Universiteit Utrecht

Factors affecting cultural participation among children

van den Berg, H. (Hilde)

Abstract

Cultural participation improves quality of life, wellbeing, and participation in wider society. The purpose of this study is to investigate factors affecting the cultural participation of children. In the first part, the theoretical framework defines cultural participation, discusses why it should be studied in children, and discusses potential affecting factors such as the family's cultural participation, family socio-economic status, parents' education, and ethnicity. This research aims to answer the question *"What is the relationship between the socio-economic status and the cultural participation of children?"* and sub-questions "*What factors interact with socio-economic status?*" and "*What changes can be seen in the relationship between socio-economic status and the cultural participation of children and interacting factors between 2005 and 2016?".* Data from the yearly UK survey "Taking Part: the National Survey of Culture, Leisure and Sport" was used, years 2005/06 and 2016/17. The subjects were randomly selected from a list of addresses within the UK. The variables 'cultural participation', 'socio-economic status', 'ethnicity', and 'educational qualifications' were examined through quantitative methods. The results show that there is a correlation between socio-economic status and cultural participation among children in both years. This study supports educational qualifications as an interacting factor but found no evidence for ethnicity as such. Based on the results of this research, it can be implied that policies need to target socio-economic status and educational qualifications in order to improve equality in cultural participation among children.

Student number: 4094050
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Introduction

Cultural participation plays an important role in people's participation in wider society and improves their quality of life and overall wellbeing (Kraaykamp et al., 2008). For example, a higher frequency of cultural participation is associated with higher life satisfaction, and a higher diversity in cultural activities is associated with more general happiness (Kim & Kim, 2009). However, research has shown that people from lower socio-economic backgrounds are less likely to participate in cultural activities than people from higher socio-economic backgrounds, which could then affect their quality of life (Katz-Gerro & Shavit, 1998). It is therefore important to examine the concept of cultural participation and the factors that may affect it.

Cultural participation among children

Cultural participation can be defined as the participation in activities which require some cultural competence and additional knowledge (Kraaykamp et al., 2008). Bourdieu (1984) theorised that there are two different types of culture that people can participate in: 'highbrow culture', visiting a museum or attending a classical concert, and 'lowbrow culture', going to the movies or visiting a rock concert. Later, Bourdieu (1986) also introduced the notion of cultural capital, which suggests that one's knowledge of art increases one's status. These theories laid the foundation for future research on cultural participation, which came to focus mostly on highbrow culture (Kraaykamp et al, 2008). However, a shift occurred in the 1990s. Younger generations increasingly enjoy activities in both highbrow and lowbrow culture and are less likely to restrict themselves to one or the other (Peterson, 1992; Van Eijk & Knulst, 2005). Research also shows that children's cultural participation habits predict their cultural participation as an adult, which means that it is most useful to research cultural participation in children, and that policies and interventions should target children in order to be most effective (Brook, 2016). Therefore, this research will focus on the cultural participation of children.

Factors affecting cultural participation

There are multiple factors that could influence one's cultural participation: socio-economic status, education, gender, and age are some of the most researched examples (Kraaykamp et al, 2008). However, these factors have mostly been researched amongst adults. When it comes to the cultural participation of children, the following factors can be considered: the family's (attitude

towards/frequency of) cultural participation, family socio-economic status, parents' education, and ethnicity (Bandura, 1978; Gracia, 2015; Brook, 2016).

The idea that a child's cultural participation is affected by the family's cultural participation can be traced back to theories in psychology. Bandura's Social Learning Theory (1978) states that learning occurs through observation, imitation, and modelling. Although it was initially applied to aggression, researchers have later applied it to any kind of behaviour. In the case of children and cultural participation, this theory suggests that if parents have a high level of cultural participation, children observe and imitate this, making them more likely to also have a high level of cultural participation. Once a social norm has been built around (not) doing certain activities, these patterns are more likely to be passed down to children, and the amount of museum visits as a child can successfully predict museum visiting habits as an adult (Brook, 2016; Kallunki & Purhonen, 2017). The family's cultural participation could therefore have a significant impact on the child's cultural participation.

Socio-economic status is often measured by family income and could influence one's cultural participation because it concerns people's (in)ability to pay for activities (September et al., 2016). Bourdieu (1986) already suggested that cultural capital and socio-economic status are related, as being from a higher-class family allowed one to obtain more cultural capital, which could result in a higher status. In the 1990s en 2000s, it was increasingly suggested that there is a direct relation between socio-economic status and cultural participation due to the need to buy tickets, which results in lower levels of cultural participation from lower socio-economic groups (Katz-Gerro & Shavit, 1998; Chan & Goldthorpe, 2006). Additionally, some argue that the content of highbrow activities is primarily targeted at economically privileged audiences (Stylianou-Lambert, 2010; Jensen, 2016). Le Roux et al. (2008) conducted an analysis in the United Kingdom which shows a socio-economic division when it comes to cultural activities. They found that in a sample of 1,465 participants, 14.6% of the 'professional class' never went to museums vs. 50.1% of the 'working class' (Roux et al., 2008). In support, Kraaykamp et al. (2010) found that, in a sample size of 5,639 participants between 1992-2003, paid employment significantly increased one's likelihood to visit a museum and that higher professionals were 2.33 times more likely than unskilled manual labourers to visit a museum. Family socio-economic status directly affects the cultural participation of children, as high-income families more often guide their children towards cultural activities, which results in those children having a higher degree of cultural participation

than children with a lower socio-economic status (Bitgood, 1993; Gracia, 2015; Karsten & Felder, 2015; Van Hek & Kraaykamp, 2015).

Parents' education influences a child's cultural participation because those activities require additional knowledge. In general, museum visitors have higher educational qualifications than non-visitors (DiMaggio, 1996). As the level of education increases, so does the frequency of cultural participation (Vander Stichele & Laermans, 2006; Prieur & Savage, 2011). Furthermore, children are more likely to have a high level of cultural participation if their parents do so as well, which suggests that as the parents' level of education increases, so does their frequency of cultural participation, and so does their children's frequency of cultural participation (Bandura, 1978; Willekens, 2014). Additionally, Brook (2016) found that education is a strong predictor of museum attendance and that it interacts strongly with other factors, such as ethnicity.

With regards to ethnicity and cultural participation, existing research has mostly focused on the majority population. However, the research that has been conducted on ethnicity as a factor in cultural participation suggests that people who belong to an ethnic minority are less likely to participate in highbrow culture (Van Wel, Couwenbergh-Soeterboek, Couwenbergh, Ter Bogt & Raaijmakers, 2006; Ganzeboom & Nagel, 2007).

