

## **Case Study 1 - Out-of-school activities and the attainment gap: a mixed methods exploration of secondary data analysis with narrative intersectional analysis**

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*This chapter describes methodologies used in the project 'Out-of-school activities and the education gap'. The project explored how the out-of-school environment affects children, whether it impacts on primary school attainment, and whether it reinforces existing socio-economic differences. A mixed methods approach combined three areas of research: statistical analysis of the Millennium Cohort Study (MCS) linked to the National Pupil Database (NPD); a qualitative study through interviews with key stakeholders in ten schools in London and the North East; and the articulation of theories of change for how out-of-school activities may affect attainment. Patterns in how children spend their time, and whether and how this affects attainment, were investigated by analysis of the MCS linked to the NPD. Qualitative research with parents, teachers, pupils, and activity providers from schools in London and the North-East afforded an in-depth understanding of drivers and barriers influencing how children spend their time, and pathways by which activities may affect children's learning and development. The qualitative research also provided a narrative intersectional analysis of responses in terms of class, gender, ethnicity, religion, and disability. Mixing quantitative and qualitative research was made difficult by the volume of data and the time needed to analyse and report each area separately, the different nature of data in the three areas of research, and the timing of each phase of data collection. However, meaningful combining of methods occurred at the level of research questions and contributed to a more critical analysis of children's out-of-school activities than had been possible before.*

*Keywords: Millenium Cohort Study (MCS), National Pupil Database (NPD), theory of change, intersectionality, out-of-school activities, mixed methods*

### **Introduction**

The project 'Out-of-school activities and the education gap' investigated whether and how out-of-school activities affect primary school children's attainment. The research was carried out in 2015-17 with a team of researchers at an independent research agency, and by the authors at Newcastle University's Centre for Learning and Teaching. It was funded by Nuffield Foundation. We defined extra-curricular activity as "a learning activity outside normal school hours that children take part in voluntarily. We looked at both organised activities with adult supervision and unsupervised activities (such as watching TV, caring, homework and reading).

This chapter considers our methods and how we intended to use them to be better placed to understand children's out-of-school lives and the implications of certain aspects of those lives for a range of outcomes. We aimed to combine large-scale secondary data analysis, purposefully collected qualitative data analysis of interviews, and theoretical analysis. This chapter looks at the more comprehensive picture of children's out-of-school lives that we were able to present as a result of the research, and at the challenges and potential affordances in not fully realising the ambition to combine different areas of data. First we summarise our methods and discuss the trajectory of how we approached combining them. Next we briefly present the kinds of analyses we carried out and illustrate these with some of our main findings. Finally we discuss how far we were actually able to combine the methods and consider

some issues in using diverse datasets to approach educational questions about children's out-of-school lives.

## **Background**

### **The need for a mixed methods approach**

Children's out-of-school time is shaped in a number of ways. They engage in activities, both structured for them by others and that they engage in without adult organisation. The arrangements for caring for children vary, and many young people themselves also have caring responsibilities. These arrangements and responsibilities shape and are shaped by some of their relationships. The engagement of children in activities both at home and outside can provide opportunities to develop other relationships and skills. The ways that children spend their time influence children's social and cultural capital by connecting them to networks of people and knowledge. We know that children differ in their responsibilities and in the activities engaged in. Some of the differences amount to inequalities in what is accessible to them according to a range of factors including the economic capital available to them.

Much was known about the effect of the home learning environment on very young children, but less about the varied nature of out-of-school environments and how these affect older young children. Previous research tended to focus on the out-of-school activities of a wide age range or on older children (Sutton Trust, 2014). Whilst previous research had looked at broad differences in background there was no fine-grained analysis of any difference across activities of children according to varied ages and backgrounds. Where there has been detailed analysis it has often been of particular activities or of a relatively small sample of children (Anderson, Wilson, & Fielding, 1988; Becker, Dearden, & Aldridge, 2000). There was a pressing need for larger scale and more detailed in-depth research that could look at the possible relationship between out-of-school activities and educational attainment. What was needed was a more comprehensive analysis of how children spent their out-of-school time, an analysis of the link between access to out-of-school activities and attainment, particularly for disadvantaged children, and an analysis of how out-of-school activities are accessed by and offered to young people. It became clear to us that both a more large-scale comprehensive analysis and a more fine-grained analysis was needed across children's activities and interests - rather than of a small group of activities - and at a scale that could look at background effects and association with attainment.

