

Exploring Patterns of Children's Cultural Participation: Parental Cultural Capitals and their Transmission

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Key message

- How parents participate in culture plays a significant role in children's cultural participation
- High parental education provides a 'safety net' that prevents children from being culturally less active
- Parents' limited cultural participation sets barriers to children's enhancement
- Findings point to local policies to diverse social groups and nationwide strategies aiming to widen young audiences

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Introduction

Familiarity with prestigious forms of culture plays an important role in the generation and maintenance of privilege. Existing empirical studies have collected and analysed a broad range of quantitative and qualitative evidence to explore how structural conditions shape participation in cultural activities (e.g. Atkinson, 2017; Bennett et al., 1999; Bourdieu, 1984; Chan, 2010; Silva & Wright, 2005). Within this comprehensive literature, it is widely agreed that cultural competencies are transmitted intergenerationally through long socialisation processes in which families and the social environment, together with schools, are the key sites of cultural learning. Despite this, empirical studies have focused almost exclusively on adults' cultural practices. When the impact of socialisation on cultural activities in childhood is examined, the analysis often relies on adults' reporting of their cultural engagement in childhood (e.g. Scherger &

Savage, 2010). Such retrospective accounts, however, can produce only limited insights into the mechanisms of cultural capital transmission and how they operate in children's participation in arts and culture.

This paper contributes to the literature on inequalities in children's cultural participation by investigating the role of parental cultural capital in the intergenerational transmission of cultural participation. More specifically, it focuses on inequalities that emerge among families with diverse levels of education and cultural participation. Improving the understanding of those inequalities and the role of parents' capital in their transmission is important both from a sociological point of view and for social policy. Recognising this, the UK's Department for Digital, Culture, Media and Sport (DCMS) regularly monitors adults' and children's cultural participation via the Taking Part Survey (DCMS, 2021). While summary reports consistently show significant variations in participation by gender, age, ethnicity and household characteristics, stakeholders such as Arts Council England (ACE) commission more refined but descriptive reports to analyse broad trends in terms of children's levels of cultural activity and the state of equality across the sector (e.g. Oskala et al., 2009). Here, the focus is on the material (access, economics) and psychological barriers that prevent parents and children from engaging with arts and culture. Many social policies in high-income countries, such as England, aim to promote children's opportunities and social mobility by providing educational and training opportunities to parents, particularly those from disadvantaged backgrounds (Department for Education, 2017), but those policies traditionally comprise programmes that strongly emphasise training and skill development, with little or no emphasis on cultural practices within families. While important for job readiness and the economic well-being of families, those policies are likely to have a limited effect in reducing inequalities if parental cultural practices are found to play an important role in the transmission of cultural inequalities. Furthermore, the effectiveness of cultural policies targeting children may depend on parents' cultural capital and background. If the cultural inequalities among children from advantaged and disadvantaged socioeconomic groups are driven largely by parental engagement in arts and culture, this may hinder the potential impact of child-targeted policies. Thus, if parents' cultural engagement and tastes play an important role in the intergenerational transmission of cultural capital and the development of particular cultural tastes, policies entirely focused on exposing children from disadvantaged backgrounds to cultural practices may have a limited effect on children unless they are accompanied by attempts to give parents the opportunity to develop those practices as well. Similarly, if parents' cultural backgrounds are central to the

transmission of cultural capital, then many of the current policies focused on job readiness and designed to support the accumulation of education and skills among parents may have a limited impact on breaking the cycle of cultural transmission unless they include culture capital among the forms of capital targeted by those policies.

Evaluating that possibility requires assessing the simultaneous contributions of parents' education levels and their cultural engagement to their children's cultural participation. To fill these knowledge gaps, this paper examines data from the Taking Part Survey (2016/2017) to characterise the cultural participation patterns of parents and their children. Through multiple correspondence and hierarchical cluster analysis, culturally homogenous groups are identified in order to analyse the role of parental cultural participation in children's cultural inequalities among families with diverse levels of education (i.e. parental institutional cultural capital). The paper evaluates the roles of parental cultural participation and education in explaining the unequal distribution of cultural participation among children.

Children's Cultural Participation: Practical, Theoretical and Empirical Concerns

The benefits of cultural participation in young people's lives are well documented by academic and policy research. An active cultural life in the early years produces immediate positive effects, such as improved well-being, communication skills and self-confidence (Bungay & Vella-Burrows, 2013; Mak et al., 2020). It is suggested that childhood exposure generates a lifelong enjoyment of the arts, benefitting the sector as well as children themselves. It is also believed to benefit the wider community, as it contributes to a more skilled workforce and negatively correlates with anti-social behaviour (Oskala et al., 2009). Therefore, enhancing children's cultural participation has been identified as a priority by policymakers and stakeholders; hence, the number of projects aiming to increase the participation of children from diverse social groups has increased in recent years (e.g. ACE, 2019). In addition to increasing the overall engagement of young people, stakeholders aim to level the playing field and achieve equality and diversity. For instance, increasing every child's opportunity to experience art and culture is a goal of ACE's 10-year strategic framework and is linked to specific, closely monitored action plans (Blood et al., 2016). However, the current evidence suggests that children's participation in culture in England is in decline and remains highly stratified (Blood et al., 2016; DCMS, 2017). The strongest correlation with level of engagement is parental socioeconomic background and circumstances. The most recent research suggests

that children of unemployed parents or working in manual roles are 40% less likely to engage in the performing arts and 36% less likely to visit a museum or heritage site than the children of those in professional jobs (Mak & Fancourt, 2021). Children with lower socioeconomic backgrounds are also less likely to play musical instruments, engage in formal cultural activities or be able to define *drama*, *concerts*, *arts* or *culture* without direction (Blood et al., 2016). This strong segregation by social class is found to be intersectionally reinforced by gender, disability, ethnicity and geographical location.

The structure of cultural engagement in both childhood and adulthood has been a major concern of researchers studying class inequalities. The cultural turn in class analysis has inspired increasing interest in looking beyond material resources to explain the reproduction of inequalities (Bottero, 2004). Bourdieusian concepts, such as habitus, cultural capital and embodiment, have been employed in diverse national contexts and social fields to demonstrate that culture has its own economy (e.g. Bennet et al., 2009; Kahma & Tohikka, 2012; Roose et al., 2012). A central assumption is that those who are highly endowed with capital have an advantage in defining what is considered to be legitimate, respected culture, creating a hierarchy in cultural and artistic forms and activities that is often perceived as natural despite its links to social structure. The value attributed to opera, for instance, stems from its appreciation by highly cultured enthusiasts, cultural intermediaries and institutions rather than deriving from any intrinsic quality. The same process works in the opposite direction, with the cultural activities appreciated by those with low cultural capital often being denigrated as banal, tasteless and unsophisticated.

Ample empirical research has demonstrated in detail how cultural tastes contribute to how individuals define themselves and others and engage in exclusionary practices in daily life (e.g. Friedman & Kuipers, 2013; Yalvaç & Karademir Hazır, 2021). Moreover, embodied tastes generate advantages and disadvantages in the field of work, giving those who come from the same cultural background a sense of familiarity and solidarity. Participating in the 'right' cultural activities and developing an embodied habit of appreciating them increases one's chances of establishing the 'right' social network and desirable positions in traditionally middle-class occupations (e.g. Friedman & Laurison, 2019).

