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To cite this article: Daniel Hamlin (2019) Do Homeschooled Students Lack Opportunities to Acquire Cultural Capital? Evidence from a Nationally Representative Survey of American Households, *Peabody Journal of Education*, 94:3, 312-327, DOI: [10.1080/0161956X.2019.1617582](https://doi.org/10.1080/0161956X.2019.1617582)

To link to this article: <https://doi.org/10.1080/0161956X.2019.1617582>



Published online: 04 Jun 2019.



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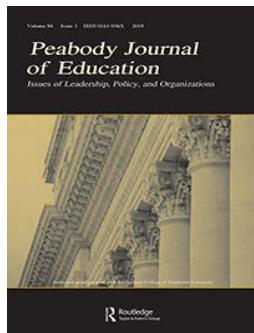
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Do Homeschooled Students Lack Opportunities to Acquire Cultural Capital? Evidence from a Nationally Representative Survey of American Households

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ABSTRACT

Experiences at school may create valuable opportunities for children to acquire cultural capital. One concern for homeschooled children is that they may be deprived of these opportunities. However, homeschool families may enable opportunities for their children to acquire cultural capital through participation in activities outside of formal instructional time. This study investigates this possibility by comparing cultural and family activities between homeschooled students and their public school peers. The analyses use data from a nationally representative survey (National Household Education Survey, 2016) containing a substantial number of respondents who homeschool their children ($n = 552$). Descriptive results indicated that formal instruction in music, arts, literature, and foreign language is lacking in nearly 40% of homeschool households. Yet, relative to public school families, homeschool families report statistically higher participation in cultural and family activities. While patterns observed in this study are only descriptive, overall evidence suggests that homeschool families may provide opportunities for their children to acquire cultural capital through greater participation in cultural and family activities.

Introduction

The concept of cultural capital has been a prominent conceptual tool for explaining variation in educational and life outcomes (Davies & Rizk, 2018). While the term has evolved considerably since it was first introduced in the late 1970s, it broadly refers to high status cultural knowledge and dispositions that help to confer societal rewards to individuals and groups (Bourdieu & Passeron, 1977). In the educational arena, possession of cultural capital may offer institutional rewards, allowing individuals to convert cultural capital into higher academic achievement, greater educational attainment, and more prestigious credentials (Anderson & Jeger, 2015; DiMaggio & Mohr, 1985; Roscigno & Ainsworth-Darnell, 1999). When initially posited, cultural capital was primarily considered a mechanism for reproducing social inequalities in educational outcomes, but a number of subsequent empirical studies have indicated that cultural capital may have value, net of socio-economic background (Banks, 2012; Davies & Rizk, 2018; DiMaggio, 1982; Dumais, 2006; Kalmijn & Kraaykamp, 1996). This prospect may make schools a potential setting for youth to acquire cultural capital as school activities, resources, and staff expertise may facilitate experiences that contribute to the acquisition of cultural capital (Andersen, & Jæger, 2015; Dumais, 2002; Feldman & Matjakso, 2005; Hirsch, 1987; Kisida, Greene, & Bowen, 2014; Sommerfeld & Bowen, 2013).

For homeschooled students who do not attend brick-and-mortar schools, there may be a lack of opportunities to develop cultural capital. Replicating school experiences that may impart cultural capital, such as participation in music and art class, involvement in student clubs, and professional guidance in

classical literature, art, and music, may prove difficult for families who homeschool their children (Curren & Blokhuis, 2011). Facilities and other physical resources that may also support opportunities for cultural capital acquisition in school may not be available to homeschooled students. Supplies found in art rooms, books available in libraries, and instruments accessible to students in music classes at school could be cost-prohibitive while a parent-teacher could struggle to be a multisubject content expert in art, music, literature, and foreign language (Curren & Blokhuis, 2011; Hanna, 2012). Such challenges could deprive homeschool students of valuable opportunities to acquire cultural capital, representing a negative consequence of choosing to homeschool (Jaeger & Holm, 2007).

However, homeschool families may be able to foster cultural capital creation through other means (Hanna, 2012). Being cognizant of the limitations of schooling at home, homeschool families may seek to supplement their children's education by participating in extracurricular activities and organizations outside of home (Murphy, 2012). One-to-one instruction at home could also progress at a fast pace, freeing up time for cultural excursions and extracurricular activities. Additionally, the nature of homeschooling appears to be transforming in ways that could create opportunities for homeschooled students to gain cultural capital (Aurini & Davies, 2005). Interviews with homeschool families, for example, suggest that access to educational content online, participation in homeschooling organizations, and part-time enrollment at postsecondary institutions may enable opportunities for the formation of cultural capital for homeschooled students (Aurini & Davies, 2005; Isenberg, 2007; Murphy, 2012). Yet, as scholarship in this area has largely remained anecdotal, very little is known about the degree to which homeschooled students have opportunities to acquire cultural capital.

The limited knowledge in this area is worth addressing. Homeschooling is a rapidly growing phenomenon in the United States with nearly two million students now being homeschooled (Redford, Battle, & Bielick, 2016). Prior scholarship on homeschooling has tended to focus on questions of academic achievement, socialization, religious tolerance, and families' rationales for deciding to homeschool their children (Cheng, 2014; Martin-Chang, Gould, & Meuse, 2011; Ray, 2013). Even these existing areas of study offer mostly descriptive evidence derived from relatively small samples of homeschool households (Murphy, 2012). One other difficulty is that homeschool families tend to be difficult to identify—a challenge that has hindered large-scale data collection and led to qualitative studies dominating investigations of homeschooling (Jolly, Matthews, & Nestor, 2013; Mazama & Lundy, 2013; Medlin, 2000; Neuman & Guterman, 2017). While this previous work provides insight into homeschooling, additional statistical analyses may help to strengthen the existing evidence base (Murphy, 2012).

This study uses the National Household Education Study (NHES, 2016) to shed light on opportunities for homeschool students to acquire cultural capital. These data are nationally representative ($N = 14,075$), comprise a large sample of homeschool families ($n = 552$), and query a wide range of household socio-demographic characteristics. In the first set of analyses, reported rates of formal instruction in humanities subjects (arts, music, literature, and foreign language) for homeschool households are investigated. This initial analysis aims to determine how much formal instruction homeschooled students receive in humanities subject areas that may be linked to cultural capital formation (Davies & Rizk, 2018). In the second set of analyses, homeschooled students are compared to their public and private school peers on extracurricular cultural and family activities. Patterns observed for these activities may illuminate potential opportunities for homeschool students to acquire cultural capital outside of school.

By undertaking a quantitative analysis of cultural capital in the context of homeschooling, this study charts new territory in the literature. Nevertheless, there remain limitations to these analyses. Results are derived from self-reports that may be subject to social desirability bias, in which respondents may overestimate their children's participation in cultural and family activities. Overestimation of activities may be salient for homeschool families who may perceive greater pressure to report positively on children's activities given their unconventional decision to educate their children outside of formal education systems. Another limitation is that this study examines previously hypothesized proxies for cultural capital that may not cover diverse ways that families could provide cultural capital-building experiences for their children (DiMaggio & Mohr, 1985; Kisida et al., 2014; Roscigno & Ainsworth-

Darnell, 1999). Despite these caveats, this study takes an important step to understand cultural capital formation for a growing segment of American education.

Acquisition of cultural capital

The concept of cultural capital signifies cultural dispositions, knowledge, and resources that may confer societal rewards to individuals and groups (Bourdieu & Passeron, 1977). When Pierre Bourdieu introduced this idea in the late 1970s, he described cultural capital as a possession of the upper class, arguing that affluent individuals naturally transmit cultural capital to one another through rituals, practices, and values (Davies & Rizk, 2018). Institutions, in theory, reward those who possess upper-class cultural capital, associating possession of cultural capital with individual ability (Anderson & Jeger, 2015). In school settings, for instance, familiarity with high-brow arts, music, and literature may increase positive perceptions of a student among school staff, possibly leading to higher expectations, greater support, and academic rewards for a student possessing such cultural knowledge (Roscigno & Ainsworth-Darnell, 1999). Following this theoretical reasoning, affluent students are able to maintain a class advantage by converting naturally inherited cultural resources into educational and economic rewards--a process referred to as cultural reproduction (Davies & Rizk, 2018).

As scholars have applied the concept of cultural capital to empirical analyses over several decades, they have used different proxies to represent cultural capital (Sullivan, 2001). Cultural activities, such as visiting an art gallery or museum (De Graaf, 1986; DiMaggio & Mohr, 1985; Gaddis, 2013; Kisida et al., 2014; Roscigno & Ainsworth-Darnell, 1999; Xu & Hampden-Thompson, 2011), experiencing a live artistic performance (De Graaf, 1986; Dumais, 2002; Gaddis, 2013; Rossel, 2011; Upright, 2004; Xu & Hampden-Thompson, 2011), and visiting a zoo, an aquarium, an athletic event, or a historical site (De Graaf, 1986) have been commonly used measures. Visiting a bookstore or library, parent-child shared reading, and other reading activities that might contribute to developing literary skills have represented cultural capital in scholarly work (Anderson & Jaeger, 2015; Dumais, 2002; Gaddis, 2013; Sullivan, 2001). Studies have also extended cultural capital analyses to parent-child interactions (e.g., discussion of books, music, arts, and cultural heritage) and child activities (e.g., attending a sporting event) thought to have potential to facilitate the development of cultural capital (Anderson & Jaeger, 2015; Dumais, 2002; Xu & Hampden-Thompson, 2011).

In many of these empirical investigations, findings have indicated that exposure to high status cultural resources may enable the acquisition of cultural capital net of socioeconomic background, and that the value of cultural capital may be greatest for individuals deemed as having low socioeconomic status (Banks, 2012; DiMaggio, 1982; Dumais, 2006; Kalmijn & Kraaykamp, 1996). These conclusions contrast with the conception of cultural capital as solely a mechanism for cultural reproduction (De Graaf, De Graaf, & Kraaykamp, 2000; Zimdars, Sullivan, & Heath, 2009), providing support for the notion of cultural mobility to describe individuals outside of elite classes who are able to leverage cultural capital for societal reward (DiMaggio, 1982; Dumais, 2006). Educational institutions have been the focus of scholarship exploring cultural capital formation (Kalmijn & Kraaykamp, 1996). Prior work suggests that organizational resources, instructional expertise, and enrichment activities in schools may help to expose students to arts, music, literature, and other cultural goods, thereby facilitating the growth of cultural capital (Andersen, & Jæger, 2015; Dumais, 2002; Feldman & Matjasko, 2005; Kisida et al., 2014). In one of the only large experimental studies, researchers found that students who participated in a school-initiated art program were able to become “cultural consumers” with the largest effects on cultural capital formation accruing to low-income students (Kisida et al., 2014). The influence of cultural capital on other student outcomes (e.g., academic achievement, educational attainment) is mixed (Dumais, 2002; Feldman & Matjasko, 2005). Nevertheless, cultural capital may be a valuable developmental outcome on its own. There is also evidence that exposure to cultural capital may have broader societal benefits by helping to enhance social cohesion, collective efficacy, and social ties (Jeannotte, 2003).



Cultural capital and homeschooling

Opportunities to develop cultural capital at school raise a potential concern for homeschooled children (Anderson & Jaeger, 2015). In homeschooling contexts, varied expertise needed to teach music, art, literature, and foreign language may present homeschool teachers with considerable challenges (Byo, 1999), while expensive facilities, supplies, and other resources may impede the quality of instruction in these subjects at home (Curren & Blokhuis, 2011; Hanna, 2012). However, to compensate for possible missed opportunities at school, homeschool families may attempt to enable the formation of cultural capital in other ways. Participation in cultural, family, and extracurricular activities outside of home could promote the acquisition of cultural capital among homeschool students (Feldman & Matjasko, 2005; McNeal, 1999). Homeschool households have previously reported comparatively high participation in numerous religious, social, sporting, educational, and civic activities outside home (Basham, Merrifield, & Hepburn, 2007; Medlin, 2000; Tillman, 1995). Using national data, Smith and Sikkink (1999) found that homeschooled students participate in more extracurricular activities than their public school peers. In addition to participation in activities, many homeschool families partake in homeschool cooperatives and other organizations that pool expertise and resources in ways that could create greater opportunities for exposure to cultural capital (Phillips, 2010). Within homeschool cooperatives, for example, homeschool families may combine resources to deliver specialist courses in music and arts to small groups of students (Addo, 2003). Interviews with homeschool families indicate that expanded access to online content and part-time attendance at postsecondary institutions may also increase opportunities for cultural capital formation (Aurini & Davies, 2005; Isenberg, 2007; Murphy, 2012).

Taking stock of the literature, evidence suggests that homeschooled families may commit time and resources to participating in activities and organizations outside of home, possibly enabling opportunities for homeschooled children to acquire cultural capital (Murphy, 2012). Yet, there are methodological limitations to this small body of work that are also general limitations found in much research on homeschooling. Current evidence on homeschooling and cultural capital exposure is primarily restricted to qualitative studies. No experimental studies exist on homeschooling and cultural capital and there are no observational studies using statistical controls to examine cultural capital in the context of homeschooling.

Common proxy measures of cultural capital may also be conceptually restrictive in homeschool settings (Collins, 2008). Whether homeschool families pursue conventional opportunities to develop cultural capital may partly depend on their reasons for deciding to homeschool. A rejection of mainstream culture may be one of the driving forces behind decisions to homeschool, making the perceived value of certain cultural goods context-dependent (Collins, 2008). For example, the domain of homeschooling has traditionally belonged to conservative Christian households who report religious and moral instruction as key influences on their decision to homeschool (Jolly et al., 2013). Yet, with the number of homeschooled students rising from approximately 300,000 in the 1990s to over 2 million, many other reported motivations for homeschooling have arisen (Murphy, 2014; Neuman & Guterman, 2017). Personalized attention for students with special needs, advanced education for gifted children, and fostering of minority cultural identities are well-documented rationales for choosing to homeschool that may influence the extent to which parents seek to expose their children to commonly measured forms of cultural capital (Aurini & Davies, 2005; Cheng, Tuchman, & Wolf, 2016; Jolly et al., 2013; Mazama & Lundy, 2015; Ray, 2015). Nonetheless, no empirical analysis has attempted to test whether homeschool households would, on average, reject or embrace opportunities to acquire cultural capital.