We applied to do this research partly because the secondary data had become available: there was another wave of the MCS (11yrs), and it was going to be possible for the first time to link the MCS with the NPD. It was clear that a more in-depth analysis of the ways that activities were engaged with at the level of the school and the family was needed. A mixed methods approach to this area was therefore taken, combining large-scale secondary data analysis with case studies that could look in detail at perceptions of and access to activities. The research questions the project aimed to address were:

1. *How do children spend their out-of-school time during Key Stages 1 and 2? Are there patterns in how children spend their time in organised activities and at home? How does time use vary by socio-economic background, gender, ethnicity, current and prior parental employment status, attitudes, school characteristics, and region?*
2. *Does children's time use in out-of-school hours affect attainment? Which types of activities predict attainment? Are some activities stronger predictors than others? What are the mechanisms underlying this? How does the relationship between activities and attainment vary for different children?*

Mixed methods approach to social science research has a robust literature going back to Denzin's ideas of triangulation (Denzin, 1970). Greene, Kreider and Mayer (2005) state that 'Using methods that gather and represent human phenomena with numbers (such as standardized questionnaires and structured observation protocols), along with methods that gather and represent human phenomena with words (such as open-ended interviews and unstructured observations), are classic instances of mixing data gathering and analysis techniques' (p.274). They argue that mixing methods has the potential to offer a better understanding of social phenomena.

There were three components, both quantitative and qualitative, to our research which our analysis aimed to combine:

- **Secondary data analysis** using the MCS to describe what a large number of children do out-of-school and linking to the NPD to explore associations with educational outcomes;
- **School case studies** enabling the analysis of the extra-curricular provision of schools, looking at 10 schools in London and 10 in Newcastle; and
- **Theory-building**, looking at possible theories for any links between out-of-school activities and educational outcomes.

**Secondary data analysis** used the MCS and the NPD. This was the first time that the MCS was linked to the NPD to analyse the possible association with attainment. The MCS is a longitudinal birth cohort study that has been tracking 19,000 children born in the UK during 2000-01. We carried out secondary analysis of the MCS to identify patterns in how children spend their time and the activities they are involved in. Data on 11,762 UK cohort children were available to us at three time points during their primary school education: at age 5; age 7; and age 11. We examined activities that are not only organised (i.e. structured) but also informal, and we consider activity in relation to a number of background factors such as economic disadvantage, class, ethnicity, gender and geographical location. Aspects of the frequencies of some of the activities were recorded. These data were analysed to form a picture of the activities children took part in outside the classroom. Structured activities included: breakfast clubs; after school clubs; religious activities; music lessons; sports clubs; and childcare. Informal activities included: watching TV; reading for pleasure; homework; playing out unsupervised; socialising with friends; playing with parents; doing chores; and caring responsibilities. Latent class analysis was used to see whether children could be grouped based on the organised activities they took part in at different time points. This technique divides individuals into discreet, non-overlapping, groups on the basis of their answers to survey questions (or in this case, children's parents' answers). Although there was much we could find out by interrogating this database (for example many questions including sub-questions about frequency), there were limits as a result of the nature of the data that had been collected. There was also a lot of detail about the activities

that was not included in the survey questions, and there were areas of out-of-school activities that were omitted.

In addition to our analysis of the uptake of out-of-school activities by the whole UK sample we looked at links between English pupils' access to out-of-school activities and their educational attainment. We also looked at whether there were particular effects for those facing economic disadvantage. To do this the MCS was linked to the NPD and analysed using multiple linear regression and binary logistic regression, to consider relationships between out-of-school activities and attainment. We used this to examine the activities of a sub-sample of 6430 disadvantaged English children (26% of the total). For the purposes of this paper disadvantage was defined as below 60% of median equivalised family income at two of the three time periods (i.e. poor in two out of 5yr, 7yr and 11yr). These children were from England only since the disadvantage analysis was carried out only on the children linked to the English NPD.

