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## **FORMAL AND POPULAR DIMENSIONS OF CULTURAL CAPITAL: EFFECTS ON CHILDREN'S EDUCATIONAL ATTAINMENT**

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### **Introduction**

One rather stable finding in Dutch research on the intergenerational transmission of educational opportunities is that parental cultural characteristics are stronger determinants of their children's educational attainment than parental economic characteristics. This finding has been established in two ways. First, it has been consistently found that parents' level of schooling has a much stronger impact on children's educational success than parents' occupation. Parents' level of education can be perceived as a basic measure of a family's cultural standing, and parents' level of occupation as a basic measure of its economic status, especially of its income. Further support for the hypothesis that in contemporary Dutch society, culture matters more than money in educational careers comes from a historical (cohort) comparison. It shows that the effect of parents' level of occupation has decreased to a very low level, and that although the effect of parents' educational attainment has decreased too, it has been more persistent over time (de Graaf & Ganzeboom, 1993). Second, models including more refined and direct measures of families' cultural and economic resources lead to the same conclusion. Parents who participate more in formal culture and the beaux-arts, and parents who read more frequently, have children who do significantly better at school than children whose parents have less interests in cultural activities (de Graaf, 1986; de Graaf, de Graaf & Kraaykamp, 2000). Interestingly, even a detailed measurement of parents' economic resources, as measured by indicators such as prosperity in the parental home and house ownership, does not lead to substantial effects.

Apparently in the Netherlands, the cultural characteristics of the family of origin make an important contribution to the explanation of the impact of fami-

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ly of origin on the educational careers of its offspring. Theoretically, this research finding was formulated as a hypothesis in the important contributions Pierre Bourdieu made to the sociology of education. Bourdieu introduced the concept of cultural capital to explain the social inequalities in the access to higher education in France. Bourdieu's cultural capital theory (Bourdieu & Passeron, 1970; Bourdieu, 1973), often called the cultural reproduction theory, argues that as a result of a general shift from ascription to achievement in the process of allocating socio-economic positions, privileged families increasingly use their cultural capital to transmit their economic and social advantages to their children (Swartz 1977; DiMaggio 1982). As a result of modernization processes advanced capitalist societies parents can no longer transmit their privileged positions directly to their children. The modern labour market selects on proven qualities (human capital as indicated by schooling and experience) and the direct transmission of occupations has become obsolete (Parsons, 1960; Blau & Duncan, 1967). However, according to Bourdieu, parents have learnt to use more indirect strategies to support their children's careers, which are found in the educational system. In modern society, educational credentials have become the most important resource on the labour market that parents can affect, and high status parents have thus started to focus on the educational careers of their children as a way to transmit their advantages to the next generation (de Graaf and Kalmijn 2000). According to Bourdieu's cultural reproduction theory, they can accomplish this by employing their cultural capital. Cultural capital is transmitted from the family to the school and converted into diplomas and degrees. This is how the higher status groups in society have compensated the loss in the power of their economic resources with a gain in power of their cultural resources, and in the end they still attain what they are after: intergenerational transmission of social privileges. In the words of Bourdieu (1970: 72): "Indeed, among all the solutions put forward throughout history to the problem of the transmission of power and privileges, there surely does not exist one that is better concealed, and therefore better adapted to societies which tend to refuse the most patent forms of the hereditary transmission of power and privileges, than that solution which the educational system provides by contributing to the reproduction of the structure of class relations and by concealing, by an apparently neutral attitude, the fact that it fills its function".

Bourdieu conceives higher types of education as an environment where children from high status origins feel at home, whereas children from lower status origins would prefer to leave the school system quite soon. Formal culture, sometimes called highbrow culture, is an important part of the school curriculum, especially in higher education and in the secondary schools that prepare children for higher education. Familiarity with classical music, novels and poems, operas and plays is generally approved in higher education, and students who lack the ability (or attitude) to appreciate these forms of formal culture have less of an opportuni-

ty to do well at school. According to Bourdieu, cultural abilities and the appreciation of formal culture are learnt at home: some children bring cultural capital with them to school, and others do not. Bourdieu argues that if cultural capital is not present in the parental home, this initial disadvantage cannot be compensated at school. On the contrary, differences in cultural capital are thought to increase during the educational career, since cultural capital can only be accumulated by students who already possess it (Bourdieu, 1970), a fine application of the Matthew principle: "for whomsoever hath, to him shall be given" [Matthew 13:12].

In the educational career, cultural capital works through self-selection and selection processes: children from culturally disadvantaged origins either do not opt for higher education (self-selection) or lack the abilities to do well at school and thus run a higher risk of not passing the exams and leaving school without a diploma (selection). Self-selection processes are perhaps the most important mechanisms for converting cultural capital into a successful completion of higher education. It is important to note that the reasons why individuals from lower status groups do not choose to attend higher education are far from irrational. Children from lower status groups might recognize that enrolment there can mean important advantages on the labour market with regard to the expected job level and income, but at the same time they evaluate attending higher education as something unpleasant and evaluate the likelihood of success as small. Furthermore, starting to earn money at an early stage in the life cycle has the advantage that children from a low status background can adjust to the life style of their friends in the same low status neighbourhood. Similar arguments are noted by Willis (1977). For these reasons, children with a low status origin are more likely to adjust their aspirations as regards the type of occupation they aspire to and thus the type of training they need. In other words, although the benefits of higher education are as great for children from lower status groups as they are for children from higher status groups, its costs may be higher for children from lower status groups. The complete cost/benefit evaluation is consistent with the research finding that social background affects educational decisions.