Methods

Students may gain exposure to cultural capital at school (Andersen, & Jaeger, 2015; Kisida et al., 2014). By not attending a traditional school, homeschooled students may have fewer opportunities for cultural capital acquisition. To examine this possibility, this study asks the following question: Do

homeschooled students lack opportunities to acquire cultural capital? This work addresses this question by using a rigorous set of statistical controls to analyze a nationally representative dataset of American households ($N = 14,075$). Initial analyses explore humanities subjects taught in homeschooled households to understand how much formal instruction homeschooled students receive in arts, music, literature, and foreign language. Seven cultural activities and seven family activities are then compared among public, private, and homeschooled students. Negative estimates for these activities for homeschooled students relative to students attending public and private schools could provide evidence of cultural capital deprivation among homeschooled students. Conversely, positive estimates could indicate that homeschooled families may seek to expose their children to cultural resources through participation in cultural and family activities.

Data

The analyses in the study use data from the National Household Education Survey (National Household Education Survey (NHES), 2016). The survey collects educational information on a nationally representative sample of American households and is administered by the US Department of Education's National Center for Education Statistics (NCES). The following three components comprise the survey: Early Childhood Program Participation, Parent and Family Involvement in Education, and Adult Training and Education. For this study, the analyses examine responses to the Parent and Family Involvement (PFI) section of this survey. In 2016, the survey was conducted in two phases. In the first phase, a household screener was used to select households for the survey, including the identification of current homeschool households. The response rate to this initial screener was 66%. In the second phase, eligible individuals identified from the initial screener were surveyed. The final unweighted response rate was 49%, yielding 14,075 responses from parent/guardians in kindergarten through 12th grade on the PFI section of the survey. These responses include 552 homeschool households.

Respondents were asked about school choice decisions, parental involvement, and family and extracurricular activities. In a series of sub-questions targeting only homeschool families, homeschool households were queried on the amount of time spent on homeschooling, subject areas covered, and resources used for homeschooling. Respondents also reported on racial background, income, family structure, household size, and parental educational level. [Table 1](#) presents each of the variables used for the analyses.

Dependent variables

Humanities instruction

This indicated whether a child who was homeschooled had ever received instruction in art, music, literature, and foreign language. Homeschool respondents were asked to think about all of the years that they had homeschooled and to indicate subject areas they had taught during that period. Only homeschool households received this subset of questions on the survey. Since knowledge in these subject areas has been considered representative of cultural capital, rates of instruction in these subjects may help to describe the extent to which homeschooled students receive formal instruction in subjects that may create opportunities for the development of cultural capital (Davies & Rizk, 2018; DiMaggio, 1982).

Cultural activities

On the survey, respondents were asked about their child's participation over a one-month duration in the following cultural activities: visiting a library; visiting a bookstore; going to a play, concert, or other live show; visiting an art gallery, a museum, or a historical site; visiting a zoo or an aquarium; and attending an athletic or sporting event outside of school in which the child was not a player. These activities have served as proxy measures for cultural capital in numerous studies (De Graaf, 1986; DiMaggio & Mohr, 1985; Gaddis, 2013; Kisida et al., 2014;

Table 1. Variables of analysis.

	M (SD)	Min.	Max.
<i>Dependent Variables</i>			
Cultural Events and Activities	2.49 (1.71)	0	7
Family Activities	4.18 (1.82)	0	7
Humanities Instruction ¹	2.58 (1.24)	0	4
<i>School Variables</i>			
Homeschooled	0.04 (0.18)	0	1
Public School	0.87 (0.33)	0	1
Private School	0.09 (0.29)	0	1
<i>Household Variables</i>			
Household Income	6.41 (2.83)	1	10
Household Size	4.58 (1.50)	2	10
Married	0.71 (0.45)	0	1
Divorced/Separated	0.16 (0.37)	0	1
Other Family Structure	0.13 (0.33)	0	1
<i>Parent/Guardian Education</i>			
High School or Less	0.34 (0.47)	0	1
Some Postsecondary	0.28 (0.45)	0	1
University Degree	0.38 (0.49)	0	1
<i>Large City</i>			
Suburb	0.42 (0.49)	0	1
Midsize	0.17 (0.37)	0	1
Rural / Remote	0.24 (0.43)	0	1
<i>Child Variables</i>			
Special education designation	0.23 (0.42)	0	1
Age	11.02 (3.84)	3	20
Sex (Male)	0.52 (0.50)	0	1
<i>Race</i>			
White	0.50 (0.50)	0	1
Hispanic	0.21 (0.41)	0	1
Black	0.14 (0.34)	0	1
Asian	0.06 (0.23)	0	1
Other	0.09 (0.28)	0	1
N	14,075		

1. Only homeschool households reported on humanities instruction. Data are weighted to account for non-response.

Roscigno & Ainsworth-Darnell, 1999; Xu & Hampden-Thompson, 2011). Visiting art galleries and museums and going to live artistic performances have been commonly used proxies for cultural capital exposure, and these common proxy measures of cultural capital may theoretically have a stronger connection to cultural capital formation than activities, such as attending a sporting event (DeGraaf, et al., 2000).

Family activities

Respondents were asked about their child's participation over a one-week duration in the following family activities: telling their child a story; doing activities like arts and crafts, coloring, painting, pasting, and using clay; playing board games or doing puzzles with their child; working on a project like building, making, or fixing an object; playing sports, active games, or exercising together; discussing with their child how to manage time (i.e., time management); and talking with their child about the family's history or ethnic heritage. These activities are more frequent during early primary school (Hamlin & Flessa, 2018) and may help to introduce students to forms of art and culture. Participation in these family activities may then have an indirect influence on the acquisition of cultural capital by helping to create a foundation for cultural capital development (Sullivan, 2001). For these activities, reported participation rates provide a snapshot of activities occurring within a single time period that may not be representative of activities over a longer duration.

Independent variables

School variables

This indicates whether the child attends public school, private school, or was homeschooled. Table 2 presents the means and standard deviations for each demographic variable by school sector.

Household variables

Household income represents total income for all persons residing in the respondent's household over a 12-month period. Respondents selected from 10 income categories, ranging from 0 to \$10,000 at the lowest end to \$150,000 or more at highest end. Household size indicates that the number of individuals residing in the respondent's household. For family structure, married, divorced/separated, and other family configurations were controlled in the analyses. The primary parent/guardian's education level was aggregated into the following three classifications: high school or less, some postsecondary, and university degree or higher (BA, MA, PhD, or professional degree). Household geographic location was classified as large city, large/midsize suburb, midsize/small city or small suburb, and rural/remote area. Homeschool families report lower incomes, larger families, and higher rates of marriage compared to families with children in public schools, whereas private school households report the highest incomes, smallest family sizes, and highest rates of marriage among the three school sectors. The parent or guardian of a homeschooled student is least likely to have a university degree at 32%. For private schools, approximately 64% of parent/guardians hold a university degree or higher and 36% of public school parents hold a university degree or higher. From these descriptive data on education level, one challenge could be that only 32% of homeschooling parents have a university degree, in which a lack of education could limit a parent-teacher's ability to expose children to high status cultural resources.

Child variables

Special education indicates whether a health or education professional told the respondent that his/her child had a condition (e.g., intellectual disability, speech impairment, or learning disability) that would designate as a student with special needs. As found in previous work (Cheng et al., 2016), many homeschool households educate children with special needs. Nearly a quarter of homeschooled students in the sample were designated as having special educational needs, a proportion similar to that of public school households. The child's age, sex, and race were also controlled in the

Table 2. Demographic variables by school sector.

	Homeschool M (SD)	Private M (SD)	Public M (SD)
Child Variables			
White	0.55 (0.50)	0.60 (0.49)	0.49 (0.50)
Hispanic	0.29 (0.45)	0.14 (0.35)	0.22 (0.41)
Black	0.07 (0.25)	0.13 (0.33)	0.14 (0.35)
Asian	0.03 (0.16)	0.06 (0.23)	0.06 (0.24)
Other	0.07 (0.26)	0.08 (0.26)	0.09 (0.28)
Special Education	0.24 (0.43)	0.19 (0.39)	0.24 (0.43)
Household Variables			
Household Income	5.74 (2.59)	7.90 (2.45)	6.28 (2.83)
Household Size	5.37 (1.95)	4.43 (1.41)	4.56 (1.47)
Married	0.74 (0.44)	0.81 (0.39)	0.70 (0.46)
Divorced/Separated	0.16 (0.36)	0.13 (0.33)	0.16 (0.37)
Other Family Structure	0.10 (0.30)	0.07 (0.25)	0.14 (0.34)
Primary Parent/Guardian			
Education Level			
High School or Less	0.40 (0.49)	0.14 (0.35)	0.36 (0.48)
Some Postsecondary	0.29 (0.45)	0.22 (0.41)	0.28 (0.45)
University Degree	0.32 (0.47)	0.64 (0.48)	0.36 (0.48)
N	552	1,532	11,991

Data are weighted to account for non-response.

analyses. Race denoted whether a student was white, black, Hispanic, Asian, or other race. Other race comprises bi- and multiracial, American Indian, Alaska Native, Native Hawaiian, and Pacific Islander children. In the sample, white students represent the largest group of homeschooled students at approximately 55% of all homeschooled students. Within racial groupings, Hispanic students comprise a greater share of homeschooled students than they do in private and public school sectors. In contrast to Hispanic students in the sample, black and Asian students make up a smaller proportion of homeschooled students relative to their representation in the private and public school sectors.

Data analysis

The data analysis proceeded as follows. First, a descriptive breakdown for each variable of analysis was performed. Demographic variables were then examined across public, private, and homeschooled households. Following this step, descriptive analyses were performed to determine how many humanities subjects (art, music, literature, and foreign language) were taught at home for the sample of 552 homeschool families. Only homeschool households received these questions on subjects taught. Separate logistic regressions were subsequently run for seven cultural activities and seven family activities. In these models, dummy variables for homeschool, private, and public school were employed with public schools serving as the reference category. Additional controls for child and household sociodemographic characteristics and geographic location were included in these models. After examining results from these models, each logistic regression model was re-run with an interaction between homeschool status and university degree holders. Finally, a descriptive breakdown of activities by education level was generated among public, private, and homeschool households. For the analyses, survey weights were applied. These survey weights were generated by NCES to account for non-response that could jeopardize the representativeness of the sample. As a cautionary note, these analyses offer descriptive and correlational evidence of cultural capital in homeschooling contexts that should not be interpreted as establishing causal relationships.

Results

Humanities subjects, such as art, music, foreign language, and literature, are linked to cultural capital (Andersen, & Jæger, 2015; Dumais, 2002; Feldman & Matjasko, 2005). In initial analyses, this study explored the extent to which homeschool families provide instruction in the humanities, using responses elicited from homeschool households on their formal instructional choices at home. Nearly one-third of respondents report having taught all four of these subjects to their children, while an additional one-third of respondents report having taught three of these subjects. Approximately 40% of homeschool families have taught only two of these subjects or less, suggesting that formal instructional opportunities for cultural capital acquisition could be lacking for many homeschooled students. Even though only homeschool households reported on the teaching of these subjects on the survey, national data indicates that students attending public and private schools tend to receive instruction in arts, music, literature, and foreign language at higher rates (National Center for Education Statistics, 2011).

Evidence from studies of homeschooling have argued that homeschool cooperatives can help to increase the breadth of content to which homeschooled children receive exposure. Figure 1 presents the percentage of homeschool households ($n = 552$) who have provided formal instruction in art, music, literature, and foreign language, distinguishing families whose children receive instruction through a homeschooling organization or cooperative and those who do not. In this study's sample, nearly three-quarters of families whose children receive instruction through a homeschooling organization or cooperative report formal instruction in three to four humanities subjects. By comparison, only half of families whose children do not participate in

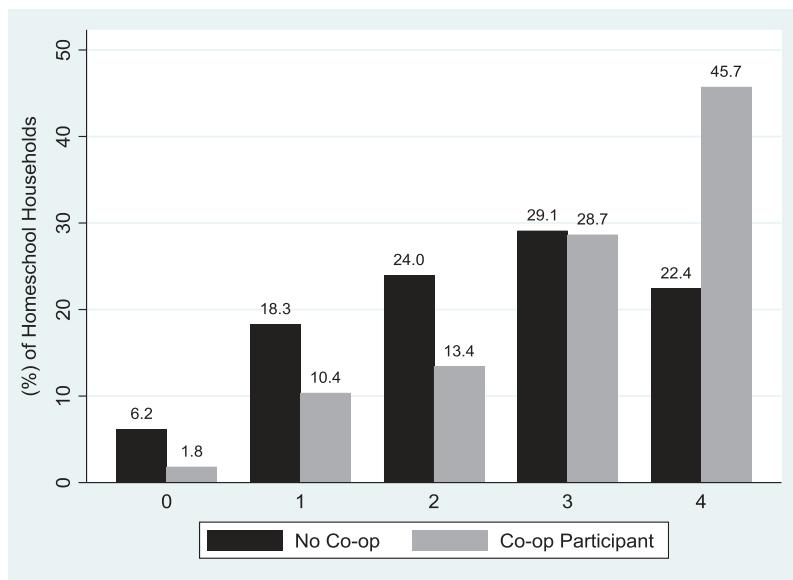


Figure 1. Number of humanities subjects taught among homeschool households. Only homeschooled households reported on subjects taught at home ($n = 552$).

a homeschooling organization or cooperative report formal instruction in three to four of the humanities subjects.

The lack of instruction in humanities subjects could represent a detriment of homeschooling. Nonetheless, families may seek to compensate by facilitating experiences outside of the home. To investigate this possibility, separate logistic regression models were performed for seven cultural activities. Table 3 presents odds ratios for participation in each of the seven activities. Relative to public school students, homeschooled students are between two and three times more likely to visit an art gallery, museum, or historical site; visit a library; or attend an event sponsored by a community, religious, or ethnic group. Homeschooled students are also approximately 1.5 times more likely to visit a zoo, aquarium, or bookstore during the course of a month. These patterns seem to indicate that homeschooled students may gain exposure to cultural capital through cultural activities outside of the home.

