated Controls	Effect Size with Sophisticated Controls	Overall Effect Size
Overall Special Education and Student with Disabilities Quality or Strategy			
General Overall Measures	.31** (.11, .51)	.26* (.04, .48)	.29ª
General Overall Measures for Studies Rated 3	.32** (.11, .53)	.27* (.02, .52)	.30ª
General Overall Measures for Studies Rated 2-3	.31** (.09, .53)	.26* (.03, .49)	.29 <sup>a</sup>
General Overall Measures for Special Education	.35** (.12, .58)	.28* (.05, .51)	.33ª
General Overall Measures for Helping Students with Disabilities	.29** (.11, .47)	.25* (.02, .48)	.28ª
Academic Outcomes	. 32** (.10, .54)	.27* (.02, .52)	.30ª
Behavior Outcomes	. 31** (.09, .32)	. 26* (.02, .50)	.29ª

<sup>\*</sup>p<.05; \*\*p<.01; NA=Not available

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

Effect Sizes for Family-Based Special Education Qualities and Strategies Overall (Research Question #1)

Table 3 lists the effect sizes that emerged for family-based special education and in helping students with disabilities, qualities, and strategies as a whole, addressed under Research Question #1. The first outcomes examined included both academic and behavioral ones combined for these African American and Latino pupils. Statistically significant effect sizes emerged for special education qualities and in helping students with disabilities strategies for families overall. The effect sizes that emerged were for family-based special education and helping students with disabilities qualities and strategies as a whole, addressed under Research Question #1. The effect size for the family-based special education qualities and helping students with disabilities qualities and strategies as a whole variable was, .31 (p < .01), 95% CI [.11, .51], of a standard deviation, without sophisticated controls. This was statistically significant at the .01 level of probability. With sophisticated controls in place the effect size was, .26 (p < .05), 95% CI [.04, .48].

The effect size for the family-based special education qualities alone was, .35 (p < .01), 95% CI [.12, .58], of a standard deviation, without sophisticated controls. This was statistically significant at the .01 level of probability. With sophisticated controls in place the effect size was, .28 (p < .05), 95% CI [.05, .51].

The effect size for the helping students with disabilities qualities and strategies alone was, .29 (p < .01), 95% CI [.11, .47], of a standard deviation, without sophisticated controls. This was statistically significant at the .01 level of probability. With sophisticated controls in place the effect size was, .26 (p < .05), 95% CI [.02, .48].

When the General Overall Measures were limited to studies with a quality rating of 3, the effect size for the family-based special education and helping students with disabilities qualities and strategies variable was, .32 (p < .01), 95% CI [.11, .53], of a standard deviation, without sophisticated controls in place. This was statistically significant at the .01 level of probability. With sophisticated controls in place the effect size was, .27 (p < .05), 95% CI [.02, .52]. When the General Overall Measures were limited to studies with a quality rating of 2-3, the effect size for the family-based special education and helping students with disabilities qualities and strategies variable was, .31 (p < .01), 95% CI [.09, .53], of a standard deviation, without sophisticated controls in place. This was statistically significant at the .01 level of probability. With sophisticated controls in place the effect size was, .26 (p < .05), 95% CI [.03, .49].

Table 3 also shows the results distinguishing between academic and behavioral outcomes for special education students and pupils with disabilities included in this meta-analysis. For academic outcomes, the effect size for the family-based special education qualities and helping students with disabilities strategies variable was, .32 (p < .01), 95% CI [.10, .54], of a standard deviation, without sophisticated controls in place. This result was statistically significant at the .01 level of probability. For behavioral outcomes with no sophisticated controls in place, the effect size for the family-based special education qualities and helping students with disabilities strategies variable was, .31 (p < .01), 95% CI [.09, .53], of a standard deviation. This result was statistically significant at the .01 level of probability. When sophisticated controls were in place, the effects were .27 and .26 respectively, both of which were significant at the .05 level of probability.

