

Preliminary and Incomplete

Please do not cite without authors' permission.

HOMESCHOOLING IN THE UNITED STATES: REVELATION OR REVOLUTION

Jessica S. Howell
California State University, Sacramento

Michelle Sheran Sylvester
University of North Carolina at Greensboro

*Prepared for the 80th Annual Conference of the Western Economic Association
July 4-8, 2005 · San Francisco, CA*

Abstract

The number of homeschooled children grew by 7-15 percent each year during the 1990s with the result that today as many as 2 million children are currently being educated at home in the United States. Despite this dramatic increase, homeschooling has received surprisingly little attention from economists. In this paper, we briefly discuss homeschooling and the state regulations that govern this educational alternative. We further discuss the available data on homeschooling and utilize the National Household Education Survey data to examine the determinants of a family's decision to homeschool. Preliminary results reveal that mother's employment, parental education, race, and the number and age of siblings play significant roles in a family's decision to homeschool. We also take a first step toward understanding the potential impact of homeschooling on public school resources by analyzing the decision to homeschool part-time versus full-time. We find that part-time homeschoolers more closely resemble non-homeschooling families in several important ways and that part-time homeschooling is much more popular in western states than elsewhere in the U.S. Finally, we utilize data from the General Social Survey to examine how attitudinal variables (*e.g.*, political affiliation, participation in organized religion, views on homosexuality) impact the homeschooling decision.

INTRODUCTION

Recent legislated education reform known as the *No Child Left Behind Act of 2001* was designed to support accountability in public schools and expand school choice for those students in public schools that fail to meet established academic standards. As many school districts discover that they lack the funding necessary to meet their state's accountability standards, our attention is drawn to the increasing number of parents who are taking the education of their children into their own hands. State-level data indicate that the number of homeschooled children grew by 7-15 percent each year during the 1990s resulting in an estimate of as many as 2 million children currently being educated at home in the United States (Lines (1999), Ray (2003)). This estimate of the number of homeschoolers amounts to approximately four percent of all school-aged children and is nearly three times as large as the number of kids currently enrolled in charter schools in the U.S.¹

Homeschooling has received little attention from economists.² The incredible growth in homeschooling is reason enough to take a closer look at this often-ignored schooling alternative, but there are additional factors which indicate that further research on homeschooling is warranted. First, there is evidence that the growth in homeschooling will continue. In a 2003 survey of adults who were themselves homeschooled, 82 percent revealed that they would homeschool their own children and, of those surveyed, 75 percent were already homeschooling their own kids (Ray, 2004).

Second, the notion that homeschooling families pay taxes to support public schools but do not utilize any school resources is somewhat of a myth. Survey data indicates that approximately 20-25 percent of homeschooling families have access to curriculum, books, and other materials provided by their local public school, as well as the opportunity to attend classes and participate in extracurricular activities.³

¹ The Center for Education Reform currently estimates that 698,142 students are enrolled in charter schools (Source: <http://www.edreform.com/index.cfm?fuseAction=stateStatChart&psectionid=15&cSectionID=44>).

² Notable exceptions include Belfield (2004), Houston and Toma (2003), and Isenberg (2002).

³ Parent Survey of the National Household Education Surveys Program (National Center for Education Statistics, U.S. Department of Education, 1999).

Third, there are a variety of public finance issues surrounding increasingly popular partnerships between home educators and traditional public schools. Some public schools collect small amounts of state public education funding for providing ancillary services to homeschoolers (like testing) while others collect as much as they are typically allotted by the state for a full-time-equivalent student. Many public schools (especially charters) have created ‘independent study programs’ that are tailored specifically to the homeschooling population. Participation in these programs technically requires a student to be enrolled, which enables the school to count that student as full-time for the purpose of determining the school’s receipt of state funding, but all or nearly all education still occurs in the home.⁴

Finally, homeschooling represents a more dramatic departure from the traditional education system than other innovations like charter schools and voucher programs. If we believe that charters and vouchers have influenced the public provision of education in this country, then we might logically expect homeschooling to have an even more dramatic influence on the traditional education system.

This paper is organized as follows. In the next section, we briefly discuss what it means to home school and the state regulations that govern this educational alternative. Next, we discuss the datasets utilized to examine the decision to homeschool and present our findings on the determinants of the homeschooling choice. Finally, we discuss our conclusions and plans for future research.

HOMESCHOOLING LEGISLATION

Homeschooling is identified where a child is being educated at home and where any schooling outside of the home does not exceed 25 hours per week. This definition allows children who attend a traditional school three days out of the week to be classified as homeschooled. Note also that the definition of homeschooling does not require that the child’s *parent* be the individual providing the instruction, allowing for the possibility that the teacher could be a guardian, another child’s parent, or a credentialed individual unrelated to the child such as a tutor.

⁴ See Lines (2000) for an in-depth study of public school programs geared toward homeschoolers in Washington.

Most homeschooling rights were established in individual states during the 1980s, and home-based education was practiced legally in all states by 1994. There are a variety of ways to legally homeschool and, since these rules vary slightly from state to state, we discuss the state of California as an example.

There are three ways for parents to legally homeschool a child in California: (1) establish their own private school by filing an affidavit with the California Department of Education, (2) enroll the child in an independent study program that is run through a public/charter school or existing private school, or (3) tutor the child by obtaining teaching credentials in all subjects/levels taught or by hiring an individual who is appropriately credentialed in the state.⁵ The only additional requirement, which is common to all states, is that homeschooling families keep attendance records so that they are able to prove that they are in compliance with compulsory attendance laws. In California, there are no other requirements regarding student progress (*e.g.*, standardized testing or receipt of a GED).