Several sociologists (Boudon, 1974; Gambetta, 1987; Goldthorpe, 1996) have criticized Bourdieu's cultural capital theory, and argue that it is not the cultural gap between the home culture and the school culture that produces the differences in the educational decisions between higher and lower status groups. These sociologists hypothesize that educational choices are embedded in the parents' economic position. The economic preferences with regard to social mobility and the perceived risk of failure at secondary or tertiary education stimulate children from lower status groups to make specific decisions with regard to their occupational and educational future. Economic arguments, especially the fear of working-class children and their families of not completing vocational training at all if they aspire to higher education, are thought to be more relevant than cultural arguments. However, as noted above, Dutch

research shows that parents' cultural characteristics are more important than their economic characteristics. This empirical dominance of the cultural dimension is hard to rhyme with a theoretical dominance of the economic dimension.

In this article we examine which elements of parents' cultural capital affect their children's educational attainment in the Netherlands, and whether the effects of parental cultural capital have changed over time. By doing so, we want to gain insight into the reasons for educational decisions made by the offspring of lower and higher status groups. We examine the effects of parental cultural capital, and not the effects of children's own acquired cultural capital, since the causality of the relationship between children's cultural capital and level of schooling is unclear in a retrospective research design. Students' cultural capital will be affected by the types of schools they have attended and thus part of the relation between acquired cultural capital and school outcomes will be spurious. Probably, only a panel design can decompose the relation between students' cultural capital and their educational results (DiMaggio, 1982).

#### **What does cultural capital measure?**

There is ample research that concludes that parental cultural capital is indeed related to children's educational success (de Graaf, 1986; Crook, 1997; Aschaffenburg and Maas, 1997; Sullivan, 2000). However, we think the lack of precision in the measurement of cultural capital in empirical research makes the relation between cultural capital and children's school success rather unclear. Cultural capital is often measured in a rather general way by asking about cultural practices in the parental home. Questions are usually asked retrospectively, referring to when the respondent was 12 to 15 years old. We want to raise two problems inherent to this approach.

The first problem is that the usual cultural capital measures are a mixture of types of cultural practices in the family of origin, which may have different theoretical foundations. Cultural capital is arbitrarily defined (cf. Goldthorpe, 1996; Crook, 1997; de Graaf, de Graaf & Kraaykamp, 2000), and we want to add a constructive switch to the tedious discussion by exploring the validity of a distinction in two main dimensions. The first dimension, *beaux-arts participation*, refers to parents' interests in high brow cultural activities, like going to museums, the theatre, the opera, and classical concerts. *Beaux-arts participation* comes closest to Bourdieu's implicit operational definition of cultural capital. It represents the distance between the cultural practices a child is familiar with at home and the cultural contents of secondary and higher education. The second dimension, *reading behavior*, refers to the reading practices and the availability of books and other reading material in the parental home. Reading behavior has a partially different theoretical interpretation than *beaux-arts par-*

ticipation. Parental reading behaviour may represent differences between cultural practices at home and at school, but it may also stand for the development of a child's language skills. Parents who read more frequently affect the educational career of their children in two ways. They socialize their children in a lifestyle where reading books, newspapers and magazines is an important element (and thus decrease the cultural distance between the family and the school), and they train their children to read and understand what they read. Research by Crook (1997) and de Graaf, de Graaf & Kraaykamp (2000) has shown that if measures of parental beaux-arts participation and reading behaviour are included in one regression model, parental reading behaviour has a stronger effect on children's educational attainment.

A second problem with the general concept of cultural capital is that it overlooks the social context where it is supposed to operate. DiMaggio (1982) distinguishes two hypotheses about the interaction between social background and the effect of cultural capital. Bourdieu's cultural reproduction theory formulates the hypothesis that cultural capital is especially advantageous for children from higher status groups. DiMaggio's opposing hypothesis (cultural mobility theory) states that it is especially children from lower status groups who are supported by their parents' cultural capital. The rationales behind these two hypotheses is that Bourdieu presupposes that the Matthew principle is in effect here, whereas DiMaggio reasons that children from higher status groups have sufficient resources already, and do not benefit from additional cultural capital in the home. The fact that the parents themselves are highly educated might be a crucial indicator of cultural capital, even if they do not participate in highbrow cultural activities. Children from lower status groups, however, are affected by the available cultural capital. De Graaf, de Graaf and Kraaykamp (2000) find evidence to support this cultural mobility theory in the Netherlands. Among children with high educated parents, educational outcomes are not affected by their parents' cultural capital, but among children with poorly educated parents cultural capital has a strong effect on their educational attainment. The findings of de Graaf, de Graaf and Kraaykamp suggest that either high educational attainment or high levels of cultural capital furthers children's educational attainment, and that in particular if parents lack both education and cultural capital, their children's educational opportunities are more limited.