Effect Sizes for Family-Based Special Education Qualities and Helping Students with Disabilities Strategies by Student Age (Research Question #2)

The effect sizes for the family-based special education qualities and helping students with disabilities strategies were somewhat consistent by age (see Table 4). The results for high school students were somewhat smaller than for elementary school students. The result of the special education qualities strategies and helping students with disabilities was .33 (p < .01), 95% CI [.11, .55] of a standard deviation for elementary school students, without the use of sophisticated controls. When sophisticated controls were included, the effects were .28 (p < .05), 95% CI [.05, .51]. The results of the special education qualities and helping students with disabilities strategies was .29 (p < .05), 95% CI [.05, .53], of a standard deviation for secondary school students, without the use of sophisticated controls. When sophisticated controls were included, the effects were .24 (p < .05), 95% CI [.03, .45].

The effect sizes for the family-based special education qualities alone were .37 (p < .01), 95% CI [.14, .60] of a standard deviation for elementary school students, without the use of sophisticated controls. When sophisticated controls were included, the effects were .30 (p < .05), 95% CI [.05, .55]. The result for helping students with disabilities strategies was .31 (p < .01), 95% CI [.12, .50] of a standard deviation for elementary school students, without the use of sophisticated controls. When sophisticated controls were included, the effects were .27 (p < .05), 95% CI [.04, .50].

The results of the special education qualities and strategies was .31 (p < .05), 95% CI [.10, .52], of a standard deviation for secondary school students, without the use of sophisticated controls. When sophisticated controls were included, the effects were .25 (p < .05), 95% CI [.02, .48]. The results for helping students with disabilities strategies was .27 (p < .01), 95% CI [.04, .50] of a standard deviation for secondary school students, without the use of sophisticated controls. When sophisticated controls were included, the effects were .22 (p < .05), 95% CI [.02, .42].

Table 4

Effect Sizes for Qualities and Strategies for Specific Special
Education and Students with Disabilities Variables with 95% Confidence
Intervals in Parentheses

Type of Overall Special Effect Size Effect Size with

Type of Overall Special Education and	Effect Size Without	Effect Size with Sophisticated	Overall Effect Size
Student with Disabilities	Sophisticated	Controls	Size
Quality or Strategy	Controls	Controls	
Quanty of Strategy	Controls		
Overall Special Education			
and Students with			
<u>Disabilities</u>			
Quality or Strategy Variable			0
Elementary School General	.33**	.29*	.32 <sup>a</sup>
Overall	(.11, .55)	(.04, .54)	
Measures			
Secondary School General	. 29*	.25*	.28 <sup>a</sup>
Overall	(.05, .53)	(.01, .49)	
Measures			
General Overall	. 31**	.26*	.29 <sup>a</sup>
Measures for Studies Rated	(.09, .53)	(.03, .53)	
2-3			
Elementary School General	. 37**	.30*	.35 <sup>a</sup>
Overall Measures for	(.14, .60)	(.05, .55)	
Special Education			
Elementary School General			- 00
Overall Measures for	. 31**	.27*	$.30^{a}$
Helping	(.12, .50)	(.04, .50)	
Students with Disabilities			0
Secondary School General	. 31**	.25*	.29 <sup>a</sup>
Overall Measures for	(.10, .52)	(.02, .48)	
Special Education			
Secondary School General			0
Overall Measures for	.27*	.22*	$.25^{a}$
Helping	(.04, .50)	(.02, .42)	
Students with Disabilities			
Academic Outcomes	. 32**	.27*	$.30^{a}$
	(.10, .54)	(.02, .52)	
Behavior Outcomes	. 31**	. 26*	.29 <sup>a</sup>
	(.09, .32)	(.02, .50)	

<sup>\*</sup>p<.05; \*\*p<.01; NA=Not available

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

Effects of Special Education Qualities and Helping Students with Disabilities Strategies on Specific Measures of Achievement and Behavior (Research Question #3)

Table 4 also lists the effects of family-based special education qualities and helping students with disabilities strategies on specific measures of achievement. The effect size for math tests was .39 (p < .01), 95% CI [.14, .64] without sophisticated controls. The effect size for reading tests was .24 (p < .05), 95% CI [.03, .45] without sophisticated controls. The result for all other tests combined (science, social studies, etc.) was .34 (p < .01), 95% CI [.12, .56]. The effect size for Other Academic Measurements, which included Grade Point Averages (GPA) and teacher ratings was .30 (p < .01), 95% CI [.11, .49].