California is considered a low-regulation state when it comes to homeschooling rules. The primary distinction between states with no regulation and those with low regulation is the process of notifying the proper authorities of the intention to homeschool. In a ‘no regulation’ state, like Texas, parents are able to withdraw a student from the public school system and simply write a letter to the principal indicating that the child will be homeschooled. Low regulation states, like California, have a more formal notification process that involves filing an annual certificate of enrollment with the state department of education. States with moderate regulation add to this notification procedure a requirement to administer standardized tests or have the student’s academic progress otherwise evaluated by a professional. There is additional variation across ‘moderate regulation’ states in the frequency with which students are to be tested. In North Carolina, for example, homeschooled students are required to be tested in grammar, reading, spelling, and math every year. By contrast, homeschooled students in neighboring Tennessee are required only to take a standardized achievement test in grades 5, 7,

⁵ State-specific rules for legally homeschooling are discussed in detail by each state’s homeschooling association. A complete list of these state associations (with links) is available at www.teachinghome.com/states/states.cfm.

and 9. Finally, high regulation states have additional requirements that range from state approval of the curriculum (*i.e.*, Pennsylvania) to home visits (*i.e.*, New York).

HOMESCHOOLING DATA

The small number of quantitative studies on the topic of homeschooling is likely due to the dearth of data on this segment of the population. The lack of data might be explained in several ways. First, state- or district-level data requires a certain amount of coordination between school districts and state and local education agencies. In practice, many school districts have no systematic mechanism for tracking homeschooled students over time because state law does not require them to do so. Any data that are available through these channels are aggregate measures of the number of homeschoolers in a district or state and, therefore, do not permit analyses based on observed individual choices.⁶ Second, anecdotal evidence suggests that homeschooling families as a group might be less tolerant than non-homeschooling families of questions and surveys that they view as intrusive. A 1996 survey of homeschooling families administered by *National Home Education Research Institute* (NHERI) had only a 28% response rate (Ray (1997)) despite the fact that NHERI and the survey were endorsed by the national homeschooling advocacy organization, the *Home School Legal Defense Association* (HSLDA).

There are several nationally-representative datasets that include questions on *all* schooling choices made by households, including homeschooling. We utilize two of these datasets in the present analysis, the National Household Education Survey (NHES) and the General Social Survey (GSS).⁷ Both sources are used because they collect different types of information on family characteristics and social views. Each is discussed below, along with the results of our analyses.

HOMESCHOOLING IN THE NATIONAL HOUSEHOLD EDUCATION SURVEY (NHES)

The Parent & Family Involvement portion of the NHES survey began asking parents about homeschooling beginning in 1996. The survey asks parents why they chose to home school as

⁶ Houston and Toma (2003) and Isenberg (2002) are examples of these kinds of studies.

⁷ Both of these datasets have restricted-use versions that enable the respondents to be linked to information about the quality of the public school district to which they are assigned. We have requested access to the restricted-use data, but have not yet received these databases.

well as information about the availability and utilization of public school resources. This survey was repeated in 1999 and 2003 (although it is not a panel). Table 1 compares the characteristics of homeschooling families over these three years (1996, 1999, and 2003). Approximately 250-300 homeschoolers were identified in each survey year, corresponding to 1.4 percent of the 1996 sample, 1.7 percent of the 1999 sample, and 2.0 percent of the 2003 sample.

Note that variable definitions and questions were constant over all three years with only a few exceptions, so it is possible to inspect Table 1 for trends in the attributes of homeschoolers. Black and Hispanic families gained representation in the sample of homeschoolers between 1996 and 1999, but this increase in diversity diminished somewhat between 1999 and 2003. The left tail of the age distribution of homeschooled children appears to have changed over this period, a trend that is also somewhat evident among non-homeschooling families. Another trend apparent in Table 1 that is mirrored among non-homeschoolers is the increase in disabilities that impede a child's learning. The question underlying this variable asks whether or not the child has a disability that affects his/her ability to learn, so the increase might simply reflect higher rates of diagnosis of learning disabilities among all children over this time period. Table 1 also indicates that between 1996 and 2003 the percentage of homeschooling moms that worked part-time fell and the percentage that were not in the labor force at all increased. Homeschooling parents were also more likely to have at least a college education in 2003 compared to 1996. Finally, there appears to be a trend toward increased representation in the southern states and decreased representation in the western states.

In Table 2, we pool the three years of NHES cross-sectional data discussed above and examine how homeschooling families compare to their non-homeschooling counterparts.⁸ The sample of homeschoolers looks similar to the sample of non-homeschoolers with regard to gender and the distribution of children's ages, however, that is where the similarities end. Homeschoolers are significantly less racially diverse and more likely to be two-parent families with more children than non-homeschoolers. Not surprisingly, 54.5 percent of mothers in homeschooling families are not in the labor force, compared with only 22.8 percent of mothers in non-homeschooling

⁸ Tables 2a, 2b, and 2c compare homeschoolers to non-homeschoolers by year, rather than in the pooled cross section.

families. The lower mean income among homeschooling families likely reflects this smaller labor force participation, especially since similar percentages of homeschoolers and non-homeschoolers own their homes. Those parents who choose homeschooling have more education on average and are more likely to live in southern and western states compared to those who choose public and private school. Finally, a higher proportion of homeschoolers than non-homeschoolers live in rural areas.⁹

Parents surveyed in the NHES were also asked about their reasons for homeschooling their children. Parents were provided with a list of potential reasons and asked to check all reasons that applied. Table 3 identifies the proportion of parents who checked various reasons. In all three years of the NHES survey, concerns about the other schooling alternatives available were cited by the most parents.¹⁰ Three-quarters of parents voiced concerns about their children's schools, where these concerns included objecting to what was taught in schools, feeling that their children were not being challenged in school or that parents could provide a better education for their children at home, as well as fears about the school learning environment. The next most popular reason for homeschooling, cited by 47 percent of families in the pooled cross section, was to provide religious or moral instruction. Table 3 also indicates that religion dramatically gained in popularity as a reason for homeschooling over the three survey years.