That being said, a linear hierarchical model of class taste has been strongly challenged, especially after the emergence of the cultural omnivore debate. The omnivore concept suggests that the boundaries of legitimate culture have become more permeable due to emerging large-

scale changes, such as cosmopolitanism (Peterson, 1992, 2005; for a review, see Hazir & Warde, 2015). Here, the traditional uniform highbrow repertoire is superseded by a new one characterised by openness to the appreciation of a broad range of cultural forms and genres, including ones that were once denigrated as popular. Some researchers believe that the rise of the omnivore signals an increase in cultural tolerance and democratization (Chan, 2019), but others regard it as a new tool for performing distinction (e.g. Atkinson, 2011; Flemmen et al., 2018).

This article advances these debates by contributing to the understanding of how cultural capital operates at the point of reproduction. For instance, do parents with a traditional highbrow repertoire broaden their children's cultural participation given the supposed social value attributed to omnivorousness? More broadly, how far and in what ways does parents' engagement shape their children's? These questions are highly relevant, as addressing them will shed light on the structure of cultural inequality, on potential ways to tackle it in the coming generation and on the effectiveness of those approaches across social groups.

Formation of Children's Cultural Profiles

Because cultural tastes and participation are considered to be important in class formation processes, scholars have paid great attention to how individuals learn to appreciate various cultural forms. Which factors, beyond material conditions, shape patterns in cultural engagement as early as childhood? Two explanations compete in the literature, one emphasising the role of formal education and the other focused on the role of parental cultural practices in shaping children's cultural socialisation. We refer to the former as the cultural mobility model and to the latter as the cultural reproduction model. Both models agree that high-culture forms are more complex than popular forms and thus require a sophisticated interpretation and decoding practice at the receiving end (Ganzeboom, 1982). However, the cultural mobility model suggests that this competency does not necessarily draw upon what children learn or see at home (primary socialisation) but may develop through formal schooling (secondary socialisation). More broadly, this theory assumes that new resources, networks and opportunities can lead to cultural enrichment and upward mobility. Steib's (2017) overview suggests that there is empirical evidence that culturally disadvantaged children can gain access to high cultural capital regardless of their family's status (Chin & Phillips, 2004; Kisida et al., 2014) and that this access helps them get ahead (Aschaffenburg & Maas, 1997). Formal

education has a significant role in this process, as it constitutes the most institutionalised agent of secondary socialisation. For instance, DiMaggio and Useem (1978) show that education level predicts participation in high arts, suggesting that schooling is important for 'deciphering the more esoteric codes of highbrow culture' (p. 150). Such findings point to the significance of cultural policies aiming to enhance children's opportunities through education and exposure to the arts outside the family. They also provide a more optimistic view of the reproduction of cultural inequalities, as it is simpler to invest in education than in family socialisation.

The alternative (and more prominent) model is cultural reproduction, which posits an intervening factor—cultural capital—that determines the extent to which children benefit from and fit into the cultural cultivation offered in schools. As defined by Bourdieu (1984, 2018), cultural capital embraces cultural competencies, knowledge and sophistication and is initially acquired in the family. This mechanism of transmission from the parents to the children is difficult to pinpoint because it occurs through a long process of socialisation in which parents inspire their children with their cultural practices, encourage them to engage in various cultural forms and create opportunities for them to learn how to appreciate 'good taste' (cf. Sullivan, 2008). Children embody these notions and habits unconsciously, putting them in advantageous (or disadvantageous) positions in other social fields in the future. Because schools' and teachers' perspectives align with these notions, children who have experienced high-cultural capital socialisation also do better at school (de Graaf et al., 2000; DiMaggio & Mohr, 1985). Qualitative studies largely corroborate this finding, showing that diverse parenting cultures form distinct cultural profiles in children through engagement (or not) with extracurricular enrichment activities (Lareau, 2000; Lareau & Weininger, 2003; Smyth, 2016).

Bourdieu offers an imprecise account of how transmission occurs in the family setting (Sullivan, 2001, 2008), but a growing body of literature empirically examines the processes of intergenerational transmission of cultural participation. Most of these studies draw on adults' retrospective accounts of their childhood and their parents' cultural participation at the time. Such studies find a strong correlation between parent's engagement and their children's participation as grown-ups (Scherger & Savage, 2010; Van Eijck, 1996). In England, for instance, children's future educational attainment depends heavily on the cultural capital they accumulate through childhood socialisation (Scherger & Savage, 2010). Children who are socialised in culturally active households are more likely to be upwardly mobile, regardless of the cultural socialisation they have in formal education. A recent study by Kallunki (2022) demonstrates that the link between family socialisation and cultural profiles is very persistent,

even in a national context such as Finland, where the long-term aim of the country's cultural policy has been to 'democratize' highbrow culture. Using retrospective data collected from adults, Kallunki (2022) found an almost symmetrical correlation between parental and children's participation. Going a step further, the author also shows that not only the volume of engagement, but the engagement type (e.g. highbrow, popular, crafts) is reproduced symmetrically in the next generation.

This family effect can be further disentangled. For instance, whether or not the mother's or father's profile shapes children's participation more directly has been questioned empirically (Willekens et al 2014). Also, different strategies of parental encouragement; such as setting a parental example vs actively participating in events together with children are compared in terms of their success in the transmission process (Willekens et al 2014). In some studies, it has become evident that the impact of family background cannot be fully captured by just taking parental participation or capital levels into consideration. Such studies, using sibling analysis to incorporate the impact of unmeasured family background, showed that the total effects of family background may be even larger than the measured example of parental cultural participation (Nagel & Ganzeboom, 2002; Van Eijck, 1997).

Analytical Focus and Models

While this growing body of quantitative research has shed more light on the transmission of cultural participation, several issues still need to be addressed. Perhaps because the field is dominated by studies comparing school and family, children's engagement per se has not been a matter of interest but merely a tool for examining the roles of these competing institutions. However, family and school operate independently in generating cultural profiles (Nagel & Ganzeboom, 2002) and thus need to be investigated separately.

When zooming in on family processes, one must further disentangle various forms of parental cultural capital, as each operates differently in the transmission process (Kraaykamp & Van Eijck, 2010). In quantitative empirical research, institutional cultural capital (ICC) is often measured by educational credentials whereas embodied cultural capital (ECC) is operationalised via cultural participation and taste indicators. Parental ICC (pICC) has a proven effect on children's ECC (cECC); children growing up in an intellectual home climate tend to develop an interest in highbrow culture (Kraaykamp et al., 2007; Van Eijck, 1997). Ample evidence shows that parental ECC (pECC) also affects cECC. Culturally active parents start to

socialise their children early on, which increases the chances of their children developing a taste for highbrow culture (Kraaykamp & Nieuwbeerta, 2000; Mohr & DiMaggio, 1995). However, there is still limited understanding of the role played by pICC and pECC in cultural transmission, especially in relation to children's diverse profiles of cultural participation.