Effect Sizes for Specific Family-Based Special Education Qualities and Helping Students with Disabilities Strategies on Achievement and Behavioral Outcomes Combined (Research Question #4)

While the first three questions focused on whether family-based special education and disabled student qualities, strategies, and interventions work overall, Research Question #4 addresses what is really the most vital question of all and that is, which of these family-based education qualities strategies and interventions work the best? Moreover, a related question is the degree to which the variables associated with a faith-based world view are related to academic and behavioral outcomes for these students. Table 5 lists the strategies in order of which reached the most impressive levels of probability and secondarily on the effect size. Attending religious schools, inclusion of special education students, family factors (levels of parental involvement or parental family structure) were the three family-based variables that stood out as the most efficacious.

These three variables stand out above the rest for another reason as well. Religious schools yielded the largest effect size with the use of sophisticated controls and inclusion yielded the largest effect size without the use of sophisticated controls. Without the use of sophisticated controls, the effects of inclusion and attending religious schools were .44 (p < .01), 95% CI [.15, .73] and .37 (p < .01), 95% CI [.14, .60], respectively. Family Factors were just behind, yielding the second largest effect size both when sophisticated controls were not used, .42 (p < .05), 95% CI [.06, .78] and also when they were utilized, .29 (p < .05), 95% CI [.03, .55].

When sophisticated controls were used, the effects for attending religious schools had almost the identical effect size with the use of sophisticated controls that emerged without them, .36 (p < .01), 95% CI [.12, .60]. For the inclusion variable, there were not enough studies using sophisticated controls to make an analysis possible.

Among some of the other special education and disabled student qualities and strategies included good friends and support, the effects were .35 (p < .05), 95% CI [.04, .66] when sophisticated controls were not utilized, but were not statistically significant (.20) when they were.

Parents sending their children to schools where character education was taught among those in special education or disabled also yielded an effect size that was statistically significant,  $.26 \ (p < .05)$ ,  $95\% \ CI \ [.04, .48]$ , when no sophisticated controls were utilized. For the character education variable, there were not enough studies using sophisticated controls to make an analysis possible.

Parents sending their children where culturally responsive teaching is taught and tutoring effect sizes were in the positive direction but did not produce statistically

significant results. On the other hand, strategies emphasizing self-efficacy and locus of control seemed to show great promise as is their level of effect, but there were not enough studies of this kind to do meta-analytic assessment of their effects.

TABLE 5

Effect Sizes for Particular Qualities and Strategies for Special Education Variables with 95% Confidence Intervals in Parentheses

Type of Particular Special Education Variable	Effect Size Without Sophisticated Controls	Effect Size with Sophisticated Controls	Overall Effect Size
Academic & Behavioral Results			
Religious Schools	.37** (.14, .60)	.36** (.12, .60)	.37ª
Inclusion	.44** (.15, .73)	NA	.44ª
Family Factors	.42* (.06, .78)	.29* (.03, .55)	.36 ª
Good Friends & Support	.35* (.09, .75)	.20	.29
Character Education	.26* (.04, .48)	NA	.26
Culturally Responsive Teaching	.24	NA	.24
Tutoring	.22	NA	.22
Self-Efficacy/ Locus of Control	NA	NA	NA

<sup>\*</sup>p<.05; \*\*p<.01; \*\*\* p<.001 NA=Not available

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

#### **DISCUSSION**

Effect Sizes for Special Education Disabled Student Strategies and Qualities Overall (Research Question #1)

The results overall were pretty encouraging in one sense of the word. That is, overall, it appears that the special education- and student disability- strategies, interventions, and qualities utilized by parents that were examined in this study are associated with improved academic and behavioral outcomes (see Table 1 and 3). The effect sizes were slightly more

than .3 of a standard deviation, when sophisticated controls were not utilized and between .25-.30 of a standard deviation when they were. The effects for special education approaches were somewhat higher than for students with disabilities. Although these results are not huge, they do provide encouragement and hope that families intervening in the right ways can yield some real benefits to children with disabilities.