There is a fair amount of overlap in these two most popular reasons because parents were permitted to cite multiple reasons. In 1996, 23 percent of parents checked both 'school reasons' and 'religious reasons' for homeschooling. In 1999 and 2003, the percentages citing both reasons were 29 and 69 percent, respectively. The 2003 survey also asks a related follow-up question in which parents were asked to choose one of the reasons that they cited as the *most important* reason. Of the parents citing 'religious reasons' as *one* of the reasons for homeschooling, 42 percent chose religion as the *most important* reason. Similarly, of the parents citing 'school reasons' as *one* of the reasons for homeschooling, 47 percent chose school as the *most important* reason.

⁹ The urbanicity definitions changed slightly in 1999, affecting the 'urban' and 'suburban' categories. The definition of 'rural' was maintained over all three sample years.

¹⁰ The list of possible reasons was not constant over the three survey years, so questions were categorized into the five groups presented in Table 3.

DETERMINANTS OF THE DECISION TO HOMESCHOOL USING THE NHES

Next we explore the determinants of the decision to homeschool using a logit model. Define y_{it}^* as the propensity of family i to homeschool in year t and X_{it} as a vector of demographic characteristics describing family i in year t . The homeschooling decision can then be described by the relationship $y_{it}^* = X_{it}\beta + \varepsilon_{it}$, where ε_{it} is a randomly distributed error. Because we cannot observe y_{it}^* and instead observe the binary outcome, $y_{it} = 1(y_{it}^* > 0)$, the probability that family i chooses to homeschool in year t is given by

$$\Pr(HS_{it}) = \Pr(y_{it}^* > 0) = \Pr(y_{it} = 1) = \Pr(X_{it}\beta + \varepsilon_{it} > 0).$$

The logit model results if we assume that ε is distributed *iid* logistic.

Table 4 presents the estimated marginal effect of various family characteristics on the probability of choosing to homeschool. The marginal effects are based on estimates from a logistic regression, which are not reported. The marginal effects in Table 4 are interpreted as the change in the probability of homeschooling associated with a discrete change in a binary variable or a one standard deviation change in a continuous variable. For example, the first cell in Table 4 indicates that the probability that a white family homeschoools in 1996 is 0.5 percentage points larger than a non-white family after controlling for differences in all other demographic characteristics. The marginal effect of being white diminishes in 1999 and 2003, although the latter is not statistically significant, reflecting the increased racial diversity among homeschooling families that was evident in Table 1. Table 4 also reveals that the probability of homeschooling is 2 percentage points higher in families in which the mother is not in the labor force and 0.9 percentage points higher in families in which the mother works part-time compared to families in which the mother works full-time. Results further indicate that the probability of homeschooling is increasing in parental education. Lastly, we note that the results indicate that, while the probability of homeschooling is increasing in the number of siblings in a family, it is decreasing in the number of children under the age of 6, perhaps reflecting that young children are more time intensive for parents.¹¹

FULL-TIME VERSUS PART-TIME HOMESCHOOLING USING THE NHES

In the previous section, we analyzed the extensive margin decision made by parents regarding the type of schooling they choose for their children. Next we examine a decision on the intensive margin; whether families who opt to homeschool do so on a full-time or part-time basis. The following analysis of the determinants of the full-time vs. part-time homeschooling decision is a first step in understanding the potential impact of homeschooling on public school resources and illuminating discussions about collaborative programs between home educators and traditional schools.

The 1999 and 2003 NHES surveys inquire about whether homeschooled children receive *all* of their instruction at home or if they get *some* instruction at school. Of the sample of 557 homeschoolers in these years, approximately 21 percent choose to homeschool part-time. Part-time homeschooling refers to attendance at a traditional school for *any* positive number of hours. In this sample, 75 percent of part-time homeschooled children attend a traditional school for ten or fewer hours each week. The maximum number of hours identified by any homeschooler is 35 hours per week. Summary statistics for both full-time and part-time homeschoolers are provided in Table 5.

According to Table 5, part-time homeschoolers are more racially diverse than their full-time counterparts, with even greater minority representation than the sample of non-homeschoolers in Table 2. Part-time homeschoolers also look more like non-homeschoolers with regard to family size and, to some extent, family type. Part-time homeschooling families are also more likely than full-time homeschooling families to have a mother in the labor force and a child with a disability. Families who homeschool full-time are more likely to have college-educated parents and live in both rural areas and the Southern states. In contrast, part-time homeschooling appears to be very popular in the West.

Using the logit model introduced in the previous section, we now explore the determinants of the decision to homeschool full-time versus part-time. Table 6 presents the estimated marginal effect of various family characteristics on the probability of choosing to homeschool full-time.

¹¹ Isenberg (2002) and Bauman (2002) similarly analyze the NHES data using logistic regression analysis.