Research question and hypothesis

While many studies on cultural participation have been conducted on adults, there is a lack of knowledge on the factors affecting cultural participation among children. This knowledge is important because cultural participation is associated with several benefits, for example that a higher frequency of cultural participation increases one's life satisfaction, and inequalities in accessing those benefits should be prevented (Kim & Kim, 2009). Additionally, children are the key to addressing issues with cultural participation, because a child's cultural participation predicts their cultural participation as an adult (Brook, 2016).

To fill this gap in knowledge, this research was designed to answer the following main question: *"What is the relationship between the socio-economic status and the cultural participation of children?".* The two sub-questions are "*What factors interact with socio-economic status?*" and "*What changes can be seen in the relationship between socio-economic status and the cultural participation of children and interacting factors between 2005 and 2016?*". Socio-economic status was chosen because there is already empirical evidence suggesting it affects cultural participation, while the evidence for other factors is substantially weaker. Therefore, socio-

economic status will be examined as the main variable. The first sub-question was chosen because the literature suggests that other variables may interact with socio-economic status when it comes to cultural participation. The second sub-question was chosen because there were two available datasets from one survey: the oldest from 2005/06 and the most recent from 2016/17. This comparison can show if there has been a development.

The hypothesis for the main research question is that there will be a positive correlation between socio-economic status and cultural participation: as a child's socio-economic status increases, so does their level of cultural participation. This hypothesis is based on research regarding socio-economic status and cultural participation, and the theories suggesting that children's cultural participation is linked to their parents'. The hypothesis for the first sub-question is that there will be interaction effects, in particular when it comes to ethnicity and educational qualifications as this was suggested by the literature. With the regards to the second sub-question, the hypothesis is that socio-economic status will remain positively correlated with cultural participation over time.

Relevance and interdisciplinarity

This research is interdisciplinary as it concerns the disciplines youth studies, social policy and cultural studies by studying children, social factors, and cultural participation respectively. This research is socially relevant as it addresses current issues like inequality between socio-economic groups and is academically relevant because most research into socio-economic status or cultural participation does not originate from an interdisciplinary background like this research does. The results of this research will contribute to society by providing the knowledge necessary to create policy addressing children's income inequality and inequality in cultural participation. Additionally, this research will contribute to scientific knowledge by providing an interdisciplinary view of the issue, which is lacking.

Methods

Quantitative research will be carried out based on pre-existing data from the survey "Taking Part: the National Survey of Culture, Leisure and Sport", years 2005/06 and 2016/17. This is a yearly national survey that has been conducted in the United Kingdom since 2005. To answer the research question *"What is the relationship between the socio-economic status and the cultural participation of children?"*, a number of questions from the survey were selected to reflect the variables 'socio-economic status' and 'cultural participation'. The research focuses on the United Kingdom because it has the seventh most unequal income distribution according to a study of 30 countries part of the Organisation for Economic Co-operation and Development (OECD), and is the fourth most unequal when it comes to income distribution out of 23 European countries featured in the study (The Equality Trust, n.d.). This means that there are wealth gaps between the different socio-economic groups which could make the differences between the groups more clearly visible. Additionally, this research focuses on children aged 11-15 as this age group was also used by the survey from which the data originates.

The two sub-questions are "*What factors interact with socio-economic status?*" and "*What changes can be seen in the relationship between socio-economic status and the cultural participation of children and interacting factors between 2005 and 2016?*". Two potential interacting factors as suggested by the literature are 'ethnicity' and 'educational qualifications'. Comparing datasets from 2005/06 and 2016/17 can provide valuable insights into what affects cultural participation and how this has developed over the years.

Variables

Regarding the variable 'socio-economic status', the UK uses the National Statistics Socio-economic Classification (NS-SEC) system created by the Office for National Statistics (ONS). This system determines a household's socio-economic status by job responsibilities and divides them into nine categories, which can be collapsed into six or four categories (see Table 1). Questions about the participants' NS-SEC classification were featured in both the 2005/06 and 2016/17 survey, so it was suitable. However, the 2005/06 survey asked participants to choose one of nine NS-SEC categories, while the 2016/17 survey asked participants to choose from one of four. In order to fully be able to compare the results, the nine NS-SEC categories from the 2005/06 survey were collapsed into four using the ONS guidelines (see Table 1). The original variable 'hrpsec2' was

therefore recoded into 'nssec4cat' (see Syntax). The variable 'hnssec3' from the 2016/17 survey remained the same.

Table 1: Collapsing NS-SEC categories

Nine classes	**Six classes**	**Four classes**
Higher managerial, administrative and professional occupations	Higher managerial, administrative and professional occupations	Higher managerial, administrative and professional occupations
Large employers and higher managerial and administrative occupations		
Higher professional occupations		
Lower managerial, administrative and professional occupations		
Intermediate occupations	Intermediate occupations	Intermediate occupations
Small employers and own account workers	Small employers and own account workers	
Lower supervisory and technical occupations	Lower supervisory and technical occupations	Routine occupations
Semi-routine occupations	Semi-routine and routine occupations	
Routine occupations		
Never worked and long-term unemployed	Never worked and long-term unemployed	Never worked and long-term unemployed

Considering the variable 'cultural participation', there were multiple options; the survey contained multiple questions about the children's participation in theatre, dance, reading, sports, library visits, museum visits, and heritage site visits. Considering the idea that the concept of 'cultural participation' requires additional knowledge and that museum visits were specifically named as examples, it was decided to use a question about museum visits to measure cultural participation (Kraaykamp et al., 2008). Both the 2005/06 and the 2016/17 surveys featured questions about visiting a museum in the past 12 months, but adjustments to the variables were required. In the 2005/06 survey, the question "In the last 12 months have you been to a museum or gallery out of school lessons?" (cscmuss) was chosen, with the answer options being "yes", "no", or "don't know". The variable 'cscmuss' was recoded into 'cscmuseum' to remove the "don't know" option from the analysis (see Syntax). In the 2016/17 survey, the question that could provide the most similar answers is "Has respondent visited a museum in the last 12 months?" (c11musumact) with answer options "yes, during school lessons", "yes, during spare time", "yes, both", "not done this". This allowed for the creation of a new variable (museum12yesno) which could also answer the question "Have you visited a museum in the last 12 months out of school lessons?" by combining answer options "yes, during spare time" and "yes, both" into the answer option "yes"

and combining "yes, during school lessons" and "not done this" into the answer option "no" (See Syntax). This way, it is possible to compare the results for the variable 'cultural participation' from 2005/06 and 2016/17.

Other included variables were 'ethnicity' and 'educational qualifications'. In both the 2005/06 and 2016/17 survey, adult respondents could answer either "white" or "non-white" when asked about their ethnicity (ethnpsa). The variable 'educational qualifications' (educ2) concerns the parents' education. The adult respondents in the 2005/06 dataset could choose from the following categories: 'high education & professional/vocational equivalents', 'other higher education below degree level', 'A levels, vocational level 3 & equivalents', 'trade apprenticeships', '5 or more GCSE/O Level grades A* -C and L2 equivalents', GCSE/O Level grade A* -C (<5 A*-C) and L1 equivalents' and 'other qualifications: level unknown'. However, the 2016/17 dataset did not include this question in the same dataset containing data on the child's cultural participation, meaning that parent and child data cannot be linked. It was still included in this research because literature indicated that it could play an important role.

