Homeschooling, social isolation, and life trajectories: An analysis of formerly homeschooled adults

Daniel Hamlin
University of Oklahoma

Albert Cheng
University of Arkansas, Fayetteville

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Daniel Hamlin
University of Oklahoma

Albert Cheng
University of Arkansas

Abstract

A longstanding critique of homeschooling is that it isolates children from mainstream society, depriving them of social experiences needed to thrive as adults. Although a small number of empirical studies challenge this criticism, this research tends to be derived from self-reports of homeschooling parents about their children. In this study, analyses of qualitative interviews ($n =$ 31) and survey data ($n = 140$) of adults who were homeschooled as children are performed. Most interview participants described conventional and unconventional social experiences that they felt had satisfied their social needs while being homeschooled. Participants who were homeschooled for all or most of their K-12 education had less exposure to mainstream school-based social opportunities but reflected that homeschooling had not hindered their ability to navigate society effectively. Analyses of survey data seemed to echo this finding. No statistical differences on four social and life outcomes (i.e. college attendance, household income, marital status, and subjective wellbeing) were observed between short-term homeschoolers (1-2 years) who spent nearly all of their K-12 education in brick-and-mortar schools and long-term (10-12 years) and substantial (3-9 years) homeschoolers who had less exposure to mainstream social opportunities available in brick-and mortar schools. This study advances the literature by using qualitative and quantitative data to generate key insights on the social and life trajectories of formerly homeschooled adults.

Keywords: Homeschooling, Social Isolation, Socialization

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An analysis of formerly homeschooled adults

Social isolation is associated with poor academic, physical, and socioemotional outcomes in children (Cacioppo et al. 2006; Dodge et al. 2003; Hawkley et al. 2006; Loades et al. 2020). One of the most powerful critiques of homeschooling is that the practice isolates children by depriving them of mainstream social skills, networks, and experiences that can be acquired at school (Bartholet 2020; Fineman & Shepherd 2016; Kunzman & Gaither 2020; Lebeda 2007). As a result, homeschooled children may become socially maladjusted so that they are ill-equipped to navigate higher education, employment, and other social settings as adults (Guterman & Neuman 2017; Medlin 2013; Murphy 2014). The isolation of homeschooled children is also thought to have consequences for broader society by weakening social cohesion and democratic values (Apple 2007; Bartholet 2020).

Concerns over the potential harm caused by homeschooling have increased in relevance as the practice has grown in recent decades with some estimates placing the number of homeschooled children at over 2 million (McQuiggan, Megra, & Grady 2017). In the empirical literature, it is unclear whether predictions of poor social and life outcomes for homeschooled children are justified. Research examining academic achievement (Belfield 2005), educational attainment (Wilken et al. 2015), civic engagement (Casagrande et al. 2019), exposure to cultural resources (Hamlin, 2019), political tolerance (Cheng, 2014), and social adjustment (Medlin 2013) reports mostly positive outcomes for homeschooled children when they are compared to their public school counterparts. However, much of this existing scholarship consists of modest descriptive studies based on self-reports from homeschooling parents about their children

(Kunzman & Gaither 2020). Less common in the literature are studies on the perspectives of adults who were homeschooled as children.

In addition to this limitation, prior studies tend to use cross-sectional designs that treat the practice of homeschooling as static, identifying homeschooled students as children who happen to be homeschooling at the time of data collection. This analytical approach may obscure heterogeneity among homeschoolers as researchers have found evidence that entry into and out of homeschooling is commonplace (Hill & den Dulk 2013). One implication of overlooking variation in years spent being homeschooled is that the isolating effects of homeschooling on social and later-life outcomes could be more profound for those who are homeschooled for longer periods of time. The argument that homeschooled children are ill-equipped to navigate society may apply differently to a person who was homeschooled for one or two years as opposed to one who was homeschooled throughout their entire K-12 education (Dwyer & Peters 2019).

In this study, interviews were performed with adults ($n = 31$) who were homeschooled as children to understand how they view the influence of homeschooling on their social and life trajectories. From these interviews, nearly all formerly homeschooled adults in the sample reported participating in an array of conventional and unconventional activities that facilitated social experiences and connections for them while being homeschooled. A child's level of interest in mainstream social opportunities offered in brick-and-mortar schools was also described as influencing decisions to either stop or continue homeschooling. While interviews offered evidence that schooling decisions were often tailored to individual social needs, those who are homeschooled for all or most of their K-12 education may still encounter difficulty navigating society as adults since they have less exposure to mainstream social experiences in

brick-and-mortar schools. To explore this idea further, data on formerly homeschooled adults (*n* =140) represented in the Understanding America Survey 2016-2019 were investigated on four measures of social and life outcomes (i.e. higher education, income, marital status, subjective wellbeing). These analyses showed no evidence that those who are homeschooled for longer periods of time have poorer outcomes. This study advances the literature by using qualitative and quantitative data to generate insights on the social and life trajectories of formerly homeschooled adults. It also offers a methodological contribution by distinguishing homeschooled children based on the length of time that they were homeschooled.

