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Culture, sport and wellbeing

Findings from the Understanding Society adult survey

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Executive Summary

Aims and approach

This research has been commissioned as part of the CASE (Culture and Sport Evidence) programme, a joint programme of strategic research led by the Department for Culture, Media and Sport (DCMS) in collaboration with Arts Council England, Historic England and Sport England. The CASE programme has been developed to directly influence culture and sport policy through collection of social and economic research. This research explored the potential of the Understanding Society surveys to help us build understanding of relationships between culture and sports engagement and the health and wellbeing of adults in England.

Understanding Society is a longitudinal panel survey designed to track and analyse change at individual and household level. It began in January 2009 with an initial sample of 40,000 households. Each adult in the household (aged 16 years or over) is asked to complete a face-to-face survey. Questions on health and wellbeing are asked via a self-completion questionnaire. Some subjects are asked at every survey wave but others, such as those on culture and sports engagement, have only been included at certain waves. They were included in the 2010/11 and 2013/14 adult surveys. This report is based on analysis of data for 20,007 adults from England who completed the adult survey in 2010/11, and again in 2013/14.

The aims of the analysis were to examine:

- patterns of **adult engagement in culture and sport** over the time period from 2010/11 to 2013/14; and the
- **health and wellbeing** benefits that might be associated with such engagement.

The report describes how different groups engaged in various types of cultural and sports activity. We also conducted more complex analyses, accounting for differences in the socio-demographic characteristics of different groups, to identify the underlying factors associated with cultural and sports engagement. Changes in patterns of cultural and sports engagement over time were also examined and related to changes in health and well-being.

It is important to be careful about attributing directions of causality when interpreting findings about the relationship between engagement and health. For example, where results show better health or wellbeing among adults who engaged in culture and sports, this does not necessarily mean that it was the cultural or sports participation that improved their wellbeing. It is also possible (and likely) that physically and mentally healthier people were more likely than others to engage in culture and sports, and also possible that other factors, such as having more available income, influenced both participation and health.

Cross-sector key findings

Importance of social context

Consistently, across the culture and sport sectors, our results showed that people were more likely to engage if other adults in their household were also doing so. For

example, for those living in a couple, participation in dance was five times more likely if the other partner also engaged, having attended the theatre was four times as likely, having visited a heritage site was three times as likely, and engagement in weekly sport was twice as likely. This partly reflects the tendency of people with similar interests to form households together, but also highlights the importance of policies which support and build on the social aspects of engagement.

Adults from households with children aged 5 to 10 years were more likely to visit the theatre (42% vs 36% of those with no children), combined arts events (34% vs 22%), heritage sites (68% vs 63%), museums and galleries (47% vs 39%) and libraries (40% vs 27%). Those providing small to moderate amounts of unpaid care to other adults were also more likely than non-carers to attend arts events (66% vs 61%), heritage sites (19% vs 17%) and libraries (32% vs 30%) suggesting that sharing activities with others may be an important driver for engagement.

Persisting inequalities

Our findings add to the weight of existing evidence showing that disadvantaged groups (with lower incomes, qualification levels and problems with health, for example) tend to have lower engagement in cultural and sports activities. For the wellbeing benefits of sports and culture to be spread more widely, attention needs to be focused on ways of overcoming barriers to access. Libraries provided an example of cultural provision that was more evenly accessed by disadvantaged groups, highlighting the importance of the library sector and the need to build on its record in this area.

Suggestions for further research

The report identifies several potential avenues for further research, including:

- Further research using experiential measures of wellbeing, such as happiness or sense of purpose, which have been shown to be more appropriate than evaluative measures, such as life satisfaction¹.
- Employing time-use diaries² to allow more precise linkage of engagement and subjective wellbeing at the time of participation.
- Use of randomised control trials of specific engagement initiatives in order to make direct causal links between engagement and changes in health or wellbeing. Examples of such research studies are ongoing via Arts Council England's research grants programme.
- More qualitative studies to learn more about the ways in which engagement affects wellbeing and health³. It would be particularly interesting to have more studies focussing on the importance of social connections, as well as studies of the different ways that engagement fits into the lifestyles of people from different groups and communities.

¹ Taking Part reports (DCMS, 2015) include measures of happiness and sense of purpose but do not link them precisely to time of engagement.

² These allow individuals to record the activities they were engaged in at different points during a day, and their feelings at the time. The American Time Use Survey has been used to examine links between time spent engaging in music and sports and concurrent wellbeing (Dolan and Testoni 2016; 2017)

³ The AHRC Cultural Value Project report (Crossick and Kazynska, 2016) provides an excellent overview of the use of different research methods to analyse cultural engagement, recommends the use of more qualitative methods, and provides useful insight into the processes of drawing conclusions using rigorous qualitative analysis techniques.

Summaries of key findings by sector are provided below, covering:

- Participation in arts activities
- Attending arts events
- Visiting heritage sites
- Visiting museums and galleries
- Visiting Libraries
- Participating in sporting activities.

Arts activities

Drawing on the wealth of information in the Understanding Society adult surveys (2010/11 and 2013/14), this study has uncovered new insights about patterns of active participation in arts activities (covering dance, music, theatre, literature, visual arts and crafts, digital arts and combined arts activities) and about links between arts engagement, health and wellbeing.

Who participates in arts activities

Patterns by ethnicity

An analysis of arts participation among nine different ethnic groups showed a varied set of preferences by art form, illustrating the complexity that is masked when analysing all art forms, or all Black and Minority Ethnic groups together:

- Black Caribbean and African groups had the highest levels of engagement in dance (18% vs 9% overall).
- White and mixed ethnic adults had the highest engagement in literary activities (68-72% vs 54% or less for other ethnic groups) and visual arts activities (26-27% vs 21% or less for other ethnic groups).
- The lowest levels of engagement in literary activities were found among Pakistani groups (39% vs 68% of white UK adults).
- Pakistani, Bangladeshi and Indian adults were all less likely to engage in dance or music activities than those of African, Caribbean or white ethnicity.