***School case studies*** used qualitative data from interviews with head teachers and teachers, parents, pupils and activity providers in 10 schools in London and the North East. We looked at what was accessed through different schools, and at perceived barriers, facilitators, and impacts. The schools varied in size, in the proportion of children eligible for free school meals (which varied from 20% to 60%), and in the proportion of children assessed as needing support for special education needs and disability. The interview sample was of course not the same sample as the MCS. Parents interviewed were from a wide diversity of backgrounds, in keeping with the diversity of schools accessed. By starting from schools, and interviewing stakeholders about what was accessed through schools, this meant that there would be some limitations in terms of what could be revealed generally about out-of-school activities. However, we also spoke to a number of providers about a wider group of out-of-school activities.

Stakeholder interviews were subject to two different analyses. The initial analysis looked at the drivers and barriers influencing how children spend their time. This was followed by a thematic analysis looking beyond drivers and barriers. This was a multi-level narrative intersectional analysis looking at responses of all those interviewed in terms of class, gender and ethnicity, religion and disability. The key areas of focus in the qualitative data analysis were patterns of use and function of (or reasons for engagement in) out-of-school activities. Given the in-depth and narrative nature of some of the interview data (particularly with respect to the Head teachers), we were also able to locate 'core stories' in particular cases of individuals whose responses were comprehensive in exploring out-of-school provision from a range of angles.

It was decided that intersectionality (Crenshaw, 1989) would be a useful way to approach these data because of the many factors that would be working together to influence patterns of engagement in out-of-school activities in diverse and mutually influencing ways. An intersectional approach addresses how related identity categories (e.g. class, ethnicity, race, religion, gender, disability, age, sexuality) overlap to create inequality of access on multiple levels, and shape the experiences and values attached to them that we are interrogating. We felt that this was a useful framing of the considerable amount of qualitative data generated in this project. An intersectional approach foregrounds the idea that understanding any social category requires the analysis of difference as well as similarity: one-dimensional categories can

perpetuate assumptions that actually contribute to inequality (Museus, 2009). This was an important consideration in ongoing thinking around combining datasets.

**Theory building** Drawing on the existing research and literature, we developed theories exploring the anticipated impacts of out-of-school activities on children in our secondary data analysis, linked to the project aims and questions. Theories of change were developed through round-table meetings with out-of-school activity providers and the project academic advisors. For example, based on the literature we anticipated seeing improved educational outcomes for those children who take part in school-based activities outside of regular school hours. This may be because the activities change their view of school, the teachers see the pupils in a different light, or the child's confidence and related aspirations and achievements are developed.

## Findings

We found a myriad of ways that children spend their time out-of-school. We found more robust evidence than in the past of a link between out-of-school activities and attainment, particularly for economically disadvantaged children. Our qualitative data revealed rich and varied intersectional narratives about out-of-school activities. We generated many different theories. An indication of some of our resulting analysis is useful here in order to situate our wider argument in the section following this about how challenging it would be to combine the different datasets or analyses here. The separate reporting of this data is an indication of how difficult it was to combine the data. Findings are reported in a number of brief papers and a working paper (Chanfreau et al., 2015a, 2015b; Chanfreau et al., 2016a, 2016b; Chanfreau et al., 2016).

- **Secondary data analysis.** Economically disadvantaged pupils had lower take-up of most organised activities than their more affluent peers, except for after-school clubs. However, by age 11, participation in after school clubs did not vary by economic disadvantage: 31% of both disadvantaged and more affluent children attended after school clubs at least weekly. In comparison, disadvantaged children were less likely to participate in other activities outside school, including sports activities (61% compared to 78% among more affluent children), extra tuition (18% to 24%), and music lessons (7% compared to 29%). The reasons for take-up of after-school clubs included the low cost, convenience associated with them taking place at school, and the reassuring familiarity of staff and location. After-school club attendance was associated with positive academic and social outcomes for disadvantaged children in particular. Organised physical activities were associated with higher attainment and better social, emotional, and behavioural outcomes at age 11. School staff, parents, and pupils identified a wide range of perceived benefits from taking part in after-school clubs that covered academic as well as social and emotional outcomes. Participation in sport/physical activities was associated with higher attainment and better social, emotional, and behavioural outcomes at age 11. Participation in 'other clubs' at 7 was associated with higher attainment (Level 5 Maths and Total Points Score) at age 11. Reading for enjoyment and hours per week on homework at age 11 was associated with Total Points Score at KS2, and with prosocial skills. Participation in after-school clubs was the only activity related to outcomes for disadvantaged children. The findings highlight the potential

value of after-school clubs for increasing opportunities for disadvantaged pupils, as well as supporting positive outcomes.

