

BRINGING ACHIEVEMENT HOME:

<u>A Review of the Academic</u> Outcomes of Homeschooling Students in the United States



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Lindsey M. Burke



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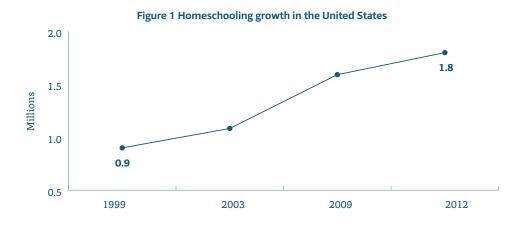
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Introduction

Over the past several decades, the United States has experienced a dramatic increase in the number of families choosing to homeschool. As recently as the 1970s, between just 10,000 to 15,000 children were homeschooled in the United States.¹ By 1990, the number of children being homeschooled had grown to 300,000, increasing further to 360,000 by 1994 and to 850,000 by 1996.² By 2012 the number of children being homeschooled had reached 1.8 million students—a doubling of the number of families homeschooling in a little over a decade.³ The proportion of homeschooling students increased from 1.7 percent of students in the equivalent of grades K-12 to 3.4 percent from 1999 to 2012.⁴ As Joseph Murphy notes, "when life cycle numbers are compiled, we discover that 6 to 12 percent of all students will have been educated at home at some time in their K-12 educational career."⁵

Homeschooling has enjoyed an enormous surge in popularity in recent years. With its growth has come additional information about the reasons families choose to homeschool, and the outcomes of the students who participate. This review of the literature builds off reviews conducted by Brian D. Ray, and Robert Kunzman and Milton Gaither.⁶ Although this broadens the inclusion criteria in some aspects, it narrows it in others. This review does not include all of the literature that exists on homeschooling, but instead focuses on the most prominent studies included in the two previous reviews.





Although methodological limitations prevent scholars from drawing a causal connection between homeschooling and the largely positive outcomes identified in the literature, the research on the outcomes of those who homeschool, whether the result of homeschooling itself or other unobservable characteristics of families who homeschool such as greater parental involvement, shows positive academic outcomes for participants.

Why Parents Homeschool

Families choose to homeschool for a variety of reasons. Many families choose to homeschool out of dissatisfaction with the public education system, specifically bureaucratization.⁷ Others choose to homeschool in order to impart religious values and instruction to their children.⁸ Still others choose to do so in order to provide moral instruction or out of issues pertaining to "safety, drugs, and negative peer pressure".⁹ Parents homeschool to provide a quality education and to strengthen family relationships between children and parents and reduce moral laxity.¹⁰

Among African American parents, homeschooling has been identified as an education choice in order to impact black culture and history, in addition to having a quality education option.¹¹

Among parents of children with special needs, the choice to homeschool is often borne out of a dissatisfaction with the services available to them in the public system, or out of a need to remove their children with special needs from environments in which they were bullied or faced stigma.¹²

Although these reasons vary from family to family, there is a unifying thread that connects them all: a desire to have greater control over the direction of their children's education. Whatever the reason a family may have for choosing to homeschool, there is growing public acceptance of homeschooling as a valuable education choice.¹³

Limitations in Evaluating the Effects of Homeschooling on Academic Achievement

Isolating the causal effect of homeschooling as an intervention is challenging absent experimental evaluations. Without rigorous randomized controlled trial evaluations (RCTs), it is difficult to control for selection bias in homeschooling, which could





mean that those choosing to homeschool are different from those choosing nonhomeschooling options on unobservable characteristics, "thereby undercutting the possibility of identifying homeschooling as the causal mechanism in improving outcomes".¹⁴ Selection bias in homeschooling research could mean, for example, that homeschooling parents have higher levels of parental involvement, which could be the underlying factor leading to higher levels of academic achievement among their children, rather than the act of homeschooling itself. It is possible, then, that those higher levels of parental involvement could have led to those children doing just as well in a non-homeschooling setting. Inherent in the design of homeschooling is a key issue that prevents RCTs from being conducted: there will never be oversubscription (demand for homeschooling exceeding supply), thus precluding a lottery and randomized controlled trial evaluations of its effects. Hence, studies of academic achievement among homeschoolers do not control for confounding variables through the use of RCTs.¹⁵