Social isolation and its consequences

The development of social bonds is considered a basic psychological need (Deci & Ryan 2012; Fiske & Haslam 2005). Social experience, interactions with peers, and engagement with a broader community promote social bonds, positive social adjustment and other developmental outcomes in children (Coleman 1961; Deci & Ryan 2012; Lee 2014; Piaget 1996). When children lack these opportunities, they may become socially isolated. Being in a state of social isolation is thought to have harmful short- and long-term effects on children (Davis 1940; Loades et al. 2020; Mathews et al. 2015; Parigi & Henson 2014). Researchers, for example, have consistently linked indicators of social isolation in children to poor academic, behavioral, and socioemotional outcomes (Cacioppo et al. 2006; Hawkley et al. 2006; Loades et al. 2020). In adulthood, individuals identified as being socially isolated tend to have less education, earn lower salaries, are less likely to marry, and report lower levels of life satisfaction (Rodkin & Hanish 2007; Stewart et al. 2009). In spite of the disconcerting consequences of social isolation in childhood, it is unclear how many children might be classified as being socially isolated. Estimates of social isolation are imprecise, relying on proxy measures of varying dimensions of

social isolation and self-reports that are subject to response biases (Loades et al. 2020). In the literature, common measures are individual perceptions of loneliness (Cacioppo et al. 2006); reports of social participation and volunteer activities (Seino 2017); perceptions of social support from friends and relatives (Gierveld & Tillburg 2006); measurements of the frequency and quality of social interactions; and the extent of contacts within a person's social network (Cornwell & Waite 2009). Two broad theoretical mechanisms may underlie the occurrence of social isolation in children. The first mechanism is the use of exclusionary practices by institutions that can impede individual participation in the social life of mainstream institutions while the other mechanism is a voluntary decision to exclude oneself from mainstream social institutions (Leigh-Hunt et al. 2017). The latter mechanism may be most common in the case of homeschooled children whose families voluntarily opt out of local public and private schools that most children attend.

Homeschooling and social outcomes

Theoretical reasoning suggests that homeschooling could be harmful if the practice results in socially isolating children who are homeschooled (Dwyer & Peters 2019). When children who are not homeschooled leave the confines of their home to attend brick-and-mortar schools, they are presented with potentially valuable opportunities for social experience (Bartholet, 2020). At school, children may develop social bonds with peers and other adults, and these ties may foster positive socioemotional development and mental health (Crosnoe, Johnson, & Elder 2004; Erickson, McDonald, & Elder 2009; Jennings & DiPrete 2010; Thoits 2011). Students attending brick-and-mortar schools are also generally exposed to mainstream social habits, norms, and knowledge that could prepare them for success in adulthood (Theiman 2016). As a result, social experience at school might enable access to social and cultural capital that

support academic and life success (Hamlin 2019; DiMaggio 1982). Because homeschooled children do not have these conventional school-based social opportunities, they may become socially isolated, lacking peer relationships, social ties, and knowledge of mainstream norms (Fineman & Shepherd 2016; Kunzman 2010; Lebeda 2007). The effects of isolation in children, as some critics have cautioned, could extend beyond the individual by promoting religious fundamentalism, intolerance, and erosion of democratic values (Apple 2007). Conversely, scholars have argued that homeschooling can be socially beneficial for a child. Merry and Howell (2009) assert that homeschooling strengthens familial bonds by encouraging a high level of attentiveness from parents that fosters positive social development. Other scholars have pointed out how homeschooling could insulate children from negative peer or cultural influences that undermine healthy social development (Wyatt 2008; Dill & Elliot 2019; Koganzon, 2020). Some parents purportedly opt to homeschool their children because of perceived concerns over negative social influences in school environments (Redford et al. 2016).

Empirical evidence is needed to test the veracity of these claims as the practice of homeschooling appears to have grown sharply in recent decades (National Household Education Study [NHES] 2001; 2019). In the early 1970s, it was estimated that approximately 13,000 children were homeschooled when the practice was illegal in nearly every US state (Dwyer & Peters 2019). Homeschooling, however, is now legal in all fifty states and estimates place the number of homeschooled children at between 1.7 and 2.5 million today (McQuiggan, Megra, & Grady 2017; Renzulli, Werum, & Krongber, 2020). In the wake of the COVID-19 pandemic, these numbers may have doubled, but these estimates may decline to their previous levels once the pandemic has subsided (US Census Bureau 2021).

The current state of empirical literature on homeschooling and social outcomes is underdeveloped. A small body of descriptive research offers insight into whether homeschooled children are socially isolated. Studies tend to demonstrate either positive or no difference in social outcomes between homeschooled and public school children (Chatham-Carpenter 1994; Medlin 2006; Shyer 1992). However, this work is characterized by methodological flaws, including statistical analyses using very small samples of 30 or less (Chatham-Carpenter 1994), unreported sample sizes (Saunders 2009), surveys performed at homeschool conventions or through homeschool advocacy groups (McCulloch et al. 2006), and inappropriate statistical procedures. Medlin (2006) conducted mean comparisons of social skills between 70 homeschooled children and approximately 1,000 public school children and found that homeschooled children rated themselves higher than their public school peers. Other similar self-reports of social skills find no difference between these two groups (Francis & Keith 2004; McKinley et al. 2007; Valdez 2005). In one of the most compelling studies, Shyer (1992) matched 70 children (ages 8-10) who had been entirely home-schooled to 70 children who had always attended public schools and observed no difference in self-concept between the two groups. The two groups were also videotaped while playing and working together, and subsequent analyses performed by independent observers, found higher levels of pro-social behavior among homeschooled children.

Other descriptive work indicates that homeschooled children frequently participate in mixed-age social engagements and have generally positive attitudes toward relationships with adults (Chatham-Carpenter 1994; Reavis & Zakrinski 2005). A small number of studies find that homeschooled children are relatively active in their local communities. For instance, in an analysis of 259 homeschool families, Tillman (1995) observed that homeschool families reported

being active in church groups, group classes, music lessons, community service, and sports. An analysis of nationally representative survey data reports that homeschooling families exhibit higher participation in civic activities than public school families (Smith & Sikkink, 1999). This national study is one of the only statistical analyses within this strand of literature that uses statistical controls for racial background, parental education, and socioeconomic status.