Household contexts

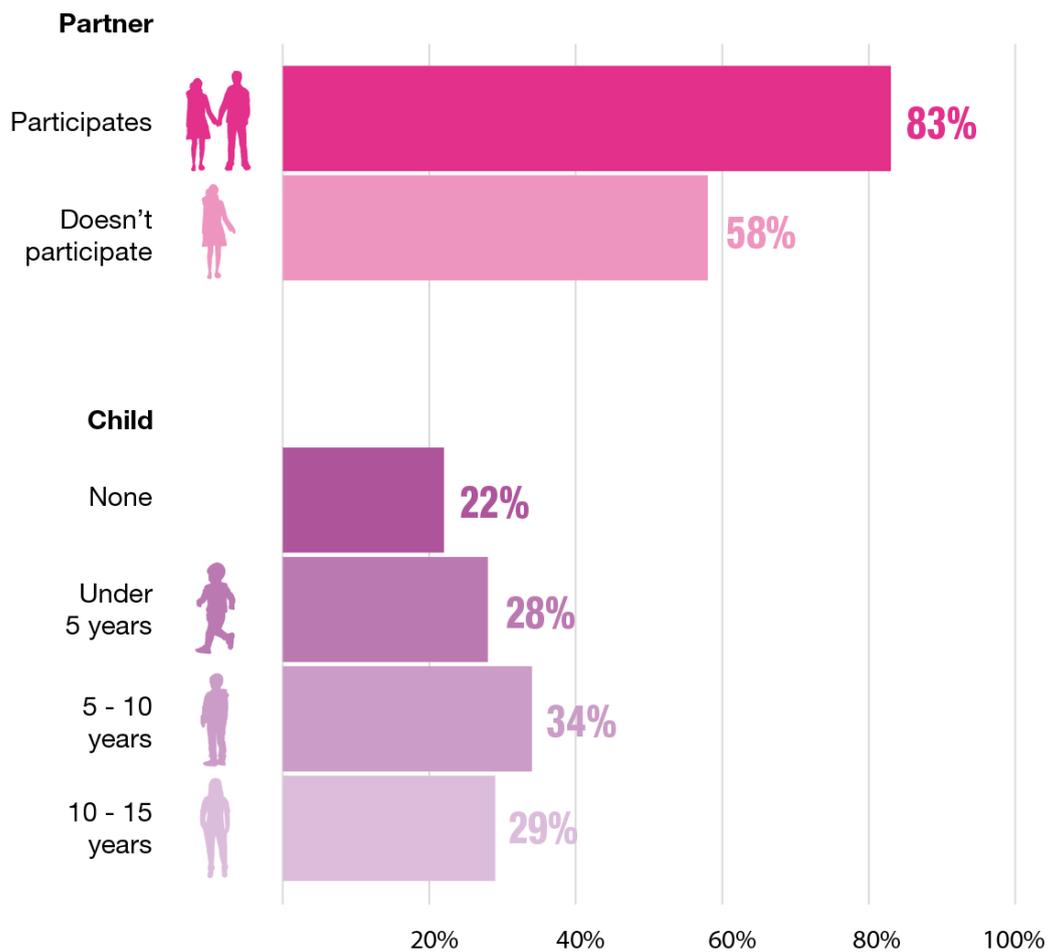
Analysis of participation patterns across households showed a strong household 'cluster effect': arts participation was much more likely if a person lived with other adults who participated. This effect was particularly strong in couples for dance, theatre and combined arts.

The research found lower levels of arts activity participation among adults living with children under 5, compared with those in households with older children:

- Adults living with under 5s were less likely than those with older children to engage in dance, literature, theatre and combined arts activities (Figure 3:3).
- Looking at patterns over time, adults (including new parents) who were newly living in a household with children were less likely to have increased engagement in arts activities.

Further information on arts participation of young people is available in a separate report based on the Understanding Society youth survey [\[add hyperlink\]](#).

Participation in arts activities by partner and children in household



Employment and caring

The research also looked at links between changing engagement in arts activities and changes in employment. It showed that the groups least likely to increase their participation were those who moved from part-time to full-time work and those who were consistently neither employed nor in full-time education.

People who spent a moderate amount of time (less than 20 hours per week) providing unpaid care to other adults were more likely to participate in arts activities than those with no caring responsibilities, and much more likely to do so than those who provided more care.

Participation and wellbeing

The research also looked at the associations between active participation in arts activities and a range of wellbeing indicators including self-assessed general health,

physical health (SF12) score⁴, mental health (SF12) score, satisfaction with life overall and a 'self-efficacy' score.

- We found a positive association between arts participation and higher physical health, mental health, life satisfaction and self-efficacy scores.
- Those who did not engage in arts activities were more likely to assess their own health as fair or poor.

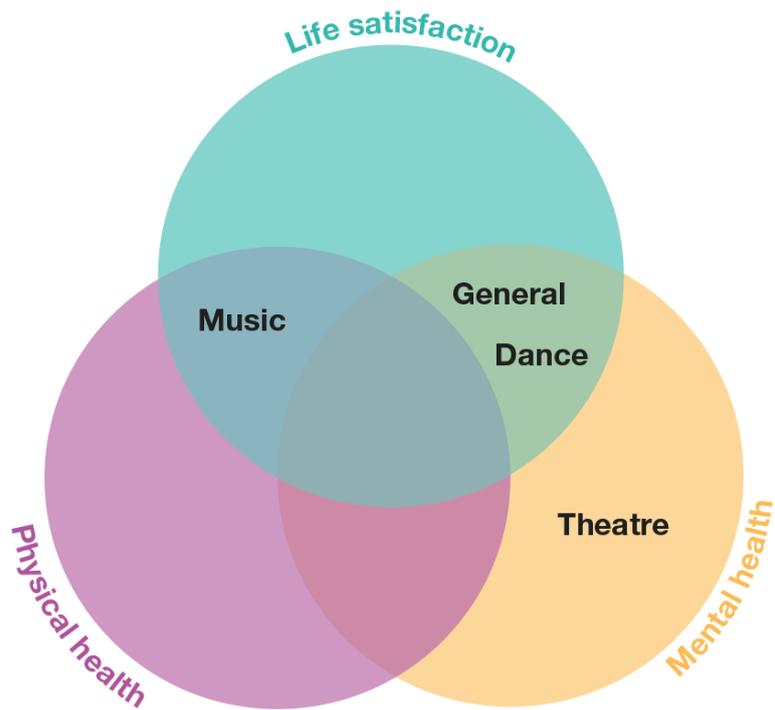
Analysis of changes over time showed links between increasing engagement in arts activities and better results for health and well-being. Decreasing engagement in arts activities was associated with steeper declines in health and wellbeing over time.

Increasing engagement in arts activities in general was linked with better results for mental health (decline of 0.4 in average score between 2010/11 and 2013/14, vs decline of 1.2 for those who did not engage in arts at either time).

- Increasing engagement in music and dance was linked with no overall change in average score for life satisfaction, compared with declines for other groups.
- Increasing engagement in dance and theatre activities was linked with better results for mental health (increase of 0.4 for those who took up dance engagement, vs decline of 0.7 for those who did not engage at either time; decline of 0.1 for those who took up theatre activities, vs decline of 0.8 for consistent non-engagers).
- Increasing engagement in music was linked with better results for physical health (improvement of 0.3 vs decline of 0.8 for consistent non-engagers).
- Decreasing engagement in arts activities was linked with worse results for mental health and life satisfaction (decline of 1.5 for mental health for those with lapsed participation vs decline of 1.2 for consistent non-engagers; decline of 0.3 for life satisfaction vs decline of 0.2 for consistent non-engagers).
- Decreasing engagement in music was linked with worse results for physical health (decline of 1.5 for those with lapsed participation vs decline of 0.8 for consistent non-engagers).

⁴ The Medical Outcomes Study SF-36 and SF-12 are multi-item generic health surveys intended to measure "general health concepts not specific to any age, disease, or treatment group". The SF-12 is a shorter version of the SF-36 and uses only 12 questions to measure functional health and well-being from the patient's perspective. The original objective was to develop a short, generic health-status measure that reproduces the physical component summary (PCS) score and the mental component summary (MCS) score from the SF-36.

