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Teenage Time Use as Investment in Cultural Capital

Karen Robson

ISER Working Papers
Number 2003-12

Institute for Social and Economic Research

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ABSTRACT

This article begins by briefly examining the previous literature in this area and focusing on the difficulty associated with defining and measuring cultural capital Next, the term cultural capital is examined in a wider context alongside its relationship with the other capitals defined by Bourdieu. While cultural capital is theoretically convertible into other forms of capital, the overwhelming majority of previous research focuses on its relationship with childhood school achievement. I suggest that the more attention be given to the relationship that cultural has with economic and social capital and the causal mechanisms by which it is thought to act. Next, I propose a measure in which the metaphor of investment implied in the term “capital” is recognised. The availability of time diaries from the British Cohort Study of 1970 provides an invaluable source of information regarding how British youth spent their leisure at age sixteen. Empirical analysis examines the effect of cultural capital on economic capital and social capital outcomes. This article ends with a discussion of the results, addressing some fundamental shortcomings in previous cultural capital research which have been identified by previous researchers and which this study has attempted to either address or improve upon.

Teenage Time Use as Investment in Cultural Capital

INTRODUCTION

If we consider economic capital, social capital, and cultural capital to be the three main "capitals" that have been of interest to sociologists in the past decade or so, it is the latter of these that has received the least attention. Cultural capital is associated mainly with the writings of Pierre Bourdieu, although concept has been examined by a fair number of sociologists in recent years. The main relationship that is examined is the role of cultural capital as a subtle mechanism by which class inequalities in educational outcomes are maintained, which Bourdieu (1977) first drew attention to in his earlier writings.

This article begins by briefly examining the previous literature in this area and focusing on the difficulty associated with defining and measuring cultural capital. Of course, any results that emerge from empirical analysis of cultural capital are directly contingent upon these definitional and measurement issues. Next, the term cultural capital is examined in a wider context alongside its relationship with the other capitals defined by Bourdieu (1986). While cultural capital is theoretically convertible into other forms of capital, the overwhelming majority of previous research focuses on its relationship with childhood school achievement. I suggest that more attention be given to the relationship that cultural capital has with economic and social capital and the causal mechanisms through which it is theorised to act. Next, I propose a measure of cultural capital in which the metaphor of investment implied in the term "capital" is recognised. The availability of time diaries from the British Cohort Study of 1970 provides an invaluable source of information regarding how British youth spent their leisure at age sixteen. Empirical analysis examines the effect of cultural capital on economic capital and social capital outcomes in adulthood. This article ends with a discussion of the results, addressing some fundamental shortcomings in previous cultural capital research which have been identified by previous researchers and which this study has attempted to either address or improve upon.

DEFINITIONAL ISSUES

Defining cultural capital is no simple task. Bourdieu himself made the definition of this term very complex indeed by modifying the concept and its functions throughout his various writings. What follows is not a comprehensive review of the various definitions being used in the literature, but an overview of the subtle differences that exist in the core components of the definitions used by authors. For example, Aschaffenburg and Maas (1997) identify the key features of cultural capital as being skill and familiarity with cultural codes and practices of the dominant class. Dumais (2002), however, indicates that cultural capital consists of "linguistic and cultural competence", as well as a comprehensive knowledge of the culture of the upper classes. Sullivan (2001) also asserts that cultural capital is comprised of familiarity with the dominant culture in a society and emphasises that the ability to use "educated language" is a key feature. Kalmijn and Kraaykamp (1996) stress that cultural capital involves socialisation into highbrow cultural activities, which includes being socialised into the tastes and preferences of highbrow culture. Mohr and DiMaggio (1995) define the concept as the highbrow tastes, objects, or styles legitimised by the dominant culture which "maintain and disseminate societal standards of value and serve collectively to clarify and periodically revise the cultural currency" (p.168). While fundamentally similar, all of these definitions stress different aspects of the concept.

Lamont and Lareau (1988) documented Bourdieu's changing definition of the concept throughout his writings. In particular, they note the wide range of functions performed by cultural capital, stating that according to Bourdieu "cultural capital is alternatively an informal academic standard, a class attribute, a basis for social selection, and a resource for power which is salient as an indicator/basis of class position" (p. 156). Several authors have opted for the definition proposed by Lamont and Lareau (1988) as it captures the crux of his most compelling arguments. The end product of their semantic analysis was a definition that they assert captures the overarching common elements that were present in the definitions presented by Bourdieu and his co-authors over time. They proposed to define cultural capital as

> "institutionalized, i.e. widely shared, high status cultural signals (attitudes, preferences, formal knowledge, behaviors, goods and credentials) used for social and cultural exclusion, the former referring to exclusion from jobs and resources, and the latter, to exclusion from high status groups" (Lamont and Lareau, 1988: 156).

It is tempting to assume that cultural capital is merely "showing off", but Lamont and Lareau (1988) argue that the signals are sent unconsciously because they are learned through socialisation and incorporated into the habitus. They add this it is important to engage the metaphor of "capital" implied in the concept. Cultural capital is something that is invested in and accumulates over time. It should also be noted that in order to be cultural capital, according to Bourdieu, consumption of cultural activities cannot simply be unreflective for reasons of pure enjoyment. Peterson and Kern (1996) highlight Bourdieu's argument that true cultural capital is inextricably linked to intellectualised appreciation.