### ***School case studies***

The initial analysis of drivers and barriers influencing how children spend their time were reported in our 3<sup>rd</sup> and 4<sup>th</sup> briefings ( Chanfreau et al., 2016a, 2016b). These explored what it was about how these clubs were structured and delivered that helped to engage less affluent families. Taking part in after-school clubs was thought to have a range of positive benefits. These included providing access to enriching new experiences, providing opportunities for children to succeed, fostering self-esteem and confidence, supporting the academic curriculum, improving fitness, providing opportunities to socialise, as well as opportunities for relaxation and enjoyment. Facilitators to take-up of after-school clubs included low cost, ease of access, flexibility, familiarity with the environment, choice and variety of activities, and positive relationships with club staff. Barriers to take-up included limited availability, provision that did not meet the needs of children with SEN, and a perception that some parents' own negative experiences of school may discourage them from engaging with after-school clubs or perceiving there to be any value in participating.

It was clear from the initial analysis that there was considerable potential for further in-depth analysis of the interviews with teachers, parents, providers, and young people in schools in London and the North east. The qualitative data revealed a strongly normative evaluation of activities, which were situated in a range of background norms and contextual factors that then defined purpose and function in particular ways. There was a particularly notable North/South divide in relation to such evaluative issues when questions of the quality of provision were addressed, for instance. The nature of the analysis in this part of the project enabled interpretation of how structural, cultural, institutional, and individual aspects intersected to shape engagement in out-of-school activities. The data, however, were localised in this respect and there are inevitably questions about how far localised patterns can be extrapolated beyond these data. Nonetheless, the strength of having oversight of localised data in answer to our research questions was in problematising the potential to over-generalise from patterns and categories in these quantitative datasets.

Narrative analysis (Riessman, 2008) was used as a means of foregrounding core stories and invoking 'narrative cognition' (Polkinghorne, 1995) to move from elements to stories, and focus on specifics of cases. Narrative analysis also supported the interpretation of linkages across intersections through attending to disjuncture, omission, contradiction, and complexity, which would be lost in a thematic analysis alone. There arguably is unlikely to ever be only one, or even a few, consistent reasons for pupils to engage in out-of-school activities. Opening up space to see whether complex and possibly conflicting factors drove behaviour and decisions was therefore also deemed to be important in answering the research questions. By attending to the shaping of stories in relation to categories, narrative analysis brought identity to the fore, in a more in-depth and less structural analysis than may have been the case if intersectionality had been approached thematically. Narrative analysis also brought value-based assumptions to the fore, as categories and intersections emerge in the way people speak (Sayer, 2011). In our data we saw the prominence of how others, in positions of power, shaped children's and families' identities, as supporting the logic of how decisions on after school provision were made. With this approach, the focus ultimately was on a limited number of intersections in selected social positions, in

order to analyse the complexity of lived experiences within and across social groups, at points of intersection that may have been neglected. This raised as many questions and possible avenues for further research as it answered, as did, we noted, aspects of the quantitative analysis.

The multi-level narrative intersectional analysis incorporated the following:

- Narrative analysis across roles: head teacher; deputy head teacher; parents; pupils; providers; school staff (notably how intersections were read across roles)
- Intersection of strategic categories: class; gender; ethnicity (which shaped all cases); religion; disability (apparent in only some)
- Levels of analysis: structural constraints (income, employment); locality/geography; school context and culture; family context (size, history, cultural capital etc.)

In terms of some of our findings, head teachers, for instance, held informal typologies of families - based on the intersection of particular categories - which then defined a particular set of values in relation to these groups and provided a rationale for action. So lack of cultural capital and safe living surroundings was a defining feature of some families, which then led to the school's orientation to use out-of-school activities to produce 'more rounded citizens' and a sense of responsibility to keep children at school. The intersection of categories that underpinned particular understandings of cultural capital could be linked to how head teachers rationalized nature of provision in some cases:

*'...if they don't have a hot meal and sit round a dinner table and have a discussion about the school day then I think that they're probably gaining a lot from going to a club whatever it is, to interact with other children. And if they are going home to a rich environment at home where they actually have a table that they can sit around ...then I do think it depends on the quality of the club that they're going to get.'*