Engagement in arts activities by area effected



Attending arts events

This report presents new insights about patterns of attendance at arts events (covering dance, music, theatre, literature, visual arts and combined arts) and about links between arts events attendance, health and wellbeing.

Who attends arts events

Patterns by ethnicity

An analysis of arts event attendance among nine different ethnic groups showed a varied set of preferences by art form:

- White adults born outside the UK were most likely to attend visual arts exhibitions.
- White and mixed ethnicity adults were the most likely to attend music and theatre events.
- Indian, Black African and Caribbean, mixed ethnicity and white non-UK adults were the most likely to attend dance events.
- African, mixed ethnicity and white non-UK born adults were the most likely to attend literary events.
- Pakistani and Bangladeshi adults were the least likely to attend all types of arts events, with the exception of combined arts.

Household contexts

Attendance at arts events was much more likely when a person lived with other adults who also attended. Results also suggested that having children of primary school age was a factor that encouraged people to attend arts events, and that adults were less likely to have taken up attending arts events if their household no longer had children.

Those living with children aged between 5 and 10 years were most likely to have attended any type of arts event while those living with under-fives were the least likely to have attended.

Employment and caring

Adults who were not in employment or full-time education were the least likely to have taken up attendance at arts events. Full-time students were more likely to attend than other groups.

People who spent a moderate amount of time (less than 20 hours per week) providing unpaid care to other adults were more likely to attend arts events than those with no caring responsibilities or those who provided more care. Take up of attendance at arts events was higher among people who decreased their caring hours from 20 or more hours to fewer than 20 hours per week.

Moving house

People who moved house between 2010/11 and 2013/14 were more likely than those did not to have attended arts events in the year leading up to the 2013/14 survey, after controlling for other demographic differences and changes (35% vs 30%).

Arts events and wellbeing

This research examined associations between attendance at arts events and self-assessed general health, physical health (SF12), mental health (SF12), life satisfaction and self-efficacy.

- We found a positive association between arts event attendance and physical health, mental health, life satisfaction and self-efficacy scores.
- Those who did not attend arts events had the poorest self-assessed general health.

Analysis of changes over time also showed that:

- increased attendance at arts events was linked with better results for life satisfaction (decline in average score of 0.1 between 2010/11 and 2013/14 vs decline of 0.2 for consistent non-engagers), and that
- decreased attendance at music events was linked with worse results for physical health (decline in average score of 1.1 vs decline of 0.8 for consistent non-engagers)⁵.

⁵ This was not statistically significant.

Visiting heritage sites

This analysis of the Understanding Society adult surveys provides new information about patterns of visits to heritage sites and about links between heritage engagement, health and wellbeing.

Who visits heritage sites

Patterns by ethnicity

An analysis of heritage site visiting among nine different ethnic groups showed that:

- White adults were the most likely to visit heritage sites, followed by those of mixed or 'other' ethnicity.
- Pakistani and African adults were the least likely to visit heritage sites, followed by those of Bangladeshi and Caribbean origin.
- Indian adults occupied an intermediate position.

Household contexts

People were more likely to visit heritage sites if they lived with other adults who did so, or with children aged between 5 and 10 years of age.

Employment and caring

People who were not in employment or full-time education were the least likely to visit heritage sites, and full-time students were the most likely to do so. The likelihood of taking up heritage visits was lowest among the non-employed, and was also lower than average among adults who had increased their working hours from part-time to full-time.

People who spent a moderate amount of time (less than 20 hours per week) providing unpaid care to other adults were more likely to visit heritage sites than those with no caring responsibilities or those who provided more care. After adjusting for other relevant factors in a regression model, results showed that adults who became carers in 2013/14 had an increased chance of having taken up heritage visiting (39% had done so, vs 32% of those who were carers in neither 2010/11 nor 2013/14)..

Groups most likely to visit heritage sites



White adults



Live with other adults who visited

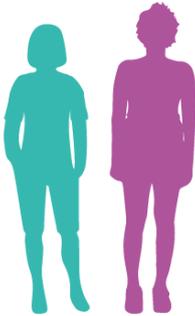


With children aged 5-10 years



Full-time students

Least likely to visit heritage sites



Pakistani and African adults



Unemployed



Full-time unpaid carers

Heritage visits and wellbeing

The research also looked at the associations between engagement in visits to heritage sites and self-assessed general health, physical health, mental health, satisfaction with life overall and self-efficacy.

- We found a positive association between heritage visiting and higher physical health, mental health, life satisfaction and self-efficacy scores.
- Those who did not engage in heritage visits self-reported the poorest general health.

A decrease in the frequency of visits to heritage sites was linked with worse results for mental health and life satisfaction.

Visiting museums and galleries

Information from the Understanding Society adult surveys provides new insights about patterns of visits to museums and galleries and their links with health and wellbeing.

Who visits museums and galleries

Patterns by ethnicity

An analysis of museum and gallery visiting by ethnicity showed that:

- White adults born outside of the UK were the most likely to have visited museums and galleries, followed by people belonging to the mixed, 'other' and white UK groups.
- Pakistani and African adults were the least likely to have visited museums and galleries, followed by those of Caribbean, Indian and Bangladeshi origin.

Household contexts

As with heritage visits, those who lived with others who visited museums and galleries were more likely to have visited themselves, as were those with children of school age. Findings were similar to those for attendance at arts events, in that where there was no longer a child in the household in 2013/14, the adults were less likely to have taken up museum and gallery visiting.

Adults living with a child aged between 5 and 10 years were the most likely to have visited museums and galleries, followed by those living with older children aged 11 to 15. Those living with under 5s were less likely to have visited museums and galleries.

Employment and caring

Full-time students were more likely to have visited museums than were those in employment. Adults who were not in employment or full-time education were the least likely to have done so.

As with other cultural activities such as visits to arts events and heritage sites, people who spent a moderate amount of time providing unpaid care to other adults were more likely to have visited museums and galleries than those with no caring responsibilities or those who provided more care.

Museum and gallery visits and wellbeing

The research also looked at the associations between engagement in visits to museums and galleries and a range of wellbeing indicators including self-assessed general health, physical health (SF12) score, mental health (SF12) score, satisfaction with life overall and self-efficacy.

- We found a positive association between museum and gallery visiting and higher physical health, mental health, life satisfaction and self-efficacy scores.
- Those who did not engage in museum and gallery visits self-reported the poorest general health

We did not find significant links between changes in museum and gallery engagement and changes in health or wellbeing over time.

Visiting libraries

This study has uncovered new insights about patterns of visits to libraries and about links between library engagement, health and wellbeing.

Who visits libraries

Patterns by ethnicity

An analysis of library visiting among nine different ethnic groups showed that:

- Adults of Black African origin were the most likely to have visited libraries (55% had used a library in the year leading up to the 2013/14 survey).
- White UK adults were the least likely to have visited (29%).

Household contexts

As with other cultural activities, library visits were much more likely if a person lived with other adults who had visited.