A combination of the idea that it is especially parental reading behaviour that has a strong effect on children's educational outcomes and that the effects of parental cultural capital are especially strong for children from low status families make one wonder what kind of parental reading behaviour is so important for children's school performance. If reading is especially helpful for children from a low social background, perhaps almost any kind of reading, irrespective of the quality, would do the trick. After all, it is less likely that lower status parents will be frequent readers of literature (poems, classic and modern novels)

than that they will prefer popular literature and magazines. Kraaykamp (2001: 27) shows that indeed, people with low socio-economic status or low levels of schooling rarely read literature. If it is not a transmission of specific cultural codes, as Bourdieu argues (1973), but merely skills and simply a positive attitude towards reading that stimulates children's educational achievement, we expect popular reading to be especially important for low status children.

We thus address three research questions. The first one is which elements of parental cultural capital affect children's educational attainment. Is it parental beaux arts participation or parental reading behaviour? If parental behaviour affects on children's educational attainment, does literary reading or popular reading have the strongest effects? If parents' beaux arts participation has the strongest effect, Bourdieu's cultural reproduction hypothesis would be supported. However, if the effects of parents' reading behaviour dominate, Bourdieu's theory would not be supported, and cognitive interpretations of cultural capital would prevail. The second question focuses on trends in the effects of parental characteristics, especially the effects of parental cultural capital. The third question is whether parental socio-economic characteristics interact with the effects of cultural capital on children's educational attainment. Do children from privileged backgrounds take more advantage of their parents' cultural capital? Or do children from humbler family background experience more of an impact from their parents' cultural capital?

## **Data**

The data we use to answer these three questions are from the repeated cross-sectional retrospective life-course Family Surveys Dutch Population conducted in 1992, 1998, and 2000 (Ultee and Ganzeboom, 1993; De Graaf, De Graaf, Kraaykamp and Ultee, 1998, 2000). These surveys provide retrospective detailed information on the family background and complete educational trajectories of 5,328 individuals. The response rates in the three surveys are on average 50 percent. Given that on average 20 percent of the original samples could not be reached, the cooperation rates are about 60 percent. We limit the sample to respondents between 25 and 70 years old and apply list-wise deletion of missing cases, which results in 4,726 cases.

## **Measurement of educational attainment**

Educational attainment is measured by the highest level of schooling at age 25. The final level of education is derived from detailed retrospective information on the educational careers of the respondents. The questionnaires include charts in which the complete educational career is filled in: starting and ending month and year, type and level of school, and success (completed with diploma). Table 1 gives an overview of the distribution of the highest level of schooling by sex and

Table 1 Highest level of schooling in the Netherlands by sex and cohort

	Cohort born before 1941		Cohort 1941-1950		Cohort 1951-1960		Cohort born after 1960	
	Men %	Women %	Men %	Women %	Men %	Women %	Men %	Women %
<b>PRIMARY EDUCATION</b>								
primary education (LO: 6 years)	20.7	32.9	13.3	21.7	8.8	10.8	5.8	4.9
<b>SECONDARY EDUCATION</b>								
low level vocational (LBO: 10 years)	24.2	24.5	20.8	24.8	15.7	14.0	14.9	12.1
low level general (MAVO: 10 years)	15.3	13.3	7.0	13.0	7.7	12.4	5.8	7.8
intermediate level general (HAVO: 11 years)	0.4	1.3	0.7	1.6	2.9	3.6	3.6	3.9
intermediate level vocation (MBO: 13 years)	18.1	11.5	22.4	16.1	27.4	27.8	33.0	37.1
high level general (VWO: 12 years)	4.0	2.3	3.0	2.4	1.7	4.2	3.3	3.1
<b>TERTIARY EDUCATION</b>								
high vocational (HBO: 15 years)	18.3	13.0	22.6	18.2	21.4	21.1	22.1	22.7
university (WO: 18 years)	9.0	1.3	10.2	2.2	14.3	6.1	11.6	8.4
Average years of education	11.4	9.8	12.1	10.8	12.8	12.1	12.9	12.8
Number of respondents	454	392	571	548	718	716	639	688

Source: Family Surveys Dutch Population 1992, 1998, 2000

birth cohort; we distinguish between respondents born before 1941, born between 1941 and 1950, born between 1951 and 1960, and born after 1960. The figures not only show the general increase of the educational level, they also illustrate the enormous catch up by women, resulting in only small differences compared to men for the youngest birth cohort. The dependent variable in the regression analyses presented below is the years of successfully completed schooling. Note that here we do not measure the actual years of education (although we have the information), but the number of years of education needed for the highest level of education. Table 1 includes these required years of education for each educational category, varying from 6 (primary education only) to 18 (university degree).

