

Educational Attainment and Participation in 'Highbrow Culture'. A Comparative Approach in European Union.

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Abstract

This paper displays the results of a comparative analysis of the relationship between educational attainment and participation in 'highbrow culture'. Based on the data of a recent European survey, it is mainly related to a multivariate analysis of the participation in nine relevant cultural-activities. We first show the remaining effect of the country factor, while controlling for other variables, including the educational factor. We then perform a series of multilevel models, taking account of this last factor both as an individual and as a contextual characteristic. At the individual level, it is mainly interpreted in terms of human capital, while at the contextual level, it is primarily understood as a socialization process. The main finding of the paper concerns the interaction of these two levels, which advocates the development of explicit teaching of arts at school, while the massification process of education alters the socialization effect of the school life in cultural matters.

Keywords

Educational attainment, cultural participation, human capital, status assignation, multilevel modelling

The issue of educational attainment effect on cultural participation is a very common and well-studied one in the sociology of arts and cultural participation, although controversial. On the one hand, there is some argument about the meaning of the relation between these two variables. As many authors, mostly in the field of sociology of education, support the idea that the cultural habits of the children and their parents have a deep influence on the school achievement of pupils (Di Maggio, 1982, Jonsson, 1987, Farkas, Grobe, Sheehan and Shuan, 1990, Katsillis and Robinson, 1990, Crook, 1997, De Graaf, De Graaf and Kraaykamp, 2000), the reverse relation – *i.e.* the impact of school attainment on cultural participation – is one of the most common beliefs among the professionals of Arts and Culture field. On the other hand, the correlation between these two variables is often considered as spurious, considering that the same social factors are involved in both cultural participation and educational attainment, first of all the inherited cultural capital of the family (Bourdieu and Passeron, 1970).

Hereafter, we will attempt to make a comparative overview of the relationship between school attainment and cultural participation in 15 European countries, all members of the EU at the time of the Eurobarometer on cultural participation completed by Eurostat in 2001 on a 16 000 individuals sample across EU. Further developments of this paper are mainly based on these data, which include a range of indicators on participation in

various fields of cultural activities, from pure entertainment (TV watching, radio listening, etc) to the most exclusive ones (theatre, opera, classical concerts, ballets, arts museums, etc.). In this paper, we focus on the participation in the so-called 'highbrow' culture, assuming that family and educational context are more deeply and exclusively involved in those activities than they are in other cultural practices, much more subjected to the influence of mass-media. We then build an indicator of the participation in nine 'highbrow' practices, seven related to cultural outings (theatre, opera, classical concerts, ballets, museums or galleries, archaeological sites, historical monuments) and two to home practices, *i.e.* non-assigned readings (excluding professional or school readings) and listening to classical music.

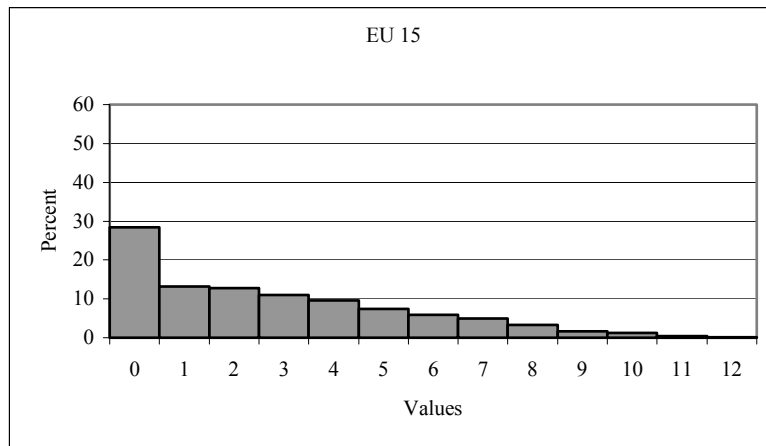
To some extent, what we called 'highbrow' culture could be better called 'non industrial' culture, as the cultural practices concerned appear to be the less 'commodified' ones. Indeed, both reading and listening to classical music are related to specific areas of the cultural industry, but neither book editing nor classical record production constitute the core of it, both in terms of profitability and employment. Moreover, theatre, like opera, museums and so on, remain essentially outside the industrial sphere, both because they imply small-scale production and public funding or non-profit organizations' grants. Making this restriction to the so-called 'highbrow culture', we assume that familial as well as educational and structural (*i.e.* demographic and political) factors matters in the likelihood of these practices more than in the more 'commodified' ones. The aim of the paper is precisely an attempt to disentangle these effects.