Whereas adults living with children under five were generally less likely than others to engage in arts activities, attend arts events or visit museums and galleries, they were among the most likely to visit libraries. Adults living with any child aged under 11 years were more likely to have visited libraries than those with older children or no children in the household.

Employment and caring

The full-time employed were less likely to visit libraries than other groups. Full-time students were the most likely to have visited libraries and also tended to visit more frequently than other economic activity groups.

People who spent a moderate amount of time providing unpaid care to other adults were somewhat more likely to have visited libraries than those with no caring responsibilities (32% vs 30%) or than those caring for 20 or more hours per week (29%).

Fewer inequalities

Results showed that people with limiting disabilities were less likely to visit libraries than those without, but differences in attendance rates were smaller than for other sectors. Adults with higher levels of qualifications were more likely to visit libraries overall but, among those who did visit them, those with qualifications below GCSE level did so more frequently. There was no significant difference in visiting rates between those who were better and worse off financially.

Library visits and wellbeing

This research looked at the associations between engagement in visits to libraries and self-assessed general health, physical health (SF12), mental health (SF12), life satisfaction and self-efficacy.

-
- We found a positive association between library visiting and higher physical health, but no clear difference by mental health, life satisfaction or self-efficacy scores.⁶
 - Those who did not engage in library visits self-reported the poorest general health.

We did not find significant links between changes in library engagement and changes in health or wellbeing over time.

⁶ Other research has found significant associations between library use and various measures of wellbeing in models controlling for a wide range of factors (Fujiwara et al, 2015).

Sports activities

Drawing on the wealth of information in the Understanding Society adult surveys (2010/11 and 2013/14), this study provides new insights about patterns of active sports participation and about links between sports engagement, health and wellbeing.

Who engages in sports

Patterns by ethnicity

An analysis of sports engagement among nine different ethnic groups showed that:

- Pakistani and African adults were the least likely to have participated in any kind of sport, but there were no significant ethnic differences in **weekly** sporting participation.
- Different sports appealed to different ethnic groups, for example:
 - Walking was most popular among white adults.
 - Yoga was most popular among adults of Indian origin.
 - Team sports were most popular among adults of Pakistani origin.

Household contexts

Analysis of weekly sports engagement across households showed that adults were more likely to engage if others from their household also did so. The associations were particularly strong for those living in couple households, where, for example:

- Participation in cycling, running, outdoor/adventure sports and sports clubs was more than three times as likely when the partner or spouse also participated.
- Participation in walking, swimming, fitness, team sports and leisure sports was more than twice as likely when the partner or spouse also participated.

Adults living with a child aged under 5 years of age had lower levels of engagement in weekly sports than those with older children. Adults who were living with a child in 2013/14 after not doing so in 2010/11⁷ were less likely to have taken up weekly sports.

Employment and caring

After adjusting for demographic differences, including age⁸, we found that adults who were neither employed nor in full-time education were the least likely to participate in sports on a weekly basis (32% vs 35% of the full-time employed and 39% of full-time students). Looking at all sports participants, full-time students were the most likely to engage frequently (at least three times per week).

⁷ Results do not distinguish between households with new babies and those where an older child had joined

⁸ The model adjusted for gender, age, ethnicity, sexual orientation, presence of long-standing limiting illness/disability, highest educational qualification, work status, provision of informal care to others, having children in the household, participation of others in the household in similar sports activity, urban/rural residence,

Adjusted figures also showed that people who provided many hours (20 or more per week) of unpaid care to other adults were less likely than those not shouldering such responsibilities to engage in weekly sports (29% participated vs 34% of non-carers).

Persisting inequalities

Results supported previous research findings in showing higher levels of sports engagement among men, younger people, adults with higher levels of educational qualifications, those in better financial circumstances and those without a limiting disability. However, the picture was different for different types of sports:

- Women were more likely than men to participate in walking, swimming, fitness activities and yoga.
- Walking, swimming, fitness and leisure sports remained relatively popular among older people.
- Older people who did participate in sports were more likely than younger participants to do so at least weekly.
- Membership of sports clubs was associated with high levels of weekly engagement at all ages: even among the oldest age group (75 years and over), four fifths of those who were sports club members engaged at least weekly.

Sports engagement and wellbeing

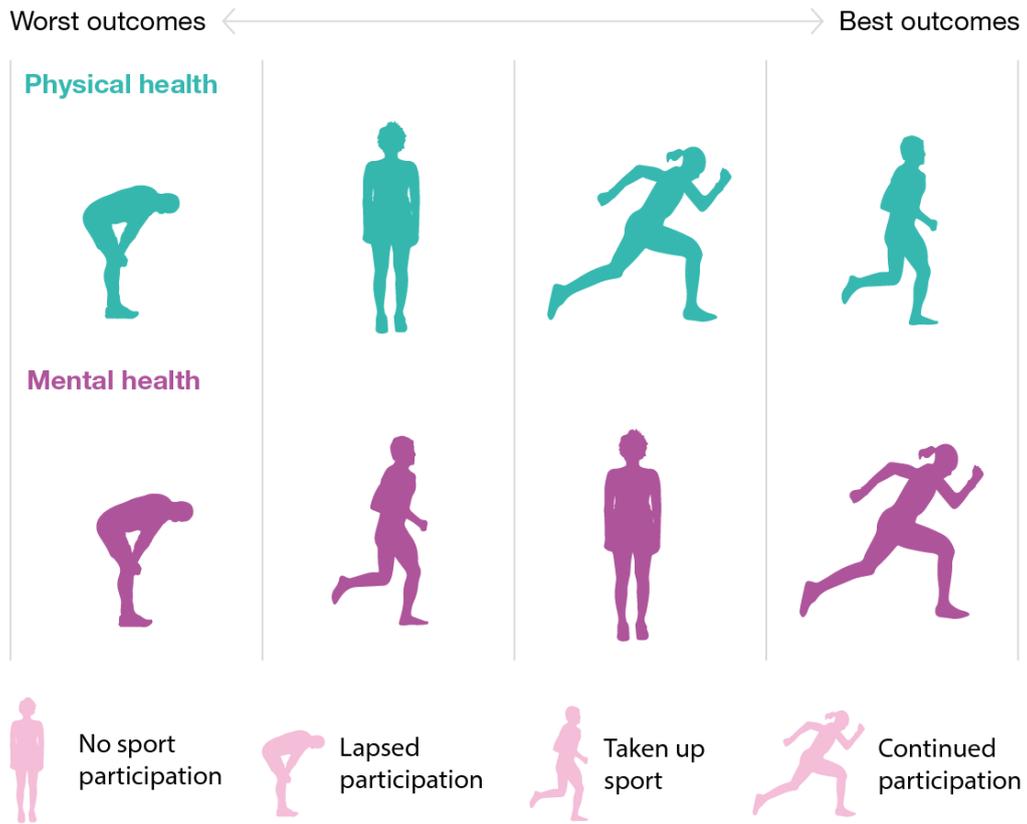
The research also looked at the associations between sports engagement, health and wellbeing, using indicators of self-assessed general health, physical health, mental health, satisfaction with life overall, and self-efficacy.