The patterns that were evident in Table 5 also appear in the results in Table 6. For example, the probability that a white family chooses to homeschool full-time is 10.3 percentage points higher than a non-white family. A one-standard deviation increase in the number of siblings increases the probability of full-time homeschooling by 2.9 percentage points. The largest marginal effect is associated with living in a Western state, which decreases the probability of homeschooling full-time by 11.4 percentage points. Based on the year dummy for 2003, there doesn't appear to be a statistically significant increase in full-time versus part-time homeschooling between 1999 and 2003. Finally, this model does a better job of predicting the proportion of families who will choose to homeschool full-time. The predicted proportion, 81.9 percent is only slightly higher than the 79.2 percent who do homeschool full-time in the NHES sample.

We also examined parents' stated reasons for choosing to homeschool with regard to the full-time decision. The only noticeable difference is in the prevalence of citing religion as a factor or as the most important factor. Among full-time homeschoolers, religious reasons were cited by 56.2 percent, compared to 39.7 percent of part-time homeschooling families. Additionally, religion was cited as the *most* important factor by 31.4 percent of full-time families and only 22.4 percent of part-time families. Despite these differences, adding a dummy variable for citing religious reasons to the logistic regression discussed above yielded a positive but insignificant coefficient and left the other marginal effects essentially unchanged.

HOMESCHOOLING IN THE GENERAL SOCIAL SURVEY (GSS)

We next analyze the decision to homeschool using the General Social Survey, which is administered by the National Opinion Research Center (NORC) at the University of Chicago. Questions on homeschooling on the 1998 and 2000 surveys allow us to explore how attitudinal variables (e.g., political affiliation, participation in organized religion, views on homosexuality, abortion, gun control, and the quality of political and religious leadership) vary over school choices. Table 7 compares various characteristics of homeschooling families to those of families who choose to send their children to one of the following three alternatives: public school, non-religious private school, and religious private school.

A number of interesting differences emerge. Parents who homeschool are more likely married than parents who send their children to public school and, on average, are younger than parents who send their children to private school. Moreover, homeschooling families are more likely white than public school families. On average, homeschooling families report lower incomes than private school families. Table 7 further demonstrates that parents who homeschool are, on average, more educated than parents who send their children to public school but less educated than parents who send their children to private school. We also find that compared to families that send their children to private schools, homeschooling families are more likely to live in the Midwest and less likely to live in the South. Lastly, the average homeschooling family has more household members compared to the average public school family.

The contemporary image of homeschooling often depicts such families as deeply religious, socially conservative, and anti-government. We explore this in Tables 8-12. Table 8 presents various measures of religiosity for families that homeschool compared to families that send their children to public school, secular private school (hereafter simply called private school), and private religious school. The table demonstrates that compared to public and private school families, homeschoolers are less likely protestant, more likely catholic, and less likely no religion. Compared to families that send their children to private religious schools, homeschoolers are more likely protestant, less likely catholic, and more likely no religion. Table 8 further reveals that homeschoolers are least likely to never attend religious services and most likely to attend more than once a week. Interestingly, homeschoolers are more likely than public school families but less likely than private and private religious school families to self report strong religious beliefs. Lastly, they are most likely to believe that the Bible is the actual work of God.

We next explore how the political beliefs of families with children older than 5 years of age vary across school choices. As shown in Table 9, parents who homeschool are less likely democrat and more likely republican compared to all other groups. Based on self-reporting, they are also more conservative than parents who send their children to public and private school but more liberal than parents who send their children to private religious schools.

Table 10 reveals how attitudes on government spending vary across the four possible school choices. Not surprisingly, the table demonstrates that homeschoolers are generally against big government. They are most likely to think that they pay too much in federal income taxes, and they are least likely to think that the government spends too little on national defense and crime. They are also less likely than public and private schoolers to think that the government spends too little on welfare.

The result for education is confounded. Homeschoolers may value education more than most and, thus, think that the government should spend more on education. Additionally, they may homeschool because they think the public school system is inadequate and, thus, think that the government should spend more on education. On the other hand, they may think the government should spend less overall, including on education. The data show that homeschoolers are less likely than private school families but more likely than public and private religious school families to think that the government spends too little on education.

Table 11 demonstrates that homeschoolers have more conservative views on a variety of social issues compared to private school families. However, we observe mixed results when comparing homeschoolers to public and private religious school families. Results do indicate, though, that families that homeschool are substantially more likely to be against sex education in public schools, more likely to be against premarital sex, and more likely to support increases in divorce laws. Given that these views are family related, we conclude that families that homeschool have more conservative family values.

Finally, Table 12 shows that homeschoolers have more conservative views on parenting and think that parents should have authority over their children. Homeschoolers are more likely than both private school families and private religious school families to be in favor of spanking as a form of discipline. Homeschoolers are also more likely than public and private schoolers to be against making birth control available to children. In addition, families that homeschool are most likely to think that working mothers are inferior to stay-at-home mothers. Homeschooling families are also most likely against sex education in public schools and are most likely to think that the most desirable quality in a child is that he or she obeys the parents.

DETERMINANTS OF THE DECISION TO HOMESCHOOL USING THE GSS

We next employ the GSS data to explore the determinants of the decision to homeschool using a logit model. Results are similar to those presented in Table 4 using the NHES data. Table 13 shows that the probability that a white family homeschoools is 0.7 percentage points larger than a non-white family after controlling for differences in the other demographic characteristics. Results further indicate that the probability of homeschooling is 0.08 percentage points higher for mothers who have at least a college education. Lastly, while the probability of homeschooling is increasing in the number of children in a family, it is decreasing in the number of children under the age of 6. This result perhaps reflects that young children are more time intensive for parents.