Logistic regression models were also performed for seven family activities. Table 4 presents odds ratios for participation in each of these seven activities. Results indicate that homeschooled students are two and a half times more likely to do arts and crafts and nearly two times more likely to work on projects that entail building, making, or fixing an object with family. As these activities may help to introduce students to different forms of art, they may help to provide a foundation for cultural capital consumption (Anderson & Jaeger, 2015; Dumais, 2002; Xu & Hampden-Thompson, 2011). Along with these differences in participation, homeschool households are nearly two times more likely to report playing sports or doing physical activity with family and approximately one and half times more likely to report playing board games and engaging their children in discussions about time management. Interactions and discussions arising from participating in these activities may promote cultural capital acquisition indirectly. For the 14 cultural and family activities investigated, homeschooled households report statistically greater participation in 10 of the 14 activities.

In Tables 3 and 4, parents with a university degree or higher indicated greater participation in most of the cultural and family activities, particularly activities that have been commonly used as proxies for cultural capital, such as visiting museums and art galleries, going to bookstores and libraries, and attending live artistic performances. Previous research on cultural capital has also

Table 3. Logistic regression predicting participation in cultural activities.

	Museum/ Gallery	Live Performance	Library	Zoo/ Aquarium	Community Event	Sporting Event	Bookstore
Homeschool	2.361*** (0.368)	1.048 (0.137)	2.787*** (0.486)	1.523** (0.298)	2.168*** (0.298)	1.024 (0.145)	1.511*** (0.214)
Private Schl.	1.134 (0.099)	1.198** (0.094)	1.045 (0.092)	0.773** (0.081)	1.592*** (0.139)	1.164* (0.095)	1.155* (0.096)
Spec. Ed.	1.161** (0.080)	0.960 (0.062)	0.957 (0.064)	1.195** (0.094)	0.989 (0.063)	0.778*** (0.050)	1.068 (0.069)
Gender (Male)	0.849*** (0.051)	0.663*** (0.037)	0.793*** (0.046)	0.933 (0.065)	0.919 (0.050)	1.241*** (0.067)	0.776*** (0.041)
Black	1.021 (0.106)	1.058 (0.107)	1.354*** (0.139)	1.318** (0.155)	2.109*** (0.217)	1.259** (0.124)	0.824** (0.079)
Asian	0.795* (0.097)	0.842 (0.093)	1.680*** (0.222)	1.017 (0.169)	0.812* (0.099)	0.417*** (0.051)	0.836 (0.092)
Hispanic	1.097 (0.096)	1.036 (0.088)	0.919 (0.080)	1.491*** (0.146)	1.195** (0.095)	1.057 (0.085)	1.130 (0.091)
Other Race	1.015 (0.107)	1.059 (0.102)	1.160 (0.117)	1.011 (0.123)	1.198* (0.117)	0.843* (0.082)	1.153 (0.113)
Age	0.949*** (0.007)	1.005 (0.008)	0.920*** (0.007)	0.872*** (0.008)	0.971*** (0.007)	1.000 (0.007)	0.971*** (0.007)
Some Postsec.	1.269*** (0.114)	1.157* (0.096)	1.286*** (0.109)	0.996 (0.094)	1.402*** (0.106)	1.177** (0.092)	1.519*** (0.122)
University	1.943*** (0.179)	1.579*** (0.136)	2.020*** (0.177)	1.046 (0.106)	1.871*** (0.149)	1.282*** (0.105)	2.111*** (0.176)
Other Family	1.095 (0.118)	0.966 (0.107)	0.956 (0.103)	1.312** (0.157)	0.778** (0.079)	1.185* (0.121)	0.901 (0.091)
Divorced/Sep.	1.107 (0.103)	1.181* (0.102)	0.934 (0.087)	1.218* (0.136)	0.927 (0.077)	1.147* (0.094)	0.915 (0.074)
Household Size	0.967 (0.025)	0.982 (0.025)	1.000 (0.027)	1.048 (0.030)	1.064** (0.026)	1.060** (0.024)	0.927*** (0.022)
Household Inc.	1.023 (0.015)	1.072*** (0.015)	0.934*** (0.013)	0.988 (0.017)	1.021 (0.013)	1.080*** (0.014)	1.034** (0.014)
Suburb	0.877 (0.076)	1.052 (0.089)	0.996 (0.089)	0.883 (0.087)	1.178** (0.098)	1.068 (0.090)	0.853** (0.068)
Midsize	1.070 (0.119)	0.950 (0.099)	1.080 (0.117)	0.818 (0.104)	1.125 (0.116)	1.029 (0.106)	0.922 (0.091)
Rural/Remote	0.656*** (0.065)	0.939 (0.089)	0.878 (0.087)	0.649*** (0.075)	1.440*** (0.132)	1.204** (0.112)	0.700*** (0.064)
Constant	0.490*** (0.102)	0.315*** (0.061)	1.533** (0.286)	1.120 (0.245)	0.578*** (0.107)	0.243*** (0.044)	0.690** (0.131)
N	14,075	14,075	14,075	14,075	14,075	14,075	14,075

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. Survey weights are applied. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Data are weighted to account for non-response.

consistently echoed the link between education level and exposure to such cultural goods (DiMaggio, 1982; Lareau, 2015). However, this well-documented association between education level was less evident for homeschool households. In the sample, homeschool parents are least likely to have a university degree but also the group that is most likely to indicate participation in cultural and family activities. To investigate this pattern further, an interaction between homeschool status and parents with a university degree or higher is introduced to the previous logistic regression models. Tables 5 and 6 present the results for cultural and family activities, respectively. In both tables, the interaction between homeschool status and university degree holders is not statistically significant for any of the activities. Based on these results, higher rates of participation in activities among homeschool households does not appear to be driven by education level.

Table 7 presents a descriptive breakdown of activities by education level for homeschool, private, and public school households. Relative to private and public school parents, homeschool parents report greater participation in cultural and family activities for both parents who have a high school degree or less and those who have a university degree or higher. For homeschool households, 27% of university

Table 4. Logistic regression predicting participation in family activities.

	Storytelling	Arts & Crafts	Board Games	Projects	Sports	Time Management	Cultural Heritage
Homeschool	1.208 (0.228)	2.562*** (0.356)	1.571** (0.319)	1.852*** (0.245)	1.893*** (0.270)	1.452** (0.251)	0.916 (0.144)
Private Schl.	1.099 (0.092)	1.140 (0.098)	0.953 (0.081)	1.103 (0.089)	1.264** (0.138)	1.110 (0.103)	1.080 (0.090)
Spec. Ed.	1.085 (0.068)	1.186** (0.087)	1.018 (0.067)	1.044 (0.067)	0.812*** (0.054)	1.112 (0.078)	0.998 (0.064)
Gender (Male)	0.936 (0.052)	0.463*** (0.028)	0.959 (0.054)	1.174*** (0.063)	1.319*** (0.084)	1.147** (0.067)	0.885** (0.048)
Black	0.953 (0.093)	0.815* (0.090)	0.941 (0.097)	0.856 (0.084)	0.913 (0.101)	1.377*** (0.156)	2.847*** (0.296)
Asian	0.616*** (0.088)	0.707* (0.135)	0.662*** (0.101)	0.665*** (0.089)	0.568*** (0.111)	1.149 (0.152)	1.849*** (0.247)
Hispanic	0.758*** (0.061)	1.116 (0.104)	1.004 (0.086)	0.904 (0.073)	1.336*** (0.132)	1.473*** (0.131)	2.710*** (0.226)
Other Race	0.998 (0.095)	0.931 (0.094)	0.900 (0.084)	1.053 (0.097)	0.973 (0.101)	1.440*** (0.156)	2.203*** (0.219)
Age	0.848*** (0.007)	0.746*** (0.008)	0.851*** (0.007)	0.913*** (0.007)	0.845*** (0.008)	1.118*** (0.009)	1.051*** (0.008)
Some Postsec.	1.326*** (0.099)	1.129 (0.094)	1.208** (0.092)	1.239*** (0.094)	1.056 (0.085)	1.222** (0.100)	1.042 (0.080)
University	1.460*** (0.115)	0.992 (0.086)	1.169* (0.095)	1.079 (0.086)	1.161* (0.099)	1.406*** (0.122)	1.092 (0.088)
Other Family	0.924 (0.089)	0.998 (0.110)	1.117 (0.110)	1.114 (0.110)	0.949 (0.105)	0.847 (0.093)	0.927 (0.095)
Divorced/Sep.	0.867 (0.077)	1.060 (0.094)	0.857* (0.080)	0.970 (0.080)	0.965 (0.084)	0.857* (0.076)	0.952 (0.079)
Household Size	0.961 (0.026)	1.033 (0.036)	1.032 (0.030)	0.991 (0.026)	1.071* (0.043)	0.901*** (0.023)	1.000 (0.026)
Household Inc.	1.014 (0.014)	0.954*** (0.015)	0.975* (0.014)	1.006 (0.014)	1.062*** (0.017)	0.992 (0.014)	0.955*** (0.013)
Suburb	1.034 (0.091)	0.860 (0.086)	1.010 (0.087)	1.070 (0.090)	1.221* (0.128)	1.044 (0.097)	1.039 (0.090)
Midsize	1.072 (0.115)	0.980 (0.120)	1.021 (0.117)	1.069 (0.110)	1.396*** (0.166)	0.815* (0.092)	1.006 (0.107)
Rural/Remote	0.928 (0.090)	0.894 (0.099)	1.031 (0.097)	1.163* (0.107)	1.324** (0.145)	0.800** (0.079)	0.808** (0.076)
Constant	9.144*** (1.744)	39.953*** (8.806)	6.544*** (1.229)	3.000*** (0.557)	8.404*** (1.784)	0.756 (0.146)	0.622*** (0.114)
N	14,075	14,075	14,075	14,075	14,075	14,075	14,075

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. Survey weights are applied. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Data are weighted to account for non-response.

Table 5. Logistic regression predicting participation in cultural activities.

	Museum/ Gallery	Live Performance	Library	Zoo/ Aquarium	Community Event	Sporting Event	Bookstore
Homeschool	2.59*** (0.53)	0.90 (0.16)	2.53*** (0.59)	1.42 (0.38)	2.35*** (0.40)	1.18 (0.22)	1.54* (0.30)
Homeschool x High School Ed.	0.76 (0.21)	1.52 (0.38)	1.39 (0.41)	1.25 (0.42)	0.76 (0.19)	0.65 (0.17)	0.95 (0.25)

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Models include the same controls presented in Tables 4 and 5. Data are weighted to account for non-response.

degree holders report participation in 5–7 cultural activities, whereas 21% of those with a high school education or less indicate 5–7 cultural activities. Homeschool parents with a high school education or less also report participation in 5–7 cultural activities at a higher rate than public and private school parents who hold a university degree or higher. Homeschool families generally indicate greater total

Table 6. Logistic regression predicting participation in family activities.

	Storytelling	Arts & Crafts	Board Games	Projects	Sports	Time Management	Cultural Heritage
Homeschool	1.14 (0.29)	2.58*** (0.46)	1.62 (0.46)	1.82*** (0.30)	1.99*** (0.35)	1.27 (0.28)	0.82 (0.17)
Homeschool x	1.20	0.98	0.91	1.07	0.85	1.58	1.42
High School Ed.	(0.40)	(0.26)	(0.30)	(0.28)	(0.24)	(0.50)	(0.38)

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. Survey weights are applied. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Models include the same controls presented in Tables 4 and 5. Data are weighted to account for non-response.

Table 7. Comparison of activities by parent education level.

	High School Education or Less M, (SD)			University Degree or Higher M, (SD)		
	Homeschool	Private	Public	Homeschool	Private	Public
Cultural Activities						
0–1	0.24 (0.43)	0.29 (0.46)	0.44 (0.50)	0.10 (0.30)	0.19 (0.39)	0.22 (0.42)
2–4	0.55 (0.50)	0.66 (0.48)	0.48 (0.50)	0.64 (0.48)	0.62 (0.49)	0.61 (0.49)
5–7	0.21 (0.41)	0.05 (0.22)	0.08 (0.27)	0.27 (0.44)	0.19 (0.40)	0.17 (0.37)
Family Activities						
0–1	0.09 (0.28)	0.09 (0.29)	0.12 (0.32)	0.03 (0.18)	0.06 (0.24)	0.06 (0.24)
2–4	0.42 (0.50)	0.42 (0.50)	0.45 (0.50)	0.32 (0.47)	0.47 (0.50)	0.49 (0.50)
5–7	0.49 (0.50)	0.49 (0.50)	0.43 (0.50)	0.65 (0.48)	0.47 (0.50)	0.45 (0.50)

participation in cultural and family activities than families in the other two school sectors for households with a high school degree or less and those with a university degree or higher. These descriptive patterns across school sectors by education level provide evidence that homeschool households participate in cultural and family activities at high rates irrespective of education level.

Discussion

Cultural capital is a resource that may contribute to positive educational and life outcomes and is arguably an important developmental outcome in its own right (Davies & Rizk, 2018). At school, organizational resources, instructional expertise, and enrichment experiences may promote the acquisition of cultural capital (Andersen, & Jæger, 2015; Feldman & Matjasko, 2005; Kisida et al., 2014). Homeschooled children who do not attend school may then be deprived of these opportunities, prompting homeschool families to seek opportunities to compensate for this potential disadvantage. To investigate this possibility, this study performed an initial descriptive analysis of formal instruction in four humanities subjects (i.e., art, music, literature, and foreign language) in homeschool households. Approximately 40% of homeschool families reported ever providing instruction in two (or fewer) of these subjects. By comparing cultural and family activities between homeschooled students and their public school peers, homeschool families reported statistically greater participation in 10 out of 14 cultural and family activities, net of controls for child and household sociodemographic characteristics.