A second methodological limitation is that many homeschooling studies use convenience samples, which may not be representative of the targeted sample under discussion, small samples, or methods that lack an appropriate comparison group.¹⁶ Non-representative samples, low response rates in surveys, difficulty in conducting rigorous experimental evaluation through RCTs, and self-selection leading to sampling bias are frequent issues inherent in homeschooling research, and ultimately preclude researchers from being able to make causal claims about the effects of homeschooling or to generalize findings.

Despite these difficulties, homeschool scholars have attempted to address some of these methodological limitations through increasingly sophisticated research techniques, such as quantitative statistical analysis and matching designs.¹⁷ Moreover, homeschool researchers have been consistently clear about these methodological limitations.¹⁸ This paper, therefore, considers the academic and other effects experienced by children who homeschool, recognizing the selection bias inherent in studying the impact of homeschooling. That is to say, the "impact" of homeschooling may have as much to do with "the predispositions that most homeschooling families share" than a particular pedagogical or curricular approach.¹⁹ Nonetheless, among those who choose to homeschool, the positive effects are demonstrable. Although study designs limit researchers' ability to draw a causal connection, it is clear the homeschooling population experiences positive academic outcomes.

Literature Review Methods

This review of the literature builds off reviews conducted by Ray (2017) and Kunzman and Gaither (2013), broadening the inclusion criteria in some aspects and narrowing it



in others.²⁰ The inclusion criteria were broadened by including studies from the 1980s forward through 2017. It was narrowed by including only U.S.-based studies, with the exception of a study by Martin-Chang, Gould, and Meuse (2011), as that study is widely recognized to be innovative in design and could serve as a methods framework for future study of the effects of homeschooling on participants.²¹ It is further limited because this review does not include all of the literature that exists on homeschooling. However, the reviews that this review builds off, Ray (2017) and Kunzman and Gaither (2013), cover a wide array of the most prominent literature on the subject.²² Ray (2017) conducted a review of the homeschooling literature that included "the entirety of the English-language set of homeschool research and scholarship" and built off an ongoing bibliography he has been continuously updating since 1983.²³ Kunzman and Gaither (2013) analyzed some 1,400 English-language texts, including scholarly articles, dissertations, and books, among other sources.²⁴

This review builds off these sets of literature reviews, incorporating additional studies identified in their reference lists. From that point, several factors bounded this current review of the literature:

- 1. Did the study address the central question of the impact of homeschooling on the academic outcomes of participants?
- 2. Did the study incorporate a defensible methodology to guide the research, either using surveys, interviews, case studies, descriptive statistics, matching methods, or an explanatory design? Was the data used appropriate for answering the question posed by the study's author(s)?
- 3. Has the study been cited regularly in other studies of the effects of homeschooling?

Based on those criteria, this review identified 38 total studies that addressed the question of the academic outcomes of homeschoolers. Those studies were subdivided into two categories: studies that addressed the academic outcomes of homeschoolers in the elementary and secondary years, and studies that addressed the academic outcomes of homeschoolers enrolled in or preparing for postsecondary education.

Homeschooled Students' Academic Outcomes: Findings

Twenty-six studies addressed the academic outcomes of K-12 level homeschooled students. Of those 26,15 studies reported mainly positive findings, with homeschoolers largely outperforming their non-homeschooled counterparts; nine studies were mixed or neutral in their findings; and two had negative or worse outcomes for homeschooled students relative to their non-homeschooled peers. (See table 1). Twelve studies addressed the academic outcomes of homeschooled students pursuing higher education.

Of those 12, nine found positive results, with homeschoolers outperforming their nonhomeschooled peers; three were neutral or found mixed results; and no studies found a negative outcome or showed homeschoolers to be performing worse than their nonhomeschooled counterparts. (See table 2).