Another area meriting attention is how ECC is operationalised in the transmission literature. Most studies take participation in highbrow culture as an indicator of ECC (e.g. Kraaykamp & Van Eijck, 2010). Although this has been useful in discovering links between pECC and cECC, only a partial picture emerges when using a single type of vertical stratification (highbrow vs. lowbrow) to explore the formation of children's cultural engagement. Extensive research on adults' cultural participation has revealed the complex positioning of cultural profiles on social fields horizontally as well as vertically. For instance, Flemmen et al. (2018) have identified eclectic, cosmopolitan profiles that are closely adjacent to traditional highbrow participation but differ in terms of content and exchange value. Everyday activities and digital engagement have also been identified as being of potentially high value (e.g. Leguina & Downey, 2021). Therefore, there is a need to look at the transmission process and children's participation profiles through less restrictive lenses than those offered by traditional low-to-high cultural hierarchies.

Simultaneously, it is surprising that the theoretical and methodological interest in patterns of cultural preferences, from a consumption perspective, has not yet been directed at children's engagement in arts and culture outside school (cf. Mak & Fancourt, 2021). Most studies on cultural transmission and children's participation have relied on adults' retrospective accounts of childhood, mainly due to the lack of data on participation during childhood. Here, the limitation is that models of cultural transmission are based on participants' memories of childhood, which are arguably less reliable than *in situ* accounts.

In sum, with the aforementioned exceptions, sociological research has largely failed to explore the relative effects of pICC and pECC in shaping cECC. This study addresses that gap and, more specifically, relationally examines children's and parents' current engagement profiles in the context of the conditions within which they emerge, making it possible to explore patterns in children's engagement and seek evidence of the transmission process from a broader perspective. The first part of the paper explores children's and parents' distinct profiles of cultural participation by asking the following research questions:

RQ1: Is it possible to identify profiles of cultural participation across children and parents/guardians?

RQ2: What is the composition of these in terms of activities and demographics?

The second part of the paper considers the role of pECC in unequal cECC among families with diverse levels of pICC.

RQ3a: After controlling for pECC, is it possible to observe a relationship between pICC and cECC?

RQ3b: Does the effect of pECC on cECC depend on pICC?

Methodology

The Taking Part Survey (TPS) is an annual face-to-face survey of a representative sample of the English population aged 16 years and above. The TPS questionnaire asks a broad range of fixed and rotating questions on cultural participation, covering fine and performing arts, sport, leisure and free time activities and a growing variety of media and digital activities. Although still biased in favour of highbrow culture, TPS data have featured in the academic literature exploring a wide variety of topics related to cultural consumption and inequalities (e.g. Leguina & Miles, 2017; Leguina et al., 2021; Mihelj et al., 2019). Far less known is the child proxy survey, conducted in households with one or more children aged 5–10 years. This questionnaire asks the parent or guardian about the activities that one randomly selected child of the household participated in outside school. The total sample size for 2016/2017 was 9,352 for adults and 967 for children (DCMS, 2021). While the data offer a rich source for studying the transmission of cultural capital, the limitations of the TPS should be acknowledged. The available data set has a limited capacity to capture the full range of children's cultural activities, particularly those associated with digital and mundane practices. Also, the data are collected from only one child in the household, restricting the possibility of studying the role of siblings and family structures. Nonetheless, these weaknesses are outweighed by the survey's detailed range of variables, which are fairly comparable across parents/guardians and children.

To answer RQ1, the first part of the analysis looks separately at children's and parents/guardians' trends in cultural participation. Due to the limited availability of cultural participation indicators, particularly in the case of the children's sample, this takes a different

approach to the more traditional Bourdieusian research in the area. Instead of focusing on their spaces of participation, we separately apply multiple correspondence analysis (MCA) to a broadly comparable selection of indicators of children's and parental participation. (A detailed presentation of MCA and the other statistical methods used in this research is provided in the glossary section of the Appendix.) This technique makes it possible to summarise a series of qualitative variables into numerical indices, reducing the number of variables for analysis (Le Roux & Rouanet, 2004) and facilitating the implementation of classification techniques. The variables measuring adult participation (21 dichotomic indicators measuring the respondents' activities in the past 12 months) include a combination of everyday activities (such as dining out and shopping), sport and mid- and highbrow activities, such as watching movies in cinemas and attending concerts, theatre, street arts, museums and galleries. Children's participation (23 dichotomic indicators measuring the respondents' activities in the past 12 months outside school) includes attending, doing/practicing and taking formal lessons on domains such as sport, drama, music, arts and crafts, cinema, museums/galleries and heritage/monuments. A full list of indicators and their frequencies is presented in the Appendix (Tables A.1 and A.2).

The next task in the analysis was to determine whether there were distinct groups based on cultural participation and, if so, to describe their demographic composition. This was done by applying ascending hierarchical cluster analysis (HCA) to MCA's first three dimensions. Although the second and third axes retained considerably less variance than the first axis, especially in terms of their Benzécri's modified rates, they were still informative in terms of cultural differentiation and provided a fuller picture of patterned cultural participation (Bennett et al., 2009). This became clearer when inspecting the unmodified variance rates calculated directly from the axes' eigenvalues (variance). The demographic composition of children's and parental profiles of participation was explored by household income (low, medium, high), occupational class (higher managerial; intermediate; small employers and self-employed; lower supervisory and technical; semi-routine and routine; non-classified), deprivation (high, medium, low) and children's gender (male, female) and ethnicity (white, BAME).

The second part of the analysis sought to identify the shape of the relationship between pICC and pECC by addressing RQ3a and RQ3b. Here, the analysis focused on the combined information from 828 parents and children within households with complete information. Children's ECC was operationalised as membership in the profiles of cultural participation derived in the previous step. Similarly, pECC was operationalised according to parental participation clusters. Parental ICC as educational level was measured in four categories: lower

secondary (including GCSE/O Level grades A*–C, L1 and L2 equivalents), vocational (trade apprenticeships), upper secondary/lower tertiary (A levels, vocational level 3, other higher education below the degree level and equivalents) and tertiary (higher education and professional equivalents). Following Erikson et al. (2005) and Buis (2010), RQ3a was answered by testing a mediation model via the counterfactual decomposition approach. This framework can be used to compare observed odds ratios (ORs) to hypothetical counterfactual estimates of what would have happened to the cECC if the pECC had no effect on the children's engagement in arts and culture. Note, however, that the counterfactual analysis provides no evidence of how pICC and pECC interact to produce cECC. The influence of pECC as well as whether that influence varies by pICC (RQ3b) was addressed by moderation analysis. Specifically, various logit models were used to investigate that question. The comparison of coefficients across models offers insights into the influence of pICC, pECC and their interactions.

Results

As an initial step, MCA was applied to children's indicators of participation in arts and culture. The first three MCA axes retained a large portion of Benzécri's modified variance (unmodified rates): the first axis retained 78.7% (19.9%), the second 8.2% (9.3%) and the third 6.4% (8.8%). Next, distinctive profiles were obtained by applying HCA to MCA's first three retained axes. The results revealed that a four-cluster solution was best. Table 1 summarises the main categories that are overrepresented by cluster, all of which yielded significant test values (95%), indicating a relatively large presence of the characteristic.