The implicit, evaluative stance taken by some head teachers, particularly in the north of England sample, to quality of provision and what would therefore constitute the rationale for such decisions, was stark. This would certainly constitute an area for further research. Likewise in the quantitative data we fail to see any evidence of quality of provision, which we should assume is variable. Another salient finding was that children's identities were spoken about as being flexible and therefore potentially shaped by different relationships and environments. Here there was a notable trend towards seeing out-of-school provision as having the potential to improve in-school engagement and relationships, through fostering positive experiences in out-of-school activities, which may then improve in-school experiences. New and positive relationships with teachers in an after-school club were evidenced as causally affecting in-school engagement with other teachers and in different classes:

*'children flourish in different environments...if you're able to change their perception of themselves...it's just about raising that self-esteem...once you raise a child's self-esteem their work and their attainment goes with it...'*

## ***Theory building***

We grouped the theories of change into three broad categories: child-related; related to the social context; and activity-related. We wanted to identify which theories we could use to inform our understanding of the connection between out-of-school activities and attainment, in particular between out-of-school activities, attainment and disadvantage. Our round-table discussions and the qualitative data built upon theories identified from the literature, which included those focused on the child (goal theory, capabilities approach), social theories (social capital, social cognitive learning theories), and activity-related (competition). The three most promising pathways linking out-of-school activities with attainment were:

1. The **identification/commitment model** (Marsh & Kleitman, 2002; Valentine et al., 2002) suggests that participation in activities that take place within the school helps to foster a greater sense of identification and engagement with the school (Cummings et al., 2011). This has a positive impact on children's engagement with their education and improves attainment. It may also be that school staff involved in running out-of-school activities have a better impression of children who participate, which has positive spill-over effects in how they relate during school time. Of course, this does not help those children that do not participate in out-of-school activities in their engagement with school.
2. The **academic model** suggests that activities which are directly related to academic study have a more positive effect on attainment (Valentine et al., 2002). The pathway for this is by improving knowledge and learning skills, and by normalising academic learning within peer groups (Buoye, 2004).
3. The student **self-belief model** argues that out-of-school activities enable some children who are not performing well within school to experience success, which has a positive effect on their self-belief and confidence. This in turn leads to improvements in their academic learning (Valentine et al, 2002).

Other pathways that merited further investigation are the importance of breadth of participation (Fredricks & Eccles, 2006; Sylva et al., 2008), attachment to non-familial adults (Eccles et al., 2003), and the impact of competitive sport on social ties (Broh, 2002). The 'social inequality gap reduction' model, suggesting that disadvantaged children benefit from activities to a greater extent than others, needs to be considered alongside each of these pathways (Marsh & Kleitman, 2002).

## **Combining methods to better understand children's out-of-school activities and the link to attainment**

Our ambition was to combine the methods but there were problems in doing so. Although the secondary data and the qualitative data were not from the same samples, we had hoped that one set of data could inform interpretation of the other. We had hoped, for example, that the questions we would ask in the interviews could be informed by findings from the secondary analysis. However, the time needed to use the MCS and delays in permission to use the NPD, meant that we had already carried out the interviews before these questions could arise from the quantitative findings. Building in a timeline that accommodates a sequential research design, which would strengthen discrete methods and then subsequent mixing of data, as would have been the case here, is therefore a relevant consideration in project planning - this depends on a more considered approach to mixed methods than is sometimes allowed for.

Much time and attention then went on the separate analyses. The quantitative and qualitative analyses both took a long time - perhaps longer than we had expected - reducing the time available for combining the data. This is another consideration for timeline planning in meaningful mixed methods research designs. We found that many interesting and useful findings were coming from the separate analyses. These were reported separately on a number of occasions. We presented to national and European conferences, to a funder seminar, and to students. A number of brief reports were written on the separate data and a working paper on the MSC/NDP data. Looking back it is likely that the richness of the data that we had found, and usefulness of the separately reported data, partially removed the need to combine the data. A longer project timeline, however, would have allowed more opportunity to explore this.