Taken together, 24 out of 38 (approximately two-thirds) of studies examining the academic performance of homeschooled students in kindergarten through postsecondary education find positive outcomes; 12 out of 38 (nearly one-third) find mixed or neutral outcomes for homeschoolers; and two out of 38 (roughly five percent) of studies find negative or worse outcomes for homeschooled students relative to their non-homeschooled peers. One of those two is now nearly two decades old.²⁵

Author(s)	Year	Design	Sample Size	Findings	
Ray ²⁶	2015	Homeschooled lang students mat for hom students students		Higher reading, language, and math scores for black homeschooling students.	Pos
Green-Hennessy ²⁷	2014	Matching	1094 homeschooled students	Religious homeschooled and traditionally schooled students achieved comparable results as did non- religious students from both groups.	Neut
Martin-Chang, Gould, & Meuse ²⁸ (see Table 4.1 on page 19, Table 4.2 on page 19)	2011	Matching	37 homeschooled students matched with 37 public schooled students	Homeschooling group outscored the public school group on a variety of achievement tests; stronger performance among homeschoolers with more structured instruction.	Pos

Table 1 Academic achievement of K-12 students



Author(s)	Year	Design	Sample Size	Findings	
Ray ²⁹	2010	Descriptive analysis of the standardized test score outcomes of homeschooling students	11,692 homeschooled students	Examined the test scores of over 11,000 homeschooled children; homeschooled children performed better than average compared to traditionally schooled children.	Pos
Quaqish ³⁰	2007	Descriptive analysis of ACT math scores of a matched group of homeschooled and non- homeschooled students	escriptive 1,477 On av halysis of ACT homeschooled students slight f a matched roup of omeschooled nd non- omeschooled of sixt		Neg
Collom ³¹	2005	Descriptive analysis of the standardized test score outcomes of HomeCharter students	235 homeschooled students	Students who attend Home Charter (A charter school founded by homeschoolers with courses taught by parents) performed at the same level as the national average (54th percentile) on standardized tests of reading, language, and math.	Mixed
Belfield ³²	2005	Descriptive analysis of high school seniors' SAT scores	6,033 homeschooled students	Homeschoolers scored slightly better than predicted on the SAT verbal than SAT math; differences were minimized when family background was controlled for.	Pos



Author(s)	Year	Design	Sample Size	Findings	
Barwegen, Falciani, Putnam, Reamer, & Stair ³³	2004	Survey of student perceptions of parent involvement as a control for homeschool and public school student performance on the ACT	127 homeschooled students	Public school students who had high levels of parental involvement performing as well as homeschool students.	Mixed
Duvall, Delquadri, & Ward ³⁴	2004	Small pre-test, post-test study of four students with ADHD	4 students, total	Homeschool students with ADHD "were academically engaged about two times as often as public school students and experienced more reading and math gains."	Pos
Wenger & Hodari ³⁵	2004	Descriptive analysis of test score data	540 homeschooled students	Homeschooled students outperform national norms on academic achievement tests; performed as well on the Armed Forces Qualification Test as public and private school students.	Pos
Medlin & Blackmer ³⁶	2000	Explanatory study of students in grades 4—8	30 homeschooled students, out of 96 total	Homeschooled students performed better than public school students not assessed using portfolios, but performed worse in math.	Mixed



Author(s)	Year	Design	Sample Size	Findings	
Ray ³⁷	2000	Statistical analysis of standardized achievement results of 1,952 homeschool students	1,952 homeschooled students	Homeschool students in the study scored at or above the 80th percentile in standardized tests of reading, language, math, social studies, and science.	Pos
Rudner ³⁸	1999	Survey of 20,760 homeschool students who participated in the testing services offered by Bob Jones University took either the Iowa Tests of Basic Skills or the Tests of Achievement and Proficiency.	20,760 homeschooled students	Achievement outcomes in the 70th to 80th percentile on the Iowa Tests of Basic Skills (ITBS) or the Tests of Achievement and Proficiency (TAP) among students drawn from a sample of who responded to a survey administered by Bob Jones University.	Pos
Boulter ³⁹	1999	Descriptive study using a longitudinal sample of 110 homeschool students	110 homeschooled students	Included homeschooled students whose parents averaged only 13 years of education. Study found a gradual decline in achievement scores the longer a child remained homeschooled, which may have been the result of the relatively low levels of parent education in the sample.	Neg