Cluster 1 (17.5%) identifies children engaged with many forms of culture. The characteristic most significantly distinguishing this group from the others is an overrepresentation of children formally learning and practicing traditional highbrow forms, such as dance, performance and music, which most likely require the expenditure of household cultural and economic capital as well as investments in time and access to facilities. This cluster is therefore labelled as *highbrow*. Cluster 2 (15.9%) also identifies active kids, but now mostly in arts and crafts, museum and heritage visits, media, reading and sport. Simultaneously, this group is overrepresented in not learning or practicing dance. Unlike the previous group, this cluster's members seem to be characterised by a mix of activities that vary in terms of their prestige, with reading and visits to museums (*highbrow*), arts and crafts and heritage visits (*popular*) and

digital and street arts (emerging) taking a more predominant role. This group's engagement profile was considered *eclectic*. Cluster 3 (33.5%) identifies those active mostly in watching films or videos, visiting venues such as museums and heritage sites, attending the theatre or music events and participating in sport. Interestingly, their engagement is characterised by physical visits to mainstream events and seems to be less interested in reading and writing as well as emerging and typical performance-based highbrow culture. Children in this group were labelled as engaged mostly with *popular* forms of culture. Lastly, cluster 4 (33.1%) identifies profiles of inactivity within the limited set of variables used in our analysis. Here, activities relevant to the popular cluster are rarely undertaken. This cluster is therefore labelled *restricted* in their participation in arts and culture.

TABLE 1 HERE

In terms of demographics, Table A.3 in the Appendix reveals considerable differences across the four groups, which is consistent with previous research (Hazir & Warde, 2015; Mak & Fancourt, 2021). Although the children in the highbrow and eclectic groups share some participatory experiences, their demographic profiles differ. The former contains a large proportion of girls and is predominantly white while the latter has a considerably higher proportion of boys and non-white members across all groups. In terms of economic and cultural capital, unsurprisingly, members of the highbrow group are characterised by the highest levels of income, education and occupational class as well coming from areas with the least deprivation. Eclectics, however, seem to come from households with a similar parental educational level but lower economic resources than children in the popular cluster. This group also has a larger proportion of boys and those of white ethnicity. As expected, the restricted group contains the largest proportion of children from disadvantaged backgrounds and comprises a significant number of BAME children.

To construct profiles of pECC, we used the same procedure as for the children's data and performed an MCA and HCA for parental participation in arts and culture. The retained Benzécri's modified variance (unmodified rates) was 95.4% (22.4%) for the first axis, 4.3% (8.5%) for the second and 0.3% (5.7%) for the third. Here, the method indicated that a three-cluster solution was best. Table 2 summarises the categories that are overrepresented by cluster, of which all yielded significant test values (95%), indicating a relatively large presence of the characteristic.

TABLE 2 HERE

The first of these groups (33.1%) was labelled *eclectic* and identifies those displaying above average (and, in many cases, the highest) rates in the most activities. Members of this group combine activities that are varied in terms of their prestige, such as attending arts and culture events, reading, participating in sport and mundane activities, such as spending time with family/friends, going out and watching TV. The second group (39.7%) comprises those active mostly in popular, media-related and everyday forms of engagement, with the exception of visiting heritage sites. As in the case of children, we labelled this cluster *popular*. The third and last group (27.2%) is characterised by inactivity in the set of variables used in our analysis. As in the case of children, activities relevant to the popular cluster are not undertaken. This cluster was therefore labelled *restricted* in their participation in arts and culture. Reflecting the previous literature and consistent with the case of children, Table A.4 reveals the differences in the clusters' demographic and capital compositions (Hazir & Warde, 2015; Leguina et al., 2016). Interestingly, the analysis did not find a homogenous highbrow participation profile for parents but instead an eclectic one common to highly educated populations.

The exploration then turned to the empirical links between pICC and pECC and their potential roles in influencing cECC (RQ3a and RQ3b). Table 3 clearly shows important differences in cECC by pICC (light grey cells). For example, while only 8.05% of parents with lower secondary education had children belonging to the highbrow cluster, that figure goes up to 24.07% for parents with university degrees. The opposite is seen in the case of children in the restricted cluster (58.62% v. 15.74%). Although less obviously, popular and eclectic cECC are also related to higher pICC. The differences in pECC by pICC (dark grey cells) reflect the clear differences that formal credentials produce in cultural participation. Again, the differences are more marked for pECC profiles with contrasting practices. Among those with lower secondary education, 14.94% belong to the eclectic cluster and 35.63% to the restricted group. In comparison, among respondents with university degrees, 57.72% are classified as eclectics and only 11.11% belong to the restricted group. These discrepancies likely contribute to explaining the difference in cECC discussed in the previous point.

The evidence in Table 3 reveals important differences in the probability of children's cluster membership among educational groups even when conditioned on pICC, which suggests that education affects children's cultural participation beyond its influence via pECC. Thus, if pICC played no role beyond defining pECC, then the conditional probabilities across pICC groups controlled by pECC should be similar. As shown by the figures in the white cells (also referred

to as row percents), however, this is not the case. For instance, among parents in the lower ICC (lower secondary education) and belonging to the restricted pECC, 83.87% of their children belong to the restricted cECC. For those parents in the higher pICC (degree) who also have a restricted pECC, the figure decreases to 52.78%. Similarly, parents with an eclectic pECC and a lower pICC see 7.69% of their children displaying highbrow cECC in contrast to 36.36% of their counterparts with a higher pICC.

TABLE 3 HERE

To characterise inequalities in children's cultural participation, we estimated, for each education group, the odds of children belonging to a given cECC cluster j defined as $\frac{\Pr(\text{cECC cluster}=j)}{1-\Pr(\text{cECC cluster}=j)}$ – and then used those estimates to derive ORs for all possible pairwise comparisons of education groups. Table 4 reports the ORs based on the results in Table 3. For the analyses, we focused on those cases in which the OR was either very large (>1.5) or very small (<0.5). The ORs show, for example, that the odds of belonging to the highbrow cluster for children with parents having a university degree are 3.62 greater than those of children from families with lower secondary education. The former group also has 2.82 times the odds of belonging to the highbrow cluster if they have a parent with upper secondary education than do children from families with lower secondary education. Less marked differences in the same direction are observed for the eclectic and popular cECC profiles. However, in the case of children from the restricted group, the odds of its members having parents with a high pICC are considerably lower. As expected, the largest differences are generally found between those groups that are further apart in pICC (degree vs. lower secondary).

TABLE 4 HERE

Having shown how considerable are the potential effects of pECC and pICC on children's cultural engagement, we statistically tested the form these effects take. Table 5 summarises the results of the decomposition proposed by model 1 (mediation) for pICC across selected cases (those with very large and very small ORs as identified above). The table includes two alternative estimates of the pECC's indirect effect (see Erickson et al., 2005): the average contribution of the indirect effect relative to the total effect as well as the standard error of that contribution and the corresponding p-values. The results of the decomposition suggest that pECC explains some of the differences in children's cultural engagement. This is particularly true for the highbrow and restricted cultural profiles, in which differences in pECC among the pICC groups account for more than half of the differences in the ORs for belonging to those

clusters. Given that parents with a higher education are more likely to be eclectics, their cultural engagement has a significant impact on making their children more likely to have higher cultural engagement and less likely to be in the popular or restricted group. In the case of parents with an ICC lower than degree, their lower pECC (membership in the popular or restricted group) considerably impacts their children's ECC, increasing their chances of belonging to the restricted cECC (Coulangeon, 2017). The contribution of pECC to children's membership in the eclectic and popular groups seems to be smaller, which suggests that, for those clusters, the effect of pICC is not mediated by pECC. This does not mean that the effect of pICC is stronger, merely that pECC does not seem to contribute to explaining the relationship between pICC and cECC. The estimates presented here may be less precise and have larger standard errors in cases with a small number of observations, so there may be effects not possible to capture by the sample.