THE CAUSAL MECHANISM

How is it then, that cultural capital has an effect on life outcomes? Bourdieu argued that cultural capital is not simply a byproduct of class position, but that it is subtly deployed and is an underlying reason for the reproduction of social inequalities. Understanding of highbrow culture and participation in haute couture activities gives individuals certain types of knowledge that gives rise to behaviours manifested in the habitus which then send signals to others about the likely socioeconomic background of the individual. The classic example is that of children in school. Children who have had exposure to the beaux arts and/or participation in significant cultural events necessarily have knowledge about and familiarity with this type of culture. This knowledge and relative comfort with which they can integrate into such social situations is incorporated into the individual's habitus. These signals are then given off in schools situations when students interact with teachers. Bourdieu argued that the school system prefers these styles. The signals that are given off by the student are arbitrary. They are not fundamentally related to schooling and are not essential in the command of academic topics. While arbitrary, however, the signals are rewarded by teachers and related gatekeepers such that children without this informal knowledge may regard the school environment as a hostile one. Additionally, because children

from the upper classes are more likely to have attended cultural events and participated in the beaux arts, it is likely that children from privileged backgrounds are more likely to possess these skills. According to Bourdieu, this is how inequality is subtly perpetuated in the education system.

Cultural capital therefore, does not operate in isolation, but through a complex web of socialisation into behaviours over the life course that are rewarded by gatekeepers. In addition to cultural capital, Bourdieu (1986) identified two other broad types of capital that exist in an interrelated web along with cultural capital as well as with one another. The first is economic capital, which is that which is quickly and relatively easily converted into money. This type of capital is plainly the most straightforward, and indeed closely related to the concept of human capital outlined by Becker (1964). Job skills, job tenure and educational attainment are included in this type of capital as their transformation into money is a well understood process. The second type of capital is social capital, which according to Bourdieu (1986) is

> "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition—or in other words, to membership in a group—which provides each of its members with backing of the collectively-owned capital, a 'credential' which entitles them to credit, in various senses of the word" (p. 248-9).

It should be noted that Bourdieu's definition of social capital is entirely focused on the social networks (and the capabilities of those networks) of individuals, while other well-known social capital theorists such at Putnam (2000) understand social capital as a characteristic of societies.

As is evident by the brief discussion of cultural capital so far, these forms of capital do not exist in isolation from one another, but are inextricably linked. Each form of capital is convertible into another form. Economic capital is at the root of all capitals such that economic reward can be derived from both social and cultural capital. The example of cultural capital has demonstrated that signals of cultural knowledge are rewarded in the classroom, which is easily converted into a type of economic capital – educational attainment. Additionally, networks of colleagues can provide information about available jobs or stock tips, for example, which again

is easily convertible into economic capital in the form of a higher paying job or stock payoff. Likewise, cultural capital can be converted into social capital, as exposure to the beaux arts and participation in haute couture activities is likely to allow access to networks where cultural capital knowledge is valued, and indeed, a form of exclusion. Social capital can theoretically also be transformed into cultural capital. Access to colleagues associated with networks such as opera societies or wine clubs, for example, can result in individuals developing the skills and tastes essential to develop an intellectualised appreciation of these forms of leisure consumption.

ISSUES OF OPERATIONALISATION

There are three general techniques of measuring cultural capital in the literature that will be discussed here: assessing the activities/knowledge of the respondent, assessing the activities/knowledge of the respondent's parents, and finally, using elements of both. What follows is not an exhaustive review, but a discussion of some of the previous researchers' ways of quantifying this concept. The first technique typically involves asking young people about their participation in haute couture types of activities. DiMaggio (1982), one of the first after Bourdieu to do research in this area, measured cultural capital by students' self-reports of art, literature, and music involvement, and their interests in these respective areas. These indicators were supplemented by measuring respondents' attitudes to specific artistic activities and occupations, as well as knowledge tests. Sullivan (2001), alternatively, surveyed pupils on their reading, television viewing, and music listening preferences, as well as their knowledge of well known cultural figures. Because Bourdieu stressed the importance of linguistic competence in the concept of cultural capital, these measures were supplemented with vocabulary test scores as well. Alternatively, Dumais (2002) summed the number of high culture activities in which the respondent participated, but also supplemented the measurement with an operationalisation of Bourdieu's concept of "habitus" through the respondent's expectations of whether they would have a professional occupation by age 29.

Some researchers assess cultural capital of respondents solely by the retrospective activities of their parents. For example, Kalmijn and Kraaykamp (1996) measured cultural capital by whether parents attended various cultural events and encouraged the respondent to read books that were not school-related. De Graaf, De Graaf, and Kraaycamp (2000) measured parental cultural capital through the beaux arts participation and reading habits of parents, while De Graaf and De Graaf (2002) used a similar technique, augmented by cultural commodities in the respondent's household between the ages of 12 and 15.