Data and Hypotheses

The data used in this paper come from the Eurobarometer 56.0 of October 2001, which encompassed three topics: information and communication technologies, financial services and cultural activities¹. Our concern lies in the latter, more precisely in cultural participation in the nine activities previously defined, as measured in questions 42, 46 and 47. Based on eight dummy variables, coded '1' when the corresponding activity has occurred at least once for the respondent during the twelve months preceding the survey, and '0' in the other cases, along with a polytomous one for non-assigned readings, varying from '0' for non-readers to '4' for 13 and more books read during the interval², we built an indicator of participation in the so-called 'highbrow culture', by adding the scores in the nine preceding variables.

The values of the resulting indicator vary from 0, when the respondent does not participate in any of the nine relevant activities, to 12, when he participates in all of them at the maximum level of intensity. Considering EU as a whole, the indicator's values, as shown in **Figure 1**, are clearly non-normally distributed. About 28% of the respondents do not declare any of the nine activities, and about 54% have a score of less than 3. The higher the score, the lesser the proportion of respondents is.

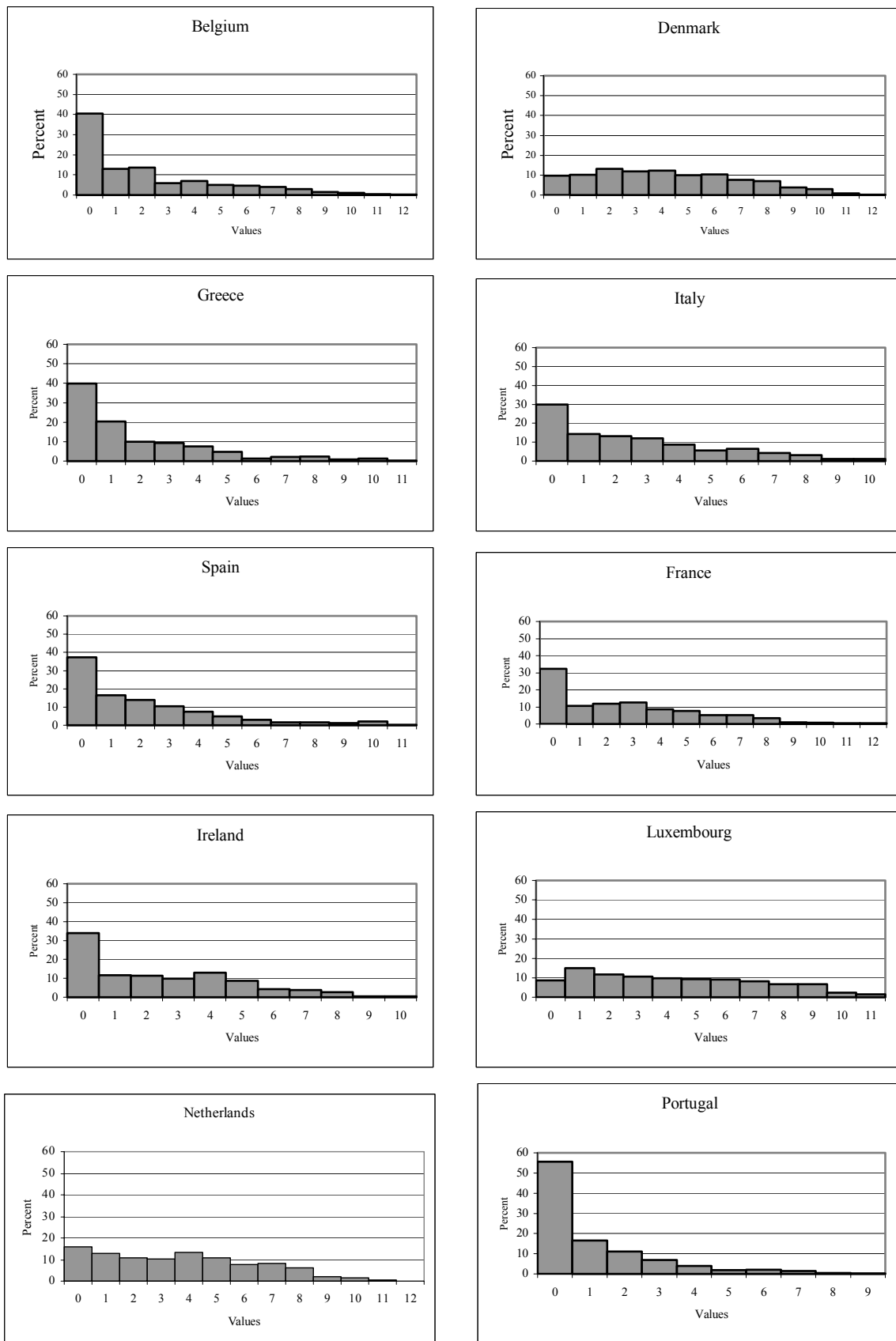
Figure 1: The distribution of the 'highbrow culture' participation indicator in EU