Recruitment and participants

Participants were randomly selected from the Post Office's list of addresses in England. This method was possible because the survey was commissioned by the Government and was held to extremely high privacy and data protection standards. The randomly selected addresses received an introductory letter and leaflet, and after a few days an interviewer called to make an appointment for the in-person interview**.** If the household consented to being part of the survey, the interviewer would come by at the agreed upon date. If there were multiple people aged 16 or over in the household, one would be randomly chosen to participate in the interview; parental consent was required if the participant was 16 or 17. If this adult participant had any children aged 5-10, they would be asked questions about that child's cultural participation. If there were any children 11-15 present, they would be interviewed for a short amount of time if parental consent was given. This research will only use the data on children aged 11-15 for which parental consent was given.

Ethical considerations

Multiple ethical considerations were made. Firstly, multiple steps were taken to ensure the protection of participants' privacy: the data in the published dataset was anonymised so that no links can be made between the participants and their answers, only members of the specific project

team had access to the data, access to the data was restricted to on-site computer access only and monitored throughout, and the data protection was certified according to the International Standard of Information Security, ISO 27001. Secondly, participants were well-informed of the procedure to ensure that fully informed consent could be given: upon selection, potential participants were sent an introductory letter and a leaflet, and a follow-up call was made by the interviewer to set a date for the interview. Using this method, potential participants had multiple opportunities to give consent and also to withdraw it. If participants changed their mind after participating, they were also able to request for their data to be removed from the dataset.

Analysis plan

To conduct the analysis, SPSS will be used. Within SPSS, a chi-square test will be used due to the correlational nature of the research question *"What is the relationship between the socio-economic status and the cultural participation of children?".* The chi-square test will show whether there is a relationship between 'socio-economic status' and 'cultural participation', but it will not show whether this relationship is positive or negative. A chi-square test will be used, and not a Pearson correlational test, because both variables are categorical and not numerical. The Cramer's V score will indicate the strength of the correlation. A one-way ANOVA with post-hoc Tukey test will show homogeneity between groups within the variable 'socio-economic status'. A univariate general linear model will be used to calculate the effect size (partial eta squared) of the effect of 'socio-economic status' on 'cultural participation'. Additionally, another univariate general linear model with the added variables 'educational qualifications' and 'ethnicity' will be used to determine whether there are any interaction effects.

The analysis of the chosen questions will be carried out using the 2005/06 and 2016/17 datasets. Besides the individual analysis, the results from both datasets will be compared in order to find out if there has been a change over time. The awareness of a potential change can help make recommendations for future policies.

Results

In the 2005/06 survey, there were 2918 participants. Of these, 1293 (44,3%) indicated that they went to a museum out of school lessons in the past 12 months (see Table 2). Most participants held intermediate occupations (42,7%), completed 5 or more GSCE/O levels (20,5%) and were white (80,2%) (see Table 3, 4, 5).

Table 2: Cultural participation frequencies (2005/06)

in the last 12 months have you been to a museum or gallery outside of school lessons?			
		Frequency	Percent
Valid	Yes	1293	44,3
	No	1583	54,2
	Total	2876	98,6
Missing	System	42	1,4
Total		2918	100,0

In the 2016/17 survey, there were 1603 participants. However, only 373 answered the question about cultural participation, and 55 (14,7%) indicated that they went to a museum out of school lesson in the past 12 months (see Table 6). This can be explained by the fact that the dataset contains the data of children aged 5-15, while only 11-15-year-olds were asked the question. Most participants held higher managerial, administrative and professional occupations (40,6%) and were white (80,9%) (see Table 7, 8).

Table 6: Cultural participation frequencies (2016/17)

Have you visited a museum in the last 12 months out of school lessons?			
		Frequency	Percent
Valid	Yes	55	3,4
	No	318	19,8
	Total	373	23,2
Missing	System	1232	76,8
Total		1605	100,0

The first analysis is a chi-square test of the variables 'socio-economic status' and 'cultural participation' from the 2005/06 data. The null hypothesis is that there is no relationship between the variables 'socio-economic status' and 'cultural participation'. The alternative hypothesis is that there is a relationship between the variables 'socio-economic status' and 'cultural participation'. The null hypothesis will be rejected if the p-value < 0.05. Table 9 and 10 show the descriptive data. The data meets the assumptions necessary to perform a chi-square test: random sampling was used, the data is categorical, and that at least 80% of the cells have a value higher than the expected count (see Table 10). The result of the test is $p = 0.000$ (see Table 11). Since $p = 0.000 < 0.05$, the null hypothesis is rejected, and the alternative hypothesis is accepted: there is a

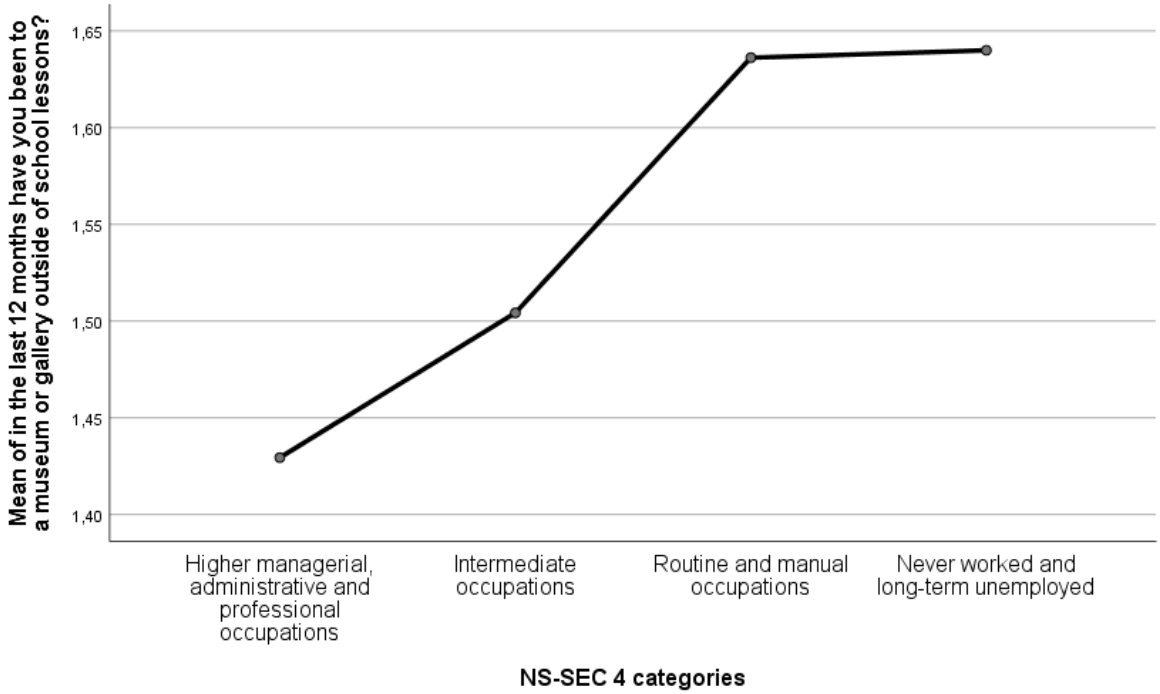
relationship between the variables 'socio-economic status' and 'cultural participation'. However, the Cramer's V score is *0.156*, which indicates that the correlation is weak (see Table 12). Furthermore, neither the chi-square test nor Cramer's V indicate what type of correlation there is: positive or negative.