Homeschooling and life outcomes

A number of scholars argue that isolating effects of homeschooling will extend into adulthood, leading to poor social and life outcomes among formerly homeschooled adults (Bartholet 2020; Fineman & Shepherd 2016; Lebeda, 2007). A modest descriptive literature generally suggests that adults who were homeschooled are capable of navigating university, employment, and other social settings. By analyzing a sample of 261 public, private, and homeschooled students at a small private Christian university, no evidence was found that students who were homeschooled as children were less socially integrated (Saunders 2009). University administrators have also tended to rate homeschooled students as being socially prepared for university (Jenkins 1998; Prue 1997; Sorey & Duggan 2008). In a small-scale analysis of 64 university students, 21 homeschooled students in the sample showed little difference in social behavior from their peers but participated in school leadership at higher levels (Sutton & Galloway, 2000). Similar results have been found in other small surveys of students (White, Moore, & Squires 2009). However, there are notable exceptions to these positive trends. In a survey of over 3,000 adults, Sikkink and Skiles (2018) observe that formerly homeschooled adults are less likely to complete a 4-year degree by the age of 24 than adults who attended public schools.

Data on employment, income, family formation, and community engagements in later life for formerly homeschooled adults are sparse. In a study published over 25 years ago, Ray (1994) compared voting, voluntarism, and social activity between adults who were homeschooled against national averages and found higher levels of involvement among the homeschooled sample. By contrast, in more recent work, researchers report that young adults who were homeschooled showed either the same level or slightly lower civic skills, commitments, and volunteering activity than their public school counterparts (Hill & Dulk, 2013; Sikkink & Skiles, 2015). In an analysis of 82 formerly homeschooled adults, Uecker and Hill (2014) found that homeschoolers did not differ from their public school peers on marriage and family formation in later life.

Empirical research on homeschooling raises questions about the critique that homeschooled children are socially isolated, and therefore, ill-prepared to participate in mainstream society as adults. Nevertheless, this work remains methodologically underdeveloped and lacks a nuanced approach to studying homeschooling (Kunzman & Gaither 2013). While formerly homeschooled adults are a key source of information, research on homeschooling has not widely analyzed data from adults who were homeschooled. Prior work also does not distinguish homeschoolers based on the length of time homeschooled even though exposure to mainstream social opportunities available in public schools varies considerably based on the number of years a child was homeschooled. Differences in years spent being homeschooled can influence the degree to which homeschooling is an isolating practice with negative social and life consequences that extend into adulthood. When assessing the overall body of literature, it is evident that additional scholarly work is needed to advance understanding of the social and life trajectories of those who are homeschooled.

Methods

This study examines the social and life trajectories of formerly homeschooled adults in two phases of analysis that seek to yield insights from different methodological approaches. In the first phase, adults who were homeschooled as children were interviewed to understand how they view the influence of homeschooling on their social and life trajectories. The following question is addressed for this phase of the study:

> **Research question 1.** *How do adults who were homeschooled perceive the influence of homeschooling on their social and life outcomes?*

In the second phase, survey data on the social and life outcomes of formerly homeschooled adults were investigated. The notion that homeschooling is an isolating practice with harmful consequences that extend into adulthood is tested by differentiating homeschooled adults according to how long they were homeschooled (i.e. long-term: 10-12 years, substantial: 3-9 years, and short-term: 1-2 years). Those who were homeschooled for only a short period of time theoretically experience fewer of the socially isolating ramifications of homeschooling, having spent most of their K-12 education in brick-and-mortar schools. By contrast, adults who were homeschooled for all or most of their K-12 education have comparatively less social experience in brick-and-mortar schools. These analyses address the following question:

> **Research question 2.** *Do social and life outcomes (i.e. educational attainment, income, marital status, and subjective wellbeing) differ among formerly homeschooled adults based on the length of time that they were homeschooled?*

Data sources

Interviews. To examine adults' perceptions of the influence of homeschooling on their social and life trajectories, semi-structured interviews ($n = 31$) with formerly homeschooled

adults were performed. Homeschooling was defined as parent directed education at home or in a homeschool cooperative. Students receiving the majority of their education from a virtual or brick-and-mortar school were not considered homeschoolers in this study. Furthermore, homeschool research has received criticism for being tainted by the participation of homeschool advocacy groups in analytic samples (Kunzman & Gaither 2020). During our recruitment phase, we avoided recruiting participants from local and national homeschooling organizations, reasoning that these organizations might lead to interviews with individuals who hold favorable views of homeschooling that are possibly uncharacteristic of the homeschooling population. We recruited participants who had been homeschooled for at least one year during their K-12 education through Internet platforms and by asking colleagues to recruit participants through their social networks. Snowball sampling procedures were also used (Aurini et al. 2016). In attempt to derive a sample representing diverse experiences, we specifically asked interview participants to connect us with individuals in their network who they knew had struggled socially as a homeschooled child.

Table 1 presents a breakdown of the background characteristics of each participant in the sample. In the sample, there is substantial variation in the number of years of homeschooled. Approximately 68% of participants reported attending private or public schools during their K-12 education. With the exception of one participant, all grew up in conventional two-parent households. Participants reported 15 forms of Christianity that were practiced in their childhood homes; only one participant was raised in a home that did not follow a religious tradition. On average, participants came from families that had four children. In 90% of these households, the mother was the primary homeschool teacher or played a significant role in delivering instruction. Three participants were taught by parents with a high school level education while the other

participants were taught by parents who had some college experience, undergraduate, and

graduate degrees. Participants were located across all regions of the United States with two

currently residing overseas. Participants in the sample are relatively well educated. Sixty-four

percent have an undergraduate degree or higher and 16% are current undergraduate students.

Nearly 20% have some college but did not complete their degrees. Approximately half of the

sample is married and only one participant is divorced.