A number of studies also measure the cultural capital of respondents' parents along with that of the child. Later work by DiMaggio and colleagues (Mohr and DiMaggio, 1995) operationalises the concept by employing a scale that measured the number of cultural goods in the home, as well as the impact of parental participation in various types of organisations on their children's cultural capital. They also conceptualise father's occupation as a additional way of assessing parental cultural capital, as a similar technique was used by Bourdieu (1974) when discussing the different leisure consumption habits of occupational groups. Aschaffenburg and Maas (1997) stress that parents' and children's cultural capital should be included in the same model and that any measure of cultural capital must capture the 'metaphor of accumulation and investment' implied by the term capital. Therefore, they measured individual cultural capital through attendance at various "cultural classes" at several ages during childhood, supplemented by the respondents' account of their parents' activities when they were growing up. Sullivan (2001) measured this concept by asking students about their parents' reading, newspaper, and radio station preferences, as well as their participation in formal cultural activities and the types of topics that were discussed by parents within the home. This was supplemented by the respondents' knowledge of famous cultural figures, vocabulary testing, as well as obtaining information on the types of materials read, programmes viewed on television, and music listened to by the respondent, along with whether or not he or she participated in "formal culture" such as art gallery or theatre attendance. Finally, Roscigno and Ainsworth-Darnell (1999) measured what they called "family cultural capital" which assessed the types of cultural trips attended by the respondent and the types of cultural classes participated in, as well as the types of cultural resources available in the family home which ranged from receiving a daily newspaper to the presence of a computer in the home.

As is clear from this brief overview, there is no standard way of measuring the concept of cultural capital. Lamont and Lareau (1988) comment on the difficulty of operationalising this concept, stressing that cultural activities and the validity of their worth in particular environments further complicates the ability of cultural capital to be adequately measured.

OBJECTIVES OF THE CURRENT STUDY

The current study has three distinct and broad objectives. The first is to contribute to the literature on cultural capital by using a unique operationalisation of the concept. Time diaries collected from teenagers will be used to examine the actual time spent participating in cultural capital activities during a time frame in youth. This is a direct and literal way of measuring haute couture and beaux arts participation and captures the investment metaphor implied in the term "capital."

The second objective is to model cultural capital alongside the other capitals discussed by Bourdieu. As discussed above, capitals are all transferable, to a greater or lesser degree, into one another. The analyses that follow will attempt to model the conversion of cultural capital into economic capital and social capital. The vast majority of cultural capital analyses focus on educational outcomes, very much in a similar vein as Bourdieu (1977). Other forms of analysis, however, are clearly possible given the discussion of the conversion possibilities of cultural capital outlined by Bourdieu (1984, 1986).

The third objective is to use a unique data set in the analyses. Up until now, examination of the effects of cultural capital socialisation in youth have focused almost entirely on retrospective data collected in adulthood, or else have examined the classroom achievement of respondents who were still children. The data used here are from a British birth cohort from which data were collected at several points in their lives. Reports of cultural capital participation during youth were collected during youth, from the respondents, during a four day period in which they kept activity diaries. There is no more exact or literal way of measuring cultural

capital investment than this. As well, the outcomes examined here—economic and social capital—are characteristics obtained from the respondents in adulthood at an additional data collection attempt. These data are truly unique in the sense that they allow for such a direct assessment of cultural capital participation in youth and an examination of outcomes several years later.

DATA AND METHODS

The data used in the analyses were from the 1970 British Cohort Study (BCS70). All persons born in Great Britain between 5 and 11 April 1970 were subjects for the study, with data collected on 17,196 births and the families of the babies in England, Scotland, Wales, and Northern Ireland. Attempts to collect data from the full cohort occurred at ages 5, 10, 16, 26, and 29. While the focus of the inquiry at birth was largely medical, the scope of latter data collection efforts broadened significantly. At the post-birth sweeps, considerable data was collected on the educational and physical development of the children. In adulthood, cohort members were asked also about topics pertaining to their economic development, living arrangements, and offspring.

This research has taken advantage of the longitudinal nature of the data and considers in the analyses characteristics of the cohort members collected at ages 16 and 29. At age 16, cohort members were given four-day leisure and activity diaries to complete over a Friday to Monday time frame, in which they were asked to record all of their activities. It is from this data that various forms of leisure consumption can be observed at youth and related to outcome measures in adulthood.

Like most longitudinal studies, particularly those that span decades, attrition is an issue that must be addressed. While the original birth cohort was 17,196, data from 11,622 members was collected at age 16. The age 16 sweep, however, consisted of some 14 different survey instruments, some of which were to be completed by the student, others by teachers, and others

by parents. A teacher's strike during this time also complicated the distribution of questionnaires to students. Therefore, while 11,622 cases have data on at least one survey document, considerable loss of cases occurs when data from different survey instruments are combined. The leisure and activity diaries were distributed to 8,526 cohort members and 7,077 contributed at least one useful diary day. Analysis of the diary returns (Jones 1990) indicates that girls were better diarists with 63% sending back good four-day diaries and 8% contributing 1 to 3 good days. The comparable figures among boys were 45% and 10%. Returns also varied by region such that Londoners were particularly bad diarists and East Anglians and Scots particularly good.

As mentioned above, the diaries were just one survey instrument of many administered at 16. Family background characteristics were also obtained in the parental questionnaire at age 16, however, combining both instruments results in a substantial loss of cases. Because family background information is an important factor for which to control in such analyses, where family background information was missing at age 16, information at age 10 was substituted, and where this was still missing, information at age 5 was substituted. Appendix A details the numbers of cases picked up through these substitutions.

The outcomes examined here are from data collected at 29 , At this attempt, full survey information was collected from 11,116 cohort members. Therefore, the analysis is limited to those who completed the time diaries at age 16 and were present in the latest data collection attempt. Depending on the outcome variable examined, this yields a final sample of approximately 5,000 cases. A longitudinal weight was created that weighted for region, class, mother's age at birth, and child's sex. All multivariate analyses shown use the longitudinal weight although the differences between the unweighted and weighted estimations are negligible.