Table 11: Chi-square test results (2005/06)

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	65,798[a]	3	,000
Likelihood Ratio	66,172	3	,000
Linear-by-Linear Association	60,799	1	,000
N of Valid Cases	2695		
a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 44,79.			

To test the homogeneity of the groups within the variable 'socio-economic status' when it comes to cultural participation, an ANOVA analysis with post-hoc Tukey test was conducted. The results are significant ($p = 0.000$), which means that there are significant differences between groups of the 'socio-economic status' variable when it comes to cultural participation (see Table 13). Table 14 shows between which groups those differences are: between 'never worked and long-term unemployed' and 'intermediate occupations' ($p = 0.040$); "never worked and long-term unemployed' and 'higher managerial, administrative and professional occupations' ($p = 0.001$); 'routine and manual occupations' and 'intermediate occupations' ($p = 0.000$); 'routine and manual occupations' and 'higher managerial, administrative and professional occupations' ($p = 0.000$). The Tukey test also shows that there are two homogenous subsets: 'higher administrative and professional occupations' could be grouped together with 'intermediate occupations', while 'routine and manual occupations' could be grouped together with 'never worked and long-term unemployed' (see Table 15). Figure 1 shows the means plot. The fact that the numbers go up can be explained by the fact that 1 is "yes" and 2 is "no" for 'cultural participation'.

Figure 1: ANOVA means plot for cultural participation grouped by socio-economic status (2005/06)



In order to determine the effect size (partial eta squared), a univariate general linear model analysis was conducted to find the partial eta squared. The result is *0.019*, which denotes a small effect size (see Table 16). This means that the effect is real, but not very visible.

A second univariate general linear model analysis was conducted in order to test for interaction between variables (see Table 17). The dependent variable remained 'cultural participation' and the fixed factors were 'socio-economic status', 'educational qualifications' and 'ethnicity'.

Table 17: General Linear Model results (2005/06)

Tests of Between-Subjects Effects						
Dependent Variable: in the last 12 months have you been to a museum or gallery outside of school lessons?						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	47,015[a]	60	,784	3,332	,000	,071
Intercept	125,197	1	125,197	532,393	,000	,168
NS-SEC 4 Categories	,116	3	,039	,165	,920	,000
- Ethnic group for PSA measurement	1,601	2	,801	3,405	,033	,003
Adult data - Highest qualification	1,205	7	,172	,732	,645	,002
NS-SEC 4 Categories * - Ethnic group for PSA measurement	1,447	3	,482	2,051	,105	,002
NS-SEC 4 Categories * Adult data - Highest qualification	7,876	21	,375	1,595	,042	,013
Adult data - Ethnic group for PSA measurement * Adult data - Highest qualification	1,131	7	,162	,687	,683	,002
NS-SEC 4 Categories * Adult data - Ethnic group for PSA measurement * Adult data - Highest qualification	4,654	17	,274	1,164	,286	,007
Error	619,410	2634	,235			
Total	7159,000	2695				
Corrected Total	666,425	2694				
a. R Squared = ,071 (Adjusted R Squared = ,049)						
b. Computed using alpha = ,05						

While the previous ANOVA showed significant results for the single independent variable 'socio-economic status', the results show that socio-economic status is no longer significant when 'educational qualifications' and 'ethnicity' are included: the p-value for 'socio-economic status' is now $p = 0.920$. The results also show that 'ethnicity' is significant at $p = 0.033 < 0.05$, but that 'educational qualifications' is not significant at $p = 0.645$ (see Table 17). However, the results also

indicate that there is a significant interaction effect between 'socio-economic status' and 'educational qualifications' at $p = 0.042 < 0.05$ with an effect size of *0.013*, which denotes a small effect size. The results do not show significant interaction effects between 'socio-economic status' and 'ethnicity', 'ethnicity' and 'education', or between all three variables.

With regards to the 2016/17 data, the same tests were conducted: Firstly, a chi-square test of the variables 'socio-economic status' and 'cultural participation'. The null hypothesis is that there is no relationship between the variables 'socio-economic status' and 'cultural participation'. The alternative hypothesis is that there is a relationship between the variables 'socio-economic status' and 'cultural participation'. The null hypothesis will be rejected if the p-value < 0.05. The descriptive data is shown in Table 18 and 19. The data meets the assumptions necessary to perform a chi-square test: random sampling was used, the data is categorical, and that at least 80% of the cells have a value higher than the expected count (see Table 19). The result of the test is $p = 0.019$ (see Table 20). Since $p = 0.019 < 0.05$, the null hypothesis is rejected, and the alternative hypothesis is accepted: there is a relationship between the variables 'socio-economic status' and 'cultural participation'. The Cramer's V score is *0.128*, which indicates that the correlation is weak (see Table 21). It also does not indicate whether the correlation is positive or negative.