Our qualitative analysis found facilitators of participation such as cost, convenience and familiarity. A thematic analysis of the interviews was carried out, enabling the brief report to be written of the perspectives of school staff, providers, parents and children on what facilitated after school activity attendance and what was a barrier. Two further analyses were carried out on the qualitative data. A thematic analysis considered differences between the approaches of schools, and an intersectional narrative analysis looked at the intersection of salient categories that arose from the qualitative interview data, as opposed to the categories that were built into the quantitative datasets. The creation of these categories, with both similarities but some differences across the datasets, could also be a fruitful area for exploration in large mixed methods projects on out-of-school learning. Taking seriously the fact that categories such as class are constructed, there could be much to be learned from analyses that problematise categories, for instance those that are predicated on free school meal data or other proxies for disadvantage, alongside categorisations that arise inductively from qualitative data, as in this intersectional narrative analysis. These separate analyses brought us into direct confrontation with the fact that categories reify, creating an objective entity where what is lived and experienced is rather a set of social relations.

In terms of theory of change, we were able to generate a number of interesting theories from the literature and the round-table meetings, but it was not possible to test these in any simplistic manner, either with quantitative or qualitative data, separately or together. The aim in looking at theories of change was to develop the theories around impact and causal mechanisms. Our intention was to start with theories from the literature that we would add to from our round-table meetings with providers and other academics. We then intended to set up logic models to articulate presumed cause and effect relationships between activities and attainment, along with a range of intermediate outcomes that would be expected to change. These logic models were to be tested in the secondary data analysis and checked with some of our provider/academic informants. We hoped that the qualitative work would test if parents, providers, and teachers also perceived that these mechanisms are behind the variation we observed in outcomes, or whether the qualitative research could offer up any other behaviour drivers. We did not find the secondary data analysis lent itself to testing the theories that were expressed in logic models. And neither was the qualitative data helpful in this respect. We could identify espoused theories in the actions and intentions of teachers, parents and children but this would not help us to analyse aspects of their efficacy or veracity.

This brings up seminal questions in mixed methods about whether a close-up and distant perspective, as we were working with here, can be mixed in a meaningful way (Greene, 2008). We clearly held different paradigmatic positions in our quantitative and qualitative work, yet both were primarily oriented towards a similar set of categorical variables, although these were not the exactly the same (as highlighted above). They also functioned in very different ways for the purposes of each analysis. The nature of this chapter is not to address the philosophical questions about commensurability of paradigmatic approaches, which is much explored elsewhere, but to question the value of these different datasets and approaches in relation to researching out-of-school learning. We could argue here, following Greene's (2008) framework of mixed methods approaches, that our assumptions about paradigmatic incommensurability hold, but that there is value in both lenses on this field of inquiry. At present, though, there are particular challenges in combining the findings. What we have found ourselves embroiled in, is a difficult - yet we would argue necessary - dialogic engagement about the paradigmatic differences that frame these datasets. We advocate keeping these methods separate, in order to substantiate the warrant for each set of interpretative analyses, but also suggest that Greene's (2008) 'dialectical stance' (also see Greene & Caracelli 1997; Maxwell & Loomis 2003) captures the important ways in which these paradigmatic positions remain salient in this field of research. We might argue that what would be beneficial in this field in terms of mixed methods designs is a move towards what Greene terms the 'alternative paradigm stance' (Greene, 2008, p.12).

The patterns of regularity as well as the insight into variation and difference in terms of out-of-school learning that this research has generated sit in dialectical relation to each other (Greene, 2008). We argue that innovation in mixed methods in this field will come through a level of conceptualising which anchors one tradition in another, in such a way that our explanatory power is developed. Patterns and regularities, given the nature of our in-depth data, can clearly mislead, as we see in relation to private tuition – also known as shadow schooling. The challenge, as we have found, is that there is too short a distance between a pattern and the leap to assumptions about what might have led to this pattern, or there is a dominant trend that arises from our data, but also significant pockets or variation to this when seen in a more fine-grained analysis. In this case, the data on private tuition, or shadow schooling, is particularly revealing of this. The patterns found tell a geographical story of where more private tuition is being accessed. But, as we see from our intersectional analysis, issues of locality are mediated by factors such as religion, which might account for high levels of what would be defined as private tuition in one area of relative deprivation, and class or ethnicity, which might mediate uptake in more advantaged areas. Shadow schooling itself, as a category of out-of-school learning, might also be influenced by pervasive cultural factors such as the shift towards a more widespread acceptance of attainment as linked to effort rather than innate ability, and/or the increased high stakes culture of performativity linked to global, as well as national trends, and the labour market (Kirby, 2016). These constitute different drivers for increased uptake and might both function in different localities according to socio-cultural norms, which should remain visible in the interpretation of findings about this issue.