Variables

Economic capital. Economically salient capital was measured of both the cohort member and his or her family of origin. Cohort member's economic capital was measured by estimating the hourly earnings potential of the respondent. The rationale, details, and theoretical underpinnings of this technique are described in detail in Gershuny (2000, 2002a, 2002b, 2002c). Briefly, this measure of economic capital is a scalar measure of social position that allows for a value to be

assigned to a person's earnings potential. It is advantageous over conventional categorical measures of "social class" because it can assign a value to those who are not in employment. Other advantages include that it is easily aggregated to the household level and that due to its scalar nature, it can illustrate intragenerational change in economically salient capital over relatively short periods of time (i.e. as opposed to generations). A Heckman regression was used to estimate an wage equation for males and females, where sex was added in the selection equation:

[Heckman] Logged Hourly Earnings Potential= workex education*MOW higrad*MOW medgrad*MOW, select (female workex educ*MOW higrad*MOW medgrad*MOW)

where:

1) logged hourly earnings= the log of hourly earnings reported at age 29;

2) work ex= work experience was measured by the year in which paid work began subtracted from the survey year;

3) education= highest educational attainment at 29;

4) MOW = mean wage of respondent's occupation, generated using the mean wage by two digit Standard Occupational Classification 1990 codes ;

5) higrade = quantiles 9 and 10 of the MOW distribution;

6) medgrade= quantiles 5, 6, 7, and 8 of MOW distribution;

7) various interaction terms to account for the different income trajectories of high and medium waged occupations and education.

Where educational attainment and occupation were missing, information was obtained from the survey conducted at age 26, which added approximately 1000 additional cases. Wages for cases added using the age 26 data were predicted in the post estimation procedure (so that people with the same occupation and education would be assigned age 29 wages instead of age 26 wages). Economic capital growth is steepest in the late 20s and early 30s and therefore substitution of age 26 wages would seriously jeopardise the accuracy of these estimations. The

actual economic capital estimation provided predicted logged hourly wages for cohort members, depending upon their characteristics (as accounted for in the regression equation and Heckman selection adjustment). The predicted values were exponentiated so that the actual values represent potential hourly earnings in British pounds.

A similar procedure to this above estimation was employed to estimate the economic capital of the family of origin (Gershuny 2002c). See Appendix 1 for details. Father's economic capital was used as the measure of family of origin economic capital, and where missing, the mother's value was substituted. This measure assumes that the vast majority of children live with their parents at age 16.

Highest educational attainment was measured at age 29. Those who had a first degree or higher were coded one. Where educational attainment information was missing at age 29, information from age 26 was substituted where possible based upon the assumption that most British people have completed their education by age 26. While highest educational attainment is a component of the economic capital scalar measure, it is used as an additional outcome variable in this study to follow with Bourdieu's argument that cultural capital plays a key role in individual's educational careers, as well as the numerous cultural capital studies that have examined educational attainment as an outcome. A dummy variable was created that measured whether or not a cohort member had attained a first degree or higher (1=yes).

Cultural Capital. Activities from the four day time diaries at age 16 were coded into 109 main activities, along with duration, and with whom the activity was done (where relevant). Using the definition of cultural capital employed here, the following activities were considered those that fell within the definition of "high culture leisure consumption": 1) taking an evening class, 2) going to museums, zoos, or exhibitions, 3) going to a library, 4) going to the theatre, 5) going to a concert or opera[1], 6) reading books, 7) participating in artistic or music-related activities[2] and 8) writing. It should be noted that studying and doing homework were coded separately from reading and writing and therefore reading and writing here are considered leisure activities, and not directly related to schoolwork. While duration of activities was recorded, there was considerable missing data on duration for all activities. As well, the large proportion of cohort members that didn't participate in these activities made the vast majority of durations "zero" and

substantially skewed the distribution of these variables. It is not so much the duration of the activity as whether or not the cohort member participated in any of them that was of interest in this study, and therefore dummy variables for the above eight activities were created, with one indicating that the cohort member had participated in this activity at least once in the diary that was returned. [3]

Social Capital. While social capital is generally conceptualised as access to networks and the resources available to network members, no such measures were available in the age 29 or age 26 data. Instead, variables that measured leisure activities of cohort members that may lead to network membership and related access to resources were used. At age 29, the respondent was asked whether he or she had done any courses for interest since the reference date (which varied according to if and when they had finished fulltime education). Those who answered yes were coded 1. As well, the CM was asked whether he or she was a member of a voluntary organisation, which ranged from political party membership to women's groups and residents' associations. The code
1 was assigned if he or she had belonged to at least one group.
Controls. A dummy variable for sex was created (1=female).

RESULTS

The results are divided into two distinct parts: first a discussion of the more descriptive analyses is undertaken, followed by commentary on the multivariate analyses. Table 1 provides descriptive statistics for the variables used in the analyses. Just over half of the respondents were female, and the mean economic capital for cohort members was almost seven pounds per hour. The family of origin economic capital had a mean value of 6.5 pounds per hour, which is smaller than the cohort members' average economic capital due largely to issues of inflation.