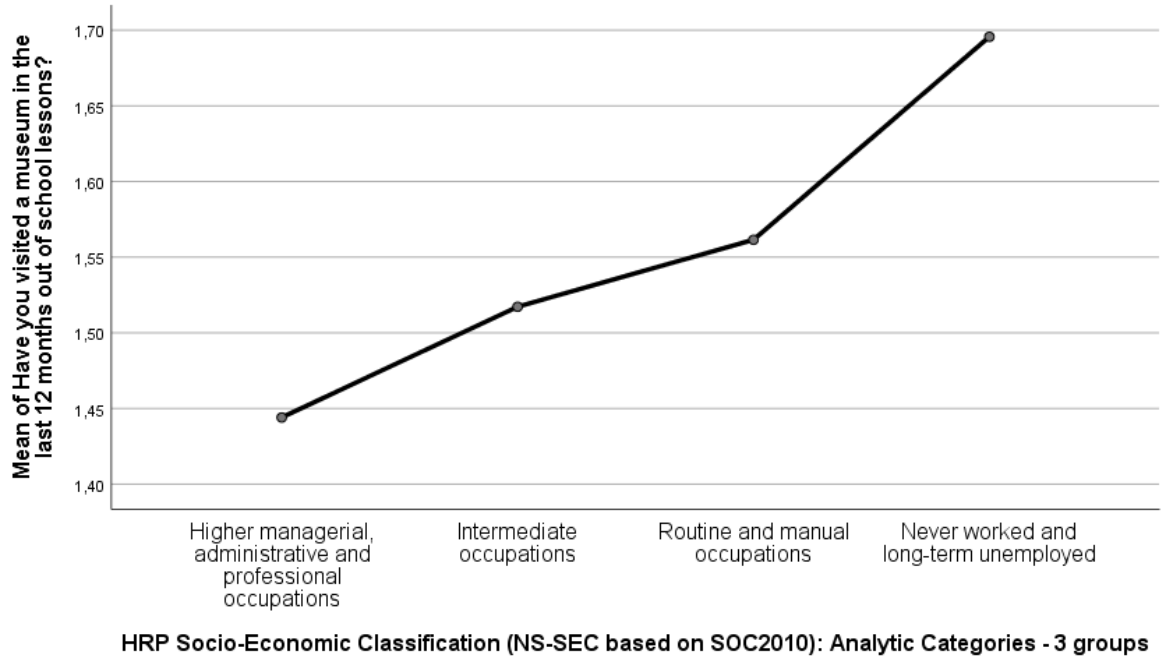
Table 20: Chi-square test results (2016/17)

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9,917[a]	3	,019
Likelihood Ratio	10,027	3	,018
Linear-by-Linear Association	9,458	1	,002
N of Valid Cases	603		
a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 11,40.			

Again, an ANOVA analysis with post-hoc Tukey test was used to gain further insights into the differences between 'socio-economic status' groups when it comes to 'cultural participation'. The results are significant ($p = 0.019$), which suggests that there are significant differences between groups of the 'socio-economic status' variable when it comes to cultural participation (see Table 22). However, Table 23 shows that there are actually no significant differences when only two groups are compared. The Tukey test furthermore indicates that the four groups could be collapsed into two homogenous subsets; two of the four groups could belong in either subset as

long as 'higher administrative and professional occupations' and 'never worked and long-term unemployed' are not grouped together (see Table 24). Figure 2 shows the means plot. The fact that the numbers go up can be explained by the fact that 1 is "yes" and 2 is "no" for the variable 'cultural participation'.

Figure 2: ANOVA means plot for cultural participation grouped by socio-economic status (2016/17)



To determine the effect size (partial eta squared), a univariate general linear model analysis was conducted. The result is *0.016*, a small effect size (see Table 25). This means that the effect is real, but not very visible.

To test for interaction between variables, a second general linear model analysis was conducted (see Table 26). In addition to the previous analysed variable 'socio-economic status', the variable 'ethnicity' was entered into the model. The variable 'educational qualifications', which was present in the 2005/06 dataset, was not included in the 2016/2016 dataset for children and could therefore not be added into the model.

Table 26: General Linear Model Results (2016/17)

Tests of Between-Subjects Effects						
Dependent Variable: Have you visited a museum in the last 12 months out of school lessons?						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1,629[a]	7	,233	1,867	,074	,036
Intercept	572,818	1	572,818	4595,410	,000	,929
HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups	,643	3	,214	1,719	,163	,015
HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups	,251	1	,251	2,017	,156	,006
HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups * Ethnic group for PSA measurement	,150	3	,050	,401	,752	,003
Error	43,503	349	,125			
Total	1269,000	357				
Corrected Total	45,132	356				
a. R Squared = ,036 (Adjusted R Squared = ,017)						
b. Computed using alpha = ,05						

Although prior tests showed significant results for the single independent variable 'socio-economic status', the results show that socio-economic status is no longer significant ($p = 0.163$) when 'ethnicity' is added, nor is 'ethnicity' significant by itself ($p = 0.156$) (see Table 26). The results also indicate that there is no interaction effect between 'socio-economic status' and 'ethnicity' ($p = .752$). However, despite the results not being significant, the results indicate that 'socio-economic status' still has a small effect size at *0.015*.

Discussion

The results have shown that, in 2005/06, socio-economic status correlated with cultural participation. This is in accordance with the theoretical framework. The literature additionally

suggested that it would be a positive correlation: as socio-economic status goes up, so would cultural participation. However, this could not be determined through SPSS because the variables are categorical: only a chi-square test could be used to determine correlation, but it cannot tell whether a correlation is positive or negative. The results also indicated that the correlation was weak; the theoretical framework did not specify the strength of the correlation, just that it would be present. Additionally, the results showed significant differences between the cultural participation of the two lower socio-economic groups and the two higher socio-economic groups, supporting the theoretical framework that there is a difference in cultural participation between socio-economic groups. The small effect size furthermore suggests that socio-economic status has an effect on cultural participation.

With regards to interaction effects, the results showed that socio-economic status significantly interacted with educational qualifications. This supports the literature that indicated that the parental education could have an effect on children's cultural participation. Although the literature also indicated that ethnicity may play a role, the results only suggested an individual effect and did not show an interaction effect.

The results from the 2016/17 dataset show that the weak correlation between socio-economic status and cultural participation that was found in 2005/06 is still present, as the theoretical framework suggested. However, the results showed that there are fewer differences between socio-economic groups when it comes to cultural participation in 2016/17. The cause for this is unknown and could be addressed in future research. However, while the differences between socio-economic groups have gotten smaller, the weak correlation and small effect size have remained, which means that the issue is still relevant. Similarly to the 2005/06 data, the 2016/17 data found no support for an interaction between socio-economic status and ethnicity, but it also did not find that ethnicity by itself had a significant effect. The literature currently offers no explanation for why ethnicity would no longer have an effect on cultural participation. It may be possible that museum are becoming more inclusive, but this requires further research.

Therefore, the answer to the main research question *"What is the relationship between the socio-economic status and the cultural participation of children?"* is that there is a weak correlation between socio-economic status and the cultural participation of children. The answer to the sub-question "*What factors interact with socio-economic status?*" is that ethnicity does not interact with socio-economic status, but that parental educational qualifications do. The final sub-question was "*What changes can be seen in the relationship between socio-economic status and the cultural*

participation of children and interacting factors between 2005 and 2016?". No change could be observed in the relationship between socio-economic status and the cultural participation of children between 2005 and 2016. There was no change with regards to the potential interacting factor ethnicity, which showed no interaction effect. Due to the limitations posed by the dataset, it was not possible to consider parental educational qualifications over time.