### **Measurement of family background**

The cultural and economic dimensions of family background are measured in two ways. First, we measure the standard variables of the parents' educational attainment (father's and mother's average years of schooling, measured in the same way as the respondent's years of schooling) and father's socio-economic status, the International Socio-Economic Index for all occupations (ISEI), as constructed by Ganzeboom, De Graaf, Treiman (1992). Both variables are transformed to variables with minimum 0 and maximum 1. As noted above, the parents' educational status and occupational status can be seen as basic aspects of the cultural and economic dimensions of social origins. We replicate earlier findings for the Netherlands which show that the parents' level of schooling is more important for children's educational attainment than the parents' occupational position (de Graaf and Ganzeboom, 1993).

Secondly, we construct detailed scales of parental resources, which are direct measures of the cultural and economic dimensions of social origins. We distinguish three subsets of cultural resources: parental beaux-arts participation, parental literary reading, and parental popular reading. All these indicators are measured retrospectively, referring to the situation when the respondent was between 12 and 15 years old. The three surveys have different sets of cultural indicators, which are made comparable by (a) dichotomizing all the indicators with regard to parental activity (yes vs. no), (b) computing the mean of the indicators, (c) a correction factor to deal with the different sets of items in the three survey years, and (d) a standardization to construct scales with minimum 0 and maximum 1. Table 2 includes detailed information on the procedures. In addition, we also construct two summary scales of the parent's cultural resources. The first one includes all the indicators, and is the often applied general cultural capital scale with mixed indicators of parental beaux-arts participation and parental literary and popular reading. The second summary scale includes all the literary and popular reading items. In the analyses, we first include only the general cultural capital scale in the model, and proceed to decompose its effect in the effects of its underlying scales.

Table 2 Measurement of parents' cultural and economic resources

	1992	Year of Survey		2000	
		1998			
<i>Parents' Beaux Arts Participation (n items)</i>	5	5		5	
Art Museum	27.6%	23.0%		20.2%	
History Museum	29.0%				
Opera or Ballet	11.2%				
Classical Concert	15.7%				
Theatre (Play or Cabaret)	27.7%				
Visits Architecture		47.1%		39.1%	
Concerts, Opera or Ballet		26.5%		20.2%	
Classical Theatre		20.9%		18.3%	
Popular Museums		60.5%		52.0%	
Reliability Coefficient	$\alpha = 0.76$	$\alpha = 0.77$		$\alpha = 0.78$	
<i>Parents' Literary Reading (n items)</i>	4	4		4	
		Father	Mother	Father	Mother
Poetry	16.2%				
Dutch literature	29.9%	34.3%	49.1%	32.3%	48.1%
Translated literature	18.1%				
Foreign language literature	11.1%	17.1%	10.0%	13.8%	8.1%
Reliability Coefficient	$\alpha = 0.79$	$\alpha = 0.68$		$\alpha = 0.60$	
<i>Parents' Popular Reading (n items)</i>	3	6		6	
		Father	Mother	Father	Mother
Historical Novels	58.6%				
Crime or Science Fiction Novels	42.7%	39.4%	24.3%	42.6%	21.4%
Informative Novels		46.3%	40.0%		
Romantic Books	32.8%	6.5%	49.2%	5.2%	52.4%
Popular Science				35.3%	13.7%
Reliability Coefficient	$\alpha = 0.63$	$\alpha = 0.70$		$\alpha = 0.51$	
<i>Reading Behavior (n items)</i>	7	10		15	
Reliability Coefficient	$\alpha = 0.75$	$\alpha = 0.80$		$\alpha = 0.70$	
<i>Cultural Resources (n items)</i>	12	15		15	
Reliability Coefficient	$\alpha = 0.83$	$\alpha = 0.86$		$\alpha = 0.82$	
<i>Economic Resources (n items)</i>	3	3		3	
Car	58.0%	62.2%		61.4%	
Dish Washer	10.1%	15.0%		14.7%	
Cleaning Woman	19.8%	20.4%		19.6%	
Reliability Coefficient	$\alpha = 0.41$	$\alpha = 0.42$		$\alpha = 0.43$	

Source: Family Surveys Dutch Population 1992, 1998, 2000

Table 3 Description of all independent variables

	Birth Cohort											
	before 1941		1941-1950		1951-1960		after 1960		all		s.d	
	min value	max value	mean	s.d	mean	s.d	mean	s.d	mean	s.d		
Years of education (d)	6	18	10.70	3.56	11.47	3.41	12.41	3.20	12.86	2.83	12.01	3.32
Parent's level of education (a)	0	1	.14	.21	.20	.22	.25	.24	.32	.22	.42	.20
Parents' economic resources (c)	0	1	.16	.23	.24	.26	.35	.27	.42	.25	.31	.27
Parents' cultural resources (c)	0	1	.23	.23	.29	.23	.30	.23	.35	.23	.30	.23
Parents' beaux arts participation (c)	0	1	.22	.26	.28	.28	.31	.29	.37	.30	.31	.29
Parents' reading behaviour (c)	0	1	.23	.21	.28	.22	.29	.22	.34	.22	.29	.22
Parents' literary reading (c)	0	1	.20	.24	.24	.25	.24	.26	.28	.27	.24	.26
Parents' popular reading (c)	0	1	.30	.22	.37	.23	.39	.24	.43	.22	.38	.23
Sex (e)	0	1	.54	.50	.51	.50	.50	.50	.48	.50	.50	.50
Number of Cases				846		1119		1434		1327		4726