Table 1. Descriptive Statistics of Variables Used in Estimations

Variable	Mean	SD	Range	N
Female	0.514		0-1	11226
Economic capital	6.919	2.608	1.729-14.462	10648
Family of Origin EC	6.504	1.908	1.482-10.228	12160
In organisation	.107		0-1	11191
Take course (adult)	.240		0-1	11175
Degree	.201		0-1	11188
Art/Music	.130		0-1	7217
Night Course (youth)	.011		0-1	7217
Concert	.011		0-1	7217
Theatre	.006		0-1	7217
Reading	.237		0-1	7217
Writing	.095		0-1	7217
Museum	.018		0-1	7217
Library	.032		0-1	7217

About 11 percent of cohort members were members of a voluntary organisation, and 24 percent reported taking a course for personal interest since leaving fulltime education. Twenty percent of cohort members had a university degree or higher. With regard to participation in leisure activities at age 16, 13 percent reported engaging in artistic or music-related leisure, 24 percent reported reading for pleasure, and just under ten percent indicated that they had done some writing during the reference period. Only one percent, however, had taken a night course, attended an opera or concert, or gone to the theatre. Almost two percent had gone to a museum and just over three percent had visited a library.

Table 2 displays the numbers of males and females participating in cultural capital activities at age 16. The most popular activity for males and females was reading books for pleasure, although over double the number of females participated in this activity compared to males. The next most reported cultural capital activity was participating in an artistic or music-related activity, followed by writing. Very few cohort members attended night courses, concerts, or theatre during the reference period. An equal number of males and females reported going to a museum, zoo, or exhibition, while over double the number of females reported going to a library compared to their males counterparts.

Table 2. Numbers of Males and Females Participating in Cultural Capital Leisure Activities (Unweighted)

	Males	Females
Art /Music	228	313
Night Course	21	52
Attend Concert	23	46
Attend Theatre	18	19
Reading Books	458	930
Go to Museum	55	55
Go to Library	58	126
Writing	165	410

Table 3 reports the total number of different cultural activities engaged in by sex. It should be noted that multiple occurrences of participation in any one cultural activity are not considered here – it is whether or not any of the cultural activities are engaged in that is the focus

of analysis. A vast majority of diarists engaged in no cultural activities—almost 62 percent, which comprised almost 70 percent of males and 56 percent of female diarists. Almost 24 percent of males engaged in one cultural activity, compared to 30 percent of females. Two different cultural activities were reported by six percent of males and ten percent of females. Participation in three different activities was rare with just over one percent of males and two and a half percent of females reporting three different activities and only very small numbers of diarists reporting four or more different cultural activities.

Table 3. Total Cultural Activities by Sex (Unweighted)

Total Cultural Activities	Male	Female	Total
0	1759	1807	3566
	68.76%	56.31%	61.83
1	609	972	1581
	23.81%	30.29%	27.41
2	155	330	485
	6.06%	10.28%	8.41
3	33	83	116
	1.29%	2.59%	2.01
4	2	15	17
	0.08%	0.47%	0.29
5	0	2	2
	0.00%	0.06%	0.03
Total	2558	3209	5767
	100.00	100.00	100.00

Cultural capital participation will, to some extent, necessarily be related to the resources of the family of origin. T-tests (not shown) indicated that mean family economic capital for the cohort members in the highest quintile (7.161) of leisure consumption was significantly different from the mean for the lowest quintile (6.419) of high culture leisure consumption. It should be noted that the correlation between total number of cultural activities engaged in and family of origin economic capital was 0.12. Additionally, the correlation between family of origin economic capital and cohort member economic capital was 0.15. A full correlation matrix of the

variables used in the analyses is found in Table 4. These results, albeit statistically unsophisticated, suggest that although there is a mean difference between the family resources of cohort members and participation of cultural activities at age 16, the correlations between the variables are surprisingly small, suggesting that there is more going on than a simple transfer of family background to offspring.

Table 5. OLS Regression of Economic capital at on Leisure Activity at 16 and Controls (N=4845)

Unstandardised Coefficients		
	(1)	(2)
Female	-0.341**	-0.4478**
Family of Origin EC	0.226**	0.198**
Art/Music		0.633**
Night Course		0.490
Attended Concert		-0.139
Attended Theatre		1.111**
Read for Pleasure		0.552**
Went to Museum		-0.118
Went to Library		0.171
Writing		0.471**
Constant	5.846**	5.804**
R-squared	0.031	0.051

* significant at 5%; ** significant at 1%, two-tailed

Table 5 presents the results of the OLS regression of economic capital at age 29 on cultural capital leisure activities at age 16 and the controls of sex and family of origin economic capital. The first estimation introduces just the controls, while the second adds the leisure activities considered here. Sex and family of origin were statistically significant for both estimations, indicating that sex and family background influenced the economic capital of cohort members at age 29. Four of the eight cultural leisure activities considered here had a statistically significant and positive effect on economic capital at age 29, independent of the effects of the

control variables: participation in artistic or music-related leisure (b=0.633), having attended theatre (b=1.111), reading for pleasure (b=0.552), and writing for leisure (b=0.471).