TABLE 5 HERE

The analysis next evaluated the influence of parental educational level and whether that influence varies with their cultural engagement. RQ3b was addressed by adjusting model 2 (moderation) to the data. Table 6 summarises the results of the full models, i.e. including interaction effects (iv). Tables A.5 to A.7 in the Appendix show the first model, controlled only for pICC (i), the second, controlled only for pECC (ii), and the third, controlled for both pICC and pECC (iii). Consistent with the evidence from the counterfactual analyses, a noticeable decrease in the values of the estimated coefficients for education from models i to iii confirms the identified mediation effects across groups with higher and lower education. Except in the case of children's membership in the popular cluster, no interaction effects are statistically significant. Parents in the eclectic group are more likely to have children belonging to the highbrow and eclectic cultural profiles. At the same time, parents in that engagement profile are considerably less likely to have children in the restricted participation profile. The logistic model predicting membership in the restricted group also shows that possession of a university degree reduces the chance of children displaying this pattern of cultural participation.

TABLE 6 HERE

The popular cluster seems to differ from the other cECC clusters. The estimated coefficients for education have a less sharp decline when controlling for pECC. Here, statistically significant interaction effects show that children of parents with lower education and eclectic participation are more likely to be part of the popular cluster. In addition, children of parents with upper secondary education and eclectic participation are less likely to belong to the active

cluster. This suggests the existence of a differentiated effect of higher parental participation (eclectic) across those with the lower educational level. It could be argued that, in combination, ICC and ECC facilitate cultural mobility, leading to children displaying a popular participation profile, but it could also be argued that, among parents with a lower educational level, a higher ECC by itself is not enough to ensure their children's participation in ways that resemble the profiles with higher engagement (eclectic and highbrow).

Conclusion

Despite the interest shown in children's cultural participation in England (e.g. Mak & Fancourt, 2021), its structure has not been studied in detail as in the case of adults. Also understudied heretofore is the mechanism behind the formation of children's cultural profiles and their links with parental capital. This paper aimed to fill this gap by disentangling the effects of cultural capital, operationalised as parental level of education and profile of cultural engagement, on the intergenerational transmission of tastes and habits. Such an analysis provides the greater granularity needed to unpack the relative strengths and significance of parents' participation vis-à-vis their education in shaping young children's current engagement with arts and culture. Unlike the previous literature, which has focused narrowly on participation in highbrow practices, cECC was operationalised as clusters, generating a richer insight into diverse types of engagement. Methodologically, this research used available data and combined methods of classification (MCA and HCA) with regression models to study two distinct specifications (mediation and moderation) for the process of intergenerational transmission of cultural inequalities.

The first important contribution of the paper is demonstrating the homogeneous vertical and horizontal patterns in children's engagement. For instance, the analysis revealed an eclectic profile, indicating that a disposition to appreciate activities with varying levels of prestige is being transmitted to the next generation, especially amongst the highly educated. This is in line with the debate on the rise of the cultural omnivore and its links to privilege (Hazır & Warde, 2015). The findings also suggest that this is a gendered phenomenon; girls are more likely to engage in or be directed to traditionally highbrow culture whereas boys are more likely to combine activities from various zones of prestige. Ethnic background is also highly significant; white children tend to benefit from an active cultural life more than BAME children, which helps them accumulate cultural capital from an early age onward. These findings are consistent with earlier research on the links between gender (e.g. Christin, 2012), ethnicity (e.g. Paredes,

2016) and adults' cultural participation, pointing to the reproduction of a similar structure in the coming generations. The findings on young children with a restricted profile are worrying, as they show that, despite policy interventions, large groups of children have been excluded from even mundane cultural practices that are often taken for granted, such as dining out and spending time with friends and family.

The association between children's clusters and parents' education levels suggests, as expected, a strong link between the two, providing support for the cultural reproduction thesis (Bourdieu, 1984, 2018). However, the analysis presented in this paper clearly shows the complexity of this process. For instance, intermediate degrees of ICC in parents do not guarantee highbrow or eclectic participation among children. In other words, children from these households do not automatically develop a disposition to enjoy highbrow culture due to their parents' educational credentials. How parents participate in culture plays a significant role in the accumulation of ECC in children. The transmission of privilege is more prominent in parents' who are active themselves and who have the capacity to transmit the repertoire. In a similar vein, children with restricted participation embody low levels of ECC not only because of their parents' relative lack of education but also because their parents' limited cultural participation sets barriers to children's enhancement. The example of parents can be expected to provide a motivational force in this process (e.g. van Hek & Kraaykamp, 2015). That being said, high pICC, regardless of how parents engage with culture, still provides a 'safety net' that prevents children from households with higher education from being culturally less active.

The analysis in this paper also sheds light on the cultural transmission process, as it shows how differently parental capital affects children in various participation clusters. The previous literature, especially the research stream comparing the social reproduction thesis to the social mobility thesis, has shown the role played by family vis-à-vis that of educational institutions in the formation of cultural repertoires (e.g. Blaskó, 2003), but little is known about the varying mechanisms of family transmission across socioeconomic and cultural contexts. While parents' broad cultural engagement plays a prominent role in their children's displaying highbrow or eclectic profiles of participation, parents' popular and restricted types of participation increase their children's chances of becoming culturally less active.

The new evidence in this paper provides insights into the dynamics of cultural accumulation and the role of embodied and institutional forms of capital in the intergenerational transmission of cultural participation and tastes. Our results suggest that greater parental participation

(eclectic), when combined with lower levels of education, is not enough to help children develop highly active profiles and increases only their chances of displaying a popular cultural profile. The results of our counterfactual decomposition analyses provide evidence regarding the important role of pECC in explaining inequalities in children's cultural participation patterns, particularly between children from families with the highest and lowest levels of institutionalised capital as measured by education. This, we argue, has important implications for the design of social policies aimed at closing the cultural gap between socioeconomic groups.

Given the important role of parents' cultural practices in driving inequalities in cultural patterns among children, social policies focused exclusively on influencing the cultural participation of excluded children may have limited success not only in the short term but also in the long term if the children's parents continue to have restricted cultural engagement. Similarly, because education alone is not enough to explain children's cultural patterns, policies focused on education and training opportunities for parents could have a limited impact on shaping the practices of children located at the lower end of the participation spectrum. Cultural transmission processes are far too complex to be tackled by a single policy strategy. Clearly, the factors contributing to the formation of children's profiles are varied and operate differently across class groups. These findings can be interpreted as pointing to a need for micro level, local policies tailored to diverse social groups in addition to large-scale, nationwide strategies aiming to diversify young cultural audiences.