Effect Sizes for Parental Special Education and Students with Disabilities Strategies and Qualities by Student Age (Research Question #2)

The findings of this meta-analysis are noteworthy with regard to the age of the students, because statistically significant results emerged for academic and behavioral outcomes for both the elementary- and secondary- school levels. Moreover, the results were similar enough at these levels, so that there was no statistically significant difference between them. These results are potentially encouraging, because there are so many efforts by parents to help their special education and children with disabilities that some hypothesize work better at the elementary level than they do in secondary school. However, the results of the meta-analysis indicate that the implementation of special education strategies and those for students with disabilities can be effective for both older and younger students.

Effects of Special Education and Being Disabled on Specific Measures of Achievement and Behavior (Research Question #3)

One of the most intriguing results is that special education and pupil disability qualities and strategies had more of an influence on math scores than they did on reading scores. The difference between the two results was statistically significant at the .05 level of probability. There are a number of possible explanations for this fact. Two of the most prominent are that mathematics may be, overall, the subject that students of any kind struggle with most of all. It could well be that when there is assistance given along any of a variety of dimensions, just the presence of some kind of extra help or extra boost proves the most beneficial in those subjects with which students struggle the most. Second, reading is an activity that students do, to some extent, every day. They read signs, labels, advertisements, etc. These youths may or may not engage in mathematical activities in a given day. The fact that those young people in a classroom may be more exposed to reading than they are to math, during the course of their daily lives may contribute to making math more challenging than reading, for most of them. Therefore, any effects or strategies to help them spend more time doing math may especially yield scholastic benefits.

Effect Sizes for Specific Parental Special Education Qualities and Student Disability Strategies on Achievement and Behavioral Outcomes Combined (Research Question #4)

There is clearly good news in that it appears that the variables associated with a faith-based worldview quite consistently yielded statistically significant effect sizes. These include the variables for religious schools, family factors, inclusion, and character education. There were other variables too that appeared to either work to a statistically significant degree or at least were in the positive direction, even if they did not reach statistical significance.

What is likely the most interesting finding of the entire study is the salience of these

four variables that are associated with a faith-based world view. These four parental special education- and student disability- strategies or qualities yielded the most impressive levels of probability and the largest effect sizes.

Parents sending their children to religious schools emerged as the most consistent variable related to the academic and behavioral outcomes of children with disabilities. The reasons for this statement are because: (a) this variable reached, on average, the lowest levels of probability for both the analyses using sophisticated and not sophisticated controls; and (b) the effect sizes were both solid and almost the same for the analyses using sophisticated and not sophisticated controls. This indicates a reasonably robust variable.

The effect sizes for Family Factors were the second highest for both the analyses that used and did not use sophisticated controls. In fact, the effects for Family Factors (.42) were just barely behind those that emerged for Inclusion (.44), when no sophisticated controls were utilized.

Sending Children to Religious Schools and Inclusion of special education students were the only variables that produced levels of significance at the .01 level of probability. Moreover, these variables had effects sizes, without the use of sophisticated controls, of .44 and .37 respectively. With sophisticated controls the effect size for religious schools was .36.

To be sure, there are likely a few reasons why these three variables had the greatest impact and some of those reasons are quite distinct from one another. Nevertheless, the three variables have some notable areas of overlap.

First, the subjects in this meta-analysis were often African American special needs students who had experience in both public schools and religious schools; and, on average, they seemed to particularly thrive in the religious ones. Why? Yes, perhaps they had more of a sense of purpose and being loved by the teachers and students in a school atmosphere in which love, purpose, self-discipline, and compassion together represent the central focus of the faith of most religious schools, as data analysis often indicates (Jeynes, 2015b, 2022; Lane & Kinnison, 2014; Sutton, 1993).