Table 1. Characteristics of adults who were homeschooled from interviews (*n* =31)

ID	Grades Homeschooled	Race	Childhood family structure	Siblings	Gender	Age
1	Gr. 1-8	White/Hispanic	Two-parent	2	Female	30-35
2	Gr. 4-7	White	Two-parent	2	Female	30-35
3	K-5	White	Two-parent	4	Female	36-40
4	K-12	White	Two-parent	6	Female	25-29
5	K-10	White	Two-parent	6	Male	25-29
6	Gr. 2-6; 8	White	Two-parent	2	Female	25-29
7	Gr. 2-12	White	Two-parent	2	Male	25-29
8	K-12	White/Asian	Two-parent	2	Female	25-29
9	Gr. 1-7	White	Two-parent	2	Male	18-24
10	K-12	White	Two-parent	6	Male	18-24
11	K-12	White	Two-parent	10	Male	18-24
12	K-12	White	Two-parent	3	Female	25-29
13	K-8	White/Asian	Two-parent	0	Male	25-29
14	K-12	White	Two-parent	4	Female	25-29
15	K-8	White	Two-parent	3	Female	25-29
16	K-9	White	Two-parent	1	Male	18-24
17	K-12	White	Two-parent	5	Female	36-40
18	Gr. 1-3; 5-10	White	Two-parent	6	Non-binary	25-29
19	Gr. 3-4; 7-12	White/Hispanic	Two-parent	2	Male	25-29
20	K-12	White	Two-parent	3	Female	25-29
21	Gr. 4-8	Asian	Two-parent	1	Female	30-35
22	K-12	White / Native	Two-parent	2	Female	18-24
23	K-9	White / Native	Two-parent	2	Female	18-24
24	K-12	White	Two-parent	5	Female	18-24
25	K-3; 5-8	White / Native	Two-parent	2	Female	18-24
26	Gr. 11-12	White / Native	Two grandparents	4	Male	41-50
27	Gr. 6-8; 11-12	White	Two-parent	2	Male	36-40
28	K-6; 9-12	Asian	Two-parent	3	Male	25-29
29	K-12	White	Two-parent	1	Female	25-29
30	Gr. 9-12	Asian	Two-parent	1	Female	30-35
31	Gr. 5-12	White / Native	Two-parent	0	Male	25-29

Interviews (approximately 35-60 minutes) occurred over the phone in the fall of 2020 and winter of 2021. During interviews, participants were asked to reflect on feelings of loneliness and social isolation as well as social connections, experiences, and opportunities while being homeschooled, when initially transitioning out of homeschooling, and during adulthood (e.g. educational attainment, employment, family formation) (Please see Reviewer Appendix for semi-structured interview protocol).

Survey data. Survey data from the Understanding America Study (UAS: 2016-2018) were used to investigate the social and life outcomes of formerly homeschooled adults. The UAS is a rolling survey of 6,000 adults in the United States that is administered by the University of Southern California's Center for Economic and Social Research. The survey queries a vast array of information, including school experiences and sociodemographic background characteristics. From 2016-2018, respondents to the survey recorded their schooling experiences (i.e. public, private, and homeschool) from grades 1 to 12. This information was used to identify 140 respondents who had been homeschooled at any time between grades 1 to 12. Table 2 presents summary statistics for respondents who were homeschooled in the sample.

Table 2. Summary statistics for adults who were homeschooled ($n = 140$)

Variable	(%) of sample
Female	61
Male	39
Age	
18-25	34
25-65	63
65	3
Marital Status (25-65 yrs. old)	
Married	52
Never Married / Widowed	34
Divorced / Separated	15
Household Income (25-65 yrs. old)	
Below $50,000	66
Greater than or equal to $50,000	34
Education (25-65 yrs. old)	

High school or less	33
Some college	37
University graduate or higher	30
Retired / Disabled	10
Race	
White	74
Black	6
Hispanic	9
Other	11
US Citizen	95
Born in US	89

Analyses

Interviews. To analyze interviews, a total of 50 *a priori* codes were initially developed in consultation with literatures on homeschooling, social isolation, and life outcomes. After completing interviews, recordings were electronically transcribed. Emergent codes were then identified by reviewing each interview transcript. This process led to the creation of 66 emergent codes (please see Reviewer Appendix Table 2a for a list of all a priori and emergent codes). After this step, codes were placed under the following three periods: *during homeschooling*, *while transitioning out of homeschooling*, and *during adulthood*. Transcripts were then reanalyzed so that the both prevalence and significance of codes was recorded. Within each of the three periods, codes were narrowed into themes over three rounds of transcript analysis (Aurini et al. 2016). The second author performed an independent analysis, both coding and deriving themes. Derived themes from both authors were largely consistent although minor revisions to one theme (e.g. individual personality) were undertaken. To reduce researcher bias, two sets of 15 randomly selected transcripts were given to two independent reviewers. These reviewers were instructed to review transcripts, identifying important themes and information. The independent reviewers were then asked to examine the authors' identified themes, determining whether the themes cohered with the transcripts that they had reviewed and whether

or not relevant information had been excluded. During this phase, the importance of individual

characteristics was highlighted as needing more emphasis in the findings section. Representative

quotes were classified by theme and were subsequently selected based on the suggestions of the

two independent reviewers and first and second authors.

     Survey analysis. Logistic and ordinary least squares regression models were estimated

based on survey data from 140 adults who reported being homeschooled. Four dependent

variables were explored. *Household income* indicated whether the respondent reported household

income that was greater than $50,000. *Higher education* indicated if the respondent had at least

some college education while *divorced/separated* identified respondents who reported being

divorced or separated, conditional on ever being married. *Subjective wellbeing* was generated

from a series of Likert items (e.g. how satisfied are you with the number of friends you have?)

derived from established scales in the positive psychology literature (Hubert et al., 2009; OECD,

2013). This measure provides self-reported information on the perceived social lives and

interactions of formerly homeschooled adults (The Reviewer Appendix contains a list of the

survey items comprising the measure). Table 3 presents the means and standard deviations for

each of these variables.