- Sports engagement was associated with higher physical health, mental health, life satisfaction and self-efficacy.
- Those who did not engage in sports at least weekly were more likely to assess their own health as fair or poor.

Those who engaged in sports more frequently tended to have more positive results on all the health and well-being indicators. Analysis of changes over time also showed links between taking up engagement in weekly sports and better results for physical health and life satisfaction, whereas decreasing engagement in weekly sports was associated with worse results for these measures. Analysis of different types of sports activities showed that:

- Taking up engagement in walking, fitness, running, combat/target sports and sports club membership was linked with better results for physical health.
- Taking up or consistently engaging in cycling and outdoor/adventure sports was also linked with better results for physical health.
- Taking up sports club membership was linked with better results for life satisfaction.
- Decreasing engagement in walking, fitness, running, cycling, outdoor/adventure sports and sports club membership was linked with worse results for physical health.

Changing sports participation and health outcomes



Figures based on change between 2010/11 and 2013/14

1 Introduction

1.1 Policy context

A strategic goal of the Department for Culture, Media and Sport (DCMS) and its related non-departmental public bodies – Arts Council England, Historic England and Sport England – is to ‘encourage participation’: enabling and inspiring as many people as possible to engage in culture and sport.

Good evidence on current levels and patterns of engagement is needed to inform the development of future policy and practice. Evidence on the benefits of engagement is also needed to provide a rationale for increasing access.

At the present time, with heightened policy interest in wellbeing objectives, there is particular interest in improving our understanding of the relationship between cultural and sports engagement and subjective wellbeing. Engagement is seen as a potential way of encouraging people along the five “ways to wellbeing” that have been identified by recent research, through the provision of experiences that help them to be active, connect with others, take notice, be alert and give of themselves.

Over the past decade the availability of quantitative data on patterns of cultural and sport engagement in England has increased dramatically with the launch of the Taking Part and Active People surveys in 2005, further enriched by the longitudinal extension to Taking Part (from 2012), the Active Lives survey (2015) and the new Taking Part web panel (from 2016). Cultural and sport questions were also introduced into Understanding Society, a UK household longitudinal survey launched in 2009.

The information collected in these surveys has enabled the development of a significant body of quantitative research on the societal drivers and barriers to culture and sport engagement (DCMS 2010). It has also facilitated the conduct of new research on associations between engagement and health and wellbeing indicators (e.g. Dolan & Testoni 2016; Fujiwara 2013; Fujiwara et al., 2014a, 2014b, 2015; Leadbetter & O’Connor 2013). The establishment of the UK What Works Centre for Wellbeing in 2015 has encouraged the development of research in this area (Daykin et al, 2016).

1.2 Aims and objectives

This report focuses on adults; a second report on young people has also been produced. They both extend the existing evidence base by drawing on the additional potential of the latest available Understanding Society data. There are two main objectives:

- To provide new evidence on the **patterns** of cultural and sporting engagement, including patterns within households and changes over time; and;
- To analyse the **relationship between engagement and health and wellbeing** measures, including changes over time.

1.3 Structure of the report

The report addresses the two key objectives in turn:

- Sections 2–7 present results from an analysis of engagement patterns for different areas of cultural activity and sport in turn; and
- Section 8 looks at the relationship between participation and health and wellbeing.

The sectors of cultural and sporting activity examined in both engagement and health and wellbeing analyses include:

1. Participation in arts activities (overall and by art form)
2. Attending arts events (overall and by art form)
3. Visiting museums or galleries
4. Visiting heritage sites
5. Visiting libraries
6. Participation in sport (overall and by type of sport)

1.4 About the dataset

Understanding Society is the UK's flagship household longitudinal study. It was launched in 2009, and collects data from all adults and young people (aged 10-15) in up to 40,000 households every year. Cultural and sport participation questions were included for adults in waves 2 and 5 (2010/11 and 2013/14) and they are included every two years for young people (starting in 2010/11).⁹

The Understanding Society culture and sport participation questions ask participants to indicate (using a reference card) which specific cultural and sport activities they have done in the 12 months prior to the interview. Therefore, the participation reported in 2010/11 referred to activities done in 2009-11, and participation reported in 2013/14 referred to those done in 2012-14.

Understanding Society provides an unprecedented opportunity for analysis, given its unique design and scale. Notable features of Understanding Society, which set it apart from other available surveys, include its:

- **Large scale:** Collects information from up to 40,000 households across the whole of the UK on an annual basis, enabling analysis by small demographic subgroups;
- **Household design:** All adults aged 16 and over invited to be interviewed and all young people aged 10–15 asked to complete a paper questionnaire.¹⁰ This means that data is available not only at individual level, but also at full household level (in contrast to Taking Part where data is collected from only one adult and young person per household);

⁹ Due to its large sample size, each round of interviews for Understanding Society is collected over two years. Each participant is interviewed in the same quarter each time, to ensure that there is around a year between each of the interviews. The specific data collection periods of the adult culture and sport participation data available to date were: January 2010 to April 2012 (wave 2) – referred to as '2010/11 data' in the report – and January 2013 to April 2015 (wave 5) referred to as '2013/14 data' in the report.

¹⁰ Data from children aged 5 to 10 is collected through proxy interviews.

- **Comprehensive longitudinal design:** Individuals who move within the UK are followed for an interview in their new location;
- **Coverage of ethnic minorities:** Oversampling of ethnic minorities and immigrants, enabling analysis by ethnic sub-group (instead of comparing white with all black and minority ethnic groups combined);
- **Cross-topic coverage:** A rotating schedule of questions across a wide range of topics provides analysts with rich information on the socio-demographic characteristics of individuals and households, as well as their relationships, behaviours, attitudes and preferences.

1.5 Analytical approach

1.5.1 Sample

In this report we look at the latest patterns observable in the 2013/14 culture and sport data for England, as well as at changes between 2010/11 and 2013/14. In order to have a consistent sample for all the analyses, we focus throughout on the 'continuous sample' of Understanding Society adult respondents interviewed at both time points. For more details on the analytical sample please see Appendix A.

1.5.2 Methods

This report presents findings from both simple bivariate and more complex multivariate analyses of the Understanding Society data:

- **Simple analysis** (bivariate analysis): Descriptive tables by socio-demographic characteristics are used to profile the people who engaged in culture and sport; and
- **Complex analysis:** Logistic regression models of cultural and sports engagement and take-up, and regression models of changes in health scores are used to examine which factors were significant predictors of these when a range of other relevant variables were simultaneously controlled for (taken into account).¹¹

The variables included in the final model of engagement are shown in the box below, which also shows which values of each were selected as reference categories¹². The adjusted table (Table 0:1) shows which values of these variables were significantly different from the reference category when it came to predicting cultural and sports engagement.

Models of cultural and sports engagement :

Variables included :

Gender
Sexual orientation
Age

Reference category :

Male
Straight
25 to 44

¹¹ Variables were added to the model in a stepwise fashion, which allowed us to choose the most effective measures of ethnicity, household and economic circumstances.