Source: Family Surveys Dutch Population 1992, 1998, 2000

- (a) Average years of education of father and mother varies between 6 years (only primary education) and 18 years (university). A linear transformation has been applied to construct a variable with minimum 0 and maximum 1.
- (b) Father's socio-economic status at respondent's age 15 has been measured by the International Socio-Economic Index (Ganzeboom, de Graaf & Treiman, 1992). A linear transformation has been applied to construct a variable with minimum 0 and maximum 1.
- (c) Parents' cultural and economic resources have been measured with different items in the surveys of 1992, 1998, and 2000 (for details see Table 3). We have used the 1992 measurement as the baseline. We estimated ols regression models with dummy indicators for the survey years, to assess to what extent the items used in 1998 and 2000 were 'easier' or 'harder' items than the items used in 1992. These regression models also include dummy indicators for the birth cohorts to control for a changing cohort composition over the three survey years that could also have caused differences in the level of parental resources between the three survey years. The average score on the measured items had to be upgraded for cultural resources in 1998 and for both cultural and economic resources in 2000. The average score on the measured items had to be downgraded for economic resources in 1998. A last step was to apply linear transformations to construct resources variables with minimum 0 and maximum 1.
- (d) Years of education vary between 6 years (only primary education) and 18 years (university). To avoid confusion between life-course and cohort interpretations of cohort differences, the years of education are based on the highest level of education completed before age 25.
- (e) Female=0, male=1.

Parental economic resources are also measured more directly than just by the father's occupational status. The surveys include questions about items in the parental home, again asked retrospectively referring to the time when the respondent was between 12 and 15 years old. In the three surveys, comparable but different sets of cultural and economic items are used, which are made comparable following the same procedures as the scales for cultural resources.

Table 3 shows the overall averages and standard deviations of all the variables, and the same information for the four birth cohorts.

### **Analytical Design**

Our analytical design is to estimate the effects of the cultural and economic indicators of social origins resources on highest level of education (years of schooling), using Ordinary Least Squares regression (OLS models). We start with a model that only includes the effects of the two standard indicators of social origins, parents' education and father's occupation. In a second step, the scales for the family's cultural and economic resources are added. This sequence of models makes it possible to assess to what extent the germane measurement of a family's resources intermediate and thus interpret the effects of the more general indicators. In a third step we test whether parental beaux-arts participation or parental reading behaviour is the most important dimension of parental cultural capital. In the fourth step, we test the extent to which it is reading literature or reading as such that affects children's educational careers. This is why we decompose parental reading behaviour into literary reading and popular reading.

In further analyses we assess the extent to which the effects of parental resources have changed over the birth cohorts, and the extent to which the effects of parental resources vary between the SES groups.

### **Analysis of educational attainment**

Table 4 shows the effects of the OLS models with years of education as the dependent variable. Model 1 of Table 4 only includes the effects of parents' level of education, father's occupational status, sex, and birth cohorts. In addition, we control for survey with the 1992 survey as a reference category. By controlling for cohorts we allow for a general increase in the level of education. Since both parents' educational attainment and father's occupational status are measured on a 0-1 range, it is possible to directly compare the effects. The effect of parents' education is much greater (factor 2.6) than the effect of father's occupation, suggesting that the cultural dimension of family background is much more important than the economic dimension. Here we repli-

Table 4 The effects of SES and parental resources on educational attainment (years of education)

	(1)	(2)	(3)	(4)
Parents' level of schooling (0-1)	4.848**	3.508**	3.380**	3.477**
Father's occupational status (0-1)	1.850**	1.038**	.994**	1.018**
Economic resources (0-1)		.739**	.693**	.704
Cultural resources (0-1)		2.409**		
Parents' beaux arts participation (0-1)			1.230**	1.306**
Parents' reading behavior (0-1)			1.523**	
Parents' literary reading (0-1)				.429
Parents' popular reading (0-1)				.997**
Sex (male=1, female=0)	.846**	.849**	.842**	.842**
Cohort 1941-1950 (vs. oldest cohort)	.439**	.340**	.333*	.323*
Cohort 1951-1960 (vs. oldest cohort)	1.109**	.976**	.961**	.942**
Cohort 1961- (vs. oldest cohort)	1.166**	.970**	.941**	.923**
Survey 1998 (vs. survey 1992)	.362**	.364**	.363**	.363**
Survey 2000 (vs. survey 1992)	-.006	-.009	-.007	-.007
Intercept	8.741	8.574	8.552	8.446**
Adjusted R square	.238	.260	.262	.261

\*\* p < .01, \* p < .05

Source: Family Surveys Dutch Population 1992, 1998, 2000

cate earlier conclusions on family background effects on children's educational careers in the Netherlands.

In the second model of Table 4, direct measures of the family's cultural and economic resources are added to Model 1. These effects interpret part of the effects of the parents' education and the father's occupational status. The effect of parental schooling declines from 4.848 to 3.508 (28 percent is interpreted) and the effects of the father's occupational status decreases from 1.850 to 1.038 (44 percent is interpreted). Since all the variables have the same 0-1 range, the effects of cultural and economic resources can be directly compared as well. Cultural resources are more than three times (factor 3.4) as important as economic resources, again completely in line with earlier Dutch results.