Author(s)	Year	Design	Sample Size	Findings	
Duvall, Ward, Delquadri, & Greenwood ⁴⁰ (see Table 3 on page 17)	1997	Explanatory	4 homeschooled students, matched with 4 public school students	Homeschool students with special needs made more progress in reading and language than similar public school students, but math gains were similar.	Pos
Galloway ⁴¹	1995	Descriptive analysis of ACT scores	60 homeschooled students, compared with 60 public schooled and 60 private schooled	50Homeschoolednomeschooledstudentsstudents,outperformedcomparedprivate schoolwith 60 publicstudents onschooled andACT English60 privateassessment.	
Oliveira, Watson, & Sutton ⁴²	1994	Descriptive analysis of critical thinking skills of California homeschooled students	58 homeschooled students out of 789 total	No significant difference between students who had been homeschooled and those attending conventional schools on the California Critical Thinking Skills Test.	Mixed
Calvery, Bell, & Vaupel ⁴³	1992	Descriptive analysis of academic achievement tests of Arkansas homeschoolers	428 homeschooled students	Homeschooled students outperform public school peers on standardized tests in grades 4 and 7, and scored significantly above the public school mean in grade 10, with the exception of language.	Pos



Author(s)	Year	Design	Sample Size	Findings		
Ray & Wartes ⁴⁴	1991	Descriptive analysis of reading and math outcomes of homeschooled students in Washington state	37 homeschooled students matched with 37 others	Homeschooled students in Washington state scored above average in reading and vocabulary but below average in math.	Mixed	
Ray ⁴⁵	1990	Study of 1,500 homeschooling families and 4,600 children	tudy of 1,5004,600Homeschooledomeschooling milies andhomeschooled studentsstudents			
Wartes ⁴⁶	1990	Survey of homeschooling families in Washington state	2,911 homeschooled students in Part 1, 877 in Part 2	Test scores higher for homeschoolers in reading, language and math.	Pos	
Wartes ⁴⁷	1988	Survey of homeschooling families in Washington state	219 homeschooled students in Washington state	Test scores higher for homeschoolers in reading, language, math, social studies and science.	Pos	
Frost ⁴⁸	1988	Descriptive analysis of math outcomes of Illinois homeschooled students	Summary of four formal studies	Illinois homeschoolers scored above average in all subjects but math.	Pos	
Rakestraw ⁴⁹	1988	Descriptive analysis of academic achievement levels of Alabama homeschooled students	84 homeschooled students in Alabama and 60 of their parents	ents in achievement for ama and homeschooled their students relative		



Author(s)	Year	Design	Sample Size	Findings	
Delahooke⁵⁰	1986	Comparative exploratory study	32 homeschooled students compared with 28 private schooled	No difference in academic achievement between homeschooled and private schooled students.	Mixed
Schemmer ⁵¹	1985	Descriptive	4 homeschooling families	Homeschooled students performed well but in some incidents did not achieve 12 months' growth in a year's time.	Mixed

Table 2 Academic achievement through college

Author(s)	Year	Design	Sample Size	Findings	
Yu, Sackett, & Kuncel ⁵²	2016	Statistical analysis	732 homeschooled matched with 732 others	Homeschooled students perform similarly to traditionally educated students matched on demographics and academic preparedness in first year college GPA.	Mixed
Wilkens, Wade, Sonnert, & Sadler ⁵³	2015	Survey of college students enrolled in calculus	190 homeschooled students	Homeschooled students performed better in calculus than their non- homeschooled peers.	Pos
Snyder ⁵⁴	2013	Descriptive analysis of archival data of students attending a Catholic university	129 homeschooled students out of 408 total	Homeschooled students enrolled in a Catholic university had higher SAT, ACT, and GPA scores than non- homeschooled students.	Pos