In reflecting on these results, higher rates of participation in cultural and family activities reported for homeschool families may suggest that homeschooled students have opportunities to acquire cultural capital outside of formal instructional time. Participation in these types of activities may thus play a compensatory role, possibly offsetting what may be forfeited by not attending a traditional brick-and-mortar school. Furthermore, results for specific activities, such as visits to museums and art galleries, to which homeschool children had greater exposure than their public school counterparts tend to be measures of high culture that have been the focus of prior studies of cultural capital (De Graaf et al., 2000; DiMaggio & Mukhtar, 2004; Kisida et al., 2014). Concerns that homeschooled children are deprived of opportunities to develop cultural capital may, in part, be assuaged based on the patterns observed in this study. Yet, much more work is needed to understand

if participation in cultural and family activities is equivalent to cultural capital developed through experiences at school.

Not all of the results exhibited positive trends for cultural capital development in homeschool households. For formal instruction in art, music, foreign language, and literature, results indicated that approximately 40% of homeschool households taught two (or fewer) of these subjects during the years that they homeschooled. Children who have low exposure to humanities subjects may be deprived of important cultural capital-forming experiences that can support positive educational and life outcomes. Although this result is only descriptive, it may illuminate a challenge faced by homeschool parents. Not only could it be difficult to be a content expert in art, music, foreign language, and literature, but also it could be cost-prohibitive to deliver lessons in these subjects, particularly in the case of art and music (Hanna, 2012). While participation in cultural and family activities may help to counterbalance these obstacles, other possibilities would be to take advantage of online educational content, part-time enrollment at local schools and universities, and private tutoring. Reports on the existence of "hybrid" homeschooled appear to show that these types of arrangements are growing more common among homeschooled (Wearne, 2016). Membership in a homeschool cooperative also appears to reduce this potential problem as three-quarters of families that were members of homeschool cooperatives in this study reported providing instruction in three to four of the humanities subjects--a large difference from non-members. This pattern further corresponds to prior work, pointing out that homeschooling cooperatives and organizations may enable instruction in the humanities through the pooling of families' resources (Addo, 2003; Phillips, 2010).

The results of this observational study are subject to limitations. The analyses present relationships that do not establish a causal link between homeschool education and greater participation in cultural and family activities. A parent who decides to homeschool may possess unique motivations, skills, and self-efficacy that enable high engagement in activities irrespective of school sector (Jeynes, 2016). Homeschool parents who take their children to museums, performances, and art galleries may embody cultural capital themselves so that, in the counterfactual case, they would undertake activities at high rates whether or not their children were homeschooled (Dumais, 2002; Hamlin, 2018). Another consideration is that this study examines proxies for cultural capital that may not cover diverse ways that homeschool and other families provide cultural capital-building experiences for their children. Cultural capital may take different forms within varying contexts (Collins, 2008; Roscigno & Ainsworth-Darnell, 1999). It is possible that knowledge of how to thrive in nature may have more localized cultural value in rural and remote communities, whereas high-status cultural knowledge and resources may carry less weight in such environments. When homeschool parents facilitate cultural capital formation, they may impart cultural capital that has differential value across varying social contexts. Additionally, results from this study are derived from self-reports that may be subject to social desirability bias, in which respondents could overestimate their children's participation in cultural and family activities. The problem of overestimation may be salient for homeschool families who could perceive greater pressure to report positively on children's activities given their unconventional decision to educate their children outside of mainstream educational systems.

Despite being subject to common methodological limitations of an observational study, this work sheds light on an important dynamic that has received very little consideration in the literature. It also strengthens existing evidence on homeschooling and cultural capital by analyzing a nationally representative survey with a rigorous set of controls for sociodemographic and other household characteristics. This initial foray into the relationship between cultural capital and homeschooling underscores lines of inquiry for future research. Little is known about how homeschool parents attempt to teach a wide breadth of humanities content, such as art, music, and foreign language. Providing instruction across these subjects may present significant challenges. Furthermore, it remains uncertain whether a lack of instruction in humanities subjects among homeschool households may signify a rejection of conventional forms of cultural capital or a consequence of unobserved barriers faced by homeschool families. Still, nearly 60% of homeschool households in this study reported providing instruction in at least three of four of the humanities subjects

examined in this study. How do homeschool families deliver this material? Do homeschool teachers seek out supplementary educational experiences for their children to compensate for a lack of knowledge that they may have in a given content area? How might homeschool cooperatives and other organizations support instruction in these subjects? Future research examining these questions could help to extend knowledge of cultural capital formation among homeschooled students.

Author bio

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References

Addo, A. O. (2003). Music teacher education: Assessing a community outreach partnership. *Teaching Education*, 14(2), 201–211. doi:10.1080/1047621032000092986

Andersen, I. G., & Jæger, M. M. (2015). Cultural capital in context: Heterogeneous returns to cultural capital across schooling environments. *Social Science Research*, 50, 177–188. doi:10.1016/j.ssresearch.2014.11.015

Aurini, J., & Davies, S. (2005). Choice without markets: Homeschooling in the context of private education. *British Journal of Sociology of Education*, 26(4), 461–474. doi:10.1080/01425690500199834

Banks, P. A. (2012). Cultural socialization in black middle-class families. *Cultural Sociology*, 6(1), 61–73. doi:10.1177/1749975511427646

Basham, P., Merrifield, J., & Hepburn, C. R. (2007). *Home schooling: From extreme to mainstream*. Vancouver, Canada: Fraser Institute.

Bourdieu, P., & Passeron, J. C. (1977). *Reproduction in education, society, and culture*. (R. Nice, Trans.). London: Sage Publications.

Byo, S. J. (1999). Classroom teachers' and music specialists' perceived ability to implement the national standards for music education. *Journal of Research in Music Education*, 47(2), 111–123. doi:10.2307/3345717

Cheng, A. (2014). Does homeschooling or private schooling promote political intolerance? Evidence from a Christian university. *Journal of School Choice*, 8(1), 49–68. doi:10.1080/15582159.2014.875411

Cheng, A., Tuchman, S., & Wolf, P. J. (2016). Homeschool parents and satisfaction with special education services. *Journal of School Choice*, 10(3), 381–398. doi:10.1080/15582159.2016.1202076

Collins, R. (2008). *Violence*. Princeton, NJ: Princeton University Press.

Curren, R., & Blokhuis, J. C. (2011). The prima facie case against homeschooling. *Public Affairs Quarterly*, 25(1), 1–19.

Davies, S., & Rizk, J. (2018). The three generations of cultural capital research: A narrative review. *Review of Educational Research*, 88(3), 331–365. doi:10.3102/0034654317748423

De Graaf, N. D., De Graaf, P. M., & Kraaykamp, G. (2000). Parental cultural capital and educational attainment in the Netherlands: A refinement of the cultural capital perspective. *Sociology of Education*, 73, 92–111. doi:10.2307/2673239

De Graaf, P. M. (1986). The impact of financial and cultural resources on educational attainment in the Netherlands. *Sociology of Education*, 59, 237–246. doi:10.2307/2112350

DiMaggio, P. (1982). Cultural capital and school success: The impact of status culture participation on the grades of US high school students. *American Sociological Review*, 47, 189–201. doi:10.2307/2094962

DiMaggio, P., & Mohr, J. (1985). Cultural capital, educational attainment, and marital selection. *American Journal of Sociology*, 90(6), 1231–1261. doi:10.1086/228209

DiMaggio, P., & Mukhtar, T. (2004). Arts participation as cultural capital in the United States, 1982–2002: Signs of decline? *Poetics*, 32(2), 169–194. doi:10.1016/j.poetic.2004.02.005

Dumais, S. A. (2002). Cultural capital, gender, and school success: The role of habitus. *Sociology of Education*, 75, 44–68. doi:10.2307/3090253

Dumais, S. A. (2006). Early childhood cultural capital, parental habitus, and teachers' perceptions. *Poetics*, 34(2), 83–107. doi:10.1016/j.poetic.2005.09.003

Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75(2), 159–210. doi:10.3102/00346543075002159

Gaddis, S. M. (2013). The influence of habitus in the relationship between cultural capital and academic achievement. *Social Science Research*, 42(1), 1–13. doi:10.1016/j.ssresearch.2012.08.002

Hamlin, D. (2018). "The types of kids we get are different"—The distinguishing characteristics of school choosers in Detroit, Michigan. *Journal of School Choice*, 12(1), 52–79. doi:10.1080/15582159.2017.1393305

Hamlin, D., & Flessa, J. (2018). Parental involvement initiatives: An analysis. *Educational Policy*, 32(5), 697–727. doi:10.1177/0895904816673739

Hanna, L. G. (2012). Homeschooling education: Longitudinal study of methods, materials, and curricula. *Education and Urban Society*, 44(5), 609–631. doi:10.1177/0013124511404886

Hirsch, E. D. (1987). *Cultural literacy: What every American should know*. Boston, MA: Houghton Mifflin.

Isenberg, E. J. (2007). What have we learned about homeschooling? *Peabody Journal of Education*, 82, 387–409. doi:10.1080/01619560701312996

Jæger, M. M., & Holm, A. (2007). Does parents' economic, cultural, and social capital explain the social class effect on educational attainment in the Scandinavian mobility regime? *Social Science Research*, 36(2), 719–744. doi:10.1016/j.ssresearch.2006.11.003

Jeannette, M. S. (2003). Singing alone? The contribution of cultural capital to social cohesion and sustainable communities. *The International Journal of Cultural Policy*, 9(1), 35–49. doi:10.1080/1028663032000089507

Jeynes, W. H. (2016). Homeschooling: The ultimate personalized environment. In M. Murphy, S. Redding, & J. Twyman (Eds.), *Handbook on personalized learning for state, districts, and schools* (pp. 99–114). Philadelphia, PA: Center on Innovations in Learning.

Jolly, J. L., Matthews, M. S., & Nester, J. (2013). Homeschooling the gifted: A parent's perspective. *Gifted Child Quarterly*, 57(2), 121–134. doi:10.1177/0016986212469999

Kalmijn, M., & Kraaykamp, G. (1996). Race, cultural capital, and schooling: An analysis of trends in the United States. *Sociology of Education*, 69, 22–34. doi:10.2307/2112721

Kisida, B., Greene, J. P., & Bowen, D. H. (2014). Creating cultural consumers: The dynamics of cultural capital acquisition. *Sociology of Education*, 87(4), 281–295. doi:10.1177/0038040714549076

Lareau, A. (2015). Cultural knowledge and social inequality. *American Sociological Review*, 80(1), 1–27. doi:10.1177/0003122414565814

Martin-Chang, S., Gould, O. N., & Meuse, R. E. (2011). The impact of home schooling on academic achievement: Evidence from homeschooled and traditionally schooled children. *Canadian Journal of Behavioural Science*, 43(3), 195–202. doi:10.1037/a0022697

Mazama, A., & Lundy, G. (2013). African American homeschooling and the question of curricular cultural relevance. *The Journal of Negro Education*, 82(2), 123–138. doi:10.7709/jnegroeducation.82.2.0123

Mazama, A., & Lundy, G. (2015). African American homeschooling and the quest for a quality education. *Education and Urban Society*, 47(2), 160–181. doi:10.1177/0013124513495273

McNeal, R. B., Jr. (1999). Participation in high school extracurricular activities: Investigating school effects. *Social Science Quarterly*, 80(2), 291–309.

Medlin, R. G. (2000). Home schooling and the question of socialization. *Peabody Journal of Education*, 75(1–2), 107–123.

Murphy, J. (2012). *Homeschooling in America: Capturing and assessing the movement*. Thousand Oaks, CA: Corwin Press.

Murphy, J. (2014). The social and educational outcomes of homeschooling. *Sociological Spectrum*, 34(3), 244–272. doi:10.1080/02732173.2014.895640

National Center for Education Statistics. (2011). *A snapshot of arts education in public elementary and secondary schools: 2009–10*. Washington, DC: U.S. Department of Education. U.S. Department of Education.

National Household Education Survey (NHES). (2016). Retrieved from <https://nces.ed.gov/nhes/>

Neuman, A., & Guterman, O. (2017). Homeschooling is not just about education: Focuses of meaning. *Journal of School Choice*, 11(1), 148–167. doi:10.1080/15582159.2016.1262231

Phillips, L. (2010). Homeschooling is an art, not a science: The impact of homeschooling on choice of college major. *Sociological Viewpoints*, 26(2), 19.

Ray, B. (2015). African American homeschool parents' motivations for homeschooling and their Black children's academic achievement. *Journal of School Choice*, 9(1), 71–96. doi:10.1080/15582159.2015.998966

Ray, B. D. (2013). Homeschooling associated with beneficial learner and societal outcomes but educators do not promote it. *Peabody Journal of Education*, 88(3), 324–341. doi:10.1080/0161956X.2013.798508

Redford, J., Battle, D., & Bielick, S. (2016). *Homeschooling in the United States: 2012 (NCES 2016-096)*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Roscigno, V. J., & Ainsworth-Darnell, J. W. (1999). Race, cultural capital, and educational resources: Persistent inequalities and achievement returns. *Sociology of Education*, 72, 158–178. doi:10.2307/2673227

Rössel, J. (2011). Cultural capital and the variety of modes of cultural consumption in the opera audience. *The Sociological Quarterly*, 52(1), 83–103. doi:10.1111/j.1533-8525.2010.01192.x

Smith, C., & Sikkink, D. (1999). Is private schooling privatizing? *First Things: A Monthly Journal of Religion and Public Life*, 92, 16–17.

Sommerfeld, A. K., & Bowen, P. (2013). Fostering social and cultural capital in urban youth: A programmatic approach to promoting college success. *Journal of Education*, 193(1), 47–55. doi:10.1177/002205741319300106

Sullivan, A. (2001). Cultural capital and educational attainment. *Sociology*, 35(4), 893–912. doi:10.1177/0038038501035004006

Tillman, V. D. (1995). Home schoolers, self-esteem, and socialization. *Home School Researcher*, 11(3), 1–6.