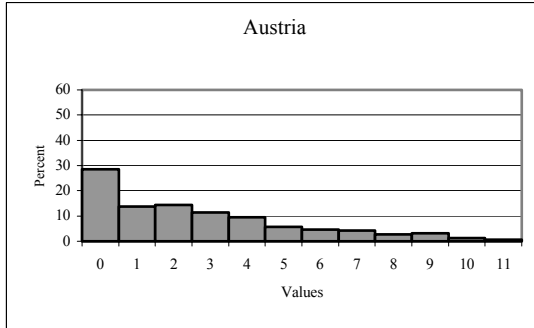
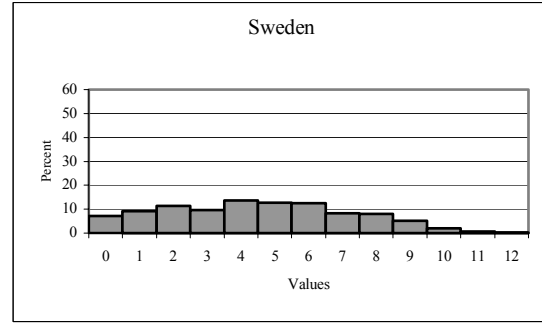
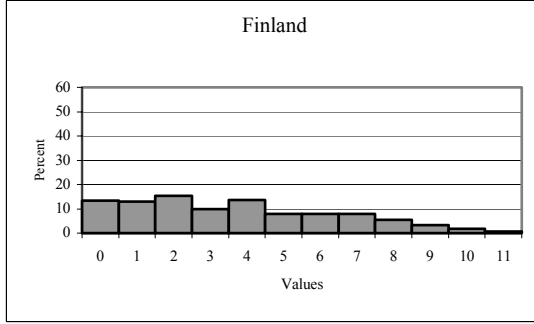
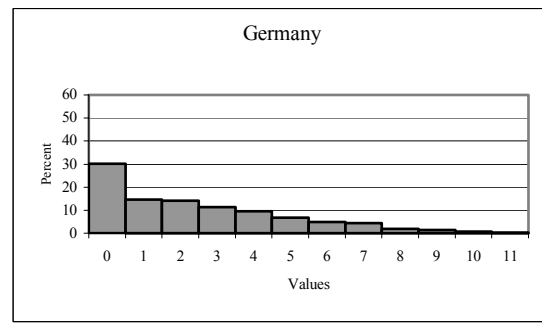
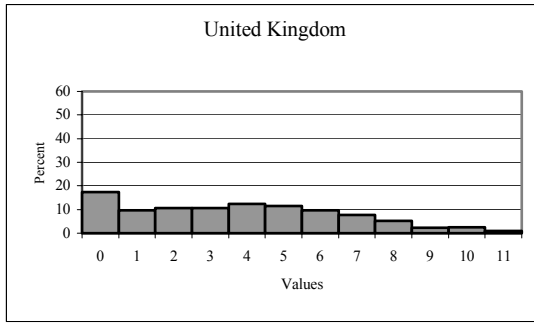


Data: Eurostat, Eurobarometer 56.0, 2001

Given this preliminary result, we therefore tend to consider participation in 'highbrow culture' as a dichotomous variable, simply differentiating those with at least one of the nine activities from the others. By the way, this preliminary result gives an insightful indication of the discriminating power of participation in 'highbrow culture', which draws an unambiguous boundary between the minority of strong participants and the majority of weak or even non-participants. Anyway, considering this distribution at the country level, some significant disparities appear among European Union members, as shown in **Figure 2**, from which one can nearly discern three classes of countries. The first one, including Belgium, Greece, Spain and especially Portugal, in which there are from 40 to 60% of non-participants in the so-called 'highbrow culture', holds a declining proportion of respondents as the participation score increases. The second one, including Denmark, Luxemburg, Netherlands, the United Kingdom, Finland and especially Sweden, has a very contrasting pattern. These countries display less than 15%, even 10% of non-participants in 'highbrow culture', and the modal categories lay between scores of 2 to 6. In other words, these countries contrast with the others as the majority of their population demonstrates a mid-range commitment in 'highbrow culture'. The last class, including Germany, Italy, France, Ireland and Austria, presents an intermediate pattern, with a lower rate of non-participants than the first class, but a lower rate of mid-range commitment than the third. In all these 15 countries, however, strong commitment to 'highbrow culture' remains fairly unusual.