¹² For example, when we look at whether age had a significant effect, results for the various age groups are compared with those of 25 to 44 year olds (the reference category) and results indicate whether they were significantly different from this group

Ethnicity	White UK
Long-standing limiting illness/disability	No long-standing illness/disability
Highest educational qualification	Below GCSE level
How managing financially	Living comfortably
Work status	Full-time paid employment
Informal care provision for adults	None
Household activity participation	Single adult household
Children under 16 in the household	None
Urban or rural area	Rural area

The variables included in the final model of take-up are shown in the box below, which also shows which values of each were selected as reference categories. The adjusted table (Table 0:2) shows which values of these variables were significantly different from the reference category when it came to predicting take-up of cultural and sports engagement.

Models of taking up engagement :

Variables included :	Reference category :
Gender	Male
Age	25 to 44
Ethnicity	White UK
Highest educational qualification	Below GCSE level
Change in health status	No long-standing issue (both interviews)
Change in whether children in the hhold	None both times
Change in economic activity status	FT employment both times
Change in informal care provided	None both times
Change in whether in HBAI ¹³	Not, both times
Change between urban and rural areas	Rural, both times
Whether moved house	Did not move
Change in participation of hhold adults	Single adult household both times

The variables included in the final models of change in health scores are shown in the box below. The adjusted table (Table 0:3) shows only the values for the effects of different longitudinal patterns of engagement in cultural and sports activities on changing health scores, after adjusting for the other variables in the model.

Models of change in health scores:

Variables included :
Gender
Sexual orientation
Age
Ethnicity
Highest educational qualification
Change in whether children in the household
Change in economic activity status
Change in informal care provided
Change in whether household is above/below average income

¹³ Household Below Average Income

Longitudinal analysis

For the longitudinal analysis conducted for this report, we divided survey respondents into categories based on whether they had reported sports or cultural engagement in both, neither or just one of the 2010/11 and 2013/14 surveys.

As noted above, the reference period for the adult cultural and sports engagement questions is the past 12 months, and the data collection points were approximately three years apart. Therefore, there is a gap of up to two years between each point of data collection where we do not know whether or not people have participated.

Therefore, the limitations of these four categories are that:

- Among people who reported participation at just one wave, we do not know at what point between 2010/11 and 2013/14 they started or ceased to participate;
- Some of the people who did not report participation at either wave may have participated in the intervening two years; and
- Some of the people reporting participation at both waves may not have participated consistently every year between 2010/11 and 2013/14.

Presentation of data and findings

- Only statistically significant associations are discussed in the report.
- All analyses are weighted to make the sample representative of adults aged 16 and over living in private households in England.
- Full results tables from simple and multivariate analyses are presented in Appendix B (in a separate PDF for ease of use) and are referenced throughout the report, with the numbers of the relevant tables presented after each paragraph. All the bar charts show percentages or mean scores taken from the descriptive tables to illustrate specific points.

For more details about the analytical methodology and weighting see Appendix A.

1.5.3 Selection of analytical variables

The following socio-demographic variables were used in the analysis:

Basic demographics

- Gender
- Age group
- Level of highest qualification
- Presence of a limiting long-term disability or illness

Sexual orientation

A dimension of people's self-identity newly available for analysis on Understanding Society since 2011/12, divided into:

- Heterosexual
- Lesbian, gay, bisexual or other

Note that the category of 'Refused' is also included in the tables (rather than excluded from the base as is usually the case) given the relatively high proportion of people who refused to answer this question. The results for the 'refused' group are not discussed, however, since it is not clear who this group represents.

Nine-category ethnic group

A more detailed ethnic group variable is used to enable analysis of patterns within different white, black and Asian groups.

Understanding Society also collects data on people's religion, country of origin and English as a first language. All of these are, however, strongly correlated with ethnicity, and ethnicity was selected as the main indicator for this study.



Economic indicators

Previous analysis of Taking Part has tended to look at patterns by personal income. Three other variables from Understanding Society were selected for this analysis to give a more comprehensive picture of people's financial situation:

- Self-defined level of financial circumstances
- Equivalised household income
- Housing tenure

Access to a car

We also look at people's access to a car, defined as having both:

- A driving licence; and
- Access to a car or van.

This variable mostly had no additional impact once financial situation was taken into account, but it is relevant for and discussed in connection with the accessibility of sport facilities.



Indicators of disposable time

In the Taking Part survey, lack of time is commonly cited as a reason for not participating in culture and sport or for a reduction in participation over time (Matthews et al, 2016). As indicators of available time, we look at the relationship between participation and weekly hours of **paid work** and **unpaid caring activities** (in or outside the household). These variables are grouped into:

- Full-time work (35+ hours per week)
- Part-time work (less than 35 hours)
- Full-time student
- Other non-employed (not students)
- High caring responsibilities (20+ hours per week)

- Lower caring responsibilities (less than 20 hours)
- No caring responsibilities

We tried breaking down these groups further by hours of work or caring, but there were no significant differences under and over the selected thresholds.

Household structure

We explored different ways of categorising households, considering the presence and number of children, presence of pensioners, number of adults and relationships between adults. We found that for adult participation, the number of children had less of an association with participation as compared with presence and age of children, and that the role of pensioners was already captured by considering age, and that the association between number of adults and participation was the same in households with and without children. Thus, two ways of classifying households were used: the first was based on number of adults (irrespective of the presence of children) and the second was based on the presence of children (irrespective of the number of adults):

- Single-adult households
- Couple households
- Any other complex households with 2+ adults
- Households without children
- Households where the youngest child is aged 0-4
- Households where the youngest child is aged 5-10
- Households where the youngest child is aged 11-15



Geographic location

A variable indicating whether a person lives in a rural or urban area is included in the analysis.

English region has been examined in previous reports using Taking Part survey data and has not been the focus here, although tables are provided for reference with breakdowns by Government Office Region.

2 Participation in arts activities



Key findings

- There were strong associations between adults' engagement in arts activities and the engagement of other adults in their households. The positive association between participation and living with other adults who also participated was particularly strong for certain art forms (in particular dance, theatre and combined arts), for those living in couple households, and for older adults aged 65 plus.
- In general, women were more likely than men to engage in and to take up engagement in arts activities.
- The proportion of people engaging or taking up engagement in arts activities rose with the highest level of qualification achieved and fell as financial circumstances became more difficult.
- Other things being equal, arts activities were most popular among those aged 45 and over, with those aged 16 to 24 being least likely to engage.
- Adults of Black or Asian origin were less likely than white UK adults to engage in arts activities overall. Among those who did not engage in 2010/11, adults of Pakistani origin were the least likely to have taken up doing so in 2013/14.
- Full-time students and part-time informal carers (providing less than 20 hours a week of unpaid care to other adults) both had higher than average levels of engagement in arts activities.
- Adults living with long-term limiting health problems or disabilities and those living with a child under 5 years of age were less likely to engage in arts activities.
- Arts participants were more likely to take part frequently (at least once a week) if they were female, older, of white ethnic origin, and more comfortably off.

Different art forms appealed to different groups of people, for example:

- Dance was most popular among people of Black African or Caribbean origin and least popular among people of Pakistani and Bangladeshi origin.
- Literary and visual arts activities were most popular among people of white or mixed ethnicity.