This research had several limitations. Firstly, the categorical nature of all variables meant not all SPSS tests could be used. For future research, it is recommended that researchers measure as many variables as possible as continuous variables to avoid this. Secondly, the variables 'socio-economic status' and 'cultural participation' were measured slightly differently in 2005/06 than in 2016/17, meaning that they had to be adjusted in order to make them comparable. Thirdly, the 2016/17 survey split the adult data from the child data whilst the 2005/06 survey linke the adult and child data in one file. This is a major limitation, because the theoretical framework indicated that adult characteristics may be extremely important in predicting the child's cultural participation and by splitting the data this can no longer be studied. Therefore, future research should keep the adult and child data in the same dataset so that the relationship can be studied.

All in all, this research has shown that there is a relationship between socio-economic status and cultural participation, and that this relationship has remained since 2005. It has furthermore shown that socio-economic status interacts with parents' educational qualifications and that ethnicity may not be an interacting factor. This has several implications for policy. Namely, policies should make cultural participation more accessible to people with a lower socio-economic status. National museums in the UK are currently already free of charge to visit but, considering the results of this research, that may not be enough. Considering that people also have to transport themselves to a museum, future research should factor in access to museums and the costs associated with it. Furthermore, more research needs to be done on the effect of parents' educational qualifications on children's cultural participation, as there remains a lack of knowledge. This research confirms that there are many factors involved in cultural participation and that interdisciplinarity should be the basis for any future research into cultural participation.

References

Bandura, A. (1978). Social learning theory of aggression. *Journal of communication*, *28*(3), 12-29. DOI: 10.1111/j.1460-2466.1978.tb01621.x

Bitgood, S. (1993). Social influences on the visitor museum experience. *Visitor Behavior*, *8*(3), 4-5.

Brook, O. (2016). Spatial equity and cultural participation: how access influences attendance at museums and galleries in London. *Cultural Trends*, *25*(1), 21-34. DOI: 10.1080/09548963.2015.1134098

Bourdieu, P. (1984). Distinction: A Social Critique of the Judgment of Taste. Routledge & Kegan Paul, London

Bourdieu, P. (1986). The forms of capital In Richardson, J. G. (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). Greenwood Publishing Group.

Chan, T.W., Goldthorpe, J.H., 2005. The social stratification of theatre, dance and cinema attendance. Cultural Trends 14, 193–212. DOI: 10.1080/09548963.2015.1134098

DiMaggio, P. (1996). Are art-museum visitors different from other people? The relationship between attendance and social and political attitudes in the United States. *Poetics, 24*, 161–180.

Ganzeboom, H., & Nagel, I. (2007). Cultural participation among ethnic minority and native majority adolescents and their parents in the Netherlands. In *ISA RC28 Research Committee on Social Stratification and Mobility, Spring Conference, Bruno, Czech Republic*.

Gracia, P. (2015). Parent–child leisure activities and cultural capital in the United Kingdom: The gendered effects of education and social class. *Social Science Research*, *52*, 290-302. DOI: 10.1016/j.ssresearch.2015.02.005

Jensen, E. A. (2016). Creativity and Culture for All? Enhancing Cultural Participation in Museums and Galleries. In *The Palgrave Handbook of Creativity and Culture Research* (pp. 535-548). Palgrave Macmillan, London.

Kallunki, J. & Purhonen, S. (2017). Intergenerational transmission of cultural capital in Finland. *Research on Finnish Society, 10*, 101-111.

Karsten, L., & Felder, N. (2015). Parents and children consuming the city: Geographies of family outings across class. *Annals of Leisure Research*, *18*(2), 205-218. DOI: 10.1080/11745398.2015.1011679

Katz-Gerro, T., Shavit, Y., 1998. The stratification of leisure and taste: Classes and lifestyles in Israel. *European Sociological Review 14*(4), 369–386. DOI: 10.1093/oxfordjournals.esr.a018245

Kim, S., & Kim, H. (2009). Does cultural capital matter?: Cultural divide and quality of life. *Social Indicators Research*, *93*(2), 295-313.

Kraaykamp, G., van Eijck, K, & Ultee, W. (2010). Status, class, and culture in the Netherlands. *Experimental Psychology*. DOI: 10.1017/CBO9780511712036.007.

Kraaykamp, G., Gils, W. V., & Ultee, W. (2008). Cultural participation and time restrictions: Explaining the frequency of individual and joint cultural visits. *Poetics, 36*, 316. DOI: 10.1016/j.poetic.2007.03.002

Le Roux, B., Rouanet, H., Savage, M., & Warde, A. (2008). Class and cultural division in the UK. *Sociology*, *42*(6), 1049-1071. DOI: 10.1177/0038038508096933

Office for National Statistics. (n.d.). The National Statistics Socio-economic classification (NS-SEC). Retrieved from https://www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/thenationalstatisticssocioeconomicclassificationnssecrebasedonsoc2010

Peterson, R. (1992). Understanding audience segmentation, from elite and mass to omnivore and univore. *Poetics 21*, 243–258.

Prieur, A., & Savage, M. (2011). Updating cultural capital theory: A discussion based on studies in Denmark and in Britain. Poetics, 39(6), 566-580. DOI: 10.1080/14616696.2012.748930

September, S. J., Rich, E. G., & Roman, N. V. (2016). The role of parenting styles and socio-economic status in parents' knowledge of child development. *Early Child Development and Care*, *186*(7), 1060-1078. DOI: 10.1080/03004430.2015.1076399

Stylianou-Lambert, T. (2010). Re-conceptualizing museum audiences: Power, activity, responsibility. *Visitor Studies*, *13*(2), 130-144. DOI: 10.1080/10645578.2010.509693

The Equality Trust. (n.d.). The Scale of Economic Inequality in the UK. Retrieved from https://www.equalitytrust.org.uk/scale-economic-inequality-uk

Van Eijck, K., & Knulst, W. (2005). No more need for snobbism: Highbrow cultural participation in a taste democracy. *European sociological review*, *21*(5), 513-528. DOI: 10.1093/esr/jci038

van Hek, M., & Kraaykamp, G. (2015). How do parents affect cultural participation of their children?: Testing hypotheses on the importance of parental example and active parental guidance. *Poetics*, *52*, 124-138. DOI: 10.1016/j.poetic.2013.05.001

Vander Stichele, A., & Laermans, R. (2006). Cultural participation in Flanders: Testing the cultural omnivore thesis with population data. *Poetics*, *34*(1), 45-64.

Van Wel, F., Couwenbergh-Soeterboek, N., Couwenbergh, C., Ter Bogt, T., & Raaijmakers, Q. (2006). Ethnicity, youth cultural participation, and cultural reproduction in the Netherlands. *Poetics*, *34*(1), 65-82.

Willekens, M., & Lievens, J. (2014). Family (and) culture: The effect of cultural capital within the family on the cultural participation of adolescents. *Poetics*, *42*, 98-113.