Author(s)	Author(s) Year		Sample Size	Findings	
Drenovsky & Cohen ⁵⁵	2012	Survey of homeschooled college students	185 homeschooled students	Self-reported college grades were higher for homeschooled students than non- homeschooled students.	Pos
Cogan ⁵⁶	2010	Explanatory study of homeschooled college students	76 homeschooled students	Homeschooled students at a midwest college had higher GPAs than their traditionally schooled peers.	Pos
Saunders ⁵⁷	2009	Survey of college enrolled homeschooled students 261 students Hore students personal for the students total		Homeschooled students displayed higher rates of college persistence into their sophomore years.	Pos
White, Williford, Brower, Collins, Merry, & Washington ⁵⁸	2007	Exploratory study of homeschooled students attending a Christian college	Exploratory18Istudy ofhomeschooledstudentsgnomeschooledstudentsggstudentsmatched withgattending18 othersga Christiantg		Pos
Jones & Gloeckner ⁵⁹	2004	Descriptive analysis of homeschooled and traditionally schooled students' first year academic performance in college	53 homeschooled students matched with 53 others	Although not statistically significant, homeschooled students had higher ACT scores and GPAs during their first year of college.	Pos
Holder ⁶⁰	2001	Explanatory study of homeschooled college students	17 homeschooled students matched with 17 traditionally schooled	Homeschooled students at a private Christian college had higher GPAs than their traditionally schooled peers.	Pos

Author(s)	Year	Design	Sample Size	Findings	
Sutton & Galloway ⁶¹	2000	Descriptive analysis of academic achievement, leadership, professional aptitude, social behavior, and physical activity of homeschooled and traditionally schooled students	40 indicators of college success in three high school settings	College-bound homeschooled students, private school students, and public school students "received essentially equivalent educations."	Mixed
Gray ⁶²	1998	Descriptive analysis of SAT scores	N/A	No significant difference between homeschooled students and non- homeschooled students on SAT scores, grades in English coursework, or overall GPA in Georgia universities.	Mixed
Jenkins ⁶³	1998	Descriptive analysis of community college GPAs	N/A	Homeschooled students who attended community college had higher GPAs than non- homeschooled students in their first year of college; homeschooled students outperformed non- homeschooled students in reading and math on the Texas Academic Skills Program assessment.	Pos



Again, because of the limitations inherent in the research methodologies of each of those studies, no causal claims about the actual impact of homeschool can be made. However, these findings do suggest, that for the populations included in the studies (which likely suffer from selection bias), that homeschoolers have strong academic outcomes from their earliest years and into their postsecondary educations.

There are also several well-designed studies of note that attempt to control for background variables and isolate the impact of homeschooling itself, understanding the intervention as something distinct from greater parental involvement that confounds the homeschooling findings generally.⁶⁴ Belfield (2005) controlled for family background and found that homeschooled students outperformed non-homeschooled students on the SAT verbal test, but not the SAT math test.⁶⁵ Rudner's (1999) survey of more than 20,000 homeschooled students is frequently cited. Although Rudner had a large sample from which to draw, the sample was a homogenous group of students who participated in the testing services offered by a single school (Bob Jones University), making causal claims inappropriate, as Rudner himself notes in the study.⁶⁶ However, as a descriptive study of that particular cohort of homeschooled students, the survey yielded information that these students had academic achievement outcomes in the 70th to 80th percentile on standardized academic achievement tests. As Rudner (1999) demonstrated, homeschooled students perform about one grade level ahead of their public school peers in first through fourth grade, though as previously noted, and as Rudner cautions, readers should be careful not to draw a causal link.⁶⁷