Figure 2: The distribution of the 'highbrow culture' participation indicator in the 15 members of EU





Data: Eurostat, Eurobarometer 56.0, 2001

It could obviously be argued that these variations in the distribution of the participation scores only reflect the disparities in the distribution of educational attainment levels across the different countries, expecting a positive relationship between the length of school exposure and the participation in the so-called 'highbrow culture'. Consequently, we can make the assumption that, controlling for these disparities the variations across countries in the distribution in participation scores would remain non-significant. In the following section, we will attempt to assess this hypothesis using logistic regression techniques, first measuring the net effect of national membership (*CTRY*) on the individual probability to reach a non-zero score on participation in 'highbrow culture' indicator in the whole sample, controlling for sex (*SEX*), number of years completed at school (*YSCH*), size of living area (*SLVA*) and household monthly income (*INC*)³. The *YSCH* variable has three modalities (up to 15 years, 16 to 19 years and 20 years and over), the *SLVA* variable has also three (rural area or village, small or middle sized town and large town), and the *INC* variable is recoded in the quartiles distribution of income in each of the 15 countries⁴. This first model can be written as follows:

$$\text{Log} \frac{P_i}{1-P_i} = \sum_{k=0}^n b_k X_k \quad (1),$$

Where P_i stands for the probability of the i^{th} individual to have a non-zero score on the cultural participation indicator, the X_k stand for the k independent variables and the b_k for

the k parameter estimates of the coefficients of the k variables. Notice that when $k = 0$, the corresponding coefficient is equivalent to the intercept of the model. Taking account of the variables included in the analysis, the model can be specifically rewritten as:

$$\text{Log} \frac{P_i}{1-P_i} = b_0 + b_1 \text{SEX} + b_2 \text{YSCH} + b_3 \text{SLVA} + b_4 \text{INC} + b_5 \text{CTRY}$$

[Model I],

A French man, living in a rural area, with no more than 15 years completed at school and a monthly household income located in the third quartile, gives the reference situation. The parameter estimates give the indication of the effect of the variation of only one of these characteristics on the probability to have at least a score of '1' on the 'highbrow culture' participation's indicator.

Nonetheless, treated as an individual characteristic, the interpretation of the country effect is not straightforward. Indeed, the country variable cannot pragmatically be considered as an individual characteristic, like gender or the number of years completed at school, for instance. It definitely encompasses various structural characteristics, such as institutional arrangements, political environment, demographic context and so on. Anyway, it can be argued that individual behaviour is influenced by contextual factors such as cultural supply (often related to the size of living area), orientations of cultural and educational policy, GDP per capita, etc. We can therefore estimate another kind of models taking account of some of these contextual factors. In that matter, multilevel modelling had proved to be the most accurate methodology (see Snijders and Bosker, 1999, Guo and Zhao, 2000). We then fit a series of two-level models, with a country level 1 and an individual level 2. Doing this, we assume some clustering among individuals in the sample, which could be nonetheless considered as fairly unrealistic, given that the people questioned in the survey are not necessarily connected to each other. Hence, although not strictly connected, we can consider the individuals of each country as indirectly connected by their membership in the same nation, experiencing all together some of their structural features and collective attributes.

First, we estimate an intercept-only multilevel model, to be compared with an intercept only standard logit model, in order to assess the clustering hypothesis. At level 1 (the individual level), the model is written as follows:

$$\text{Log} \frac{P_{ij}}{1-P_{ij}} = \beta_{0j} + \sum_k \beta_k x_{ij}$$

(2a)

where β_{0j} expresses the intercept for each country and $\beta_k x_{ij}$ expresses the impact of the explanatory variable k at the individual level. At level 2 (the country level), the country level intercept can be expressed as a sum of an overall intercept (β_0) and a series of random deviations from it (u_j):

$$\beta_{0j} = \beta_0 + u_j$$

(2b)

Substituting (2b) into (2a) yields the multilevel model:

$$\text{Log} \frac{P_{ij}}{1-P_{ij}} = \beta_0 + \sum_k \beta_k x_{ij} + u_j$$

(3)

We then estimate two subsequent models including the effects of country level predictors and one random intercept:

$$\text{Log} \frac{P_{ij}}{1-P_{ij}} = \beta_0 + \beta_1 M_YSCH + u_j \quad [\text{Model II}],$$

with M_YSCH representing the country mean of $YSCH$, treated as a scaled variable with three levels, centered about the grand mean of $YSCH$ in the whole sample, and u_j representing the random intercept, assuming some variation among countries in the probability to have a score higher than 0 on the cultural participation indicator.

$$\text{Log} \frac{P_{ij}}{1-P_{ij}} = \beta_0 + \beta_1 M_YSCH + \beta_2 M_INC + \beta_3 M_SLVA + u_j \quad [\text{Model III}],$$

with M_INC representing the country mean of INC and M_SLVA representing the country mean of $SLVA$, both centred on their respective grand mean and both treated as scaled variables. All the three effects introduced in the model are considered as contextual effects, assuming that average ‘scores’ on school attainment, income and size of living area have an impact on individual cultural participation. In other words, we make the hypothesis that the population’s structure as regards to (0) its level of education, distribution of income and degree of urbanization matters.