Table 4. Correlation Matrix of Variables Used in Analyses.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.Economic capital	1.00														
2.Has degree	0.54	1.00													
3. In organisation	0.09	0.16	1.00												
4.Takes course	0.06	0.12	0.16	1.00											
5.Female	-0.21	-0.02	0.06	0.12	1.00										
6.Family EC	0.17	0.19	0.05	0.04	0.00	1.00									
7.Art	0.11	0.15	0.09	0.06	0.02	0.09	1.00								
8.Night course	0.04	0.06	0.02	0.04	0.04	0.04	0.13	1.00							
9.Concert	0.01	0.02	0.01	0.04	0.02	0.04	0.08	0.04	1.00						
10.Theatre	0.04	0.05	0.01	0.01	0.00	0.03	0.04	-0.01	-0.01	1.00					
11.Read	0.11	0.18	0.09	0.09	0.15	0.07	0.10	0.04	0.02	0.03	1.00				
12.Museum	0.00	0.02	0.03	0.00	-0.02	0.02	0.01	-0.02	0.02	0.01	0.01	1.00			
13.Library	0.04	0.07	0.05	0.05	0.05	0.02	0.07	0.04	0.02	0.02	0.13	-0.01	1.00		
14.Writing	0.07	0.10	0.03	0.06	0.11	0.07	0.08	0.01	0.01	0.03	0.13	0.03	0.03	1.00	
15. Total Cultural Activities	0.15	0.24	0.12	0.12	0.15	0.12	0.52	0.24	0.21	0.15	0.70	0.20	0.35	0.52	1.00

Participation in these events at age 16 was associated with an increase in economic capital in adulthood. While sex and family of origin economic capital explained three percent of the variance in adult economic capital, the addition of the cultural capital leisure activity variables increased the explained variance to five percent.

Table 6. Logistic Regression of Having First Degree or Higher on Leisure Activities at 16 and Controls (N=5054)

Odds Ratios

	(1)	(2)
Female	0.864*	0.714**
Economic capital Family of Origin	1.277**	1.244**
Art/Music		2.160**
Night Course		1.734*
Attended Concert		1.296
Attended Theatre		2.017
Read for Pleasure		2.474**
Went to Museum		1.180
Went to Library		1.486*
Writing		1.799**
Pseudo R-squared	0.035	0.086
Log Likelihood	-2643.45	-2504.045

* significant at 5%; ** significant at 1%, two-tailed

Table 6 presents the results of the logistic regression of having a first degree or higher on leisure activities at 16 and controls. The first estimation includes control variables only, while the second adds the leisure activities considered here. With just controls, family of origin economic capital was a statistically significant predictor of having a higher degree. Every one unit increase in family of origin's economic capital increased the odds of having a higher degree by 1.277. When the leisure activities were added, the family of origin economic capital remain statistically significant and the sex variable became a significant predictor such that females were less likely to have a higher degree compared to males, independent of the effects of the other variables. Having participated in art and music-related leisure, taking an evening course, reading for pleasure, going to the library, and writing at age 16 all increased the odds of having a degree at age 29.

Table 7. Logistic Regression of Whether CM has Taken a Course for Interest on Leisure Activities at 16 and Controls (N=4521)

Odds Ratios

	(1)	(2)
Female	1.896**	1.727**
Economic capital Family of Origin	1.008	0.998
Economic capital	1.083**	1.064**
Art/Music		1.284*
Night Course		1.277
Attended Concert		1.565
Attended Theatre		1.135
Read for Pleasure		1.389**
Went to Museum		0.779
Went to Library		1.377
Writing		1.360**
Pseudo R-Squared	0.019	0.028
Log Likelihood	-2548.994	-2526.497

*significant at 5%; ** significant at 1%, two-tailed

The next two tables examine the relationship between social capital at 29 and cultural capital investment at age 16. Table 7 presents the results of the logistic regression of whether the cohort member had taken a leisure course in adulthood on cultural capital activities at 16 and controls. In the first estimation, the controls of sex, economic capital of family of origin, and economic capital of the cohort member at age 29 were entered. Cohort membe'sr economic capital at age 29 is used as a control variable due to the theoretically defined fungibility of the different forms of capital (i.e that economic capital, social capital, and cultural capital all have a complex and interdependent relationship with one another). Sex and cohort member's economic capital were significant predictors of whether or not the cohort member had taken a course for interest, with females being twice as likely as males to have taken a course and each one unit increase in CM's economic capital increasing the odds by 1.083 of having taken a course. The addition of the cultural capital variables decreased the odds ratios of the controls somewhat, while participation in artistic or music-related leisure,

reading for pleasure and writing during leisure at age 16 increased the odds that a course for interest was taken by the cohort member in adulthood.

Table 8. Logistic Regression of Whether CM Belonged to a Voluntary Organisation on Leisure Activities at 16 and Controls (N=4523)

Odds Ratios

	(1)	(2)
Female	1.602**	1.453**
Economic capital Family of Origin	1.051**	1.037
Economic capital	1.115**	1.091**
Art/Music		1.677**
Night Course		0.713
Attended Concert		0.881
Attended Theatre		1.517
Read for Pleasure		1.626**
Went to Museum		1.879*
Went to Library		1.311
Writing		1.169
Pseudo R-squared	0.019	0.035
Log Likelihood	-2110.187	-2075.812

*significant at 5%; ** significant at 1%, two-tailed

Table 8 presents the logistic regression of whether a cohort member belonged to a voluntary organisation on leisure activities at 16 and controls. The control variables were all significant predictors of civic engagement, with females having almost twice the odds of belonging to a voluntary organisation, and economic capital of both the cohort member and family of origin increasing the odds of belonging to a voluntary organisation. Inclusion of the cultural capital leisure variables in the second estimation resulted in family of origin economic capital losing statistical significance, while participation in artistic and music-related leisure, reading for pleasure, and museum attendance at age 16 all increased the odds of being in a voluntary organisation at 29.