Upright, C. B. (2004). Social capital and cultural participation: Spousal influences on attendance at arts events. *Poetics*, 32(2), 129–143. doi:10.1016/j.poetic.2004.02.002

Wearne, E. (2016). A descriptive survey of why parents choose hybrid homeschooleds. *Journal of School Choice*, 10(3), 364–380. doi:10.1080/15582159.2016.1202075

Xu, J., & Hampden-Thompson, G. (2011). Cultural reproduction, cultural mobility, cultural resources, or trivial effect? A comparative approach to cultural capital and educational performance. *Comparative Education Review*, 56(1), 98–124. doi:10.1086/661289

Zimdar, A., Sullivan, A., & Heath, A. (2009). Elite higher education admissions in the arts and sciences: Is cultural capital the key? *Sociology*, 43(4), 648–666. doi:10.1177/0038038509105413



Do Homeschooled Students Lack Opportunities to Acquire Cultural Capital? Evidence from a Nationally Representative Survey of American Households

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ABSTRACT

Experiences at school may create valuable opportunities for children to acquire cultural capital. One concern for homeschooled children is that they may be deprived of these opportunities. However, homeschool families may enable opportunities for their children to acquire cultural capital through participation in activities outside of formal instructional time. This study investigates this possibility by comparing cultural and family activities between homeschooled students and their public school peers. The analyses use data from a nationally representative survey (National Household Education Survey, 2016) containing a substantial number of respondents who homeschool their children ($n = 552$). Descriptive results indicated that formal instruction in music, arts, literature, and foreign language is lacking in nearly 40% of homeschool households. Yet, relative to public school families, homeschool families report statistically higher participation in cultural and family activities. While patterns observed in this study are only descriptive, overall evidence suggests that homeschool families may provide opportunities for their children to acquire cultural capital through greater participation in cultural and family activities.

Introduction

The concept of cultural capital has been a prominent conceptual tool for explaining variation in educational and life outcomes (Davies & Rizk, 2018). While the term has evolved considerably since it was first introduced in the late 1970s, it broadly refers to high status cultural knowledge and dispositions that help to confer societal rewards to individuals and groups (Bourdieu & Passeron, 1977). In the educational arena, possession of cultural capital may offer institutional rewards, allowing individuals to convert cultural capital into higher academic achievement, greater educational attainment, and more prestigious credentials (Anderson & Jeger, 2015; DiMaggio & Mohr, 1985; Roscigno & Ainsworth-Darnell, 1999). When initially posited, cultural capital was primarily considered a mechanism for reproducing social inequalities in educational outcomes, but a number of subsequent empirical studies have indicated that cultural capital may have value, net of socio-economic background (Banks, 2012; Davies & Rizk, 2018; DiMaggio, 1982; Dumais, 2006; Kalmijn & Kraaykamp, 1996). This prospect may make schools a potential setting for youth to acquire cultural capital as school activities, resources, and staff expertise may facilitate experiences that contribute to the acquisition of cultural capital (Andersen, & Jæger, 2015; Dumais, 2002; Feldman & Matjakso, 2005; Hirsch, 1987; Kisida, Greene, & Bowen, 2014; Sommerfeld & Bowen, 2013).

For homeschooled students who do not attend brick-and-mortar schools, there may be a lack of opportunities to develop cultural capital. Replicating school experiences that may impart cultural capital, such as participation in music and art class, involvement in student clubs, and professional guidance in

classical literature, art, and music, may prove difficult for families who homeschool their children (Curren & Blokhuis, 2011). Facilities and other physical resources that may also support opportunities for cultural capital acquisition in school may not be available to homeschooled students. Supplies found in art rooms, books available in libraries, and instruments accessible to students in music classes at school could be cost-prohibitive while a parent-teacher could struggle to be a multisubject content expert in art, music, literature, and foreign language (Curren & Blokhuis, 2011; Hanna, 2012). Such challenges could deprive homeschool students of valuable opportunities to acquire cultural capital, representing a negative consequence of choosing to homeschool (Jaeger & Holm, 2007).

However, homeschool families may be able to foster cultural capital creation through other means (Hanna, 2012). Being cognizant of the limitations of schooling at home, homeschool families may seek to supplement their children's education by participating in extracurricular activities and organizations outside of home (Murphy, 2012). One-to-one instruction at home could also progress at a fast pace, freeing up time for cultural excursions and extracurricular activities. Additionally, the nature of homeschooling appears to be transforming in ways that could create opportunities for homeschooled students to gain cultural capital (Aurini & Davies, 2005). Interviews with homeschool families, for example, suggest that access to educational content online, participation in homeschooling organizations, and part-time enrollment at postsecondary institutions may enable opportunities for the formation of cultural capital for homeschooled students (Aurini & Davies, 2005; Isenberg, 2007; Murphy, 2012). Yet, as scholarship in this area has largely remained anecdotal, very little is known about the degree to which homeschooled students have opportunities to acquire cultural capital.

The limited knowledge in this area is worth addressing. Homeschooling is a rapidly growing phenomenon in the United States with nearly two million students now being homeschooled (Redford, Battle, & Bielick, 2016). Prior scholarship on homeschooling has tended to focus on questions of academic achievement, socialization, religious tolerance, and families' rationales for deciding to homeschool their children (Cheng, 2014; Martin-Chang, Gould, & Meuse, 2011; Ray, 2013). Even these existing areas of study offer mostly descriptive evidence derived from relatively small samples of homeschool households (Murphy, 2012). One other difficulty is that homeschool families tend to be difficult to identify—a challenge that has hindered large-scale data collection and led to qualitative studies dominating investigations of homeschooling (Jolly, Matthews, & Nestor, 2013; Mazama & Lundy, 2013; Medlin, 2000; Neuman & Guterman, 2017). While this previous work provides insight into homeschooling, additional statistical analyses may help to strengthen the existing evidence base (Murphy, 2012).

This study uses the National Household Education Study (NHES, 2016) to shed light on opportunities for homeschool students to acquire cultural capital. These data are nationally representative ($N = 14,075$), comprise a large sample of homeschool families ($n = 552$), and query a wide range of household socio-demographic characteristics. In the first set of analyses, reported rates of formal instruction in humanities subjects (arts, music, literature, and foreign language) for homeschool households are investigated. This initial analysis aims to determine how much formal instruction homeschooled students receive in humanities subject areas that may be linked to cultural capital formation (Davies & Rizk, 2018). In the second set of analyses, homeschooled students are compared to their public and private school peers on extracurricular cultural and family activities. Patterns observed for these activities may illuminate potential opportunities for homeschool students to acquire cultural capital outside of school.

By undertaking a quantitative analysis of cultural capital in the context of homeschooling, this study charts new territory in the literature. Nevertheless, there remain limitations to these analyses. Results are derived from self-reports that may be subject to social desirability bias, in which respondents may overestimate their children's participation in cultural and family activities. Overestimation of activities may be salient for homeschool families who may perceive greater pressure to report positively on children's activities given their unconventional decision to educate their children outside of formal education systems. Another limitation is that this study examines previously hypothesized proxies for cultural capital that may not cover diverse ways that families could provide cultural capital-building experiences for their children (DiMaggio & Mohr, 1985; Kisida et al., 2014; Roscigno & Ainsworth-

Darnell, 1999). Despite these caveats, this study takes an important step to understand cultural capital formation for a growing segment of American education.

Acquisition of cultural capital

The concept of cultural capital signifies cultural dispositions, knowledge, and resources that may confer societal rewards to individuals and groups (Bourdieu & Passeron, 1977). When Pierre Bourdieu introduced this idea in the late 1970s, he described cultural capital as a possession of the upper class, arguing that affluent individuals naturally transmit cultural capital to one another through rituals, practices, and values (Davies & Rizk, 2018). Institutions, in theory, reward those who possess upper-class cultural capital, associating possession of cultural capital with individual ability (Anderson & Jeger, 2015). In school settings, for instance, familiarity with high-brow arts, music, and literature may increase positive perceptions of a student among school staff, possibly leading to higher expectations, greater support, and academic rewards for a student possessing such cultural knowledge (Roscigno & Ainsworth-Darnell, 1999). Following this theoretical reasoning, affluent students are able to maintain a class advantage by converting naturally inherited cultural resources into educational and economic rewards--a process referred to as cultural reproduction (Davies & Rizk, 2018).

As scholars have applied the concept of cultural capital to empirical analyses over several decades, they have used different proxies to represent cultural capital (Sullivan, 2001). Cultural activities, such as visiting an art gallery or museum (De Graaf, 1986; DiMaggio & Mohr, 1985; Gaddis, 2013; Kisida et al., 2014; Roscigno & Ainsworth-Darnell, 1999; Xu & Hampden-Thompson, 2011), experiencing a live artistic performance (De Graaf, 1986; Dumais, 2002; Gaddis, 2013; Rossel, 2011; Upright, 2004; Xu & Hampden-Thompson, 2011), and visiting a zoo, an aquarium, an athletic event, or a historical site (De Graaf, 1986) have been commonly used measures. Visiting a bookstore or library, parent-child shared reading, and other reading activities that might contribute to developing literary skills have represented cultural capital in scholarly work (Anderson & Jaeger, 2015; Dumais, 2002; Gaddis, 2013; Sullivan, 2001). Studies have also extended cultural capital analyses to parent-child interactions (e.g., discussion of books, music, arts, and cultural heritage) and child activities (e.g., attending a sporting event) thought to have potential to facilitate the development of cultural capital (Anderson & Jaeger, 2015; Dumais, 2002; Xu & Hampden-Thompson, 2011).

In many of these empirical investigations, findings have indicated that exposure to high status cultural resources may enable the acquisition of cultural capital net of socioeconomic background, and that the value of cultural capital may be greatest for individuals deemed as having low socioeconomic status (Banks, 2012; DiMaggio, 1982; Dumais, 2006; Kalmijn & Kraaykamp, 1996). These conclusions contrast with the conception of cultural capital as solely a mechanism for cultural reproduction (De Graaf, De Graaf, & Kraaykamp, 2000; Zimdars, Sullivan, & Heath, 2009), providing support for the notion of cultural mobility to describe individuals outside of elite classes who are able to leverage cultural capital for societal reward (DiMaggio, 1982; Dumais, 2006). Educational institutions have been the focus of scholarship exploring cultural capital formation (Kalmijn & Kraaykamp, 1996). Prior work suggests that organizational resources, instructional expertise, and enrichment activities in schools may help to expose students to arts, music, literature, and other cultural goods, thereby facilitating the growth of cultural capital (Andersen, & Jæger, 2015; Dumais, 2002; Feldman & Matjasko, 2005; Kisida et al., 2014). In one of the only large experimental studies, researchers found that students who participated in a school-initiated art program were able to become “cultural consumers” with the largest effects on cultural capital formation accruing to low-income students (Kisida et al., 2014). The influence of cultural capital on other student outcomes (e.g., academic achievement, educational attainment) is mixed (Dumais, 2002; Feldman & Matjasko, 2005). Nevertheless, cultural capital may be a valuable developmental outcome on its own. There is also evidence that exposure to cultural capital may have broader societal benefits by helping to enhance social cohesion, collective efficacy, and social ties (Jeannotte, 2003).



Cultural capital and homeschooling

Opportunities to develop cultural capital at school raise a potential concern for homeschooled children (Anderson & Jaeger, 2015). In homeschooling contexts, varied expertise needed to teach music, art, literature, and foreign language may present homeschool teachers with considerable challenges (Byo, 1999), while expensive facilities, supplies, and other resources may impede the quality of instruction in these subjects at home (Curren & Blokhuis, 2011; Hanna, 2012). However, to compensate for possible missed opportunities at school, homeschool families may attempt to enable the formation of cultural capital in other ways. Participation in cultural, family, and extracurricular activities outside of home could promote the acquisition of cultural capital among homeschool students (Feldman & Matjasko, 2005; McNeal, 1999). Homeschool households have previously reported comparatively high participation in numerous religious, social, sporting, educational, and civic activities outside home (Basham, Merrifield, & Hepburn, 2007; Medlin, 2000; Tillman, 1995). Using national data, Smith and Sikkink (1999) found that homeschooled students participate in more extracurricular activities than their public school peers. In addition to participation in activities, many homeschool families partake in homeschool cooperatives and other organizations that pool expertise and resources in ways that could create greater opportunities for exposure to cultural capital (Phillips, 2010). Within homeschool cooperatives, for example, homeschool families may combine resources to deliver specialist courses in music and arts to small groups of students (Addo, 2003). Interviews with homeschool families indicate that expanded access to online content and part-time attendance at postsecondary institutions may also increase opportunities for cultural capital formation (Aurini & Davies, 2005; Isenberg, 2007; Murphy, 2012).

Taking stock of the literature, evidence suggests that homeschooled families may commit time and resources to participating in activities and organizations outside of home, possibly enabling opportunities for homeschooled children to acquire cultural capital (Murphy, 2012). Yet, there are methodological limitations to this small body of work that are also general limitations found in much research on homeschooling. Current evidence on homeschooling and cultural capital exposure is primarily restricted to qualitative studies. No experimental studies exist on homeschooling and cultural capital and there are no observational studies using statistical controls to examine cultural capital in the context of homeschooling.

Common proxy measures of cultural capital may also be conceptually restrictive in homeschool settings (Collins, 2008). Whether homeschool families pursue conventional opportunities to develop cultural capital may partly depend on their reasons for deciding to homeschool. A rejection of mainstream culture may be one of the driving forces behind decisions to homeschool, making the perceived value of certain cultural goods context-dependent (Collins, 2008). For example, the domain of homeschooling has traditionally belonged to conservative Christian households who report religious and moral instruction as key influences on their decision to homeschool (Jolly et al., 2013). Yet, with the number of homeschooled students rising from approximately 300,000 in the 1990s to over 2 million, many other reported motivations for homeschooling have arisen (Murphy, 2014; Neuman & Guterman, 2017). Personalized attention for students with special needs, advanced education for gifted children, and fostering of minority cultural identities are well-documented rationales for choosing to homeschool that may influence the extent to which parents seek to expose their children to commonly measured forms of cultural capital (Aurini & Davies, 2005; Cheng, Tuchman, & Wolf, 2016; Jolly et al., 2013; Mazama & Lundy, 2015; Ray, 2015). Nonetheless, no empirical analysis has attempted to test whether homeschool households would, on average, reject or embrace opportunities to acquire cultural capital.