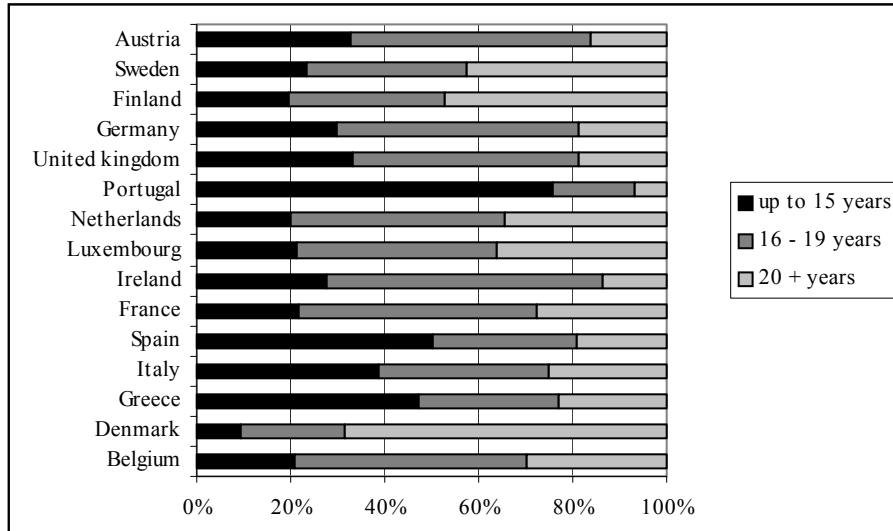
The last model is a rather simpler one but, as we will see below, it has proved to provide a better fit to the data than the previous ones. In this last model, we just keep one country level predictor (M_YSCH) and add three individual level ones (m_YSCH , m_INC and m_SLVA), both treated as scaled variables and centred on their country mean. Ultimately, we add an interaction term $m_YSCH * M_YSCH$, assuming that the individual effect of the number of years completed at school on cultural participation fluctuates according to the contextual effect of the school attainment average score in the country, as measured by M_YSCH . In this model, like in the former, the only random parameter taken into consideration is a random intercept. The next section displays the results of the estimation of all these models.

$$\text{Log} \frac{P_{ij}}{1-P_{ij}} = \beta_0 + \beta_1 m_YSCH + \beta_2 m_INC + \beta_3 m_SLVA + \beta_4 m_YSCH * M_YSCH + u_j \quad [\text{Model IV}],$$

Results

The educational level structure of the 15 EU members’ populations is quite variable, as shown in **figure 3**. Therefore, comparing **figure 3** and **figure 2** seems rather suggestive. The greater the proportion of ‘20 years and over’, the lesser the share of zero score on cultural participation indicator. However, the relation between the two figures is not totally straightforward, as shown by the UK situation, which combines a relatively ‘high’ pattern of cultural participation and a relatively ‘low’ pattern of educational level structure.

Figure 3: Distribution of educational levels in the 15 EU members



Data: Eurostat, Eurobarometer 56.0, 2001

Furthermore, while controlling the impact of school attainment effect in a multivariate analysis, the differences between countries in terms of cultural participation remain significant, as shown by the parameter estimates of the standard logit model performed in **Model I** (see **table 1**). Not surprisingly, the model validates the hypothesis of a strong linear effect of school attainment on participation in 'highbrow culture', with an odds ratio of 1.8 for the second modality of the *YSCH* variable (at least 16 to 19 years completed at school), and an odds ratio of 5.4 for the last (20 years and over)⁵. In addition, this effect looks much stronger than the effect of income and living area. Although nearly all the activities considered in the indicator imply some merchant goods and services, these estimates confirm that, whatever the country, participation in 'highbrow culture' is much more a matter of cultural capital than economic capital (Bourdieu, 1979). In addition, it can be noticed that, *ceteris paribus*, the female advantage in cultural participation proves to be rather significant.