Table 14 explores how the decision to homeschool varies across attitudinal variables. The results indicate that the probability of homeschooling increases by a relatively large 1.8 percentage points if a parent believes that sex education should not be taught in public schools. The table also shows that married parents have a higher probability of homeschooling than their single counterparts. Results further reveal that the probability of homeschooling is increasing in the frequency at which a family attends religious services. Lastly, we find that parents who believe that they pay too much in federal income taxes are more likely to homeschool.

DIRECTIONS FOR FUTURE RESEARCH

Much work remains to be done. Recall that the most often cited reason for choosing to homeschool was related to concerns about the public and private school alternatives. Given that there are no available measures of the quality of available schools, it is not surprising that this model does a fairly poor job of predicting the homeschooling decision. Based on the estimated parameters, the model only predicts that 1 percent of families would choose to homeschool, which is less than the 1.7 percent who actually does homeschool in the NHES data. In order to address this shortcoming of the data, we plan to merge the NHES data with information on the school district in which each family resides. Specifically, we will incorporate information such as the total number of students in a district, the number of schools in a district, the average student/teacher ratio, the total number of diplomas awarded per year, and total federal, state and local revenues.

REFERENCES

- Bauman, Kurt J. (2002). "Home Schooling in the United States: Trends and Characteristics." *Education Policy Analysis Archives*. 10(26). (<http://epaa.asu.edu/epaa/v10n26.html>)
- Belfield, Clive R. (2004). "Home-Schooling in the US." National Center for the Study of Privatization in Education, Occasional Paper No. 88.
- Houston, Robert G. and Eugeneia F. Toma (2003). "Home Schooling: An Alternative School Choice." *Southern Economic Journal*. 69(4): 920-935.
- Isenberg, Eric (2002). "Home Schooling: School Choice and Women's Time Use." Unpublished Ph.D. dissertation, Washington University, Department of Economics.
- Lines, Patricia M. (1999). "Homeschoolers: Estimating Numbers and Growth." Web Edition. Washington DC: National Institute on Student Achievement, Curriculum, and Assessment, Office of Educational Research and Improvement, U.S. Department of Education.
- Lines, Patricia M. (2000). "When Home Schoolers Go to School: A Partnership Between Families and Schools." *Peabody Journal of Education*. 75(1&2), 159-186.
- Ray, Brian D. (1997). *Strengths of Their Own*. Oregon: National Home Education Research Institute Publications.
- Ray, Brian D. (2003). "Facts on Homeschooling." National Home Education Research Institute website (http://www.nheri.org/modules.php?name=NHERI_Research).
- Ray, Brian D. (2004). *Home Educated and Now Adults: Their Community and Civic Involvement, Views About Homeschooling, and Other Traits*. Oregon: National Home Education Research Institute Publications.

Table 1: Characteristics of Homeschoolers in the NHES

	1996	1999	2003
Male	47.0	49.8	51.4
Female	53.0	50.2	48.6
White	83.0	72.1	77.9
Black	2.4	8.0	7.2
Hispanic	9.7	13.9	8.4
Other race/ethnicity	4.9	6.0	6.4
Child's age: 5 and under	11.7	14.6	7.2
Child's age: 6 - 7	9.7	11.3	13.3
Child's age: 8 - 10	21.9	21.9	18.1
Child's age: 11 - 14	32.4	28.2	30.9
Child's age: 15 - 18	24.3	23.9	30.5
Number of siblings: 0	17.0	20.3	12.9
Number of siblings: 1	32.0	31.6	34.9
Number of siblings: 2	27.5	24.6	23.3
Number of siblings: 3	13.4	16.6	16.9
Number of siblings: 4	2.8	3.3	6.0
Number of siblings: 5+	7.3	3.6	6.0
Family type: 2 parents	83.0	81.4	83.9
Family type: 1 parent	14.2	16.6	14.9
Family type: other	2.8	2.0	1.2
Mom works full-time	17.8	20.3	18.1
Mom works part-time	25.9	23.6	16.5
Mom not in LF	51.4	52.5	59.8
Mom looking for job or no mom in HH	4.9	3.6	5.6
English mom's 1st language	93.5	92.7	91.2
Child disability impedes learning	2.0	10.6	11.1
Owens home	68.4	72.8	75.5
Income	\$41,437	\$48,081	\$42,533
Parental Education: Less than HS	5.7	1.3	2.0
Parental Education: HS graduate	21.1	16.6	22.1
Parental Education: Some college	35.6	38.5	28.5
Parental Education: College	22.7	23.9	24.5
Parental Education: Advanced degree	15.0	19.6	22.9
Northeast	10.9	8.6	13.2
South	35.6	43.2	45.0
Midwest	21.5	18.9	19.3
West	32.0	29.2	22.5
Urban	23.9	55.8	57.8
Suburban	49.8	16.3	19.3
Rural	26.3	27.9	22.9
N	247	301	249
Percent of Sample	1.4%	1.7%	2.0%

Table 2: NHES Pooled Cross Section (1996, 1999, 2003)