Second, religious schools are also more likely to emphasize the salience of family factors, i.e., parental involvement and intact families, than are public schools (Jeynes, 2000, 2010). Christian schools advocate the primacy of parental involvement and the strength of family ties, e.g., "the family that prays together stays together." To the extent that pupils from faith-based schools outperform their counterparts from public schools, even when adjusting for socio-economic status and race, leaders of these schools often credit the faith and family emphasis of these religious schools as much as the reason why (Lane & Kinnison, 2014; Sutton, 1993).

Third, faith-based schools often emphasize the teaching of character education, which also yielded statistically significant effect sizes qualities such as love, compassion, and a welcoming atmosphere as part of their core set of values. Character education has been a long-time emphasis of religious schools. However, since the removal of Bible-based character education in America's public schools in 1962-1963, this emphasis has been largely missing in the country's public schools (Jeynes, 2009). In the minds of Christians, religion, morality, and character education all go together (Jeynes, 2019). Hence, unlike many secular public-school leaders, Christian school educators assert that character instruction school be central to the curriculum.

Fourth, Christian schools, that make up the overwhelming majority of religious schools in the United States and the West, have a long history of advocating for inclusion rather than separating out special education students, in ways that these school leaders view as unnecessary (Lane & Kinnison, 2014; Sutton, 1993). Historically, many public-school advocates have strongly criticized faith-based schools for not doing enough to accommodate the need for special education children to receive extra attention. Many religious schools have made adjustments and those that have not should give a listening ear to some of these criticisms. Nevertheless, religious school leaders have a long history of practicing inclusion and have criticized public schools for separating out special education students and those with disabilities far too much (Lane & Kinnison, 2014; Sutton, 1993).

For too long the focus of educators and American society as a whole has been too narrow when it comes to schooling children—in special education—and with disabilities. Like a plethora of other issues confronting society, too many times politicians, educators, and people at large think there is simply one solution that, although it is small, will suddenly make the statistics read much better. The reality is that such an approach with regard to special education appears naïve. The results of this meta-analysis do point out that some strategies and qualities are most important, but they also encourage a comprehensive approach combining a number of these variables. To overlook this aspect of the findings would likely do a disservice to children and adolescents with disabilities. Moreover, it is particularly interesting that variables founded in a faith-based world view were most associated with positive academic and behavioral outcomes.

#### POLICY IMPLICATIONS AND CONCLUDING THOUGHTS

Given that four variables examined are related to having a faith-based world view, i.e., sending children to a religious private school, character education, inclusion, and family factors, the results could support a broader implementation of school choice programs that include private religious schools. School choice may especially help children with disabilities because this meta-analysis indicates that these students may do better in religious schools versus public ones, even when the other three variables that reflect a faith-based world view are included in the analysis. Confirming this possibility is the fact that Anderson and his colleagues (2015) found that attending a religious school tended to insulate African American, Latino, and other students from being too easily assigned to special education.

Meta-analytic research also indicates that the achievement gap is about 25% narrower in religious schools versus traditional public schools and public charter schools (Jeynes, 2012, 2014).

Another *possible* policy implication is the extent that family factors (levels of parental involvement or parental family structure), as well as friends and support, appear to benefit students with disabilities, delaying kindergarten and being educated at home during this time may help. This may be particularly true of youths with disabilities (Mills, 1998; United States Administration for Children and Families, 2005). Many schools overseas are more likely to have the attitude that intensifying student effort, after school programs, and doing more to ensure parental involvement are better approaches than being quick to place a child in a special education program.

To the extent that special education students and those youths with disabilities do best when family factors, especially parental involvement and family structure, are strong and stable and other family strategies that include parents sending their children to inclusive and religious school environments, are in place, it makes sense to especially investigate these two factors further in future studies. Moreover, given that the results of this meta-

analysis suggest that a comprehensive approach to dealing with special education it might be wise for religious schools and public schools to learn from each other and work together to improve education for those with special needs and disabilities.