Table 1: Parameter estimates of a single logit regression predicting the probability of having at least a score of 1 to the indicator of participation in 'highbrow culture' activities (Model I)

Parameter		Estimate	Standard Error	p	Odds ratio
Intercept		-0.092	0.095		
SEX	Female	0.638	0.050	***	1.9
	Male				
YSCH	16 - 19 years	0.582	0.055	***	1.8
Up to 15 years	20 + years	1.688	0.089	***	5.4
INC	Q1	-0.695	0.068	***	0.5
Q3	Q2	-0.424	0.066	***	0.7
	Q4	0.650	0.082	***	1.9
SLVA	Small or middle	0.118	0.058	*	1.1
Rural area or village	Large town	0.229	0.064	***	1.3
CTRY	Austria	0.296	0.165	n.s	
	Belgium	-0.493	0.154	**	0.6
France	Denmark	0.907	0.279	**	2.5
	Finland	0.828	0.242	***	2.3
	Germany	0.134	0.074	n.s	
	Greece	-0.327	0.154	*	0.7
	Ireland	-0.123	0.347	n.s	
	Italy	0.169	0.093	n.s	
	Luxemburg	1.670	1.102	n.s	
	Netherlands	0.967	0.156	***	2.6
	Portugal	-0.515	0.152	***	0.6
	Spain	-0.085	0.100	n.s	
	Sweden	1.814	0.243	***	6.1
	United kingdom	0.833	0.097	***	2.3

Data: Eurostat, Eurobarometer 56.0, 2001

*** p < 0.001

** p < 0.01

* p < 0.05

n.s.: non significant

However, the most relevant result is that, even when controlled by the former variables, the net effect of the country variable remains quite strong and significant. Not surprisingly, the differences between the reference category – France – and the other countries belonging to the same class discerned as regards to the distribution of the cultural participation indicator are not statistically relevant. In contrast, all the countries of the two others (respectively Belgium, Greece, Spain and Portugal, on the one hand, Denmark, Luxemburg, Netherlands, United Kingdom, Finland and Sweden, on the other) display relatively strong and significant effects that confirms their initial ranking. Belgium, Greece and Portugal have odds ratio notably smaller than 1 while Denmark, Finland, Netherlands, United Kingdom and Sweden, have odds ratio notably greater than 1, especially Sweden, with an odds ratio of a little more than 6. Therefore, the 'highbrow culture' proclivity of Swedish, Danish or Dutch people, as compared to French, taken as

reference in the previous model, is not reducible to the relatively greater share of people with the highest levels of education in their population. As a matter of fact, it can be suspected some clustering of the observations, *i.e.* we can assume that the individuals' proclivity to cultural participation of people living in the same country are in one way or another correlated. In other words, this proclivity is not only a matter of individual characteristics, but also a matter of contextual factors.

Accordingly, before estimating the multilevel models described in the previous section, we first check the accuracy of the clustering assumption, by comparing the fitting of an intercept-only logit model and an intercept-only multilevel model, as shown in **table 2**. In the multilevel model, the estimation of the random intercept leads to the computation of the intra-class (*i.e.* intra-country) correlation. With a ρ value of 0.15 we can conclude that there is a fair bit clustering of the probability modelled, and that an ordinary logit regression would likely yield misleading results.

Table 2: Parameters and standard errors of an intercept-only logit model and an intercept-only multilevel model predicting the probability of having at least a score of 1 to the indicator of participation in 'highbrow culture' activities⁶

	Standard model	logit Multilevel model
<i>Fixed effect</i>		
Intercept	0.921 (0.022)	1.097 (0.204)
<i>Random effect</i>		
Intercept		0.577 (0.237)
Intra-country correlation (ρ)		0.15
Deviance		11329.7
AIC		51395.6
Extradispersion		0.989
-2logL	11760.6	
N	9912	9912

Data: Eurostat, Eurobarometer 56.0, 2001

Note: AIC and Deviance statistics are indicators of the quality of fit of the model to the data. Extradispersion statistic indicate underdispersion or overdispersion, that can lead to unreliable estimates of standard errors, when the corresponding value is substantially smaller or greater than 1, which is not the case here.

The next model – **model II** – adds one single country effect to the intercept-only multilevel model displayed in **table 2**. The estimation of the effect of M_YSCH ; displayed in **table 3**, suggests that the distribution of educational attainment levels in the population, as measured by a three scaled variable, has a great influence on the probability of having a non-zero score on the cultural participation indicator. Indeed, the corresponding odds ratio (not reproduced in the table) is a little more than 8, meaning, for example, that, *ceteris paribus*, living in a country with an average educational score of 3 (20 years completed at school or more) rather than 2 (16 to 19 years) increases the opportunity to have a non-zero score rather to a zero score by a factor 8. Moreover, the intra-class correlation value ρ is more than twice smaller than in the intercept-only model (0.07 rather than 0.15), meaning that about 50% of the clustering effect is due to this contextual factor. In addition, we can notice that the two other contextual effects tested in **model III** – M_INC and M_SLVA – are not significant. Thus, we have some

presumptive evidence that the main contextual factor implicated in cultural participation is related to the structure of the educational attainment levels of the individuals' national environment.