	Homeschoolers	Non-Homeschoolers
Male	49.4	51.2
Female	50.6	48.8
White	77.3	62.4
Black	6.0	14.5
Hispanic	10.9	17.5
Other race/ethnicity	5.8	5.6
Child's age: 5 and under	11.4	7.1
Child's age: 6 – 7	11.4	15.2
Child's age: 8 – 10	20.7	23.5
Child's age: 11 – 14	30.4	31.4
Child's age: 15 – 18	26.1	22.9
Number of siblings: 0	16.9	20.5
Number of siblings: 1	32.7	43.9
Number of siblings: 2	25.1	24.4
Number of siblings: 3	15.7	7.9
Number of siblings: 4	4.0	2.3
Number of siblings: 5+	5.6	1.0
Family type: 2 parents	82.7	70.8
Family type: 1 parent	15.3	26.0
Family type: other	2.0	3.2
Mom works full-time	18.8	49.4
Mom works part-time	22.1	19.8
Mom not in LF	54.5	22.8
Mom looking for job or no mom in HH	4.6	8.0
English mom's 1st language	92.5	79.9
Owens home	72.3	70.1
Income	\$44,529	\$46,091
Parental Education: Less than HS	2.9	7.8
Parental Education: HS graduate	19.7	26.5
Parental Education: Some college	34.5	30.8
Parental Education: College	23.7	18.0
Parental Education: Advanced degree	19.2	17.0
Northeast	10.8	17.4
South	41.4	37.0
Midwest	19.8	21.2
West	28.0	24.4
Urban	46.6	54.0
Suburban	27.6	25.3
Rural	25.8	20.7
N	797	46754

Table 2a: Summary Statistics, 1996 NHES

	Homeschoolers	Non-Homeschoolers
Male	47.0	51.6
Female	53.0	48.4
White	83.0	66.1
Black	2.4	14.2
Hispanic	9.7	13.9
Other race/ethnicity	4.9	5.7
Child's age: 5 and under	11.7	7.5
Child's age: 6 – 7	9.7	14.5
Child's age: 8 – 10	21.9	23.8
Child's age: 11 – 14	32.4	32.1
Child's age: 15 – 18	24.3	22.0
Number of siblings: 0	17.0	21.6
Number of siblings: 1	32.0	43.0
Number of siblings: 2	27.5	24.3
Number of siblings: 3	13.4	7.6
Number of siblings: 4	2.8	2.4
Number of siblings: 5+	7.3	1.1
Family type: 2 parents	83.0	72.2
Family type: 1 parent	14.2	24.6
Family type: other	2.8	3.2
Mom works full-time	17.8	50.1
Mom works part-time	25.9	20.2
Mom not in LF	51.4	22.3
Mom looking for job or no mom in HH	4.9	7.4
Child disability impedes learning	2.0	4.5
English mom's 1st language	93.5	84.1
Owens home	68.4	69.4
Income	\$41,437	\$45,319
Parental Education: Less than HS	5.7	7.7
Parental Education: HS graduate	21.1	28.8
Parental Education: Some college	35.6	30.6
Parental Education: College	22.7	17.0
Parental Education: Advanced degree	15.0	15.8
Northeast	10.9	17.6
South	35.6	36.2
Midwest	21.5	21.9
West	32.0	24.2
Urban	23.9	28.2
Suburban	49.8	47.0
Rural	26.3	24.8
N	247	17442

Table 2b: Summary Statistics, 1999 NHES

	Homeschoolers	Non-Homeschoolers
Male	49.8	51.0
Female	50.2	49.0
White	72.1	60.7
Black	8.0	15.6
Hispanic	13.9	18.5
Other race/ethnicity	6.0	5.2
Child's age: 5 and under	14.6	7.9
Child's age: 6 – 7	11.3	16.0
Child's age: 8 – 10	21.9	23.5
Child's age: 11 – 14	28.2	30.1
Child's age: 15 – 18	23.9	22.6
Number of siblings: 0	20.3	21.8
Number of siblings: 1	31.6	43.4
Number of siblings: 2	24.6	24.0
Number of siblings: 3	16.6	7.6
Number of siblings: 4	3.3	2.2
Number of siblings: 5+	3.6	1.0
Family type: 2 parents	81.4	68.4
Family type: 1 parent	16.6	28.3
Family type: other	2.0	3.3
Mom works full-time	20.3	49.9
Mom works part-time	23.6	19.4
Mom not in LF	52.5	22.7
Mom looking for job or no mom in HH	3.6	8.0
Child disability impedes learning	10.6	8.4
English mom's 1st language	92.7	78.7
Owens home	72.8	68.4
Income	\$48,081	\$48,962
Parental Education: Less than HS	1.3	8.3
Parental Education: HS graduate	16.6	26.0
Parental Education: Some college	38.5	31.0
Parental Education: College	23.9	17.3
Parental Education: Advanced degree	19.6	17.4
Northeast	8.6	17.2
South	43.2	38.8
Midwest	18.9	20.1
West	29.2	23.9
Urban	55.8	66.8
Suburban	16.3	13.0
Rural	27.9	20.3
N	301	17380