In Model 3 of Table 4, the effect of cultural resources is decomposed in two effects, i.e. an effect of beaux-arts participation and an effect of parents' reading behaviour. Interestingly, parental reading behaviour is more important than parental beaux-arts participation for the prediction of children's educational attainment. This supports our second hypothesis, although an additional test

shows that the difference between the two effects is not statistically significant ( $p > .10$ ). In Model 4 we decompose reading behaviour in literary reading and parental reading. The estimates show that the effect of parent's literary reading on children's educational attainment is not significant and that parental popular reading has a significant and substantial positive impact on children's educational attainment.

### **Have the effects of parental resources changed over time?**

The four panels of Table 5 present a cohort comparison of the effects of parental resources. The models document several historical developments in the Netherlands, and come to much the same conclusions as reported earlier, especially to those reported by De Graaf and Ganzeboom (1990, 1993), but with new collected data. Let us start with panel A of Table 5, which shows important historical developments. First, the effect of the parents' educational level is much stronger than the effect of the father's socio-economic status for all the cohorts. The ratios of the two effects vary. The ratios are 2.4, 2.2, 2.7 and 3.5 for the four birth cohorts, suggesting that the ratio increases and the father's occupational status (economic dimension) loses ground as compared to parents' educational attainment (cultural dimension). Second, the effects of both standard indicators of social origins decrease in a monotonous way over cohorts. For the youngest cohort, the effect of the parents' education is only 63 percent of the effect for the oldest cohort, and the effect of the father's occupational status has decreased to 42 percent of its size for the oldest cohort. It is obvious that these decreases in the effects of social origins represent an enormous change in the openness of Dutch society. The expectation that the economic dimension of family background (father's occupation) would lose ground in favour of the cultural dimension (parents' education) is not empirically supported. Both dimensions of family background have lost a substantial part of their impact on children's level of schooling, although the decrease is indeed larger for the economic dimension.

In addition, the male/female gap in educational attainment exhibits to a linear downward trend. There are no longer any sex differences in educational attainment for the youngest cohort, although we should bear in mind that for recent cohorts the horizontal differences (type of education) between men and women are still striking (van de Werfhorst, Kraaykamp, and de Graaf, 2000).

In panel B of Table 5 we present the cohort differences in the estimates of the direct measures of the family's cultural and economic resources. For each cohort, the explained variance increases (although not in every cohort to the same extent), which shows that the resource variables add extra explanatory power to the model. First, let us examine the effects of the resources themselves. The effects of the economic resources exhibit an unsystematic pattern.

Table 5 The effects of parental resources on educational attainment by birth cohort

Panel A: Model 1 of Table 4	Cohort -1940	Cohort 1941-50	Cohort 1951-60	Cohort 1961-	Sign cohort difference (p-value)
Parents' level of schooling (0-1)	6.309**	5.586**	4.336**	3.991**	.*
Father's occupational status (0-1)	2.673**	2.579**	1.599**	1.130**	n.s.
Sex (male=1, female=0)	1.643**	1.433**	.627**	.099	**
Intercept	8.000	8.499	10.115	10.600	
Adjusted R square	.273	.247	.172	.142	
<b>Panel B: Model 2 of Table 4</b>					
Parents' level of schooling (0-1)	4.104**	4.152**	3.390**	2.768**	n.s.
Father's occupational status (0-1)	1.191	1.658**	.995*	.553	n.s.
Parents' economic resources (0-1)	.579	1.147**	.536	.717*	*
Parents' cultural resources (0-1)	4.323**	2.219**	1.776**	2.059**	*
Sex (male=1, female=0)	1.691**	1.441**	.615**	.104	**
Intercept	7.733	8.249	9.919	10.194	
Adjusted R square	.320	.268	.184	.164	
<b>Panel C: Model 3 of Table 4</b>					
Parents' level of schooling (0-1)	4.023**	4.011**	3.315**	2.574**	n.s.
Father's occupational status (0-1)	1.165	1.666**	.964*	.459	n.s.
Parents' economic resources (0-1)	.483	1.133**	.517	.653*	n.s.
Parents' beaux arts participation (0-1)	2.385**	.698	.761*	1.584**	n.s.
Parents' reading behavior (0-1)	2.408**	1.946**	1.233**	.772	n.s.
Sex (male=1, female=0)	1.660**	1.425**	.614**	.103	**
Intercept	7.670	8.177	9.896	10.216	
Adjusted R square	.324	.270	.184	.173	
<b>Panel D: Model 4 of Table 4</b>					
Parents' level of schooling (0-1)	4.031**	4.120**	3.318**	2.796**	n.s.
Father's occupational status (0-1)	1.200	1.685**	.964*	.442	n.s.
Parents' economic resources (0-1)	.469	1.132**	.524	.725*	n.s.
Parents' beaux arts participation (0-1)	2.365**	.813*	.791*	1.714**	n.s.
Parents' literary reading (0-1)	1.199	.747	.612 -	.510	n.s.
Parents' popular reading (0-1)	1.295*	.978*	.592	1.240**	n.s.
Sex (male=1, female=0)	1.661**	1.434**	.615**	.076	**
Intercept	7.585	8.114	9.866	9.984	
Adjusted R square	.322	.266	.183	.177	