Barwegen, Falciani, Putnam, Reamer, & Stair (2004) controlled for parental involvement in order to determine if the ACT of homeschooled students remained higher than their public school peers when parental involvement was factored out.68 The authors found that, consistent with the literature on parental involvement, there is a relationship between academic achievement and students' perceptions of parental involvement, with greater parental involvement correlating with higher ACT scores. They found that there was no significant difference between the ACT scores of homeschool students and those students reporting high levels of parental involvement, with public school students who had high levels of parental involvement performing as well as homeschool students. Martin-Chang, Gould, and Meuse (2011) carefully controlled for background characteristics by parsing-out students who were only homeschooled and those who were solely educated in public schools, carefully matched the two groups based on geographic location, largely controlled for marital status of the mothers in the study, and then did new assessments of both groups.⁶⁹ The homeschooled group was found to outperform the public school group on a variety of academic achievement tests, particularly among those homeschooled students who had a more structured homeschool environment.⁷⁰

HSLDA

Several studies have specifically examined the outcomes of students with special needs learning in a homeschool environment. Although sample sizes were small, the researchers conducting these studies found that homeschooling provided at least as good of an educational environment for children with special needs as public schools did.⁷¹ The authors found that students with special needs in homeschooling environments "were engaged in their learning more often than students in traditional public schools and realized greater gains in math and reading achievement."72

A-Post-test B	-Gain	Rea	ding	M	ath	Written I	Language
Group	Subject	А	В	А	В	Α	В
Homeschool	1	114	3	98	10	89	-2
	2	84	3	84	13	79	9
	3	107	2	109	1	93	5
	4	78	3	93	2	72	2
Mean (HS)		95.8	2.8	96	6.5	83.3	3.5
Standard Deviation		17.4	0.5	10.4	5.9	9.5	4.7
Public School	5	74	-2	81	2	76	-2
	6	74	-3	109	15	84	4
	7	80	-5	97	6	84	1
	8	69	0	88	3	63	0
Mean (PS)		74.3	-2.5	93.8	6.5	76.8	0.8
Standard Deviation		4.5	2.1	12.1	5.9	9.9	2.5

Table 3 Comparing public school and structured homeschool students' Woodcock-Johnson Achievement Test scores (data from Duvall 1997)

Sample size includes 8 students with special needs, including 4 homeschool students and 4 public school students.

In addition to the scholarly treatments of homeschooling outcomes, state departments of education have also analyzed data on homeschool student performance, reporting that they perform above average on standardized tests. For example, Oregon homeschooled students' median percentile range on state standardized tests was between the 71st and 80th percentile according to the Oregon Department of Education (1990, 1998); homeschooled students in Tennessee were similarly found to score between the 70th and 80th percentile on standardized tests (1988). Ray (2000) found homeschooled students to generally perform above average on state standardized tests, with Indiana homeschool students averaging in the 86th percentile on standardized tests; Massachusetts students scoring in the 85th percentile; Montana students scoring in the 70th to 72nd percentile; North Dakota students scoring in the 85th percentile;



Oklahoma homeschool students scoring in the 88th percentile; and homeschool students in Pennsylvania scoring in the 60th to 74th percentile. Although generally performing among the upper bounds of the percentile distribution, homeschooling students were found to perform in just the 53rd percentile in mathematics in Washington state, and to perform below average generally in New Mexico.73

Conclusion: Homeschooling Families Have Largely Positive Academic Outcomes

On the whole, the literature suggests students who homeschool have strong academic outcomes, with approximately two thirds of studies examining the academic performance of homeschooled students in kindergarten through postsecondary education finding positive outcomes. Twenty-four out of 38 (approximately two thirds) find positive outcomes; 12 out of 38 (nearly one-third) find mixed or neutral outcomes for homeschoolers; and two out of 38 (roughly five percent) of studies find negative or worse outcomes for homeschooled students relative to their non-homeschooled peers. One of those two is now nearly two decades old.⁷⁴