DISCUSSION AND CONCLUSION

The findings presented here suggest that there is a relationship between cultural capital investment in youth and adult social and economic capital outcomes. The first relationship that was tested was between cultural capital investment in youth and economic capital in adulthood. Because children from privileged backgrounds are more likely to have exposure to haute couture socialisation, family's economic capital was considered an important characteristic for which to control. Even controlling for the effects of family of origin economic capital, however, there was still a positive relationship between art and music-related leisure, attending theatre, reading for pleasure, and leisure writing at age 16 and economic capital at age 29. In other words, some of the cohort member's economic capital in adulthood could be explained by the economic capital of their parents, but not all. The statistical significance of some of the cultural capital variables suggests that leisure consumption in youth was converted into economic capital in adulthood. While educational attainment is a component of the economic capital measure employed here, a separate analysis of the effects of cultural capital on having a first degree at 29 were carried out as much of the previous research on cultural capital has been concerned with educational attainment. Even accounting for the effects of economic capital of the family of origin, art and music-related leisure, having attending a night course, reading for pleasure, visiting a library and leisure writing at age 16 all increased the odds of having a university degree at 29. Arguably, attending a night course, reading and writing for pleasure, and going to the library are all indicators of "bookish" behaviour and a predisposition to academic pursuits, however the presence of art and music-related leisure among these significant predictors suggested that there is more to this relationship than a simple predisposition to academic achievement.

The next relationship that was tested was the transferability of cultural capital investments at age 16 on social capital in adulthood. Social capital was measured by attending a course for interest and participation in voluntary organisations. In terms of whether the cohort member reported taking a course for leisure as an adult, controlling for the effects of economic capital from the family of origin and economic capital of the respondent in adulthood was undertaken for two main reasons: first, because family background during childhood may influence network formation in adulthood capital, and two, that economic capital is transferable into social capital. Family economic capital had no statistically significant effect, but economic capital of the respondent in adulthood had increased the odds of having taken a course for interest. Independent of this effect, however, art and music-related leisure, reading for pleasure, and leisure writing at 16 all increased the odds of taking

a course for interest in adulthood. Similar results were found in the estimations of voluntary organisation participation on these same indicators. Economic capital in adulthood again was found to be transferable into social capital, as measured by this form of civic engagement. Art and music-related leisure, reading for pleasure and visiting a museum during the reference period at age 16 increased the odds of civic engagement at , also supporting the notion that cultural investments are transferable into social capital.

While the explained variances in the estimations are far from brilliant, it should be noted that the cultural activities considered here occurred not only approximately thirteen years prior to the adult outcomes examined, but also that the diaries represent a single period of four days (and in many cases, fewer days) in the life of the sixteen year old cohort member. Even the most adamant "culture vulture" will have periods of inactivity from such forms of leisure consumption. Given that these leisure activities during such a restricted period at age 16 contributed to adult outcomes, independent of the effects of the strong controls entered in the estimations, is evidence of the effect of cultural investment over time on adult economic and social capital.

Critics will likely draw attention to the finding that the leisure reading and writing were consistently statistically significant "cultural capital" indicators, suggesting that what was really being assessed is the scholastic ability and endeavours of the cohort members. Surely linguistic competence is characteristic of cultural capital, and investing in these activities is surely an investment in cultural capital. Cohort members with literary knowledge and writing competence (achieved through practice) are likely to "signal" to others (including teachers) a familiarity and ease with forms of highbrow culture. In addition to the consistent statistical significance of these two forms of cultural capital investment, art and music-related leisure was also consistently found to be a predictor of all the outcomes examined here. That reading, writing, and art and music-related leisure were consistently significant predictors also suggests that these findings are not biased due to extreme cases, as these three forms of leisure consumption were, of the activities considered here, the three most common engaged in by cohort members (Table 2).

Dumais (2002) and Lareau and Horvat (1992) have argued that in addition to cultural capital, the habitus of the individual must be considered. While cultural capital measures an investment in the form of resources, such a conceptualisation is incomplete without considering the orientation of individuals, particularly their ability to activate their capital. The habitus possesses not only the capital, but also the skills and abilities (or lack thereof) to

activate or effectively convert the capitals. These factors – the skills and abilities to activate capital, are undoubtedly important in the wider understanding of how capitals are transferred into one another.

A related point has also be made by Kingston (2001), who argues that cultural capital studies share a common weakness in that the analyses often suffer from fundamentally important, yet omitted, variables. Kingston (2001) argues that in addition to cultural capital one must account for the effects of "economic recourses, parenting style, encouragement of academic engagement, and assistance with school assignments" (p.93) when explaining academic success. As discussed above, number of authors also indicate that the cultural capital of parents should be included in estimations such as these.

The models tested here do not directly incorporate a measure of habitus, nor do they control for the host of important factors identified by Kingston. Suitable information is available in the age 16 sweep of the BCS70, but as mentioned above, the combination of multiple survey instruments at this sweep results in a substantial loss of cases. Incorporating vocabulary tests at age 16, for example, results in a loss of thousands of cases in the final usable sample. Omitting these potentially important factors from the models was a conscious decision performed in order to preserve as many cases from the original birth cohort as possible. The construction of a fairly multifaceted construct of family of origin economic capital does account for some of the effect of family background on economic and social capital outcomes in adulthood. It is also arguable that the extent to which individuals participated in cultural leisure consumption was itself indicative of their habitus. Rather than Dumais' (2002) operationalisation of habitus as a children's occupational expectations, for example, participation in leisure activities, and the extent to which they participate, may be in itself a way of assessing ambition and capability of activating the resources currently accessible to them. As well, although there was no way of obtaining assessing the cultural capital of the cohort members' parents, the method in which economic capital of the family of origin was measured is certainly accounting for at least some of the class-related leisure consumption attributes of the family of origin (as occupational group is used to estimate the scalar measure).