In this section we look at participation patterns in arts activities, based on Understanding Society data collected in 2010/11 and 2013/14.

The scope and scale of Understanding Society enables us to add to existing research literature and examine new aspects of arts participation patterns, including:

1. **Who participates** in arts activities and how often, focussing on factors not covered in previous research;
2. **Patterns within households**, including analysis by household composition, as well as by the participation status of other adults in the household; and
3. **Changes between 2010/11 and 2013/14**, and the factors associated with change.

What counts as 'arts participation'

Understanding Society asks people to indicate whether they have done different types of arts activities in the past 12 months.

Overall arts participation is defined as participation in at least one of the following:

1. Dancing (including ballet)
2. Singing
3. Playing a musical instrument
4. Writing music
5. Acting
6. Carnival/street arts
7. Circus skills
8. Painting/drawing/art
9. Photo/video art
10. Computer art
11. Crafts
12. Reading a book for pleasure
13. Writing (literature) for pleasure
14. Being a member of a book club

We also look at subgroups of these activities, divided into seven art forms for the purposes of this report:

1. Dance (activity 1)
2. Literature (activities 12, 13, 14)
3. Music (activities 2, 3, 4)
4. Visual arts and crafts (activities 8, 11)
5. Theatre (activity 5)
6. Digital arts (activities 9, 10)
7. Combined arts (activities 6, 7)

2.1 Who participates in arts activities?

The Understanding Society data shows that the majority of adults in England take part in arts activities. Three quarters (76%) had participated in at least one arts activity in the past 12 months (when asked in 2013/14).¹⁴ The majority (68%) of adults who participated did so regularly, at least once a week.

We know from previous research that participation in arts activities is not equally distributed across socio-demographic groups. Our analysis of Understanding Society is consistent with previous research (e.g. DCMS, 2010, 2016a, 2016b), which has shown significantly lower levels of overall arts participation among:

- Men;

¹⁴ Note that this is higher than the headline participation rate for 2013/14 reported in the Taking Part survey, 47 per cent (DCMS 2015). In addition to other differences in survey and analytical design, a key factor is that 'reading for pleasure' is included in arts activities in the current analysis while excluded from the headline figures based on Taking Part.

- Older people (aged 75 and over);
- People in black and minority ethnic groups;
- Those with lower levels of education;
- Social renters;
- Those living in urban areas; and
- Those with a long-standing limiting disability or illness.

Tables 2:1, 2:2 and 2:5

Further analysis by frequency and art form, and by new variables available in Understanding Society, will allow us to validate and extend the existing evidence base.

2.1.1 Age

In line with previous findings, overall arts participation was lowest among those aged 75 and over. However, among those who did participate, the proportion that **participated frequently** (at least once a week) **rose steadily with age**, from a half (53%) of arts-participants aged 16 to 24, to four fifths (83%) aged 75 or more.

Different age groups tended to take part in different types of arts activities:

- Younger people were more likely than older people to engage in music, drama, digital and combined arts activities (19%, 4%, 26% and 5% of 16–24-year-olds participating in each, as compared with 7%, 1%, 7% and 0.4% of those aged 75+).
- Involvement in literature, including reading and writing for pleasure and taking part in book groups, was highest (69-70%) in the 45 to 74 age group.
- Among the oldest age group (75 or more), literary activities such as reading or writing for pleasure were the most commonly reported arts activities, followed by visual arts and crafts. Involvement in other types of arts activities fell steeply from age 75. However, seven per cent of people in this age group still reported having participated in music and digital arts activity in the past 12 months, and five per cent had engaged in dance.
- The popularity of dance activities varied little by age, with a fairly constant proportion of adults participating between 16 and 74 (between 9% and 10%).

Tables 2:1, 2:3, 2:5

Regression models showed that, after adjusting for factors such as health, financial circumstances and qualification, participation in arts activities was significantly lower among 16 to 24 year olds than it was among 25 to 44 year olds, and it was highest among people aged 45 and over.¹⁵

Table 0:1

2.1.2 Gender

Overall, and in line with previous research (DCMS, 2016b), women were more likely than men to report arts participation (81% vs 70%), and this difference remained significant when other factors were controlled. Women also participated more frequently than men (72% of female vs 62% of male participants doing so at least once a week). Further variations by gender were evident in analysis by art form, with:

¹⁵ The full range of variables included in the model is shown in Section 1.5.2, above.

-
- Women were more likely to engage in dance (11% vs 6%), literary (74% vs 60%) and visual arts activities (36% vs 17%); whereas
 - Men were more likely to engage in music (16% vs 11%) and digital arts activities (22% vs 13% respectively) .

Tables 2:1, 2:3, 2:5, 0:1

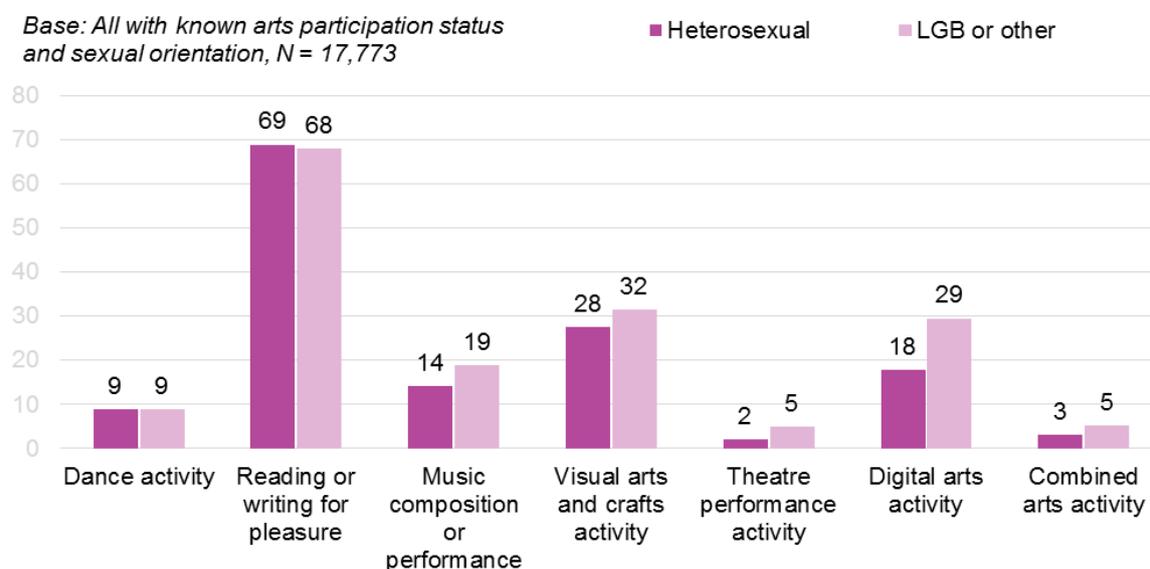
2.1.3 Sexual orientation

There was no significant difference in the overall likelihood of participating or frequency of participating in the arts by sexual orientation (lesbian, gay, bisexual or other vs heterosexual). However, analysis of participation by art form revealed some significant patterns (Figure 2:1):

- Lesbian, gay or bisexual adults were more likely than heterosexual adults to report engaging in music (19% vs 14%), theatre (5% vs 2%), digital arts (29% vs 18%) and combined arts (5% vs 3%) activities.