Despite the limitations inherent in using a restricted database, this study combined techniques traditionally used for Bourdieusian cultural class analysis with regression techniques from economics and policy evaluation. Such a fruitful cross-fertilization can be further advanced by looking at the research questions longitudinally to determine how the influence of parental capital on children's cultural engagement changes over time, which would provide a more refined understanding of the structural conditions shaping children's chances of cultural mobility as well as potential ways of tackling the intergenerational transmission of inequality.

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Conflict of interest

The Authors declare that there is no conflict of interest.

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Table 1. Children's profiles of cultural participation derived from HCA and the most representative categories (n = 967)

Cluster label	Most representative categories (% within cluster)
Highbrow (17.5%)	Perform dance (81.6), Take part in a dance lesson (65.6), Perform music (67.4), Attend a dance event (43.7), Take part in a music lesson (43.1), Attend theatre performances (65), Visit heritage sites/buildings (92.8), Do street arts (62.7), Rehearse or perform in a play/drama (19.5), Visit a museum (82.2), Attend a live music event (52), Do write and reading (95.2), Watch and discuss film or videos in a lesson (82.8), Do arts and crafts (45.5), Do sports (92.8), Attend writing or reading events (15.3), Attend exhibition of arts or craft work (30.1), Do media based activities (19.5)
Eclectic (15.9%)	Do arts and crafts (99.3), Attend exhibition of arts or craft work (87.6), Do media based activities (27.2), Visit museum (74.6), Do not take part in a dance lesson (94.8), Visit heritage sites/buildings (84.4), Do write and reading (93.5), No perform dance (85), Attend writing or reading events (14.9), Do street arts (48), Attend a live music event (40.9), Do sports (89.6)
Popular (33.5%)	Watch and discuss film or videos in a lesson (92.9), Do not attend exhibition of arts or craft work (97.8), Visit heritage sites/buildings (91.6), Do not take part in a dance lesson (96.6), No arts and crafts (83.9), Do not attend exhibition of arts or craft work (94.4), Visit museum (73.7), No perform dance (86.7), Attend theatre performances (49), Attend a live music event (41.3), No perform music (83.9), Do not take part in a drama lesson (97.8), No media based activities (91.9), No music lesson (91), No dance event (90.7) No writing or reading events (94.4), No made or appeared in films or videos (99.6)
Restricted (33.1%)	Do not attend a live music event (95.3), Do not attend theatre performances (91.5), Do not watch and discuss film or videos in a lesson (60), No visit museum (74.3), Do not visit heritage sites/buildings (67.8), No arts and crafts (90.3), Do not attend exhibition of arts or craft work (97.1), No sports (35), No street arts (82.5), No perform music (90), No dance event (97.8), Do not attend a live music event (96.2), Do not perform dance (87.5), Do not take part in a dance lesson (94), No writing or reading events (23.7), No media based activities (93.1), No writing or reading events (95.6), No made or appeared in films or videos (100), No arts, crafts, design or photography lesson (95.9), No drama lesson (96.5)

Table 2. Parental profiles of cultural participation derived from HCA and the most representative categories (N = 9,352)

Cluster name	Most representative categories (% within cluster)
Eclectic (33.1%)	Spend time with friends/family (96.8), Read (88.1), Listen to music (88.9), Day out or visits to places (93.3), Eat out at restaurant (90.5), Go to pubs/bars/clubs (60.5), DIY (50.7), Do sports (97), Attend a live music performance (65.9), Attend a live dance event (28.7), Attend the theatre (64), Event connected with books or writing (11.4), Attend arts and craft exhibition (62), Attend street arts (62.2), Watched a film at a cinema (80.6), Producing original digital art (8.6), Visit a museum (92.4), Visit heritage sites/buildings (98.2), Shopping (81.3), Play computer games (29.3), Watch TV (92)
Popular (39.7%)	Spend time with friends/family (97.2), Listen to music (87.5), Watch TV (97.5), Day out or visits to places (80.5), Eat out at restaurant (85.1), Go to pubs/bars/clubs (53.9), DIY (48.5), Shopping (87.7), Play computer games (34.8), Do not attend a live music performance (73.6), Do not attend a live dance event (96.6), Do not attend the theatre (83), No event connected with books or writing (98.6), Do not attend arts and craft exhibition (94.3), Do not attend street arts (86.1), Do not visit a museum (61.6), No produce original digital art (98.7), Do sports (89.5), Visit heritage sites/buildings (75.9)
Restricted (27.2%)	No Spend time with friends/family (38), No Read (55.6), No Listen to music (53.5), No Watch TV (20), No Days out or visits to places (78.9), No Eat out at restaurants (73.4), No Go to pubs/bars/clubs (82.9), No DIY (83.2), No Shopping (54.1), No Play computer games (85.2), No Sport/physical activity (35), Do not attend a live music performance (89.6), Do not attend a live dance event (97.4), Do not attend the theatre (91.1), No event connected with books or writing (99.2), Do not attend arts and craft exhibition (95.6), Do not attend street arts (88.9), No cinema (79.7), Do not visit a museum (77.2), Visit heritage sites/buildings (57.7), No produce original digital art (99.4)

Table 3. Conditional distribution of cultural participation by parental education cultural profiles (n = 828)

Parental education/cultural participation		Children cultural participation				Total
		Highbrow	Eclectic	Popular	Restricted	
Lower secondary		8.05	9.20	24.14	58.62	100.00
Eclectic	14.94	7.69	23.08	69.23	0.00	100.00
Popular	49.43	9.30	11.63	20.93	58.14	100.00
Restricted	35.63	6.45	0.00	9.68	83.87	100.00
	100.00					
Vocational		14.09	16.78	33.56	35.57	100.00
Eclectic	24.83	27.03	29.73	43.24	0.00	100.00
Popular	57.72	10.47	12.79	33.72	43.02	100.00
Restricted	17.45	7.69	11.54	19.23	61.54	100.00
	100.00					
Upper secondary/low tertiary		19.78	15.47	32.37	32.37	100.00
Eclectic	29.50	45.12	25.61	29.27	0.00	100.00
Popular	47.84	9.77	15.04	42.86	32.33	100.00
Restricted	22.66	7.94	3.17	14.29	74.60	100.00
	100.00					
University degree		24.07	18.83	41.36	15.74	100.00
Eclectic	57.72	36.36	20.32	41.71	1.60	100.00
Popular	31.17	8.91	17.82	44.55	28.71	100.00
Restricted	11.11	2.78	13.89	30.56	52.78	100.00
	100.00					

Table 4. ORs for children's cultural clusters by parental education (n = 828)

Parental education	Children cultural participation			
	Highbrow	Eclectic	Popular	Restricted
Tertiary vs lower sec.	3.62	2.29	2.22	0.13
Tertiary vs vocational	1.93	1.15	1.40	0.34
Tertiary vs upper sec.	1.29	1.27	1.47	0.39
Upper sec. vs lower sec.	2.82	1.81	1.50	0.34
Upper sec. vs vocational	1.50	0.91	0.95	0.87
Vocational vs lower sec.	1.87	1.99	1.59	0.39

Table 5. Results of counterfactual decomposition predicting children's belonging across selected parental educational levels (n = 828)