Arguably, this is highly pertinent to methodological issues around pupils' out-of-school activity, but so is the proviso that not all categories foregrounded in an intersectional analysis will function in the same way, according to the same logic, as we suggested above in relation to how categories are themselves constituted. Furthermore, ontological differences between the social relations that the categories point to, work differently at structural and identity levels. It is important to retain this epistemologically. We have seen this in relation to class (or class as a proxy for SES for instance) in relation

to work on poverty and schooling. Class stands for a set of social relations that function differently at the structural level of financial constraint, than at the identity level of affective experiences of stigma and shame (Mazzoli Smith & Todd, 2019). This point alone suggests one reason why it was so difficult to mix methods in this project. The data generated from the MCS were subject to an analysis that held these as largely structural and invariant categories, and these are not the same as identity categories. The data generated by the semi-structured interviews problematised this, and it was in the core stories of particular case study schools that we saw how identity categories could not be seen as homogenous across the samples.

Returning to the theory of intersectionality, we then see again the core feature of complexity underpinning the way that intersectional analysis resists simplification: 'the mundane is multiplex', as Phoenix (2006, p.26) notes. Intersectional analysis is grounded in social context, foregrounding the relational dynamic of objectified categories. As such it is used as an analytic tool to contextualize findings and interpretations in such a way that generality is problematised. Furthermore, there are also interconnections between intersections, so in some of our data we found particular linkages between class, disability and locality, but in other data, the salient linkages were between ethnicity and religion, which then became more likely to drive engagement in particular forms of out-of-school activity. Finally, intersectionality attends to the notion of power, whereby multiple factors feed into intersecting frames of power, and power *relations* are to be analysed via their intersections e.g. class and ethnicity, and across domains of power i.e. structures and cultures. The notion of power is arguably a key mediator here. A discourse of power, as we would see it in a Foucauldian sense, was seen through the qualitative data, such that certain forms of engagement became possible, whereas others did not. Analysing relations of power and distribution of resources in intersection meant posing questions such as "are people positioned in the same way in relation to each of their intersecting social divisions?" or "are they more or less powerful in relation to some than others?" Again, certain intersections would therefore be more relevant for certain groups at particular times in particular locations, and this would therefore change the status of the categories. In terms of the grounded analysis, this necessitated decisions about the linkages that mattered most based on data saturation. However, there would always be an element of creative and strategic decision making here, given the particular data we had to work with in the first place, the way it was generated in interview context with particular individuals, and our own interpretative lens in carrying out the analysis.

Perhaps our ambition to combine data analysis was too ambitious. Rather than combining of the datasets, findings were positioned in dialogic relation to each other to problematise and contextualise, rather than to simplify and conclude. Our findings did indeed reveal rich and - we would argue - more comprehensive findings about young people's out-of-school lives and the possible links with attainment and disadvantage than had been available prior to our research. On the other hand, meaningful combining of methods occurred at the level of research questions and contributed to an overall more critical analysis than had been possible before of children's out-of-school activities - particularly in not taking for granted that patterns and linkages should not be seen to imply clear and generalisable behaviours for fixed categories of pupil. However, there remain a number of questions. We were not able to integrate our exploration of theories either with the secondary data analysis or with the qualitative narrative analysis. One of the main ways this detracted from the findings was that we could not link our findings about the impact of attainment on out-of-school activities with any data about the quality of those activities, nor the detailed circumstances about how they are accessed. This would provide a useful further area of research and we

would suggest that the value of these datasets and separate analyses is partly in now being able to generate more refined research questions in this field of inquiry going forward. It would also be useful to explore further the link between theories of change and out-of-school analysis. There is more to be considered about the relationship between the narrative analysis of our interview data and secondary data analysis, perhaps drawing on relational and dialogic ideas of the mixing of methods (Creamer & Edwards, 2019; McChesney & Aldridge, 2019)

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### **Methodology highlights**

This chapter highlights researchers' interest in using mixed-methods approaches to explore complex phenomena from multiple perspectives. However, it also highlights the challenges involved in actually combining data and theory from different perspectives.

The chapter also introduces intersectionality as an important means to help us address complexity around people's engagement with, and response to, different out-of-school learning opportunities.