Table 3: Parameters and standard errors of three multilevel models predicting the probability of having at least a score of 1 to the indicator of participation in 'highbrow culture' activities

	Model II	Model III	Model IV
<i>Fixed effect</i>			
Intercept	0.990 (0.131)	0.990 (0.140)	1.117 (0.144)
GMD8R	2.087 (0.458)	1.858 (0.532)	2.202 (0.510)
GMD29_C		0.712 (0.738)	
GMD25		-0.043 (0.839)	
iMD8R			0.729 (0.038)
iMD29_C			0.381 (0.024)
iMD25			0.118 (0.031)
iMD8R*GMD8R			-0.419 (0.213)
<i>Random effect</i>			
Intercept	0.218 (0.097)	0.232 (0.115)	0.263 (0.116)
Intra-country correlation (ρ)	0.06	0.07	0.07
Deviance	11330.0	11330.0	10256.6
AIC	51473.2	51495.9	53164.7
Extradispersion	0.990	0.990	0.971
N	9912	9912	9912

Data: Eurostat, Eurobarometer 56.0, 2001

Note: The parameter estimates of fixed effects are in bold when significant at $p < 0.05$ level

Finally, this contextual effect of education remains when controlling for individual factors, as in **model IV**. Although measured as scaled variables, rather than categorical ones, as in **model I**, the individual effects of educational attainment, income and size of living area are similarly ranked: individual increment in educational level scale m_YSCH has a greater net effect than individual increments in income scale m_INC and size of living area scale m_SLVA . The most striking result of this last model is related to the interaction term between, say, individual and contextual levels of education factor. As shown in the last column of **table 3**, the corresponding parameter estimate has a negative value that can be interpreted as a contextual attenuation of individual educational attainment level. In other terms, the higher the educational attainment level environment, the lesser the impact of an increment in the individual educational attainment level scale. In the last section, we will develop some theoretical interpretation of this apparent paradox.

Discussion

Why does educational attainment matter in cultural participation? The relationship between these two elements is not so obvious than it first appears to be. Two main theoretical propositions can be set out on this issue. The first one considers the impact of educational attainment on cultural participation as the actualization of some specific skills and habits primarily trained at school. This interpretation can be expressed in the terms of Gary S. Becker's human capital theory, as illustrated by George Stigler and himself on music consumption (Becker and Stigler, 1977). Which means that as the frequency and intensity of exposition to Artistic and Cultural products increases, the ability to appreciate them raises too. It is the reason why cultural consumption is basically considered as an addictive one by Becker and Stigler: the more you practice, the more you want to practice.

In any case, the accuracy of this hypothesis depends on the location of cultural practices at stake in the academic sphere. Whether the practices are at the core of academic culture or not entails divergent consequences. Indeed, most of the activities included in the cultural participation indicator do not especially entail academic skills and habits. In most of the European educational systems, cultural and artistic domains and activities are not especially essential, except for literature. Though the taste for reading can be realistically depicted as mostly scholarly trained and supported, it is not obviously the case for classical music, theatre or visual arts, which are often not of great importance in the hierarchy of academic disciplines, neither in elementary schools, nor in high schools and universities. Consequently, the human capital argument cannot be clearly generalized.

This provision does not fully obliterate the argument yet, according to some active options today often developed and supported in cultural and educational matters. In that matter, school outings to museums, theatres and so on and so forth can be of great importance in the formation of the aesthetic and cultural dispositions of pupils. Indeed, there are many evidences of the significant impact of the precocity of exposition to arts during childhood on cultural activities of adulthood (Abbé-Decarroux, 1993; Tavan, 2003). This leads at least to an additional formulation of the human capital hypothesis, which can be depicted as the 'captive' or 'captivation audience' hypothesis.

In the alternative hypothesis, educational attainment is less taken as an individual characteristic than as an environmental one. This ecological perspective, more or less stemmed from some of Pierre Bourdieu and Jean-Claude Passeron's first writings (Bourdieu and Passeron, 1970), suggests that the school impact rests more on the characteristics of school as a place of socialization than as a place of training. The basic idea is that the school function in cultural matters is extremely dependent on the social characteristics of its pupils: the socialization effect of school tends to shape the behaviour of pupils and former pupils on the dominant behaviour among them and, namely, their families. To be more precise, in a situation in which the majority of pupils belonged to the middle class, even the upper middle class, to some extent as it was the case in France in secondary schools until the last sixties, the social experience of school life used to model the behaviours in a large variety of practices on the middle-class' behaviour. It is the reason why, according Bourdieu and Passeron, the few students of lower classes who succeeded in reaching High School level and, even more, University, tended to adopt a sort of 'over-conformity' to the middle class' norms, even in domains not precisely taught at school. It is what they called the 'status assignation effect', which proved to be particularly accurate in practices that do not belong to the core of academic culture (namely music and visual arts vs. literature, for example).