	Odds ratio	Ln odds ratio	pECC eff1	pECC eff2	pECC effect (%)	Std. error	p-value
cECC=Highbrow							
Degree vs lower sec.	3.62	1.29	0.80	0.81	62.37	29.42	0.034
Upper sec. vs lower sec.	2.82	1.04	0.36	0.35	34.11	22.53	0.130
Vocational vs lower sec.	1.87	0.63	0.31	0.31	49.09	220.74	0.824
Degree vs vocational	1.93	0.66	0.49	0.50	75.15	127.86	0.557
cECC=Eclectic							
Degree vs lower sec.	2.29	0.83	0.41	0.41	49.94	252.38	0.843
Upper sec. vs lower sec.	1.81	0.59	0.18	0.18	29.84	768.29	0.969
Vocational vs lower sec.	1.99	0.69	0.17	0.17	24.13	51.81	0.641
cECC=Popular							
Degree vs lower sec.	2.22	0.80	0.24	0.24	29.59	27.04	0.274
Vocational vs lower sec.	1.59	0.46	0.10	0.10	20.98	230.81	0.928
cECC=Restricted							
Degree vs lower sec.	0.13	-2.03	-1.07	-1.03	51.69	7.80	0.000
Upper sec. vs lower sec.	0.34	-1.09	-0.42	-0.41	38.36	10.69	0.000
Vocational vs lower sec.	0.39	-0.94	-0.43	-0.46	47.10	16.46	0.004
Degree vs vocational	0.34	-1.08	-0.59	-0.54	52.14	12.14	0.000
Degree vs upper sec.	0.39	-0.94	-0.63	-0.63	66.72	15.15	0.000

Table 6. Logistic regression models, including interaction terms, predicting children's cultural participation (n = 828)

	Children cultural participation							
	Highbrow		Eclectic		Popular		Restricted	
	Coef.	S.E.	Coef.	SE.	Coef.	S.E.	Coef.	S.E.
Education (base=Vocational)								
Lower sec.	-0.130	0.632	-0.108	0.575	-0.653	0.439	0.609	0.378
Upper sec.	-0.075	0.458	0.187	0.404	0.388	0.288	-0.457	0.286
Tertiary	-0.177	0.496	0.391	0.415	0.457	0.303	-0.628*	0.310
Parental part. (base=Popular)								
Eclectic	1.153*	0.511	1.059*	0.483	0.403	0.403	-3.206***	0.622
Restricted	-0.338	0.816	-0.117	0.694	-0.759	0.547	0.75	0.458
Interactions								
L. sec.#Eclectic	-1.360	1.273	-0.235	0.945	1.736*	0.815	0	n.e.
L. sec #Restr.	-0.058	1.215	0	n.e.	-0.145	0.900	0.569	0.738
U. sec.#Eclectic	0.873	0.629	-0.394	0.597	-0.998*	0.502	0	n.e.
U. sec.#Restr.	0.109	0.984	-1.568	1.028	-0.744	0.678	1.065	0.573
Tertiary#Eclectic	0.611	0.637	-0.897	0.578	-0.519	0.474	0	n.e.
Tertiary #Rest.	-0.892	1.348	-0.178	0.884	0.157	0.686	0.269	0.608
Constant	-2.146***	0.352	-1.919***	0.323	-0.675**	0.228	-0.28	0.218

Appendix

Glossary of statistical methods used in the analysis

Multiple correspondence analysis (MCA)

MCA is a multidimensional technique for the analysis of categorical data (Le Roux & Rouanet, 2004). It decomposes the main sources of variation into fewer dimensions and provides summary values, which can be plotted as clouds to visualise the interrelations among individuals and variables. The resulting lower-dimensional space represents the interrelations among individuals and variables, and the distance between them indicates their degree of similarity.

Hierarchical cluster analysis (HCA)

Cluster analysis is a family of exploratory statistical procedures that classify individuals in a finite number of groups based on their similitude or 'distance' (Le Roux & Rouanet, 2004). The exploratory nature of cluster analysis algorithms allows data to reveal the 'natural' grouping of observations. The procedure used here, HCA with Ward's linkage criteria, ensures that clusters are as different as possible while the observations within each cluster are as similar to one another as possible. The optimal number of groups is determined by adequate variance retention (percent), exploration of dendrograms and cluster silhouette values, which ensures cohesion and separation within and between groups and the substantive meaningfulness of the ultimate solution.

Mediation model via counterfactual decomposition

An odds ratio (OR) is a measure of the association between two binary variables that determines how the presence or absence of one variable affects the presence or absence of a second variable (OR=1: no association; OR>1: a positive outcome of the first variable increases the likelihood of a positive outcome of the second variable; OR<1: a positive outcome of one variable reduces the likelihood of a positive outcome of the second).

In this research, for each cECC profile found using multiple correspondence and cluster analysis, the ORs of belonging to that profile are compared vis-à-vis having parents with various pICCs. The framework assumes that the probability of a child's belonging to a cultural cluster can be modelled parametrically using a logistic model, such as the following:

$$\text{Model 1: } \Pr(\text{Child's cluster} = 1 | \text{pICC}, \text{pECC}) = \Lambda(\alpha + \beta * \text{pICC} + \gamma * \text{pECC}) + \epsilon_i$$

This is a statistical model, part of the family of generalised linear models that is suitable for cases in which the dependent variable takes the form of a categorical variable of two categories; in this particular application, it enables deriving counterfactuals to estimate the indirect effect of pICC (i.e. the effect of pICC mediated by pECC) as the difference between the total and direct effects. Here, the total effect of pICC is obtained from a logistic model not controlled for pECC, and the direct effect of pICC is its effect from the model including both pICC and pECC. A detailed description of counterfactual decomposition can be found in Buis (2010).

Moderation analysis and logit model

The influence of pECC and whether that influence varies by pICC was addressed by moderation analysis that adjusted various logit models, such as the following:

$$\text{Model 2: Pr}(Child's\ cluster = 1 | pICC, pECC) \\ = \Lambda(\alpha + \beta * pICC + \gamma * pECC + \theta * pICC * pECC) + \epsilon_i$$

where $\theta * pICC * pECC$ captures the interaction effects that evaluate whether the impact of pECC varies by pICC. Four models were estimated: one that controlled only for income (model i), a second that controlled only for parental culture (model ii), a third that controlled for both income and parental culture (model iii) and a final model (iv) that included interaction effects.

Tables

A.1 Parental set of cultural indicators and frequencies.

	Done in the past twelve months	
	No	Yes
Spend time with friends/family	12.5	87.5
Read	31.3	68.7
Listen to music	23.1	76.9
Watch TV	9.0	91.0
Days out or visits to places	31.4	68.6
Eat out at restaurants	29.0	71.0
Go to pubs/bars/clubs	53.9	46.1
DIY	59.4	40.6
Shopping	25.8	74.2
Play computer games/computer games on a digital device	72.4	27.6
Sport/physical activity in last 4 weeks	14.7	85.3
Attended a live music performance (not karaoke)	64.9	35.1
Attended a live dance event	88.5	11.5
Attended the theatre	69.7	30.3
Attended event connected with books or writing	95.5	4.5
Attended crafts or visual art exhibition	76.0	24.0
Attended street arts event	70.9	29.1
Watched movie in the cinema	47.2	52.8
Attended digital arts event	96.5	3.5
Visited museums or galleries	48.0	52.0
Visited heritage sites or historic building	25.8	74.2

A.2 Children set of cultural indicators and frequencies.