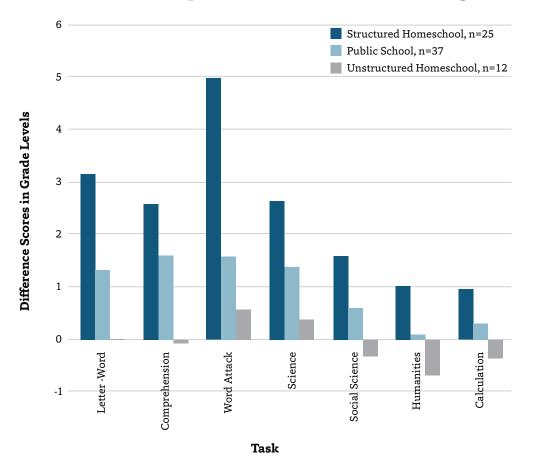
Data from state departments of education also show that the median percentile range for homeschooled students on standardized tests of academic achievement is above that of their non-homeschooled peers. Students who previously homeschooled have also been shown to transition smoothly into and excel in college.⁷⁵ Although methodological limitations prevent scholars from drawing a causal connection between homeschooling and these largely positive outcomes, the research on the outcomes of those who homeschool, whether the result of homeschooling itself or other unobservable characteristics of families who homeschool such as greater parental involvement, shows positive academic outcomes for participants.



	Public	school	Structur	Structured homeschooled			
Test	M	SD	М	SD	r(60) ^a	р	\mathfrak{y}^2
Letter-Word	1.38	1.89	3.11	2.36	3.20	.002	.15
Comprehension	1.58	2.04	2.56	1.95	1.86	.068	.06
Word Attack	1.61	3.80	4.89	4.91	2.90 ª	.006	.13
Science	1.37	1.75	2.61	2.31	2.41	.019	.09
Social Science	0.59	1.32	1.59	1.24	2.97	.004	.13
Humanities	-0.005	1.58	0.99	2.14	2.11	.039	.07
Calculation	0.27	1.27	0.94	0.92	2.29	.026	.08

Table 4.1 Comparing public school and structured homeschool students' follow-up test scores (data from Martin-Chang, et al. 2011)

Table 4.2 Comparing public school, structured homeschool, and unstructuredhomeschool students' follow-up test scores (data from Martin-Chang, et al. 2011)



For Further Discussion: Test Scores as a Reductionist Construction of the Benefits of Homeschooling

Although it is critical to acknowledge the limitations of existing research, an equally important issue should color our understanding of homeschooling outcomes: many homeschoolers across the political spectrum reject the notion that test scores and the types of assessments used in public schools should be the sole—or are even appropriate—measures of homeschooling success.⁷⁶ Larry Kaseman and Susan Kaseman for example argue that the right to homeschool transcends test scores, and that other important outcomes, such as the inculcation of values, should serve as the barometer of whether homeschooling "works."⁷⁷

Indeed, as McShane, Wolf, and Hitt (2018) recently documented in a meta-analysis on the effects of school choice on educational attainment, there is a weak relationship between student test scores and later life outcomes.⁷⁸ Although their analysis addressed school choice programs, not homeschooling specifically, their admonition that "policymakers need to be much more humble in what they believe that test scores tell them about the performance of schools of choice" is well taken. Test scores should not, they argue, "occupy a privileged place over parental demand and satisfaction as shortterm measures of school choice success or failure"—a point directly applicable to the homeschooling research.

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Lindsey M. Burke, PhD, is the Will Skillman Fellow in Education and the Director of the Center for Education Policy at the Heritage Foundation, <u>www.Heritage.org</u>.

20 THE HELDA

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Erratum

Lindsey M. Burke: "Bringing Achievement Home: A Review of the Academic Outcomes of Homeschooling Students in the United States," 13.

The first printing of this paper contained an error. The header on page 13 that previously read "Table 2 Academic gain between public school and homeschool students (data from Duvall et al. 1997)" has been corrected to read:

Table 2 Academic achievement through college

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