By the way, as Bourdieu, and before him Thorstein Veblen (Veblen, 1899), supported the idea that artistic tastes and cultural practices, like many others components of the lifestyle, but perhaps a little more, took part of the building of symbolic boundaries between social classes, school effect primarily consists in giving some academic legitimacy to the middle class' norms of cultural behaviour. Even if expunged of this class-based component, this theoretical perspective sheds a very different light on the impact of school attainment on cultural practices. That is to say a kind of morphologic understanding of individual behaviours, while individual practices do vary according to the social structure of their environment.

Nonetheless, regarding the results displayed in the previous section, these two hypotheses do not look entirely incompatible. Indeed, the human capital hypothesis is supported by the significant effect on cultural participation, in all the models, of the school attainment level, considered as an individual characteristic. Meanwhile, the multilevel models displayed a rather significant effect of this same variable considered as a contextual characteristic. Moreover, the interaction-term between the two, as shown in the last model, is fairly understandable in 'assignment effect' terms. Indeed, the negative sign of the corresponding parameter merely points out that the positive effect of individual school attainment level on cultural participation is attenuated when the collective school attainment level raises, *i.e.* as the proportion of high school and, even more, university graduates increases. This apparent paradox is nevertheless quite straightforward, according to the structural consequences of the process of school massification, which, with some variations in pace and intensity, has affected nearly all the western European countries during the last thirty years. Indeed, as the access to the top of the distribution of diplomas and qualifications is less and less the privilege of the 'happy few', the so-called 'assignment effect' declines, while the members of the upper-middle class are no longer numerically dominant at school and university, and then become noticeably unable to impose their norms, especially in the cultural field. In other terms, as the massification process progresses, the cultural socialization effect of school declines.

Conclusions

The results presented in this paper suggest that, in terms of cultural participation, educational policies are perhaps quite as essential as cultural policies. In that field, the variance observed in individual behaviours is not only a matter of family inherited 'cultural capital', as formerly suggested by Bourdieu and Passeron (Bourdieu and Passeron, 1970). In addition, the statistical modelization performed in this paper illustrates the dual nature of school attainment's effect on cultural participation. Indeed, in all the fifteen countries of the EU considered in the Eurobarometer survey on cultural activities, school attainment's effect has proved to be both individual and contextual. In our view, this dual nature of school attainment's effect induces a rethinking of cultural strategies in school context. As a matter of fact, as school massification increases, it becomes less and less possible to be confident in the socialization effect of school experience, according to the fact that the 'status assignment' effect impact decreases as the social structure of school audience changes. Consequently, in the context of school massification, the explicit transmission of cultural issues has to be reinforced. Previous results, concerning musical tastes, have shown the impact of explicit transmission in the building of cultural dispositions and habits (see Coulangeon, 2003). In other words, cultural policy must go through the educational policy.

Notes

- ¹ Carried out between August 22 and September 27 on 16 162 individuals' sample, it covers the population aged 15 years and over, resident in each of the 15 member states of the EU at the time of the survey. The basic sample design applied in all member states is a multistage, random one. For additional technical specifications, see: http://www.gesis.org/en/data_service/eurobarometer/standard_eb_profiles/data/eb_56_0.htm
- ² The other values are '1' for 1 to 3 books, '2' for 4 to 7 books and '3' for 8 to 12 books.
- ³ For the convenience of the analysis, in all subsequent models, we consider a sub-sample deleted from non-respondent to questions about income and size of living area. We also delete students from the sample, in order to avoid considering people not having yet completed their school, which could seriously complicate the interpretation of the school attainment effect, given that the number of years completed at school remains indeterminate for those still studying at the time of the survey. Given these restrictions, we allow for a sub-sample reduced to 9 912 observations.
- ⁴ For instance, a Spanish observation in Q1 means that the respondent's income is in the bottom quartile of the Spanish Income distribution, among the 25% of the poorest Spanish households, an Italian observation in Q2, that the respondent's income is in the second quartile of the Italian Income distribution, just behind the median income, etc.
- ⁵ Contrary to the estimates in OLS regression, the interpretation of the estimates of logistic regression is not straightforward. Odds ratio, which comes from the exponentiation of raw estimates, is one of the usual methods of interpretation of these estimates. Basically, an odds ratio of 1 indicates a lack of effect of the corresponding modality, while an odds greater than 1 indicates a positive effect and an odds lesser than 1 indicates a negative effect.
- ⁶ All the multilevel models are estimated with the SAS Glimmix macro.

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