Table 3. Summary statistics for dependent variables

	M	SD
Household Income ($50>)	0.36	0.44
Attended Higher Education	0.61	0.49
Divorced/Separated	0.11	0.31
Subjective Well Being	6.81	1.87

     For the independent variables, we categorized respondents who were once homeschool

into the following three categories: short-term (1-2 years homeschooled), substantial (3-9 years

homeschooled), and long-term (10-12 years homeschooled) homeschoolers. These classifications

were developed based on findings from our qualitative interviews and existing literature on

homeschool trajectories. While offering conceptually meaningful distinctions among

homeschoolers, these classifications were also practical, providing adequate analytic subsamples

within each category. Robustness checks were performed using years homeschooled as a

continuous variable or by slightly modifying inclusion criteria (i.e. years homeschooled) for

categories. Results were mostly consistent with the main analyses. In the logistic regression

models, dummy variables for short-term, substantial, and long-term homeschooling were used.

As a reference category, short-term homeschoolers had comparatively little experience with

homeschooling but were part of a family who had self-selected into the practice.

Even though the survey sample of 140 adults is larger than much existing research on

adults who were homeschooled, it remains a small sample size that necessitates parsimonious use

of controls. The following controls were used to address confounding factors to the greatest

extent possible given the limits of the sample. Control variables for gender (male/female), racial

background (white/non-white), and the age of the respondent were included. As a proxy measure

for childhood socioeconomic status, a binary variable indicating whether the respondent had ever

attended private school, was also included for the analyses. This proxy measure is imperfect but

it is used because of the well-documented association between socioeconomic advantage and

private school attendance (Gamoran, 1996).

Findings

This section presents findings from interviews and survey data on the social and life

trajectories of formerly homeschooled adults.

Findings from interviews

From interviews with formerly homeschooled adults, the following themes were derived: conventional and unconventional activities, parent intentionality, the salience of personality, and social acculturation.

Conventional and unconventional activities. In this study, 28 of the 31 adults interviewed did not report feeling socially isolated while being homeschooled. Extracurricular activities were described as one of the ways that they had opportunities to socialize, build relationships with peers, and satisfy social needs. During their time being homeschooled, formerly homeschooled adults identified a wide range of activities that are typical for many children to do, including boy/girl scouts, martial arts, recreational sports, symphony orchestra, community theatre, and church-based groups. In some cases, it took effort by children and parents to seek out these opportunities, as one participated noted.

> "*I did stuff at one of the local high schools. I participated in the Model United Nations at the local high school. I did have to go out of my way to do that and my parents encouraged that.*" –Homeschooled grades 1-7

The families of several participants who were homeschooled in high school also contacted their local high schools so that they could join after-school clubs and sports teams offered at local schools. These standard extracurricular activities appeared to give homeschooled children exposure to mainstream social opportunities.

Many adults who were homeschooled as children identified unconventional activities where they had opportunities to socialize and develop friendships with other children. For instance, 24 of 31 adults reported being part of homeschool cooperatives at points during their time being homeschooled. Cooperatives were described as allowing homeschooled children to gain exposure to content that parents might not have the expertise in or have necessary resources

to teach, such as high school science, math, and foreign language. From a social standpoint, cooperatives appeared to facilitate social opportunities. Participants recalled being close with their peers in cooperative courses and felt that cooperatives had helped them to develop lasting relationships. In areas of the country with large numbers of homeschooling families, cooperatives reportedly held homeschool proms and, in some instances, formed homeschool sports teams that competed with local public schools. Several adults who were homeschooled recalled participating in international homeschool organizations that organized annual conferences, trips, and other social experiences for homeschooled children. Participants felt that these organizations created a broader community and social connectedness for them.

In addition to these activities, adults who were homeschooled identified unique activities that fostered diverse social experiences. For example, participants recalled being homeschooled in the mornings and apprenticing in the afternoons in carpentry, agriculture, husbandry, and other skilled trades. Interactions while working purportedly led to mixed-aged social engagements and relationships. Participants linked these opportunities to feeling comfortable interacting with those of different age groups while being homeschooled and in later life. Homeschooling also seemed to support international social experiences through parents' military deployments overseas, religious missions, and long-term business trips. Formerly homeschooled adults who had these international experiences recounted intercultural exchanges and friendships with peers in other countries that are uncommon for many youth. One adult who had spent time extended time being homeschooled in a remote part of the Amazon rainforest explained how the experience had led to rich social opportunities and lasting relationships:

> *That was a very unique and different upbringing and something I hold true to my values*
>
> *today… I lived [in the Amazon] for so long that, yeah, I have family in the bush that are*

> *actually [Indigenous]. I mean, they're friends. They treat me like their family. But yeah, I*
>
> *had extremely good friends.*
>
> -Homeschooled Grades 6-8 and 11-12

Numerous participants expressed satisfaction with the friendships they had formed as children, describing their relationships as "quality over quantity." They reflected that although they may have possessed smaller social circles than children who were not homeschooled, they tended to feel that they had developed small but relatively dense networks that fostered deep social connections during the time they were homeschooled.

    Parent intentionality. The role of the homeschooling parent in being intentional about facilitating social experiences was a frequent theme in interviews. Twenty-nine of the 31 adults who were homeschooled felt a deep sense gratitude to their parents for having homeschooled them but emphasized that one of the key factors that made homeschooling work from a social standpoint was that their parents were intentional about facilitating social experiences for them. In reflecting on this point, one participant explained how her mother was deliberate about seeking out social opportunities and activities for her that would expose her to people of different backgrounds and cultures:

> *I think one thing that was very important to my mother was that she didn't want us to*
>
> *become isolated and she wanted us to always be able to thrive around different types*
>
> *and groups of people*. -Homeschooled grades 1-8

    By contrast, an indifferent approach to socialization seemed to be considerably harmful. In two cases in which homeschooling parents were reported to have made little effort to facilitate social opportunities for their children, the experience of homeschooling was considered socially

isolating. One adult who had been homeschooled from kindergarten through 12th grade explained

how his parents did not attempt to facilitate social experiences for him:

> "*I would say parental involvement is really important, but also getting into*
>
> *extracurriculars, getting out of the house, and having a social life. There really needs to*
>
> *be a balance. For me, it was lack of socialization.* –Homeschooled K-12

To enable social experiences for children, homeschooling parents were reportedly likely

to focus on developing family bonds and close-knit networks with other families. Adults in the

sample consistently mentioned being very close with their parents and siblings in childhood and

in later life. Most viewed closeness with family and friends as having been highly beneficial.