The research presented here has made use of a unique data set from which involvement in cultural leisure consumption could be examined, and the transferability of this cultural capital investment into other forms of capital could be observed from data collected in adulthood. Findings suggest that there is evidence that cultural activities participated in

during youth (cultural capital) are transferable into economic capital in the form of earnings potentials and higher degree attainment, as well as social capital, as measured by civic engagement and leisure course participation. Evidence was found for the fungibility of the capitals over the lifecourse. Future researchers interested in cultural capital may consider examining the conversion of capitals in addition to focusing on educational outcomes. As well, the metaphor of "capital" implies an investment that occurs over time, which should be recognised in any discussion of these concepts. Capitals are not static traits, but are accumulated and converted over the lifecourse. The current availability of various longitudinal data sets allows for these dynamic changes to be examined in a similar manner as to how they are discussed in the theoretical literature.

NOTES

[1] Pop concerts were coded separately.

[2] Listening to music in the form of records or tapes was coded separated.

[3] This technique also allows for the greatest number of cases to be retained as it does not distinguish between diarists who completed the entire four days and those who only returned partial diaries. All those who returned at least one usable day were included.

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Appendix A

Imputing Parents’ Economic capital

Because the economic capital of parents largely determines the life chances of their offspring, some sort of way of assessing the economic capital of cohort members’ parents was necessary. Social class of the cohort members’ parents was obtained at age 16, however, the data had were collapsed into five Goldthorpe-type categories, with additional codes for “dead” and “student”. A more detailed measure of the economically salient resources of the parents was desired, and therefore a scalar measure of economic capital was constructed. As described above, estimating economic capital requires various pieces of information including age, educational attainment, occupation and earnings. Within the various waves of the BCS70, information about the age, educational attainment, and occupation of the parents was obtainable. In the first instance, information about the parents when the cohort member was 16 was preferred, but where this was missing, information from previous waves was used to replace missing values.

Age of the mother was recorded at birth, and age of the father was recorded at the age five sweep. In the cases where the ages of either parent were not recorded, the mean age of mothers and fathers was replace (at the age 16 sweep, the mean age for mothers was 42 and the mean age for fathers was 45).

Highest educational attainment of parents was recorded when the respondent was 16, 10, and 5. A five category variable measuring parents’ highest academic attainment was

created with the following values: 1) degree or higher, 2) hnd/hnc/teachers/nurses, 3)a levels, 4) o levels/cse, and 5) other.

	Age 16 sweep only		Adding info from Age 10 sweep		Adding info from Age 5 sweep	
	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers
Degree	438	1271	567	1884	596	1920
HND/HNC/ teachers/nurses	573	112	710	125	1187	444
A levels	279	602	554	1210	601	1327
O levels/CSE	1284	1061	2416	2143	2728	2421
None of these	3527	3017	4717	4719	9146	7833
Total	6101	6063	8964	10081	14258	13945

The occupational codes of the parents were recorded in the age 16 sweep in the form of 1980 Operation Codes. Information about parental occupation was available for 6718 fathers and 5310 mothers. Where occupational information was missing, information from the age 10 sweep was used, where possible, to replace missing values. This added the occupations of an additional 6718 fathers and 5778 mothers.

Because no detailed earnings information was obtained from the parents in the 1986 sweep, the coefficients for the estimation are derived from the earliest (1991) sweep of the British Household Panel Survey. The variables were harmonised as closely as possible, and in the case of the occupational codes, the 1980 Operation Codes were converted to Soc90 codes.

The economic capital for parents was estimated with a two stage Heckman selection model where sex is used in the selection equation such that I originally estimate an "androgynous score", so to speak, and enter gender as a status-type difference in the process of economic capital accumulation. For details on the theoretical underpinnings of this argument, see Gershuny (2002a).

The estimation equation was:

Heckman [lnwage age* i.ed MOW mowsq medgrad higrad agegr agrsq agemd agmsq,
select (female age* i.ed MOW mowsq medgrad higrad agegr agrsq agemd agmsq)]

where:

lnwage=logged hourly wage;

age=current age;

age squared=quadratic age term;

ed=highest educational atainment;

MOW=mean hourly occupation wage by two-digit soc90 codes;

mowsq=quadratic MOW term;

medgrad=quantiles 6 and 7 of MOW;

higrad= quantiles 8 through 10 of MOW;

agegr=age*higrad;

agegrsq=agegr*agegr;

agemd=age*medgrad;

agemsq=agemd*agemd;

unemp=number of weeks unemployed in last year; and

female=sex , used in selection equation.

Coefficients from this equation are then applied to the variables derived about the parents in of the cohort members, estimating their economic capital. The economic capital score is essentially a shadow wage rate and these imputed scores will reflect 1991 rates, and therefore obviously inflated. While not perfect, these estimations allow for some approximation of the economic capital of parents. See Gershuny (2002c) for further discussion of this method of imputation.