Table 2c: Summary Statistics, 2003 NHES

	Homeschoolers	Non-Homeschoolers
Male	51.4	51.2
Female	48.6	48.8
White	77.9	59.6
Black	7.2	13.3
Hispanic	8.4	21.1
Other race/ethnicity	6.4	6.0
Child's age: 5 and under	7.2	2.3
Child's age: 6 - 7	13.3	15.1
Child's age: 8 - 10	18.1	22.8
Child's age: 11 - 14	30.9	32.3
Child's age: 15 - 18	30.5	24.6
Number of siblings: 0	12.9	17.0
Number of siblings: 1	34.9	45.9
Number of siblings: 2	23.3	25.3
Number of siblings: 3	16.9	8.6
Number of siblings: 4	6.0	2.2
Number of siblings: 5+	6.0	1.0
Family type: 2 parents	83.9	72.5
Family type: 1 parent	14.9	24.5
Family type: other	1.2	3.0
Mom works full-time	18.1	47.6
Mom works part-time	16.5	19.6
Mom not in LF	59.8	23.8
Mom looking for job or no mom in HH	5.6	9.0
Child disability impedes learning	11.1	9.9
English mom's 1st language	91.2	75.5
Owens home	75.5	73.6
Income	\$42,533	\$40,809
Parental Education: Less than HS	2.0	7.3
Parental Education: HS graduate	22.1	23.6
Parental Education: Some college	28.5	30.8
Parental Education: College	24.5	20.3
Parental Education: Advanced degree	22.9	18.1
Northeast	13.2	17.4
South	45.0	35.4
Midwest	19.3	21.9
West	22.5	25.4
Urban	57.8	73.3
Suburban	19.3	11.4
Rural	22.9	15.3
N	249	11932

Table 3: Stated Reasons for Homeschooling in the NHES*				
Proportion citing:	1996	1999	2003	Pooled
Available schooling alternatives	70.5	65.1	92.8	75.4
Religious or moral instruction	32.8	37.5	71.5	46.7
Child has disability	8.9	8.0	31.7	15.7
Child is temporarily ill	3.6	3.0	2.8	3.1
Other reasons	32.0	44.2	18.5	32.4
* Columns do not sum to 100% because parents were encouraged to check all that applied				

Table 4: Determinants of the Decision to Homeschool

	Marginal Effect
White	0.006 ***
White * 1999	-0.004 *
White * 2003	0.001
Parental education	0.006 ***
Family income ('000s)	0.000 ***
# of siblings	0.002 **
# in HH under age 6	-0.001 ***
Child disability impedes learning	0.001
Mom works PT	0.009 ***
Mom not in LF	0.015 ***
Mom's 1st language is English	0.010 ***
Family lives in suburbs	0.003 **
Family lives in rural area	0.003 **
Family lives in South	0.006 ***
Family lives in Midwest	0.004 **
Family lives in West	0.008 ***
1999 Year dummy	0.007 **
2003 Year dummy	0.006 ***
Predicted choice probability	0.010
Actual choice probability	0.017
N	42,418
*** p<.001, ** p<.01, * p<.05	
Means and standard deviations of continuous variables:	
Income - 45.673 (30.366), # siblings - 1.28 (1.07), # under age 6 - .576 (.788)	

Table 5: Full-Time vs. Part-Time Homeschooling in the NHES		
	FT Homeschoolers	PT Homeschoolers
Male	51.3	46.6
Female	48.7	53.4
White	78.7	56.9
Black	5.0	17.2
Hispanic	9.5	19.8
Other race/ethnicity	6.8	6.0
Child's age: 5 and under	12.7	11.2
Child's age: 6 – 7	11.8	12.9
Child's age: 8 – 10	21.1	15.5
Child's age: 11 – 14	29.0	29.3
Child's age: 15 – 18	25.4	31.0
Number of siblings: 0	15.0	23.3
Number of siblings: 1	32.4	36.2
Number of siblings: 2	24.5	23.3
Number of siblings: 3	17.7	12.9
Number of siblings: 4	5.2	1.7
Number of siblings: 5+	5.2	2.6
Family type: 2 parents	83.7	77.6
Family type: 1 parent	15.4	18.1
Family type: other	0.9	4.3
Mom works full-time	17.5	25.9
Mom works part-time	18.8	25.0
Mom not in LF	60.3	40.5
Mom looking for job or no mom in HH	3.4	8.6
Child disability impedes learning	23.1	30.2
English mom's 1st language	93.4	85.3
Owens home	74.6	70.7
Income	\$45,898	\$46,510
Parental Education: Less than HS	1.8	1.7
Parental Education: HS graduate	18.1	23.3
Parental Education: Some college	36.1	25.9
Parental Education: College	22.7	28.5
Parental Education: Advanced degree	21.3	20.7
Northeast	10.7	10.3
South	47.4	32.8
Midwest	19.7	15.5
West	22.2	41.4
Urban	53.5	71.6
Suburban	19.1	11.2
Rural	27.4	17.2
N	441	116
Percent of Sample	79.2%	20.8%

Table 6: Determinants of the Decision to Homeschool Full-Time	
	Marginal Effect
White	0.103 **
# of siblings	0.029 *
Child disability impedes learning	-0.054
Mom not in LF	0.085 *
Family lives in suburbs	0.097 *
Family lives in rural area	0.077 *
Family lives in West	-0.114 **
2003 Year dummy	0.010
Predicted choice probability	0.819
Actual choice probability	0.792
N	557
*** p<.001, ** p<.01, * p<.05	
Means and standard deviations of continuous variables: # siblings - 1.75 (1.36)	

Table 7: Characteristics of Homeschoolers in the GSS				
	Home School	Public School	Private School	Private Religious
Respondent is married	0.72	0.55***	0.68	0.62
Age of respondent	49.25	51.40	54.40**	53.47**
Race of respondent				
White	0.89	0.77**	0.85	0.80
Black	0.10	0.18	0.15	0.15
Other race	0.02	0.05	0.00	0.05
Family income	51179.25	44713.90	79337.50***	56048.64
Mother's education	13.52	12.72**	15.19***	13.66
Father's education	13.93	13.07*	16.40***	13.88
SMSA	0.79	0.71	0.88	0.80
Northeast	0.16	0.15	0.12	0.18
Midwest	0.25	0.25	0.09**	0.28
South	0.36	0.39	0.51*	0.33
West	0.20	0.18	0.18	0.13
# Household members				
Total	3.08	2.73*	2.76	2.76
Under 6 yrs	0.23	0.18	0.13	0.16
Btwn 6 & 12 yrs	0.65	0.45**	0.48	0.33***
Between 13 & 17 yrs	0.32	0.28	0.23	0.33
Read paper > once wk	0.39	0.43	0.50	0.46
Hours of tv per week	3.10	3.07	2.61	2.61
Sample size	61	2139	68	260
*, **, *** Statistically different from homeschoolers at the 10%, 5%, and 1% levels.				