Yet, a subset of adults saw their tightly-knit groups as being advantageous in some ways and

partly insulating so that they identified a tension between enjoying closeness with family and

friends but simultaneously feeling a sense of having been sheltered. One adult who was

homeschooled from grades 9 to 12 articulated how she socialized frequently but that

socialization occurred among those who shared her religious tradition:

> "*Like, obviously, parents have to protect their kids and you do need to shelter your*
>
> *children. But I think it was a little bit too extreme. So it was so sheltered and so much of*
>
> *a subculture that we weren't really clued into normal culture, like a lot of the pop culture.*
>
> *It was like, oh, we didn't listen to that kind of music.*" –Homeschooled grade 9-12

In some households, strong religious commitments when coupled with homeschooling

appeared to have an insulating effect. However, a number of adults who were raised in religious

households noted how their parents had raised them in a particular faith tradition and had worked

to expose them to other religious perspectives and cultures. Even among those who were

ostensibly more insulated, there was a degree of openness that was exemplified through a

recognition of different cultures and an ability to question the religious culture in which they were raised.

   The Salience of Personality. Adults who were homeschooled consistently identified individual interests and personal attributes as the most influential factors determining whether a person would seek to exit homeschooling to pursue social opportunities in traditional schools. Many study participants explained that they decided to stop homeschooling because of a desire for mainstream social experiences and activities offered in brick-and-mortar schools. Some described this phenomenon as "growing out of" homeschooling or homeschooling no longer being "the right fit". Participants mentioned wanting to expand their social networks, attend sporting events, go to prom, and participate in other mainstream school-based activities as reasons for growing out of homeschooling. This situation seemed to occur in middle and high school after a child had been homeschooled for many years. Conversely, some participants were satisfied with their social opportunities and wanted to continue homeschooling. Within families, variation in schooling selections where one sibling might transition to a brick-and-mortar school while other siblings continued to do homeschooling throughout their entire K-12 education was considered to be primarily affected by personality differences among siblings.

   Decisions to stop homeschooling were made in consultation with parents. Parents were often supportive of the desire to attend traditional schools. Parents purportedly played a role in recognizing that a child's social interests would be served more effectively in traditional school. This level of parental awareness did not always occur in families. Three adults who were homeschooled throughout high school felt that attending their local schools might have been more optimal for them socially. Even though the parents of these three adults did not directly prevent their children from attending traditional schools, these parents were described as not

having created opportunities for children to consider such decisions meaningfully. Parental

inaction in this respect seemed to have negative consequences. One formerly homeschooled

adult explained how as she entered her high school years, she began to feel that she was missing

important social experiences. Although these situations were uncommon in the sample, for the

few homeschooled participants who felt like traditional schools would have benefitted them,

there was a sense of lament that valuable social experiences had been missed and could not be

regained.

Nearly all of the homeschooled adults in this study described life circumstances that

indicated that they were navigating broader society relatively well as adults, even in the case of

two participants whose homeschooling experiences represented a state of social isolation.

Employment, higher education, and marriage were largely the norm in the sample. All

participants had networks of friends and family and many were highly active in local community

organizations. A number of them also worked in the public or private education systems as

administrators, classroom teachers, and paraprofessionals. When reflecting on the influence of

homeschooling on their social and life trajectories, nearly all participants identified their personal

characteristics and individual personalities as being more salient than the experience of

homeschooling itself. Twenty-eight of 31 participants felt that homeschooling had given them

positive social opportunities, experiences, and skills. When participants were asked to share their

overall reflections, most summed up their perspective by arguing that social success in

homeschooling depended on the personality and interests of the child and that "it wasn't for

everyone", and importantly, that homeschooling was not suitable for every parent to do. One

participant articulated these sentiments:

> *I think it is very personality dependent... You know, home schooling is maybe not the best thing for everyone. But just because you're homeschooled doesn't mean you are going to be a weirdo and just because you have been to public school does not mean you are going to be a perfectly socialized, well-functioning human being either. It definitely depends on the person and the environment that they are homeschooled in.*

Homeschooled grades 1-7

Social acculturation. All formerly homeschooled adults in the sample eventually moved onto mainstream institutions. In the transition out of homeschooling, most adults found that their transition into higher education or the workforce was relatively smooth from a social standpoint. Participants routinely highlighted an early process of social adaptation where they had to learn mainstream social norms, and, in some instances, overcome social gaps between the social interactions they were accustomed to as homeschooled children and new social expectations in mainstream institutions. Several adults recalled having culture shock at first. One participant mentioned how he had "culture shock" upon entering the workforce for the first time:

> *Up until that point, I had very little exposure to profanity and foul language, and that was quite a shock. It's kind of going from a very sheltered upbringing into a very rough part of the workforce in general, but a lot of profanity, a lot of smoking. That was very different. It took it took a little while to find my feet for sure.* Homeschooled K-12

Many adults in the sample highlighted how negative perceptions of homeschooling and socialization had been a frustrating stereotype. Others felt insecure about their homeschooling background when entering university or the workforce. One formerly homeschooled adult summed up this sentiment:

When I tell people I'm homeschooled, they almost kind of gasp, "like really, you?" And I'm like, "okay, what do you think a homeschooler is?" I mean, I understand that your perception is that I'm part of an Amish community or that I'm part of a religious community or a group of people who live in a rural area. And I don't know how to tell them, like, no, I just did school from home. Homeschooled Grades 1-8

Eight adults also reported difficulty socializing with peers when initially entering postsecondary institutions or the workforce. Initial social difficulties appeared to be amplified by distinct personality characteristics. Adults who were highly introverted experienced greater struggles during their initial transitions, but these participants noted that their own personality seemed to have played a greater role in this respect than their schooling background did. Participants who identified themselves as being more introverted suggested that they would have faced the same challenges had they not been homeschooled. Other participants contrasted their challenges with those of their siblings who were also homeschooled, pointing out how the more introverted individual had a more difficult experience transitioning out of homeschooling.
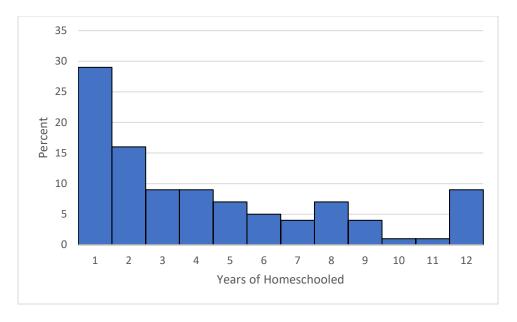
Results from survey analyses

Only three of 31 adults described experiences that could be characterized as a state of social isolation while being homeschooled. Even though interviews indicated that decisions to either continue or stop homeschooling were often meant to be aligned with a child's particular social needs, those who were homeschooled for all or most of their K-12 education had less exposure to mainstream social opportunities offered in brick-and-mortar schools. However, most of these participants felt that homeschooling had given them a personalized experience that was suited to their individual social needs, and that homeschooling had not hindered their ability to navigate society effectively as adults. To explore the social and life trajectories of formerly

homeschooled adults further, analyses of survey data are performed that distinguish formerly

homeschooled adults based on the length of time that they were homeschooled.

In the sample of formerly homeschooled adults, there is considerable variation in the

length of time homeschooled. Figure 1 presents the number of years that each respondent to the

survey was homeschooled. Nearly one-third of those reporting that they were homeschooled, did

so for only one year of their K-12 education. Approximately 45% of the sample reports being

homeschooled for only 1 or 2 years. An additional 44% of the sample was homeschooled for 3 to

9 years so these individuals will have had considerable experience with homeschooling and will

have spent substantial time attending a public or private school. In the sample, 39 percent of

those reporting homeschooling in the range of 3 to 9 years also attended a private school at some

point during their K-12 education, while 30 percent of those reporting 1 or 2 years of

homeschooling attended a private school at some point. Only 11 percent of the sample reports

homeschooling for 10 to 12 years and less than 10 percent report having been homeschooled for

all 12 years of their education. Homeschooling was not particularly more or less common at any

particular grade level – between 30 and 40 percent of respondents were homeschooled at any

given grade level.

Figure 1. Number of years homeschooled

Notes: *n* = 140

Table 3 presents the results of logistic and ordinary least squares regression analyses that compare three groups of homeschooled adults: short-term homeschooling (1-2 years); substantial homeschooling (3-9 years); and long-term homeschooling (10-12 years). The first three columns display odds ratios from logistic regression models comparing the three groups of homeschooled adults on household income, attendance at a postsecondary institution, and divorced/separated status. The fourth column displays ordinary least squares regression estimates for subjective wellbeing. Across all the models, neither of estimates for substantial and long-term homeschooling are statistically significant, suggesting that outcomes for these two groups of homeschooled adults are not significantly different from short-term homeschoolers. Separate statistical tests show no statistical differences between long-term and substantial homeschooling on the four outcomes of analysis. It appears that length of time homeschooled is not strongly correlated with either of the four dependent variables. The estimates for long-term homeschooling exhibit the strongest positive associations though these are not statistically significant.

Table 3. Homeschool trajectories and social and life outcomes (25-65 year olds)

	Household Income Above $50,000	Attended College	Divorced / Separated	Subjective Well-Being
Substantial	1.22	0.90	0.88	0.261
Homeschooling	(0.59)	(0.47)	(0.57)	(0.421)
Long-term				
Homeschooling	1.22	1.26	1.00	0.611
	(1.04)	(1.09)	(1.22)	(0.667)
White	1.89	2.72*	0.61	-0.278
	(1.06)	(1.46)	(0.41)	(0.468)
Age	0.99	0.96	1.06**	-0.0211
	(0.02)	(0.02)	(0.03)	(0.0162)
Male	2.02	0.94	0.50	-0.452
	(0.96)	(0.49)	(0.35)	(0.411)
Ever attended	2.39*	5.93***	0.48	0.586
private school	(1.15)	(3.67)	(0.35)	(0.454)
Constant	0.20	2.58	0.04**	7.527***
	(0.22)	(2.61)	(0.05)	(0.728)
Observations	95	95	95	92

*** $p<0.01$, ** $p<0.05$, * $p<0.1$. Note. In Models 1-3, logistic regressions are performed. Odds ratios and standard errors presented in Models 1-3. In Model 4, OLS regression is performed. The sample is smaller for Model 4 because of missing data for the outcome variable.