### **REFERENCES**

- Amar, J. (2019, August 13). The liturgy was made for all people and languages, not just Latin. America: The Jesuit review.
- Anderson, J. A., Howland, A. A. & McCoach, D. B. (2015). Parental characteristics and resiliency in identification rates for Special education. *Preventing School Failure*, 59 (2), 63-72.
- Bean, K. F. (2012). Ecological factors and the behavioral and educational outcomes of African American students in special education. Dissertation, Arizona State University.
- Bean, K. F. & Sidona-Arcoleo, K. (2012). The relationship between environment, efficacy beliefs, and academic achievement of low-income African American children in special education. *Journal of Social Work in Disability and Rehabilitation*, 11 (4), 268-288.
- Black, K. (2011). Closing the achievement gap: Impact of inclusion upon achievement rates of students with special needs. *Dissertation Abstracts*, University of Texas at El Paso.
- Boughan, K. (1996). The academic impact of student support services program participation in fiscal year 1996. Program evaluation.Largo, MD:Prince George's Community College.
- Bradshaw, C. P., Waasdorp, T. E. & Leaf, P. J. (2012). Effects of school-wide positive behavioral interventions and supports on child behavior problems. *Pediatrics*, 130 (5), 1136-1145.
- Brubacher, M. R., McMahon, D. & Keys, C. B. (2018). Self-efficacy, anxiety, and aggression among African American and Latino adolescents with disabilities. *Exceptionality*, 26 (1), 20-34.
- Bunch-Crump, K. R. & Lo, Y. (2017). An investigation of multitiered behavioral interventions on disruptive behavior and academic engagement of elementary students. *Behavior Interventions*, 19 (4), 216-227.
- Burke, M. M., Rios, K. & Garcia, M. (2020). Examining differences in empowerment, special education, knowledge, and family-school partnerships among Latino and white families of children with autism spectrum disorder. *International Journal of Developmental Disabilities*, 66 (10), 75-81.
- Carter, E. W., Wehby, J. Hughes, C., Johnson, S. M., Plank, D. R., Barton-Arwood, S. M. & Lunsford, L. B. (2005). Preparing adolescents with high-incidence disabilities from high stakes testing with strategy instruction. *Preventing School Failure*, 49 (2), 55-62.
- Cavendish, W., Nielsen, A.L. & Montague, M. (2012). Parent attachment and problem behavior trajectories of diverse adolescents. *Journal of Adolescence*, *35* (6), 1629-1639.
- Chesmore, A. A., Oh, S. & Reynolds, A. J. (2016). Childhood placement in special education and adult well-being. *Journal of Special Education*, 50 (2), 109-120.
- Clements, T. P. (2012). How does inclusion affect African American middle school