Table 8: Religion in the GSS				
	Home School	Public School	Private School	Private Religious
Religion				
Christian	1.64	1.68	0.00	3.08
Protestant	55.74	62.37	66.18	42.69*
Catholic	34.43	20.57***	7.35***	46.15*
Jewish	0.00	1.92	8.82**	1.15
No religion	8.20	10.94	16.18	5.00
Other Religion	0.00	2.34	1.47	1.92
Sample Size	61	2139	68	260
Frequency of Religious Service Attendance				
Never	6.67	19.58**	17.91*	8.63
Twice per year or less	23.33	39.45**	26.86	17.65
Once per week or more	46.67	25.71***	31.34*	51.37
More than once a week	25.00	8.03***	13.43*	14.12**
Sample Size	60	2089	67	255
Strength of Religious Beliefs				
Self report strong belief	44.26	35.30	47.06	55.77
Bible is actual word God	40.98	32.02	20.59**	32.69
Sample Size	61	2139	68	260
*, **, *** Statistically different from homeschoolers at the 10%, 5%, and 1% levels.				

Table 9: Politics in the GSS				
	Home School	Public School	Private School	Private Religious
Democrat	31.15	46.75**	41.18	45.38**
Republican	52.46	32.96***	39.71	39.62*
Independent	14.75	18.33	16.18	13.85
Liberal	24.59	23.38	33.82	17.31
Moderate	29.51	38.62	26.47	31.54
Conservative	44.26	31.42**	38.24	45.00
Sample size	61	2139	68	260
*, **, *** Statistically different from homeschoolers at the 10%, 5%, and 1% levels.				

Table 10: Views on Government Spending in the GSS				
	Home School	Public School	Private School	Private Religious
Pay too high taxes	54.10	42.12	30.88***	45.77*
Govt spends too little on				
Education	37.70	34.13	50.00	32.31
Crime	24.59	29.73	33.82	32.31
Defense	6.56	11.27	11.76	13.85
Welfare	6.56	9.12	11.76	6.54
Sample Size	61	2139	68	260
*, **, *** Statistically different from homeschoolers at the 10%, 5%, and 1% levels.				

Table 11: Views on Social Issues in the GSS				
	Home School	Public School	Private School	Private Religious
For capital punishment	63.93	64.24	58.82	61.15
Against gun permits	11.48	11.59	7.35	14.62
For tough on crime courts	73.77	72.00	61.76	74.23
Against public sex educn	24.59	9.30***	7.35***	12.69**
Against ban on school prayer	37.70	41.80	27.94	45.38
Against abortion	42.62	45.40	27.94*	46.15
For increase in divorce laws	47.54	34.13**	33.82	38.46
Against premarital sex	37.70	27.21*	20.59**	32.69
Against homosexuality	42.62	43.06	32.35	45.77
Gun owner	24.59	24.26	16.18	23.85
Sample Size	61	2139	73	260
*, **, *** Statistically different from homeschoolers at the 10%, 5%, and 1% levels.				

Table 12: Views on Parenting in the GSS				
	Home School	Public School	Private School	Private Religious
Against teenage sex	60.66	60.87	58.82	61.92
For spanking as discipline	52.46	50.68	29.41***	44.62
Against birth control for kid	39.34	29.50*	27.94	38.46
Most desirable kid quality				
Obey parents	19.67	14.73	14.71	13.85
Be popular	1.64	0.61	0.00	0.38
Help others	1.64	8.93**	5.88	10.38**
Think for self	31.15	29.92	47.06*	31.92
Work hard	8.20	10.80	11.76	12.31
Stay at home moms are best	29.51	25.95	23.53	22.69
Against public sex educn	24.59	9.30***	7.35***	12.69**
Sample size	61	2139	68	260
*, **, *** Statistically different from homeschoolers at the 10%, 5%, and 1% levels.				

Table 13: Determinants of the Decision to Homeschool in the GSS

	Marginal Effect	Standard Error
White	0.007*	0.004
Mom has at least college educ	0.008	0.006
Income (1000s)	-0.000	0.000
# in HH under age 18	0.004***	0.001
# in HH under age 6	-0.003	0.004
Parent is immigrant	-0.006	0.005
Family lives in SMSA	0.005	0.004
Family lives in South	0.000	0.005
Family lives in Midwest	-0.002	0.005
Family lives in West	0.002	0.006
* Significant at the 10% level ** Significant at the 5% level *** Significant at the 1% level		

Table 14: Determinants of the Decision to Homeschool in the GSS

	Marginal Effect	Standard Error
Republican	0.005	0.004
Against sex education in public schools	0.018**	0.009
Married	0.007**	0.003
Thinks pay too high income taxes	0.006*	0.003
Frequency of church attendance	0.001**	0.001
Thinks working moms inferior	-0.000	0.004
* Significant at the 10% level ** Significant at the 5% level *** Significant at the 1% level		