Done in the past twelve months outside school		
	No	Yes
Do dance	74.8	25.2
Attended a dance event	87.2	12.8
Taken part in a dance lesson	84.6	15.4
Do music	74.9	25.1
Attended a live music event	69.0	31.0
Taken part in a music lesson	86.2	13.8
Rehearsed or performed in a play/drama or drama club	98.9	1.1
Attended theatre performances such as plays, pantomime, opera, musicals or comedy	63.6	36.4
Taken part in a drama lesson	94.2	5.8
Do write or reading	15.2	84.8
Attend write or reading event	91.6	8.4
Taken part in an English Literature lesson	96.7	3.3
Do arts and crafts	67.6	32.4
Attended exhibition of arts, photography or other craft work	79.1	20.9
Taken part in an arts, crafts, design or photography lesson	93.4	6.6
Do street art	62.3	37.7
Made or appeared in films or videos for artistic purposes	98.4	1.6
Attended the cinema or an outdoor film screening	29.9	70.1
Watched and discussed film or videos in a lesson or film society	97.0	3.0
Do media based activities (PC)	87.3	12.7
Visited a museum	40.5	59.5
Visited heritage sits or historic buildings	29.0	71.0
Sport/physical activity in last 4 weeks	16.3	83.7

A.3. Children profiles of cultural participation derived from HCA according to overrepresented sociodemographic characteristics (per cents) (n = 967).

			Highbrow	Eclectic	Popular	Restricted
Children	Genre	Male	26.1%	55.5%	60.0%	51.8%
		Female	73.9%	44.5%	40.0%	48.2%
	Ethnicity	White	88.8%	81.6%	88.1%	73.1%
		Non-white	11.2%	18.4%	11.9%	26.9%
Parental	Income	Low	10.9%	22.4%	15.6%	34.9%
		Mid	40.1%	34.4%	29.8%	44.0%
		High	49.0%	43.2%	54.6%	21.1%
	NSSEC	Higher managerial	49.7%	36.5%	49.8%	22.0%
		Intermediate	14.9%	19.0%	20.3%	15.1%
		Small employers and self employed	6.8%	7.3%	4.4%	8.6%
		Lower supervisory and technical	7.5%	6.6%	5.1%	6.9%
		Semi-routine and routine	19.3%	27.7%	16.6%	38.8%
		Non classified	1.9%	2.9%	3.7%	8.6%
		High	25.5%	32.8%	22.7%	48.6%
	Deprivation	Mid	37.3%	38.7%	37.6%	30.2%
		Low	37.3%	28.5%	39.7%	21.2%
		Tertiary	48.4%	44.5%	45.4%	20.8%
Highest qualification	Upper secondary/Lower tertiary	34.2%	31.4%	30.5%	36.7%	
	Vocational	13.0%	18.2%	16.9%	21.6%	
	Lower secondary	4.3%	5.8%	7.1%	20.8%	

A.4. Parental profiles of cultural participation derived from HCA according to overrepresented sociodemographic characteristics (per cents) (n = 9352).

		Eclectic	Popular	Restricted
Gender	Male	33.5%	32.2%	30.8%
	Female	66.5%	67.8%	69.2%
Ethnicity	White	84.3%	78.5%	61.5%
	BAME	15.7%	21.5%	38.5%
Income	Low	9.2%	24.2%	41.1%
	Mid	30.8%	40.1%	41.1%
	High	59.9%	35.7%	17.8%
NSSEC	Higher managerial	55.5%	33.3%	21.2%
	Intermediate	17.9%	17.1%	17.9%
	Small employers and self employed	5.0%	7.7%	7.1%
	Lower supervisory and technical	5.0%	8.0%	5.1%
	Semi-routine and routine	14.7%	30.3%	35.9%
Deprivation	Non classified	1.9%	3.6%	12.8%
	High	22.3%	33.9%	50.0%
	Mid	36.1%	36.6%	32.1%
	Low	41.7%	29.5%	17.9%
Highest qualification	Tertiary	48.4%	44.5%	45.4%
	Upper secondary/Lower tertiary	34.2%	31.4%	30.5%
	Vocational	13.0%	18.2%	16.9%
	Lower secondary	4.3%	5.8%	7.1%

A.5. Logistic regression models i-iii, predicting children's membership to highbrow cultural profile (n = 828)

Highbrow	Model i		Model ii		Model iii	
	Coef.	Std.error	Coef.	Std.error	Coef.	Std.error
Education (base=Vocational)						
Lower sec.	-0.628	0.459			-0.391	0.480
Upper sec.	0.407	0.279			0.37	0.296
Degree	0.658*	0.269			0.106	0.290
Parental participation (base=popular)						
Eclectic			1.678***	0.213	1.673***	0.222
Restricted			-0.443	0.372	-0.431	0.374
Constant	-1.807***	0.235	-2.237***	0.178	-2.379***	0.279

A.6. Logistic regression models i-iii, predicting children's membership to eclectic cultural profile (n = 828)

Eclectic	Model i		Model ii		Model iii	
	Coef.	Std.error	Coef.	Std.error	Coef.	Std.error
Education (base=Vocational)						
Lower sec.	-0.688	0.431			-0.514	0.437
Upper sec.	-0.096	0.275			-0.093	0.279
Degree	0.14	0.261			-0.078	0.273
Parental participation (base=popular)						
Eclectic			0.529**	0.199	0.508*	0.209
Restricted			-0.936**	0.359	-0.901*	0.360
Constant	-1.601***	0.219	-1.744***	0.147	-1.634***	0.237

A.7. Logistic regression models i-iii, predicting children's membership to popular cultural profile (n = 828)

Popular	Model i		Model ii		Model iii	
	Coef.	Std.error	Coef.	Std.error	Coef.	Std.error
Education (base=Vocational)						
Lower sec.	-0.462	0.305			-0.315	0.311
Upper sec.	-0.053	0.216			-0.003	0.219
Degree	0.333	0.207			0.305	0.216
Parental participation (base=popular)						
Eclectic			0.052	0.157	-0.066	0.166
Restricted			-1.054***	0.235	-1.023***	0.236
Constant	-0.683***	0.173	-0.465***	0.108	-0.515**	0.185

A.8. Logistic regression models i-iii, predicting children's membership to restricted cultural profile (n = 828)

Restricted	Model i		Model ii		Model iii	
	Coef.	Std.error	Coef.	Std.error	Coef.	Std.error
Education (base=Vocational)						
Lower sec.	0.942	0.277			0.727*	0.323
Upper sec.	-0.142	0.214			-0.186	0.246
Degree	-1.083***	0.229			-0.522*	0.267
Parental participation (base=popular)						
Eclectic			-4.121***	0.590	-3.961***	0.593
Restricted			1.346***	0.205	1.32***	0.209
Constant	-0.594	0.171	-0.535***	0.109	-0.421*	0.200