Methods

Students may gain exposure to cultural capital at school (Andersen, & Jaeger, 2015; Kisida et al., 2014). By not attending a traditional school, homeschooled students may have fewer opportunities for cultural capital acquisition. To examine this possibility, this study asks the following question: Do

homeschooled students lack opportunities to acquire cultural capital? This work addresses this question by using a rigorous set of statistical controls to analyze a nationally representative dataset of American households ($N = 14,075$). Initial analyses explore humanities subjects taught in homeschooled households to understand how much formal instruction homeschooled students receive in arts, music, literature, and foreign language. Seven cultural activities and seven family activities are then compared among public, private, and homeschooled students. Negative estimates for these activities for homeschooled students relative to students attending public and private schools could provide evidence of cultural capital deprivation among homeschooled students. Conversely, positive estimates could indicate that homeschooled families may seek to expose their children to cultural resources through participation in cultural and family activities.

Data

The analyses in the study use data from the National Household Education Survey (National Household Education Survey (NHES), 2016). The survey collects educational information on a nationally representative sample of American households and is administered by the US Department of Education's National Center for Education Statistics (NCES). The following three components comprise the survey: Early Childhood Program Participation, Parent and Family Involvement in Education, and Adult Training and Education. For this study, the analyses examine responses to the Parent and Family Involvement (PFI) section of this survey. In 2016, the survey was conducted in two phases. In the first phase, a household screener was used to select households for the survey, including the identification of current homeschool households. The response rate to this initial screener was 66%. In the second phase, eligible individuals identified from the initial screener were surveyed. The final unweighted response rate was 49%, yielding 14,075 responses from parent/guardians in kindergarten through 12th grade on the PFI section of the survey. These responses include 552 homeschool households.

Respondents were asked about school choice decisions, parental involvement, and family and extracurricular activities. In a series of sub-questions targeting only homeschool families, homeschool households were queried on the amount of time spent on homeschooling, subject areas covered, and resources used for homeschooling. Respondents also reported on racial background, income, family structure, household size, and parental educational level. Table 1 presents each of the variables used for the analyses.

Dependent variables

Humanities instruction

This indicated whether a child who was homeschooled had ever received instruction in art, music, literature, and foreign language. Homeschool respondents were asked to think about all of the years that they had homeschooled and to indicate subject areas they had taught during that period. Only homeschool households received this subset of questions on the survey. Since knowledge in these subject areas has been considered representative of cultural capital, rates of instruction in these subjects may help to describe the extent to which homeschooled students receive formal instruction in subjects that may create opportunities for the development of cultural capital (Davies & Rizk, 2018; DiMaggio, 1982).

Cultural activities

On the survey, respondents were asked about their child's participation over a one-month duration in the following cultural activities: visiting a library; visiting a bookstore; going to a play, concert, or other live show; visiting an art gallery, a museum, or a historical site; visiting a zoo or an aquarium; and attending an athletic or sporting event outside of school in which the child was not a player. These activities have served as proxy measures for cultural capital in numerous studies (De Graaf, 1986; DiMaggio & Mohr, 1985; Gaddis, 2013; Kisida et al., 2014;

Table 1. Variables of analysis.

	M (SD)	Min.	Max.
<i>Dependent Variables</i>			
Cultural Events and Activities	2.49 (1.71)	0	7
Family Activities	4.18 (1.82)	0	7
Humanities Instruction ¹	2.58 (1.24)	0	4
<i>School Variables</i>			
Homeschooled	0.04 (0.18)	0	1
Public School	0.87 (0.33)	0	1
Private School	0.09 (0.29)	0	1
<i>Household Variables</i>			
Household Income	6.41 (2.83)	1	10
Household Size	4.58 (1.50)	2	10
Married	0.71 (0.45)	0	1
Divorced/Separated	0.16 (0.37)	0	1
Other Family Structure	0.13 (0.33)	0	1
<i>Parent/Guardian Education</i>			
High School or Less	0.34 (0.47)	0	1
Some Postsecondary	0.28 (0.45)	0	1
University Degree	0.38 (0.49)	0	1
<i>Large City</i>			
Suburb	0.42 (0.49)	0	1
Midsize	0.17 (0.37)	0	1
Rural / Remote	0.24 (0.43)	0	1
<i>Child Variables</i>			
Special education designation	0.23 (0.42)	0	1
Age	11.02 (3.84)	3	20
Sex (Male)	0.52 (0.50)	0	1
<i>Race</i>			
White	0.50 (0.50)	0	1
Hispanic	0.21 (0.41)	0	1
Black	0.14 (0.34)	0	1
Asian	0.06 (0.23)	0	1
Other	0.09 (0.28)	0	1
N	14,075		

1. Only homeschool households reported on humanities instruction. Data are weighted to account for non-response.

Roscigno & Ainsworth-Darnell, 1999; Xu & Hampden-Thompson, 2011). Visiting art galleries and museums and going to live artistic performances have been commonly used proxies for cultural capital exposure, and these common proxy measures of cultural capital may theoretically have a stronger connection to cultural capital formation than activities, such as attending a sporting event (DeGraaf, et al., 2000).

Family activities

Respondents were asked about their child's participation over a one-week duration in the following family activities: telling their child a story; doing activities like arts and crafts, coloring, painting, pasting, and using clay; playing board games or doing puzzles with their child; working on a project like building, making, or fixing an object; playing sports, active games, or exercising together; discussing with their child how to manage time (i.e., time management); and talking with their child about the family's history or ethnic heritage. These activities are more frequent during early primary school (Hamlin & Flessa, 2018) and may help to introduce students to forms of art and culture. Participation in these family activities may then have an indirect influence on the acquisition of cultural capital by helping to create a foundation for cultural capital development (Sullivan, 2001). For these activities, reported participation rates provide a snapshot of activities occurring within a single time period that may not be representative of activities over a longer duration.

Independent variables

School variables

This indicates whether the child attends public school, private school, or was homeschooled. Table 2 presents the means and standard deviations for each demographic variable by school sector.

Household variables

Household income represents total income for all persons residing in the respondent's household over a 12-month period. Respondents selected from 10 income categories, ranging from 0 to \$10,000 at the lowest end to \$150,000 or more at highest end. Household size indicates that the number of individuals residing in the respondent's household. For family structure, married, divorced/separated, and other family configurations were controlled in the analyses. The primary parent/guardian's education level was aggregated into the following three classifications: high school or less, some postsecondary, and university degree or higher (BA, MA, PhD, or professional degree). Household geographic location was classified as large city, large/midsize suburb, midsize/small city or small suburb, and rural/remote area. Homeschool families report lower incomes, larger families, and higher rates of marriage compared to families with children in public schools, whereas private school households report the highest incomes, smallest family sizes, and highest rates of marriage among the three school sectors. The parent or guardian of a homeschooled student is least likely to have a university degree at 32%. For private schools, approximately 64% of parent/guardians hold a university degree or higher and 36% of public school parents hold a university degree or higher. From these descriptive data on education level, one challenge could be that only 32% of homeschooling parents have a university degree, in which a lack of education could limit a parent-teacher's ability to expose children to high status cultural resources.

Child variables

Special education indicates whether a health or education professional told the respondent that his/her child had a condition (e.g., intellectual disability, speech impairment, or learning disability) that would designate as a student with special needs. As found in previous work (Cheng et al., 2016), many homeschool households educate children with special needs. Nearly a quarter of homeschooled students in the sample were designated as having special educational needs, a proportion similar to that of public school households. The child's age, sex, and race were also controlled in the

Table 2. Demographic variables by school sector.

	Homeschool M (SD)	Private M (SD)	Public M (SD)
Child Variables			
White	0.55 (0.50)	0.60 (0.49)	0.49 (0.50)
Hispanic	0.29 (0.45)	0.14 (0.35)	0.22 (0.41)
Black	0.07 (0.25)	0.13 (0.33)	0.14 (0.35)
Asian	0.03 (0.16)	0.06 (0.23)	0.06 (0.24)
Other	0.07 (0.26)	0.08 (0.26)	0.09 (0.28)
Special Education	0.24 (0.43)	0.19 (0.39)	0.24 (0.43)
Household Variables			
Household Income	5.74 (2.59)	7.90 (2.45)	6.28 (2.83)
Household Size	5.37 (1.95)	4.43 (1.41)	4.56 (1.47)
Married	0.74 (0.44)	0.81 (0.39)	0.70 (0.46)
Divorced/Separated	0.16 (0.36)	0.13 (0.33)	0.16 (0.37)
Other Family Structure	0.10 (0.30)	0.07 (0.25)	0.14 (0.34)
Primary Parent/Guardian			
Education Level			
High School or Less	0.40 (0.49)	0.14 (0.35)	0.36 (0.48)
Some Postsecondary	0.29 (0.45)	0.22 (0.41)	0.28 (0.45)
University Degree	0.32 (0.47)	0.64 (0.48)	0.36 (0.48)
N	552	1,532	11,991

Data are weighted to account for non-response.

analyses. Race denoted whether a student was white, black, Hispanic, Asian, or other race. Other race comprises bi- and multiracial, American Indian, Alaska Native, Native Hawaiian, and Pacific Islander children. In the sample, white students represent the largest group of homeschooled students at approximately 55% of all homeschooled students. Within racial groupings, Hispanic students comprise a greater share of homeschooled students than they do in private and public school sectors. In contrast to Hispanic students in the sample, black and Asian students make up a smaller proportion of homeschooled students relative to their representation in the private and public school sectors.

Data analysis

The data analysis proceeded as follows. First, a descriptive breakdown for each variable of analysis was performed. Demographic variables were then examined across public, private, and homeschooled households. Following this step, descriptive analyses were performed to determine how many humanities subjects (art, music, literature, and foreign language) were taught at home for the sample of 552 homeschool families. Only homeschool households received these questions on subjects taught. Separate logistic regressions were subsequently run for seven cultural activities and seven family activities. In these models, dummy variables for homeschool, private, and public school were employed with public schools serving as the reference category. Additional controls for child and household sociodemographic characteristics and geographic location were included in these models. After examining results from these models, each logistic regression model was re-run with an interaction between homeschool status and university degree holders. Finally, a descriptive breakdown of activities by education level was generated among public, private, and homeschool households. For the analyses, survey weights were applied. These survey weights were generated by NCES to account for non-response that could jeopardize the representativeness of the sample. As a cautionary note, these analyses offer descriptive and correlational evidence of cultural capital in homeschooling contexts that should not be interpreted as establishing causal relationships.

Results

Humanities subjects, such as art, music, foreign language, and literature, are linked to cultural capital (Andersen, & Jæger, 2015; Dumais, 2002; Feldman & Matjasko, 2005). In initial analyses, this study explored the extent to which homeschool families provide instruction in the humanities, using responses elicited from homeschool households on their formal instructional choices at home. Nearly one-third of respondents report having taught all four of these subjects to their children, while an additional one-third of respondents report having taught three of these subjects. Approximately 40% of homeschool families have taught only two of these subjects or less, suggesting that formal instructional opportunities for cultural capital acquisition could be lacking for many homeschooled students. Even though only homeschool households reported on the teaching of these subjects on the survey, national data indicates that students attending public and private schools tend to receive instruction in arts, music, literature, and foreign language at higher rates (National Center for Education Statistics, 2011).

Evidence from studies of homeschooling have argued that homeschool cooperatives can help to increase the breadth of content to which homeschooled children receive exposure. Figure 1 presents the percentage of homeschool households ($n = 552$) who have provided formal instruction in art, music, literature, and foreign language, distinguishing families whose children receive instruction through a homeschooling organization or cooperative and those who do not. In this study's sample, nearly three-quarters of families whose children receive instruction through a homeschooling organization or cooperative report formal instruction in three to four humanities subjects. By comparison, only half of families whose children do not participate in

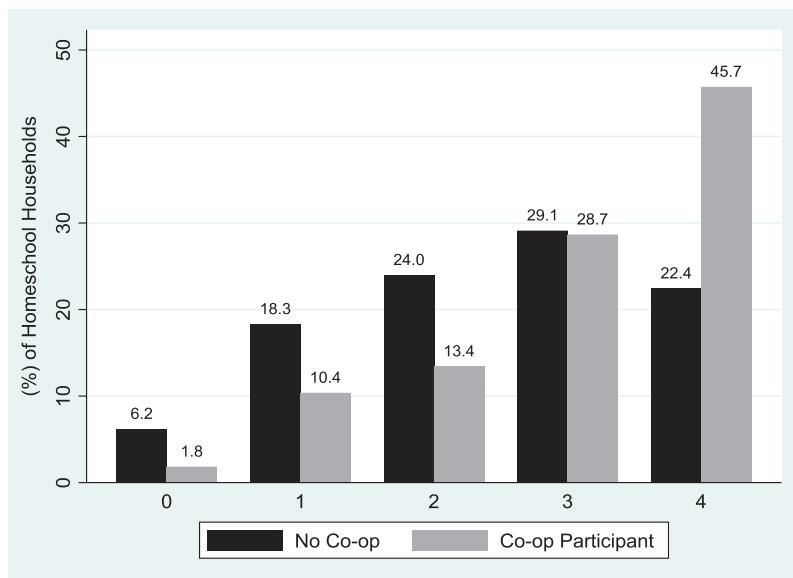


Figure 1. Number of humanities subjects taught among homeschool households. Only homeschooled households reported on subjects taught at home ($n = 552$).

a homeschooling organization or cooperative report formal instruction in three to four of the humanities subjects.

The lack of instruction in humanities subjects could represent a detriment of homeschooling. Nonetheless, families may seek to compensate by facilitating experiences outside of the home. To investigate this possibility, separate logistic regression models were performed for seven cultural activities. Table 3 presents odds ratios for participation in each of the seven activities. Relative to public school students, homeschooled students are between two and three times more likely to visit an art gallery, museum, or historical site; visit a library; or attend an event sponsored by a community, religious, or ethnic group. Homeschooled students are also approximately 1.5 times more likely to visit a zoo, aquarium, or bookstore during the course of a month. These patterns seem to indicate that homeschooled students may gain exposure to cultural capital through cultural activities outside of the home.