\*\* p < .01, \* p < .05

Note: Models also include dummy-indicators for survey years

Source: Family Surveys Dutch Population 1992, 1998, 2000

The effect is relatively large for the 1941-1950 cohort, but clearly smaller for the other cohorts. An equality constraint on the four effects of economic resources reveals that the effects are significantly different. Panel B of Table 5 also shows that cultural resources do have significant positive effects in all four cohorts. For the oldest cohort, the effect is much higher than for the three younger cohorts, which indicates that cultural reproduction is clearly not becoming more important. Overall, the effects are rather strong, which means children from the cultural elite attain much higher levels of education. Again, we do not find any evidence to support the expectation that cultural resources have become more important over time.

Next, let us examine what has happened to the effects of the parents' level of education and the father's occupational status after the direct measurement of the family's resources is introduced in the model. Apparently, economic and cultural resources are becoming less capable of interpreting the effect of parents' education. Over the cohorts, the decrease in the effect of the parents' education are 35, 26, 22, and 21 percent respectively. This also suggests that the cultural interpretation of the effect of parents' education is far from complete. The effect of the father's occupation decreases from the oldest cohort onwards by 55, 36, 38, and 51 percent. Hence, we cannot detect a clear trend in the interpretation of the status effect.

In panel C of Table 5, parental cultural participation is separated into beaux-arts participation and reading behaviour. With regard to the trend, for the oldest three cohorts reading behaviour is more important than beaux-arts participation. Oddly enough, for the youngest cohort it is the other way around: parental beaux-arts participation has a stronger effect than parental reading behaviour. In panel D of Table 5 we also draw a distinction between literary and popular reading. The effect of parental literary reading is not significant for any of the cohorts. There is not a clear trend for parental popular reading. The effects are strongest for the youngest and oldest cohort.

### **Do the effects of parental resources depend on SES?**

In our final analysis we present models addressing the interaction effects between parental SES and parental resources. They make it possible to test whether the data are more in line with the DiMaggio's cultural mobility theory or with Bourdieu's cultural reproduction theory. In the interaction models presented in Table 6, SES is the average of the parents' educational attainment and the father's occupational status. As a result, SES also has a minimum of 0 and a maximum of 1, which facilitates a straightforward interpretation of the interaction effects. In the interaction models, the main effect of parental resources represents the effect for the lowest SES group, i.e. respondents whose parents have a minimum education and occupational status. The interaction effects

Table 6 The impact of SES on the effects of parental resources on educational attainment

	(1)	(2)	(3)
Parents' level of schooling (0-1)	4.808**	4.795**	5.058**
Father's occupational status (0-1)	2.001**	2.040**	2.337**
Economic resources (0-1)	1.223**	1.145**	2.214**
SES * economic resources	-1.192	-1.131	-1.352
Cultural resources (0-1)	4.338**		
SES * cultural resources	-4.987**		
Parents' beaux arts participation (0-1)		2.119**	2.375**
SES * parents' beaux arts participation		-2.044*	-2.600**
Parents' reading behavior (0-1)		2.835**	
SES * parents' reading behavior		-3.261**	
Parents' literary reading (0-1)			.652
SES * parents' literary reading			.082
Parents' popular reading (0-1)			1.978**
SES * parents' popular reading			-3.663**
Sex (male=1, female=0)	.837**	.828**	.830**
Cohort 1941-1950 (vs. oldest cohort)	.258*	.246	.246
Cohort 1951-1960 (vs. oldest cohort)	.878**	.859**	.860**
Cohort 1961- (vs. oldest cohort)	.827**	.792**	.811**
Survey 1998 (vs. survey 1992)	.363**	.360**	.375**
Survey 2000 (vs. survey 1992)	-.035	-.034	-.017
Intercept	8.016	7.938	7.728
Adjusted R square	.266	.268	.268

Source: Family Surveys Dutch Population 1992, 1998, 2000

Note: SES is the average of parents' educational attainment and father's occupational status

between SES and parental resources represents the effect for the highest SES group relative to the effect for the lowest SES group. So if a main effect equals  $M$  and the interaction effect equals  $I$ , the effect for the lowest SES group is  $M$  and the effect for the highest SES group is  $M+I$ .

In Table 6 we present three models. Model 1 of Table 6 elaborates on Model 2 of Table 4 and adds two interaction effects to the model between parental SES and economic and cultural resources. The estimates show the effect of cultural resources is dependent on the status of the parents, and the effect of economic resources is not. The interaction tests make it unequivocally clear that the cultural reproduction theory as Bourdieu presented it does not hold. For the lowest status group, the impact of cultural resources is 4.3 and is very strong. In fact, it

is as strong as the effect of parents' educational level. For the highest status group, the cultural resource effect even becomes slightly negative ( $4.3 - 5.0 = \text{minus } 0.7$ ), although this negative effect is not statistically significant ( $p > .10$ ).