Discussion

A longstanding critique of homeschooling is that it may lead to socially isolating children, and consequently, make it difficult for them to navigate society in adulthood. However, little empirical research has sought to test this claim. In this study, adults who were homeschooled as children identified an array of conventional and unconventional activities that they felt had provided them with social skills, experiences, and connections. Furthermore, homeschooling parents were reportedly integral to facilitating social opportunities as well as recognizing when a child's particular social needs might require that the child transition to a brick-and-mortar school. Interview participants explained how they underwent a brief period of social acculturation when transitioning out of homeschooling for the first time, but all reported feeling socially integrated as adults. Those who homeschooled for all or most of their K-12 education had less exposure to mainstream social opportunities at school. Nevertheless, they

reflected that long-term homeschooling had not hindered their ability to navigate society effectively. Analyses of survey data seemed to echo this finding. No statistical differences on four social and life outcomes (i.e. college attendance, household income, marital status, and subjective wellbeing) were observed between short-term homeschoolers (1-2 years) who spent nearly all of their K-12 education in brick-and-mortar schools and long-term (10-12 years) and substantial (3-9 years) homeschoolers who had less exposure to mainstream social opportunities available in brick-and mortar schools.

In prior research, a small number of descriptive studies report that homeschooled children have adequate social skills, participate in conventional extracurricular activities, and are active in local community groups (Medlin 2006; Reavis & Zakrinski 2005; Smith & Sikkink 1999; Tillman 1995). This study finds evidence that is consistent with this work. Yet, it also finds that the social lives and experiences of homeschooled children can be atypical in certain ways, such as through their participation in homeschool cooperatives or apprenticeships. Beyond the venues where social interactions might occur, social flourishing as a homeschooled child may be partly dependent on individual personalities and interests. Children who desire mainstream social experiences offered in traditional schools may be socially dissatisfied with homeschooling and feel that they are socially isolated. Along with the individual child's characteristics, parental efforts to facilitate social opportunities for homeschooled children may be critical (Wyatt 2008). Parents who are not proactive in this respect may fail to provide adequate social experiences for their children. Considering these interacting child and parent factors, a sweeping conclusion that the decision to homeschool either undermines or supports social development in children could be misleading.

In the case of social and life outcomes in adulthood, the literature generally reports that formerly homeschooled adults are able to navigate university, employment, and mainstream social settings effectively (Murphy, 2012; Saunders 2009; Sorey & Duggan 2008; White Moore, & Squires 2009). Recent survey work, however, diverges from these patterns, finding that young adults who were homeschooled show either the same level or slightly lower civic skills, commitments, and volunteering activity than their public school counterparts (Hill & Dulk, 2013; Sikkink & Skiles, 2015). In this study, formerly homeschooled adults were socially integrated and actively participating in mainstream social institutions in later life. Results from both qualitative and quantitative analyses offer little evidence to support the idea that those with less exposure to mainstream social opportunities offered in brick-and-mortar schools encounter difficulty participating in society as adults though there does appear to be a brief period of social acculturation that homeschooled children undergo when they initially leave homeschooling for schools, universities, or the workforce. Individual characteristics and personality traits possibly win out over the long-term, taking precedence over schooling selections in shaping the social lives of formerly homeschooled adults.

The analytical approach used in this this builds on previous research by distinguishing formerly homeschooled adults according to the number of years that they were homeschooled. Homeschooling is not static. Instead, entry and exit into homeschooling appear to be the norm (Hill & den Dulk 2013). Most research on homeschooling does not distinguish homeschoolers based on the number of years that they are homeschooled. Data from this study show substantial variation in the number of years a person was homeschooled, which raises questions about existing analyses that treat homeschoolers as a uniform group since those who homeschool for 1

or 2 years may represent a fundamentally different group of homeschoolers from those who do so for most or all of their K-12 education.

There are important limitations to this study. First, the analyses are exploratory and descriptive. As a result, they are unable to establish causal claims on homeschooling and social and life outcomes. One vexing methodological challenge when investigating homeschooling is that it is inextricably linked to self-selection processes, making it difficult to disentangle effects generated by the practice of homeschooling from unobserved effects caused by those who choose to homeschool. To a degree, the analyses in this study may partially sidestep self-selection issues that arise when comparing homeschoolers with non-homeschoolers by exploring associations among different types of homeschoolers based on years spent being homeschooled. Even so, selection processes based on different durations of homeschooling remain an issue, and outcomes for homeschooled children may reflect characteristics of parents who decide to homeschool rather than anything distinctive about the practice itself. While this study's research design was used to probe formerly homeschooled adults social and life trajectories, both the quantitative and qualitative findings are derived from small samples that could limit generalizability to the broader homeschool population. Socially isolated individuals are more difficult to locate for interviews and surveys. Even though recruitment efforts allowed the researchers to secure interviews with those known to have had difficult or socially isolating experiences while being homeschooled, the overall composition of this study's quantitative and qualitative samples remains a key caveat to the findings presented in this study. Efforts to connect with black adults who were formerly homeschooled fell short during the qualitative data collection phase. The literature on black homeschoolers is growing and may add a key dimension to analyses of social isolation in homeschooling contexts (Fields-Smith & Kisura 2013; Mazama

& Lundy 2012). It is important to acknowledge that the small sample of formerly homeschooled adults limits statistical power. Estimates in this study should be viewed as being exploratory and descriptive.

Despite these limitations, findings on the social and life outcomes of formerly homeschooled adults lay the groundwork for future research on what could end up becoming a growing educational phenomenon. During the COVID-19 pandemic, the percentage of families homeschooling their children is reported to have doubled. It is uncertain whether these figures will return to their original levels once the pandemic subsides, but ongoing demands for educational customization, dual enrollment opportunities, homeschool cooperatives, and virtual content could lead to a rise in the number of families choosing to homeschool their children. These trends present new questions not only on how to define homeschooling but also about the effects of emerging homeschooling practices (Saiger 2016). Social media and online content appear to be facilitating connections among homeschooling families more so than in years past. As the accessibility of homeschooling grows, disputes about parental responsibilities and the role of the state in regulating homeschooling could come into focus (Bartholet 2020; West 2009). All of these issues are worth exploring empirically since discussions about homeschooling are largely dominated by a priori philosophical beliefs and theoretical arguments.

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