- special education student performance? A comparison of disability categories. Dissertation, Union University, Jackson, TN.
- Cochran, L., Feng, H. & Cartledge, G. (1993). The effects of cross-age tutoring on the academic achievement, social behaviors, and self-perceptions of low achieving African American males with behavioral disorders. *Behavioral Disorders*, 18 (4), 292-302.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cooper, H. Hedges, L. V. & Valentine, J. C. (2019). *The handbook of research synthesis and meta-analysis*. New York Russell Sage Foundation.
- Darney, D., Reinke, W. M., Herman, K. C. & Stomort, M. & Ialango, N. S. (2013). Children with co-occurring academic and behavior problems in first distal problems in twelfth grade. *Journal of School Psychology*, *51* (1), 117-128.
- Dawkins, H. S. (2010). The impact of inclusion on the academic achievement of high school special education students. Dissertation, Gardener Webb University, Boiling Springs, NC.
- Decker, D. M., Dona, D. P. & Christenson, S. L. (2007). Behaviorally at-risk African American students: The importance of student-teacher relationships for student outcomes. *Journal of School Psychology*, 45 (1), 83-109.
- Dow, P. (2013). Virtuous minds: Intellectual character development for students, educators, and parents. Downers Grove, IL: InterVarsity Press.
- Esser, M. M. S. (2002). The effects of metacognitive strategy training and attribution retraining on reading comprehension in African-American students with learning disabilities. *Dissertation Abstracts International*, 62 A, p. 2340, University of Wisconsin, Milwaukee, Milwaukee, WI.
- Fagan, T. K. (2003). *School* psychology. In Friedheim, D. K (Ed.). *Handbook of psychology: History of psychology, Vol. I.* (pp. 413-429). Hoboken, NJ: Wiley & Sons.
- Glass, G. V., McGaw, B. & Smith, M. L. (1981). *Meta-analysis in social research*. Beverly Hills: Sage.
- Gonzales, L. & Cramer, E. (2013). Class placement and academic and behavioral variables as predictors of graduation for students with disabilities. *Journal of Urban Learning, Teaching, and Research*, 9.
- Gregory, J. F., Shanahan, F. & Walberg, H. (1987). Orthopedically handicapped students in public and private schools. *Exceptional Child*, *34* (2), 85-92.
- Greene, J. P. & Winters, M. A. (2008). The effects of special education vouchers on public school achievement: Evidence from Florida's McKay Scholarship Program. Civic Report No. 52. New York: Center for Civic Innovation.
- Hedges, L. V. & Vevea, J. L. (1998). Fixed and random effects models in meta-analysis. *Psychological Method*, *3*, 486-504.
- Heward, W. L. (2003). *Exceptional children: An introduction to special education*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Hinshaw, S. P. & Scheffler, R.M. (2014). *The ADHD explosion: Myths, medications, money, and today's push for performance*. Oxford, UK: Oxford University Press.
- Hughes, M. T. & Talbott. E. (eds.). (2017). *The handbook of diversity in special education*. Chichester, UK: Wiley & Sons.
- Jeynes, W. (2000). Assessing school choice: A balanced perspective. *Cambridge Journal of Education*, 30 (2), 223-241.

- Jeynes, W. (2009). A call for character education and prayer in the schools. Westport, CT: Praeger.
- 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 (3), 747-774.
- Jeynes, W. (2012). A meta-analysis on the effects and contributions of public, public charter, and religious schools on student outcomes. *Peabody Journal of Education*, 87 (3), 265-305.
- Jeynes, W. (2014). School choice and the achievement gap. *Education and Urban Society*, 46 (2), 163-180.
- Jeynes, W. (2015a). A meta-analysis on the factors that best reduce the achievement gap. *Education & Urban Society*, 47(5), 523–554.
- Jeynes, W. (2015b). A meta-analysis: The relationship between father involvement and student academic achievement. *Urban Education*, 50 (4), 387-423.
- Jeynes, W. (2019). A meta-analysis: The relationship between character education programs and student outcomes. *Education & Urban Society*, 51, (1), 33-71.
- Jeynes, W. (2022). A meta-analysis of the relationship between cannabis, opiates, cocaine, heroin, or other illegal drug use and student academic and behavioral outcomes. *Education and Urban Society*, *54* (6), 656-694.
- Johnson, L. C., Jr. (2018). The impact of positive behavior interventions and supports on the perception, attitudes, and behaviors of African American male special education students in a South Carolina middle school. *Dissertation Abstracts*, Wingate University, Hendersonville, NC.
- Kelderman, E. (2008). As New York goes, so goes the country? *Chronicle of Higher Education*, 55 (6), A5.
- Lane, J. M. & Kinnison, Q. P. (2014). Welcoming children with special needs: Empowering Christian special education through purpose, policies, and Procedures. Bloomington, IN: West Bow Press.
- Lo, Y, & Cartledge, G. (2000). FBA and BIP: Increasing the behavior of adjustment of African American boys in schools. *Behavioral Disorders*, *31* (2), 147-161.
- Lo, Y, Mustian, A. C., Brophy, A. & White, R. B. (2011). Peer-mediated social skill instruction for African American males with or at risk of mild disabilities. *Exceptionality*, *19*, 191-209.
- McMahon, D., Keys, C. B., Bernard, L., Crouch, R. & Coker, C. (2016). School inclusion: A multidimensional framework and links with outcomes among urban youth with disabilities. *Journal of Community Psychology*, 44 (5), 656-673.
- Meany-Walen, K. K., Braton, S. C. & Kottman, T. (2014). Effects of Adlerian therapy on reducing students' disruptive behavior. *Journal of Counseling and Development*, 92 (1), 47-56.
- Merriam-Webster Dictionary, (2021). *Disability*. https://www.merriam-webster.com/dictionary/disability.
- Mills, K. (1998). Something better for my children: The history and the people of Head Start. New York: Dutton.
- Morgan, P. L. et al. (2017). Are black children disproportionately overrepresented in special education? A best evidence thesis. *Exceptional Children*, 63 (2), 181-198.
- Patterson, K. B. (2005). Increasing positive outcomes for African American males in special education with the use of guided notes. *Journal of Negro Education*, 74 (4), 311-320.