In Model 2 of Table 6 we again decompose our general measure for cultural resources (as in Model 3 of Table 4), and include interactions for parental reading behaviour and parental beaux-arts participation. The effects of parental beaux-arts participation and reading behaviour are conditional upon socio-economic status in much the same way as in Model 1. For the highest status group there is no effect of either type of cultural resources and for the lowest status group there is a strong positive effect of both types. The impact of parental reading seems somewhat more important than parental beaux-arts participation. In Model 3 of Table 6 we again decompose the measure for parental reading, and distinguish between popular and literary reading. The results are striking. First of all, the estimates show that cultural mobility holds for parental popular reading as well as beaux-arts participation. Popular reading has a negative effect on children with high status parents. In more detail, our parameter estimates imply that for parents with the lowest status popular reading leads to an increase of two years of schooling for their children, whereas for parents with the highest status popular reading leads to a lower educational attainment. An additional test shows this negative effect of popular reading for high status families to be statistically significant ( $p < .05$ ). Apparently, popular reading has different consequences for higher and lower status groups. Within the higher status groups, popular reading indicates a relatively low level of linguistics skills, and within the lower status groups, popular reading represents a relative high level of skills.

## Conclusions

Within the sociology of education, the study of the impact of cultural resources on educational attainment is a field of research with a tradition of about two decades. Compared to previous research, we have made progress in several ways. First of all, our results show that it is very important to decompose parental cultural resources. The distinction between formal cultural activities and various forms of reading behaviour is important. The impact of popular reading shows the importance of linguistic and cognitive skills and the impact of beaux arts participation shows the importance of familiarity with the dominant cultural codes. Interestingly, our analysis shows that parental literary reading is of no importance for children's educational attainment.

Second, the comparison of cohorts reveals that the parents' education and the father's occupational status have become less relevant for the explanation of educational attainment. The decline has been quite substantial. Furthermore, economic and cultural resources are becoming less capable of interpreting the

effects of parents' education. For the impact of cultural resources, no clear trend over cohorts can be observed. The effect is relatively high for the oldest cohort, but stable for the three youngest ones. There is no decline in the impact of the (small) effect of economic resources on children's educational attainment in the Netherlands. This may be because the relative impact of economic resources is quite small to begin with.

Third, to understand the cultural resources work, one should study their different effects on children from higher and lower status groups. Our results unequivocally support DiMaggio's cultural mobility theory and are negative for Bourdieu's cultural reproduction theory. Children of high status groups do not do better at school if their parents have extra cultural resources. Interestingly, if high status parents frequently read popular books, they even harm their children's educational opportunities. Low SES parents, however, improve their children's educational opportunities by popular reading. Our results also imply that parental highbrow cultural activities only improve the educational performance of children with a low status background.

In summary, we think it is necessary to avoid studying the general effects of cultural capital. First, cultural capital should be decomposed in theoretically meaningful sets of parental resources. Second, the effects of these sets of parental resources should be allowed to vary among status groups. Third, the effects of cultural resources can vary historically. There are several ways future research could elaborate on these issues. One promising path would entail a further decomposition of the existing set of cultural capital indicators. The indicators we use to measure parental beaux-arts participation all refer to going visits to the theatre, the concert hall or the museum. This does not necessarily imply consumption of highbrow culture. We think it would be wise to devote more attention to this issue, and study the different effects of highbrow and more popular cultural activities.

A second path would focus on the relevance of standard cultural indicators in empirical research. The relevance and patterns of cultural capital indicators may change substantially over time and new indicators might become salient. For example, how teachers positively sanction particular cultural codes, cultural knowledge and skills on the part of their students might very well change. Teaching itself now has less status than it did decades ago. Young teachers might positively reward and sanction different types of cultural behaviour than are distinguished here. Older generations of teachers may have been involved in traditional highbrow culture, whereas younger generations are more interested in popular culture. This might provide an explanation for the strong drop in the impact of parental beaux-arts participation for the youngest cohorts. More importantly, this implies that we should devote attention to new types of cultural resources that help explain why some children do better at school than others.

## ABSTRACT

### **Formal and Popular Dimensions of Cultural Capital: Effects on Children's Educational Attainment**

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In this paper we address three questions related to Bourdieu's cultural capital theory. First, which aspects of parental cultural capital foster the educational attainment of children? Second, have cultural resources become more important and economic resources less important in the past half a century? Third, do only higher status groups benefit from these resources or are they especially beneficial for children with a low status background? Data from the repeated cross-sectional retrospective life-course Family Surveys Dutch Population collected in 1992, 1998, and 2000 offer appropriate and accurate family background measurements. The results show that in sharp contrast to what cultural capital theory predicts, in the highest status groups parental cultural resources do not affect educational attainment. Parental beaux-arts participation and parental popular reading only affect the educational performance of children with a low status background. Parental literary reading is not relevant to either higher or lower status groups. As regards the general impact of cultural and economic resources, no clear trend between the cohorts could be detected.

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