Appendix

Table 3: NS-SEC 4 categories frequencies (2005/06)

NS-SEC 4 categories			
		Frequency	Percent
Valid	Higher managerial, administrative and professional occupations	357	12,2
	Intermediate occupations	1194	40,9
	Routine and manual occupations	1083	37,1
	Never worked and long-term unemployed	101	3,5
	Total	2735	93,7
Missing	System	183	6,3
Total		2918	100,0

Table 4: Adult data – Highest qualification frequencies (2005/06)

Adult data - Highest qualification			
		Frequency	Percent
Valid	No associated adult data	68	2,3
	Higher Education & professional/vocational equivalents	533	18,3
	Other Higher Education below degree level	271	9,3
	A levels, vocational level 3 & equivalents	493	16,9
	Trade Apprenticeships	87	3,0
	5 or more GCSE/O Level grades A* -C and L2 equivalents	597	20,5
	GCSE/O Level grade A* -C(< 5 A*-C) and L1 equivalents	293	10,0
	Other qualifications: level unknown	93	3,2
	Total	2435	83,4
Missing	System	483	16,6
Total		2918	100,0

Table 5: Adult data – Ethnic group for PSA measurement frequencies (2005/06)

Adult data - Ethnic group for PSA measurement			
		Frequency	Percent
Valid	No associated adult data	68	2,3
	White	2340	80,2
	Non white	508	17,4
	Total	2916	99,9
Missing	System	2	,1
Total		2918	100,0

Table 7: HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups frequencies (2016/17)

HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups			
		Frequency	Percent
Valid	Higher managerial, administrative and professional occupations	651	40,6
	Intermediate occupations	294	18,3
	Routine and manual occupations	536	33,4
	Never worked and long-term unemployed	63	3,9
	Total	1544	96,2
Missing	Excluded from filter	32	2,0
	No answer	7	,4
	Job not in list	22	1,4
	Total	61	3,8
Total		1605	100,0

Table 8: Ethnic group for PSA measurement frequencies (2016/17)

Ethnic group for PSA measurement			
		Frequency	Percent
Valid	White	1297	80,8
	Non-white	306	19,1
	Total	1603	99,9
Missing	Dont know	2	,1
Total		1605	100,0

Table 9: Chi-square test frequencies (2005/06)

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
in the last 12 months have you been to a museum or gallery outside of school lessons? * NS-SEC 4 categories	2695	92,4%	223	7,6%	2918	100,0 %

Table 10: Chi-square test crosstabulation (2005/06)

in the last 12 months have you been to a museum or gallery outside of school lessons? * NS-SEC 4 categories Crosstabulation						
Count						
		NS-SEC 4 categories				Total
		Higher managerial, administrative and professional occupations	Intermediate occupations	Routine and manual occupations	Never worked and long-term unemployed	
in the last 12 months have you been to a museum or gallery outside of school lessons?	Yes	198	583	390	36	1207
	No	149	593	682	64	1488
Total		347	1176	1072	100	2695

Table 12: Cramer's V (2005/06)

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	,156	,000
	Cramer's V	,156	,000
N of Valid Cases		2695	

Table 13: ANOVA results (2005/06)

ANOVA					
in the last 12 months have you been to a museum or gallery outside of school lessons?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16,271	3	5,424	22,448	,000
Within Groups	650,155	2691	,242		
Total	666,425	2694			

Table 14: Tukey between-group means comparison of 'cultural participation' scores (2005/06)

Multiple Comparisons						
Dependent Variable: in the last 12 months have you been to a museum or gallery outside of school lessons?						
Tukey HSD						
(I) NS-SEC 4 categories	(J) NS-SEC 4 categories	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Higher managerial, administrative and professional occupations	Intermediate occupations	-,07486	,03003	,061	-,1520	,0023
	Routine and manual occupations	-,20680*	,03036	,000	-,2848	-,1288
	Never worked and long-term unemployed	-,21061*	,05579	,001	-,3540	-,0672
Intermediate occupations	Higher managerial, administrative and professional occupations	,07486	,03003	,061	-,0023	,1520
	Routine and manual occupations	-,13194*	,02076	,000	-,1853	-,0786
	Never worked and long-term unemployed	-,13575*	,05120	,040	-,2674	-,0041
Routine and manual occupations	Higher managerial, administrative and professional occupations	,20680*	,03036	,000	,1288	,2848
	Intermediate occupations	,13194*	,02076	,000	,0786	,1853
	Never worked and long-term unemployed	-,00381	,05139	1,000	-,1359	,1283
Never worked and long-term unemployed	Higher managerial, administrative and professional occupations	,21061*	,05579	,001	,0672	,3540
	Intermediate occupations	,13575*	,05120	,040	,0041	,2674
	Routine and manual occupations	,00381	,05139	1,000	-,1283	,1359
*. The mean difference is significant at the 0.05 level.						

Table 15: Tukey grouping information (2005/06)

in the last 12 months have you been to a museum or gallery outside of school lessons?			
Tukey HSD[a,b]			
NS-SEC 4 categories	N	Subset for alpha = 0.05	
		1	2
Higher managerial, administrative and professional occupations	347	1,4294	
Intermediate occupations	1176	1,5043	
Routine and manual occupations	1072		1,6362
Never worked and long-term unemployed	100		1,6400
Sig.		,284	1,000
Means for groups in homogeneous subsets are displayed.			
a. Uses Harmonic Mean Sample Size = 272,758.			
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.			

Table 16: Effect size (2005/06)

Tests of Between-Subjects Effects						
Dependent Variable: In the last 12 months have you been to a museum or gallery?						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	12,971[a]	3	4,324	17,758	,000	,019
Intercept	2274,351	1	2274,351	9341,210	,000	,776
NS-SEC 4 Categories	12,971	3	4,324	17,758	,000	,019
Error	655,922	2694	,243			
Total	6376,000	2698				
Corrected Total	668,893	2697				
a. R Squared = ,019 (Adjusted R Squared = ,018)						

Table 18: Chi-square test frequencies (2016/17)

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Have you visited a museum in the last 12 months out of school lessons? * HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups	603	37,6%	1002	62,4%	1605	100,0 %

Table 19: Chi-square test crosstabulation (2016/17)

Have you visited a museum in the last 12 months out of school lessons? * HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups Crosstabulation						
Count						
		HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups				Total
		Higher managerial, administrative and professional occupations	Intermediate occupations	Routine and manual occupations	Never worked and long-term unemployed	
Have you visited a museum in the last 12 months out of school lessons?	Yes	154	56	82	7	299
	No	123	60	105	16	304
Total		277	116	187	23	603

Table 21: Cramer's V (2016/17)

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	,128	,019
	Cramer's V	,128	,019
N of Valid Cases		603	

Table 22: ANOVA results (2016/17)

ANOVA					
Have you visited a museum in the last 12 months out of school lessons?					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,479	3	,826	3,339	,019
Within Groups	148,261	599	,248		
Total	150,740	602			

Table 23: Tukey between-group means comparison of 'cultural participation' scores (2016/17)