- Phillips, D. M. (2013). The relationship between educational placement, instructional practices, and achievement gains of black students with specific learning disabilities in secondary urban school settings. Dissertation Abstracts International 73 (11 A/E), Florida Atlantic, Baca Raton, FL.
- Proctor, S. L., Graves, S. L. & Esch, R. C. (2012). Assessing African American students for specific learning disabilities: The promises and perils of response intervention. *Journal of Negro Education*, 81 (3), 268-282.
- Ruiz, N. T. & Figueroa, R. A. (1995). Learning handicapped classrooms with Latino students: The Optimal Teaching Environment (OTE) Project. *Education and Urban Society*, 27 (4), 463-483.
- Strauss, V. (2013). Common Core tests widen achievement gap in New York. Common Core equity. *Washington Post*, 26 August. https://www.washingtonpost.com/news/answer-sheet/wp/2013/08/26/common-core-tests-widen-achievement-gap-in-new-york/ Retrieved on May 6, 2021.
- Strauss, V. (2014). The myth of Common Core equity. *Washington Post*, 10 March. https://www.washingtonpost.com/news/answer-sheet/wp/2014/03/10/the-myth-of-common-core-equity/ Retrieved on May 6, 2021.
- Sutton, J. P. (1993). *Special education, a biblical approach: Special education resources for Christian schools*. Greenville, SC: Hidden Treasure.
- Thompson, T. L. (2016). The influence of African American parents' educational values on the scholastic adjustment on their children with and without exceptional leaning needs. *Dissertation Abstracts International*, 76 (9-A/E). Southern University, Baton Rouge, Louisiana.
- Towns, E. L. (2009). *A history of religious educators*. Lynchburg, VA: Liberty University.
- United States Administration for Children and Families. (2005). FACES findings: New research on Head Start outcomes and program quality. Washington DC: Administration for Children and Families. Washington Post. (2015). Report: 175,000 plus N.Y. students opt out of Common Core tests, more expected. April 14. https://www.washingtonpost.com/news/answer-sheet/wp/2015/04/18/report-175000-plus-n-y-students-opt-out-of-common-coretest-more-expected/
- Welch, T. F. (2016). The impact of positive behavioral interventions and supports on academic achievement among African American male students diagnosed as emotionally disturbed. *Dissertation Abstracts International*, California State University, Fresno.
- Wikipedia. (2021). *Emotional or Behavioral Disability*. https://en.wikipedia.org/wiki/Emotional\_or\_behavioral\_disability.
- Williamson, B. D., Campbell, W. G. & Lo, Y. (2009). Using a random dependent group contingency to increase on task behaviors of high school students with high incidence disabilities. *Psychology in the Schools*, 46 (10), 1074-1083.
- Wu, Q. Morgan, P. L. & Farkas, G. (2012). Does minority status increase the effect of disability status on elementary schoolchildren's academic achievement. *Remedial and Special Education*, *35* (6), 366-377.