Logistic regression models were also performed for seven family activities. Table 4 presents odds ratios for participation in each of these seven activities. Results indicate that homeschooled students are two and a half times more likely to do arts and crafts and nearly two times more likely to work on projects that entail building, making, or fixing an object with family. As these activities may help to introduce students to different forms of art, they may help to provide a foundation for cultural capital consumption (Anderson & Jaeger, 2015; Dumais, 2002; Xu & Hampden-Thompson, 2011). Along with these differences in participation, homeschool households are nearly two times more likely to report playing sports or doing physical activity with family and approximately one and half times more likely to report playing board games and engaging their children in discussions about time management. Interactions and discussions arising from participating in these activities may promote cultural capital acquisition indirectly. For the 14 cultural and family activities investigated, homeschooled households report statistically greater participation in 10 of the 14 activities.

In Tables 3 and 4, parents with a university degree or higher indicated greater participation in most of the cultural and family activities, particularly activities that have been commonly used as proxies for cultural capital, such as visiting museums and art galleries, going to bookstores and libraries, and attending live artistic performances. Previous research on cultural capital has also

Table 3. Logistic regression predicting participation in cultural activities.

	Museum/ Gallery	Live Performance	Library	Zoo/ Aquarium	Community Event	Sporting Event	Bookstore
Homeschool	2.361*** (0.368)	1.048 (0.137)	2.787*** (0.486)	1.523** (0.298)	2.168*** (0.298)	1.024 (0.145)	1.511*** (0.214)
Private Schl.	1.134 (0.099)	1.198** (0.094)	1.045 (0.092)	0.773** (0.081)	1.592*** (0.139)	1.164* (0.095)	1.155* (0.096)
Spec. Ed.	1.161** (0.080)	0.960 (0.062)	0.957 (0.064)	1.195** (0.094)	0.989 (0.063)	0.778*** (0.050)	1.068 (0.069)
Gender (Male)	0.849*** (0.051)	0.663*** (0.037)	0.793*** (0.046)	0.933 (0.065)	0.919 (0.050)	1.241*** (0.067)	0.776*** (0.041)
Black	1.021 (0.106)	1.058 (0.107)	1.354*** (0.139)	1.318** (0.155)	2.109*** (0.217)	1.259** (0.124)	0.824** (0.079)
Asian	0.795* (0.097)	0.842 (0.093)	1.680*** (0.222)	1.017 (0.169)	0.812* (0.099)	0.417*** (0.051)	0.836 (0.092)
Hispanic	1.097 (0.096)	1.036 (0.088)	0.919 (0.080)	1.491*** (0.146)	1.195** (0.095)	1.057 (0.085)	1.130 (0.091)
Other Race	1.015 (0.107)	1.059 (0.102)	1.160 (0.117)	1.011 (0.123)	1.198* (0.117)	0.843* (0.082)	1.153 (0.113)
Age	0.949*** (0.007)	1.005 (0.008)	0.920*** (0.007)	0.872*** (0.008)	0.971*** (0.007)	1.000 (0.007)	0.971*** (0.007)
Some Postsec.	1.269*** (0.114)	1.157* (0.096)	1.286*** (0.109)	0.996 (0.094)	1.402*** (0.106)	1.177** (0.092)	1.519*** (0.122)
University	1.943*** (0.179)	1.579*** (0.136)	2.020*** (0.177)	1.046 (0.106)	1.871*** (0.149)	1.282*** (0.105)	2.111*** (0.176)
Other Family	1.095 (0.118)	0.966 (0.107)	0.956 (0.103)	1.312** (0.157)	0.778** (0.079)	1.185* (0.121)	0.901 (0.091)
Divorced/Sep.	1.107 (0.103)	1.181* (0.102)	0.934 (0.087)	1.218* (0.136)	0.927 (0.077)	1.147* (0.094)	0.915 (0.074)
Household Size	0.967 (0.025)	0.982 (0.025)	1.000 (0.027)	1.048 (0.030)	1.064** (0.026)	1.060** (0.024)	0.927*** (0.022)
Household Inc.	1.023 (0.015)	1.072*** (0.015)	0.934*** (0.013)	0.988 (0.017)	1.021 (0.013)	1.080*** (0.014)	1.034** (0.014)
Suburb	0.877 (0.076)	1.052 (0.089)	0.996 (0.089)	0.883 (0.087)	1.178** (0.098)	1.068 (0.090)	0.853** (0.068)
Midsize	1.070 (0.119)	0.950 (0.099)	1.080 (0.117)	0.818 (0.104)	1.125 (0.116)	1.029 (0.106)	0.922 (0.091)
Rural/Remote	0.656*** (0.065)	0.939 (0.089)	0.878 (0.087)	0.649*** (0.075)	1.440*** (0.132)	1.204** (0.112)	0.700*** (0.064)
Constant	0.490*** (0.102)	0.315*** (0.061)	1.533** (0.286)	1.120 (0.245)	0.578*** (0.107)	0.243*** (0.044)	0.690** (0.131)
N	14,075	14,075	14,075	14,075	14,075	14,075	14,075

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. Survey weights are applied. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Data are weighted to account for non-response.

consistently echoed the link between education level and exposure to such cultural goods (DiMaggio, 1982; Lareau, 2015). However, this well-documented association between education level was less evident for homeschool households. In the sample, homeschool parents are least likely to have a university degree but also the group that is most likely to indicate participation in cultural and family activities. To investigate this pattern further, an interaction between homeschool status and parents with a university degree or higher is introduced to the previous logistic regression models. Tables 5 and 6 present the results for cultural and family activities, respectively. In both tables, the interaction between homeschool status and university degree holders is not statistically significant for any of the activities. Based on these results, higher rates of participation in activities among homeschool households does not appear to be driven by education level.

Table 7 presents a descriptive breakdown of activities by education level for homeschool, private, and public school households. Relative to private and public school parents, homeschool parents report greater participation in cultural and family activities for both parents who have a high school degree or less and those who have a university degree or higher. For homeschool households, 27% of university

Table 4. Logistic regression predicting participation in family activities.

	Storytelling	Arts & Crafts	Board Games	Projects	Sports	Time Management	Cultural Heritage
Homeschool	1.208 (0.228)	2.562*** (0.356)	1.571** (0.319)	1.852*** (0.245)	1.893*** (0.270)	1.452** (0.251)	0.916 (0.144)
Private Schl.	1.099 (0.092)	1.140 (0.098)	0.953 (0.081)	1.103 (0.089)	1.264** (0.138)	1.110 (0.103)	1.080 (0.090)
Spec. Ed.	1.085 (0.068)	1.186** (0.087)	1.018 (0.067)	1.044 (0.067)	0.812*** (0.054)	1.112 (0.078)	0.998 (0.064)
Gender (Male)	0.936 (0.052)	0.463*** (0.028)	0.959 (0.054)	1.174*** (0.063)	1.319*** (0.084)	1.147** (0.067)	0.885** (0.048)
Black	0.953 (0.093)	0.815* (0.090)	0.941 (0.097)	0.856 (0.084)	0.913 (0.101)	1.377*** (0.156)	2.847*** (0.296)
Asian	0.616*** (0.088)	0.707* (0.135)	0.662*** (0.101)	0.665*** (0.089)	0.568*** (0.111)	1.149 (0.152)	1.849*** (0.247)
Hispanic	0.758*** (0.061)	1.116 (0.104)	1.004 (0.086)	0.904 (0.073)	1.336*** (0.132)	1.473*** (0.131)	2.710*** (0.226)
Other Race	0.998 (0.095)	0.931 (0.094)	0.900 (0.084)	1.053 (0.097)	0.973 (0.101)	1.440*** (0.156)	2.203*** (0.219)
Age	0.848*** (0.007)	0.746*** (0.008)	0.851*** (0.007)	0.913*** (0.007)	0.845*** (0.008)	1.118*** (0.009)	1.051*** (0.008)
Some Postsec.	1.326*** (0.099)	1.129 (0.094)	1.208** (0.092)	1.239*** (0.094)	1.056 (0.085)	1.222** (0.100)	1.042 (0.080)
University	1.460*** (0.115)	0.992 (0.086)	1.169* (0.095)	1.079 (0.086)	1.161* (0.099)	1.406*** (0.122)	1.092 (0.088)
Other Family	0.924 (0.089)	0.998 (0.110)	1.117 (0.110)	1.114 (0.110)	0.949 (0.105)	0.847 (0.093)	0.927 (0.095)
Divorced/Sep.	0.867 (0.077)	1.060 (0.094)	0.857* (0.080)	0.970 (0.080)	0.965 (0.084)	0.857* (0.076)	0.952 (0.079)
Household Size	0.961 (0.026)	1.033 (0.036)	1.032 (0.030)	0.991 (0.026)	1.071* (0.043)	0.901*** (0.023)	1.000 (0.026)
Household Inc.	1.014 (0.014)	0.954*** (0.015)	0.975* (0.014)	1.006 (0.014)	1.062*** (0.017)	0.992 (0.014)	0.955*** (0.013)
Suburb	1.034 (0.091)	0.860 (0.086)	1.010 (0.087)	1.070 (0.090)	1.221* (0.128)	1.044 (0.097)	1.039 (0.090)
Midsize	1.072 (0.115)	0.980 (0.120)	1.021 (0.117)	1.069 (0.110)	1.396*** (0.166)	0.815* (0.092)	1.006 (0.107)
Rural/Remote	0.928 (0.090)	0.894 (0.099)	1.031 (0.097)	1.163* (0.107)	1.324** (0.145)	0.800** (0.079)	0.808** (0.076)
Constant	9.144*** (1.744)	39.953*** (8.806)	6.544*** (1.229)	3.000*** (0.557)	8.404*** (1.784)	0.756 (0.146)	0.622*** (0.114)
N	14,075	14,075	14,075	14,075	14,075	14,075	14,075

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. Survey weights are applied. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Data are weighted to account for non-response.

Table 5. Logistic regression predicting participation in cultural activities.

	Museum/ Gallery	Live Performance	Library	Zoo/ Aquarium	Community Event	Sporting Event	Bookstore
Homeschool	2.59*** (0.53)	0.90 (0.16)	2.53*** (0.59)	1.42 (0.38)	2.35*** (0.40)	1.18 (0.22)	1.54* (0.30)
Homeschool x High School Ed.	0.76 (0.21)	1.52 (0.38)	1.39 (0.41)	1.25 (0.42)	0.76 (0.19)	0.65 (0.17)	0.95 (0.25)

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Models include the same controls presented in Tables 4 and 5. Data are weighted to account for non-response.

degree holders report participation in 5–7 cultural activities, whereas 21% of those with a high school education or less indicate 5–7 cultural activities. Homeschool parents with a high school education or less also report participation in 5–7 cultural activities at a higher rate than public and private school parents who hold a university degree or higher. Homeschool families generally indicate greater total

Table 6. Logistic regression predicting participation in family activities.

	Storytelling	Arts & Crafts	Board Games	Projects	Sports	Time Management	Cultural Heritage
Homeschool	1.14 (0.29)	2.58*** (0.46)	1.62 (0.46)	1.82*** (0.30)	1.99*** (0.35)	1.27 (0.28)	0.82 (0.17)
Homeschool x	1.20	0.98	0.91	1.07	0.85	1.58	1.42
High School Ed.	(0.40)	(0.26)	(0.30)	(0.28)	(0.24)	(0.50)	(0.38)

Robust standard errors in parentheses. For school type, public school is the reference category and large city is the reference category for geographic location. Survey weights are applied. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Models include the same controls presented in Tables 4 and 5. Data are weighted to account for non-response.

Table 7. Comparison of activities by parent education level.

	High School Education or Less M, (SD)			University Degree or Higher M, (SD)		
	Homeschool	Private	Public	Homeschool	Private	Public
Cultural Activities						
0–1	0.24 (0.43)	0.29 (0.46)	0.44 (0.50)	0.10 (0.30)	0.19 (0.39)	0.22 (0.42)
2–4	0.55 (0.50)	0.66 (0.48)	0.48 (0.50)	0.64 (0.48)	0.62 (0.49)	0.61 (0.49)
5–7	0.21 (0.41)	0.05 (0.22)	0.08 (0.27)	0.27 (0.44)	0.19 (0.40)	0.17 (0.37)
Family Activities						
0–1	0.09 (0.28)	0.09 (0.29)	0.12 (0.32)	0.03 (0.18)	0.06 (0.24)	0.06 (0.24)
2–4	0.42 (0.50)	0.42 (0.50)	0.45 (0.50)	0.32 (0.47)	0.47 (0.50)	0.49 (0.50)
5–7	0.49 (0.50)	0.49 (0.50)	0.43 (0.50)	0.65 (0.48)	0.47 (0.50)	0.45 (0.50)

participation in cultural and family activities than families in the other two school sectors for households with a high school degree or less and those with a university degree or higher. These descriptive patterns across school sectors by education level provide evidence that homeschool households participate in cultural and family activities at high rates irrespective of education level.

Discussion

Cultural capital is a resource that may contribute to positive educational and life outcomes and is arguably an important developmental outcome in its own right (Davies & Rizk, 2018). At school, organizational resources, instructional expertise, and enrichment experiences may promote the acquisition of cultural capital (Andersen, & Jæger, 2015; Feldman & Matjasko, 2005; Kisida et al., 2014). Homeschooled children who do not attend school may then be deprived of these opportunities, prompting homeschool families to seek opportunities to compensate for this potential disadvantage. To investigate this possibility, this study performed an initial descriptive analysis of formal instruction in four humanities subjects (i.e., art, music, literature, and foreign language) in homeschool households. Approximately 40% of homeschool families reported ever providing instruction in two (or fewer) of these subjects. By comparing cultural and family activities between homeschooled students and their public school peers, homeschool families reported statistically greater participation in 10 out of 14 cultural and family activities, net of controls for child and household sociodemographic characteristics.

In reflecting on these results, higher rates of participation in cultural and family activities reported for homeschool families may suggest that homeschooled students have opportunities to acquire cultural capital outside of formal instructional time. Participation in these types of activities may thus play a compensatory role, possibly offsetting what may be forfeited by not attending a traditional brick-and-mortar school. Furthermore, results for specific activities, such as visits to museums and art galleries, to which homeschool children had greater exposure than their public school counterparts tend to be measures of high culture that have been the focus of prior studies of cultural capital (De Graaf et al., 2000; DiMaggio & Mukhtar, 2004; Kisida et al., 2014). Concerns that homeschooled children are deprived of opportunities to develop cultural capital may, in part, be assuaged based on the patterns observed in this study. Yet, much more work is needed to understand

if participation in cultural and family activities is equivalent to cultural capital developed through experiences at school.