Multiple Comparisons						
Dependent Variable: Have you visited a museum in the last 12 months out of school lessons?						
Tukey HSD						
(I) HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups	(J) HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Higher managerial, administrative and professional occupations	Intermediate occupations	-,07320	,05502	,544	-,2149	,0685
	Routine and manual occupations	-,11745	,04709	,062	-,2388	,0039
	Never worked and long-term unemployed	-,25161	,10796	,092	-,5297	,0265
Intermediate occupations	Higher managerial, administrative and professional occupations	,07320	,05502	,544	-,0685	,2149
	Routine and manual occupations	-,04426	,05880	,876	-,1957	,1072
	Never worked and long-term unemployed	-,17841	,11356	,396	-,4710	,1141
Routine and manual occupations	Higher managerial, administrative and professional occupations	,11745	,04709	,062	-,0039	,2388
	Intermediate occupations	,04426	,05880	,876	-,1072	,1957
	Never worked and long-term unemployed	-,13415	,10993	,614	-,4174	,1491
Never worked and long-term unemployed	Higher managerial, administrative and professional occupations	,25161	,10796	,092	-,0265	,5297
	Intermediate occupations	,17841	,11356	,396	-,1141	,4710
	Routine and manual occupations	,13415	,10993	,614	-,1491	,4174

Table 24: Tukey grouping information (2016/17)

Have you visited a museum in the last 12 months out of school lessons?			
Tukey HSD[a,b]			
HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups	N	Subset for alpha = 0.05	
		1	2
Higher managerial, administrative and professional occupations	277	1,4440	
Intermediate occupations	116	1,5172	1,5172
Routine and manual occupations	187	1,5615	1,5615
Never worked and long-term unemployed	23		1,6957
Sig.		,531	,170
Means for groups in homogeneous subsets are displayed.			
a. Uses Harmonic Mean Sample Size = 65,513.			
b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.			

Table 25: Effect size (2016/17)

Tests of Between-Subjects Effects						
Dependent Variable: Have you visited a museum in the last 12 months out of school lessons?						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2,479[a]	3	,826	3,339	,019	,016
Intercept	633,329	1	633,329	2558,765	,000	,810
HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups	2,479	3	,826	3,339	,019	,016
Error	148,261	599	,248			
Total	1515,000	603				
Corrected Total	150,740	602				
a. R Squared = ,016 (Adjusted R Squared = ,012)						

Syntax

2005/2006

```
GET
  FILE='\\Client\C$\Users\hilde_dp231j\Documents\UKDA-5717-
spss\year_1_2006_child_survey_data.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
RECODE hrpsec2 (8=4) (5 thru 7=3) (3 thru 4=2) (1 thru 2=1) (-6 thru -1=SYSMIS) INTO
nssec4categories.
VARIABLE LABELS  nssec4cat 'NS-SEC 4 categories'.
EXECUTE.

RECODE cscmuss (1=1) (2=2) (-3 thru -1=SYSMIS) INTO cscmuseum.
VARIABLE LABELS  cscmuseum 'In the last 12 months have you been to a museum or gallery out
of school lessons?'.
EXECUTE.

FREQUENCIES VARIABLES=cscmuseum educ2 ethnpsa
  /ORDER=ANALYSIS.

CROSSTABS
  /TABLES=cscmuseum BY nssec4cat
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ PHI
  /CELLS=COUNT
  /COUNT ROUND CELL.

ONEWAY cscmuseum BY nssec4cat
  /STATISTICS DESCRIPTIVES
  /PLOT MEANS
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).

UNIANOVA cscmuseum BY nssec4cat
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /PRINT ETASQ DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /DESIGN=nssec4cat.

UNIANOVA cscmuseum BY nssec4cat educ2 ethnpsa
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=nssec4cat educ2 ethnpsa(TUKEY)
  /PRINT ETASQ DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /DESIGN=nssec4cat educ2 ethnpsa nssec4cat*educ2 nssec4cat*ethnpsa educ2*ethnpsa
    nssec4cat*educ2*ethnpsa.
```

2016/2017

```
GET
  FILE='\\Client\C$\Users\hilde_dp231j\Documents\UKDA-8378-spss\y2016-
17_youth_and_child_data_eul.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.

RECODE c11musumact (2=1) (3=1) (1=2) (4=2) (-8 thru -1=SYSMIS) INTO museum12myesno.
VARIABLE LABELS  museum12myesno `Have you visited a museum in the last 12 months out of
school lessons?'.
EXECUTE.

FREQUENCIES VARIABLES=museum12myesno hnssec3 ethnpsa
```

```
  /ORDER=ANALYSIS.

CROSSTABS
  /TABLES=museum12yesno BY hnssec3
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ PHI
  /CELLS=COUNT
  /COUNT ROUND CELL.

ONEWAY museum12yesno BY hnssec3
  /STATISTICS DESCRIPTIVES
  /PLOT MEANS
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).

UNIANOVA museum12yesno BY hnssec3
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /PRINT ETASQ DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /DESIGN=nssec4cat.

UNIANOVA museum12yesno BY hnssec3 ethnpsa
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=hnssec3 ethnpsa(TUKEY)
  /PRINT ETASQ DESCRIPTIVE
  /CRITERIA=ALPHA(.05)
  /DESIGN=hnssec3 ethnpsa hnssec3*ethnpsa.
```

Questionnaires

This research uses the following questions from the questionnaires.

2005/2006

cscmuss
"In the last 12 months have you been to a museum or gallery out of school lessons?"
Yes
No

hrpsec2
"Adult data - HRP [Respondent or non-respondent] NS-SEC - Analytic categories"
Large employers and higher managerial occupations
Higher professional occupations
Lower professional/managerial occupations
Intermediate occupations
Small employers and own account workers
Lower supervisory and technical occupations
Semi routine occupations
Routine occupations
Never worked

ethnpsa
"Adult data - Ethnic group for PSA measurement"
White
Non-white

educ2
"Adult data - Highest qualification"
Higher Education & professional/vocational equivalents
Other Higher Education below degree level
A levels, vocational level 3 & equivalents
Trade Apprenticeships
5 or more GCSE/O Level grades A* -C and L2 equivalents
GCSE/O Level grade A* -C(< 5 A*-C) and L1 equivalents
Other qualifications: level unknown

2016/2017

c11musumact
"Has respondent visited a museum in last 12 months?"
Yes – During school lessons
Yes – During spare time
Yes – both during school lessons and spare time
No – not done this activity in the last 12 months

hnssec3
"HRP Socio-Economic Classification (NS-SEC based on SOC2010): Analytic Categories - 3 groups"
Higher managerial, administrative and professional occupations
Intermediate occupations
Routine and manual occupations
Never worked and long-term unemployed

ethnpsa
"Adult data - Ethnic group for PSA measurement"
White
Non-white