Not all of the results exhibited positive trends for cultural capital development in homeschool households. For formal instruction in art, music, foreign language, and literature, results indicated that approximately 40% of homeschool households taught two (or fewer) of these subjects during the years that they homeschooled. Children who have low exposure to humanities subjects may be deprived of important cultural capital-forming experiences that can support positive educational and life outcomes. Although this result is only descriptive, it may illuminate a challenge faced by homeschool parents. Not only could it be difficult to be a content expert in art, music, foreign language, and literature, but also it could be cost-prohibitive to deliver lessons in these subjects, particularly in the case of art and music (Hanna, 2012). While participation in cultural and family activities may help to counterbalance these obstacles, other possibilities would be to take advantage of online educational content, part-time enrollment at local schools and universities, and private tutoring. Reports on the existence of "hybrid" homeschooled appear to show that these types of arrangements are growing more common among homeschooled (Wearne, 2016). Membership in a homeschool cooperative also appears to reduce this potential problem as three-quarters of families that were members of homeschool cooperatives in this study reported providing instruction in three to four of the humanities subjects--a large difference from non-members. This pattern further corresponds to prior work, pointing out that homeschooling cooperatives and organizations may enable instruction in the humanities through the pooling of families' resources (Addo, 2003; Phillips, 2010).

The results of this observational study are subject to limitations. The analyses present relationships that do not establish a causal link between homeschool education and greater participation in cultural and family activities. A parent who decides to homeschool may possess unique motivations, skills, and self-efficacy that enable high engagement in activities irrespective of school sector (Jeynes, 2016). Homeschool parents who take their children to museums, performances, and art galleries may embody cultural capital themselves so that, in the counterfactual case, they would undertake activities at high rates whether or not their children were homeschooled (Dumais, 2002; Hamlin, 2018). Another consideration is that this study examines proxies for cultural capital that may not cover diverse ways that homeschool and other families provide cultural capital-building experiences for their children. Cultural capital may take different forms within varying contexts (Collins, 2008; Roscigno & Ainsworth-Darnell, 1999). It is possible that knowledge of how to thrive in nature may have more localized cultural value in rural and remote communities, whereas high-status cultural knowledge and resources may carry less weight in such environments. When homeschool parents facilitate cultural capital formation, they may impart cultural capital that has differential value across varying social contexts. Additionally, results from this study are derived from self-reports that may be subject to social desirability bias, in which respondents could overestimate their children's participation in cultural and family activities. The problem of overestimation may be salient for homeschool families who could perceive greater pressure to report positively on children's activities given their unconventional decision to educate their children outside of mainstream educational systems.

Despite being subject to common methodological limitations of an observational study, this work sheds light on an important dynamic that has received very little consideration in the literature. It also strengthens existing evidence on homeschooling and cultural capital by analyzing a nationally representative survey with a rigorous set of controls for sociodemographic and other household characteristics. This initial foray into the relationship between cultural capital and homeschooling underscores lines of inquiry for future research. Little is known about how homeschool parents attempt to teach a wide breadth of humanities content, such as art, music, and foreign language. Providing instruction across these subjects may present significant challenges. Furthermore, it remains uncertain whether a lack of instruction in humanities subjects among homeschool households may signify a rejection of conventional forms of cultural capital or a consequence of unobserved barriers faced by homeschool families. Still, nearly 60% of homeschool households in this study reported providing instruction in at least three of four of the humanities subjects

examined in this study. How do homeschool families deliver this material? Do homeschool teachers seek out supplementary educational experiences for their children to compensate for a lack of knowledge that they may have in a given content area? How might homeschool cooperatives and other organizations support instruction in these subjects? Future research examining these questions could help to extend knowledge of cultural capital formation among homeschooled students.

Author bio

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References

Addo, A. O. (2003). Music teacher education: Assessing a community outreach partnership. *Teaching Education*, 14(2), 201–211. doi:10.1080/1047621032000092986

Andersen, I. G., & Jæger, M. M. (2015). Cultural capital in context: Heterogeneous returns to cultural capital across schooling environments. *Social Science Research*, 50, 177–188. doi:10.1016/j.ssresearch.2014.11.015

Aurini, J., & Davies, S. (2005). Choice without markets: Homeschooling in the context of private education. *British Journal of Sociology of Education*, 26(4), 461–474. doi:10.1080/01425690500199834

Banks, P. A. (2012). Cultural socialization in black middle-class families. *Cultural Sociology*, 6(1), 61–73. doi:10.1177/1749975511427646

Basham, P., Merrifield, J., & Hepburn, C. R. (2007). *Home schooling: From extreme to mainstream*. Vancouver, Canada: Fraser Institute.

Bourdieu, P., & Passeron, J. C. (1977). *Reproduction in education, society, and culture*. (R. Nice, Trans.). London: Sage Publications.

Byo, S. J. (1999). Classroom teachers' and music specialists' perceived ability to implement the national standards for music education. *Journal of Research in Music Education*, 47(2), 111–123. doi:10.2307/3345717

Cheng, A. (2014). Does homeschooling or private schooling promote political intolerance? Evidence from a Christian university. *Journal of School Choice*, 8(1), 49–68. doi:10.1080/15582159.2014.875411

Cheng, A., Tuchman, S., & Wolf, P. J. (2016). Homeschool parents and satisfaction with special education services. *Journal of School Choice*, 10(3), 381–398. doi:10.1080/15582159.2016.1202076

Collins, R. (2008). *Violence*. Princeton, NJ: Princeton University Press.

Curren, R., & Blokhuis, J. C. (2011). The prima facie case against homeschooling. *Public Affairs Quarterly*, 25(1), 1–19.

Davies, S., & Rizk, J. (2018). The three generations of cultural capital research: A narrative review. *Review of Educational Research*, 88(3), 331–365. doi:10.3102/0034654317748423

De Graaf, N. D., De Graaf, P. M., & Kraaykamp, G. (2000). Parental cultural capital and educational attainment in the Netherlands: A refinement of the cultural capital perspective. *Sociology of Education*, 73, 92–111. doi:10.2307/2673239

De Graaf, P. M. (1986). The impact of financial and cultural resources on educational attainment in the Netherlands. *Sociology of Education*, 59, 237–246. doi:10.2307/2112350

DiMaggio, P. (1982). Cultural capital and school success: The impact of status culture participation on the grades of US high school students. *American Sociological Review*, 47, 189–201. doi:10.2307/2094962

DiMaggio, P., & Mohr, J. (1985). Cultural capital, educational attainment, and marital selection. *American Journal of Sociology*, 90(6), 1231–1261. doi:10.1086/228209

DiMaggio, P., & Mukhtar, T. (2004). Arts participation as cultural capital in the United States, 1982–2002: Signs of decline? *Poetics*, 32(2), 169–194. doi:10.1016/j.poetic.2004.02.005

Dumais, S. A. (2002). Cultural capital, gender, and school success: The role of habitus. *Sociology of Education*, 75, 44–68. doi:10.2307/3090253

Dumais, S. A. (2006). Early childhood cultural capital, parental habitus, and teachers' perceptions. *Poetics*, 34(2), 83–107. doi:10.1016/j.poetic.2005.09.003

Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75(2), 159–210. doi:10.3102/00346543075002159

Gaddis, S. M. (2013). The influence of habitus in the relationship between cultural capital and academic achievement. *Social Science Research*, 42(1), 1–13. doi:10.1016/j.ssresearch.2012.08.002

Hamlin, D. (2018). "The types of kids we get are different"—The distinguishing characteristics of school choosers in Detroit, Michigan. *Journal of School Choice*, 12(1), 52–79. doi:10.1080/15582159.2017.1393305

Hamlin, D., & Flessa, J. (2018). Parental involvement initiatives: An analysis. *Educational Policy*, 32(5), 697–727. doi:10.1177/0895904816673739

Hanna, L. G. (2012). Homeschooling education: Longitudinal study of methods, materials, and curricula. *Education and Urban Society*, 44(5), 609–631. doi:10.1177/0013124511404886

Hirsch, E. D. (1987). *Cultural literacy: What every American should know*. Boston, MA: Houghton Mifflin.

Isenberg, E. J. (2007). What have we learned about homeschooling? *Peabody Journal of Education*, 82, 387–409. doi:10.1080/01619560701312996

Jæger, M. M., & Holm, A. (2007). Does parents' economic, cultural, and social capital explain the social class effect on educational attainment in the Scandinavian mobility regime? *Social Science Research*, 36(2), 719–744. doi:10.1016/j.ssresearch.2006.11.003

Jeannette, M. S. (2003). Singing alone? The contribution of cultural capital to social cohesion and sustainable communities. *The International Journal of Cultural Policy*, 9(1), 35–49. doi:10.1080/1028663032000089507

Jeynes, W. H. (2016). Homeschooling: The ultimate personalized environment. In M. Murphy, S. Redding, & J. Twyman (Eds.), *Handbook on personalized learning for state, districts, and schools* (pp. 99–114). Philadelphia, PA: Center on Innovations in Learning.

Jolly, J. L., Matthews, M. S., & Nester, J. (2013). Homeschooling the gifted: A parent's perspective. *Gifted Child Quarterly*, 57(2), 121–134. doi:10.1177/0016986212469999

Kalmijn, M., & Kraaykamp, G. (1996). Race, cultural capital, and schooling: An analysis of trends in the United States. *Sociology of Education*, 69, 22–34. doi:10.2307/2112721

Kisida, B., Greene, J. P., & Bowen, D. H. (2014). Creating cultural consumers: The dynamics of cultural capital acquisition. *Sociology of Education*, 87(4), 281–295. doi:10.1177/0038040714549076

Lareau, A. (2015). Cultural knowledge and social inequality. *American Sociological Review*, 80(1), 1–27. doi:10.1177/0003122414565814

Martin-Chang, S., Gould, O. N., & Meuse, R. E. (2011). The impact of home schooling on academic achievement: Evidence from homeschooled and traditionally schooled children. *Canadian Journal of Behavioural Science*, 43(3), 195–202. doi:10.1037/a0022697

Mazama, A., & Lundy, G. (2013). African American homeschooling and the question of curricular cultural relevance. *The Journal of Negro Education*, 82(2), 123–138. doi:10.7709/jnegroeducation.82.2.0123

Mazama, A., & Lundy, G. (2015). African American homeschooling and the quest for a quality education. *Education and Urban Society*, 47(2), 160–181. doi:10.1177/0013124513495273

McNeal, R. B., Jr. (1999). Participation in high school extracurricular activities: Investigating school effects. *Social Science Quarterly*, 80(2), 291–309.

Medlin, R. G. (2000). Home schooling and the question of socialization. *Peabody Journal of Education*, 75(1–2), 107–123.

Murphy, J. (2012). *Homeschooling in America: Capturing and assessing the movement*. Thousand Oaks, CA: Corwin Press.

Murphy, J. (2014). The social and educational outcomes of homeschooling. *Sociological Spectrum*, 34(3), 244–272. doi:10.1080/02732173.2014.895640

National Center for Education Statistics. (2011). *A snapshot of arts education in public elementary and secondary schools: 2009–10*. Washington, DC: U.S. Department of Education. U.S. Department of Education.

National Household Education Survey (NHES). (2016). Retrieved from <https://nces.ed.gov/nhes/>

Neuman, A., & Guterman, O. (2017). Homeschooling is not just about education: Focuses of meaning. *Journal of School Choice*, 11(1), 148–167. doi:10.1080/15582159.2016.1262231

Phillips, L. (2010). Homeschooling is an art, not a science: The impact of homeschooling on choice of college major. *Sociological Viewpoints*, 26(2), 19.

Ray, B. (2015). African American homeschool parents' motivations for homeschooling and their Black children's academic achievement. *Journal of School Choice*, 9(1), 71–96. doi:10.1080/15582159.2015.998966

Ray, B. D. (2013). Homeschooling associated with beneficial learner and societal outcomes but educators do not promote it. *Peabody Journal of Education*, 88(3), 324–341. doi:10.1080/0161956X.2013.798508

Redford, J., Battle, D., & Bielick, S. (2016). *Homeschooling in the United States: 2012 (NCES 2016-096)*. Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Roscigno, V. J., & Ainsworth-Darnell, J. W. (1999). Race, cultural capital, and educational resources: Persistent inequalities and achievement returns. *Sociology of Education*, 72, 158–178. doi:10.2307/2673227

Rössel, J. (2011). Cultural capital and the variety of modes of cultural consumption in the opera audience. *The Sociological Quarterly*, 52(1), 83–103. doi:10.1111/j.1533-8525.2010.01192.x

Smith, C., & Sikkink, D. (1999). Is private schooling privatizing? *First Things: A Monthly Journal of Religion and Public Life*, 92, 16–17.

Sommerfeld, A. K., & Bowen, P. (2013). Fostering social and cultural capital in urban youth: A programmatic approach to promoting college success. *Journal of Education*, 193(1), 47–55. doi:10.1177/002205741319300106

Sullivan, A. (2001). Cultural capital and educational attainment. *Sociology*, 35(4), 893–912. doi:10.1177/0038038501035004006

Tillman, V. D. (1995). Home schoolers, self-esteem, and socialization. *Home School Researcher*, 11(3), 1–6.

Upright, C. B. (2004). Social capital and cultural participation: Spousal influences on attendance at arts events. *Poetics*, 32(2), 129–143. doi:10.1016/j.poetic.2004.02.002

Wearne, E. (2016). A descriptive survey of why parents choose hybrid homeschooleds. *Journal of School Choice*, 10(3), 364–380. doi:10.1080/15582159.2016.1202075

Xu, J., & Hampden-Thompson, G. (2011). Cultural reproduction, cultural mobility, cultural resources, or trivial effect? A comparative approach to cultural capital and educational performance. *Comparative Education Review*, 56(1), 98–124. doi:10.1086/661289

Zimdar, A., Sullivan, A., & Heath, A. (2009). Elite higher education admissions in the arts and sciences: Is cultural capital the key? *Sociology*, 43(4), 648–666. doi:10.1177/0038038509105413