Tables 2:1, 2:3, 2:5

Figure 2:1 Participation (%) in arts activities, by art form and sexual orientation, England 2013/14



2.1.4 Ethnicity

In terms of overall participation in arts activities, around three quarters of white and mixed ethnicity adults had participated in the past year – a higher proportion than in all other ethnic groups. Around two thirds of black adults had participated (66 to 68%), with the lowest levels of participation reported by people of Pakistani, Bangladeshi and Indian origin (45%, 53% and 59% respectively). After controlling for other differences between ethnic groups, the lower rates of participation in arts activity among people of Black and Asian origin remained significant.

Among those who had participated, adults from ethnic minority groups tended to have done so less frequently than white adults (50% to 54% of adults from the Asian groups and 60% of people of black Caribbean origin participated weekly, for example, vs 68% of white UK adults).

Tables 2:1, 2:5, 0:1

Distinct patterns by ethnic group also emerged when looking at types of arts activity, as illustrated in Figure 2:2:

- People of Pakistani and Bangladeshi origin had the lowest participation in dance (3% to 4%) and those of black Caribbean and African origin had the highest (18%), compared with eight per cent for those of white UK and nine per cent for those of Indian origin.
- For literature participation (including reading for pleasure), people of Pakistani origin had the lowest participation (39%) followed, in order, by those of Bangladeshi, Indian, Caribbean and African origin (46%, 48%, 53% and 54% respectively vs 68% of white UK or mixed ethnicity respondents).
- People of Asian origin had the lowest participation in visual arts and crafts activities (13% to 14%) followed by those of black origin (18%), with the highest levels of participation found among those of white or mixed origin (26% and 27%).

-
- People of white, mixed and black ethnic origin had similar levels of participation in music, but those of Asian origin were less likely to have participated (2% of Pakistani, 5% of Bangladeshi and 8% of Indian adults vs 14% of white UK adults).
 - People of Caribbean origin were the most likely to have participated in combined arts activities (8%) followed by those of mixed origin (6%). People of Pakistani, Bangladeshi and African origin were also more likely than white UK adults to have taken part in combined arts activities (4 to 5% vs 3%).

The numbers participating in theatre and digital arts were too small for any significant differences by ethnic origin to be apparent.

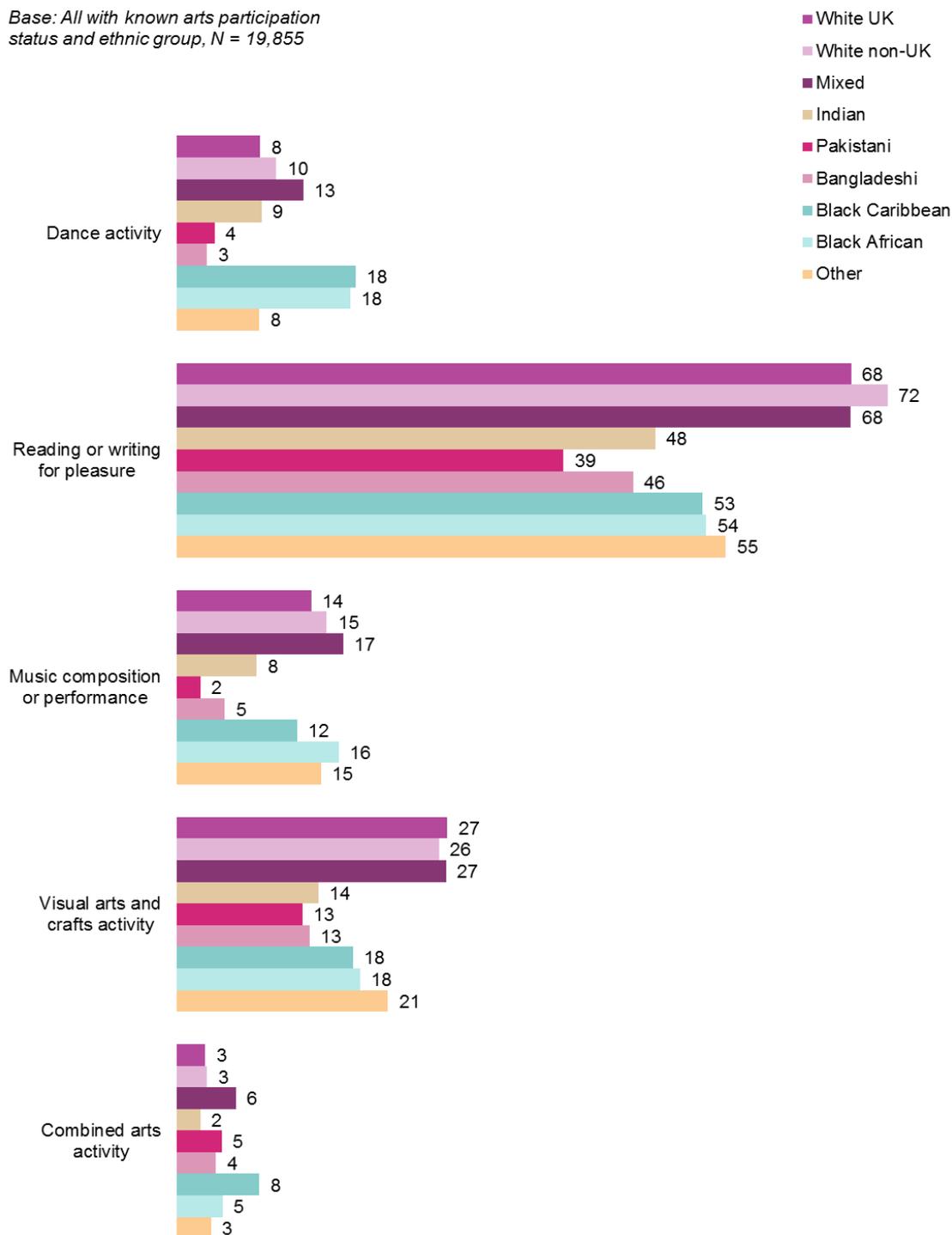
Table 2:3

What about religion, country of origin, English as a first language ?

The headline patterns of participation by these variables are provided in Table 2:1. Given the correlations with ethnicity, it is not unexpected that we see lower levels of arts participation among those whose first language is not English, those not born in the UK, and Muslim and Hindu adults.

Figure 2:2 Participation (%) in arts activities, by art form and ethnicity, England 2013/14

Base: All with known arts participation status and ethnic group, N = 19,855



2.1.5 Personal and household income

Previous research has shown an association between arts participation and personal income (e.g. DCMS 2016b). The results by the income variables examined in this analysis were consistent with the earlier findings. An individual’s self-assessed financial situation and the relative income level of their household were both significantly

associated with arts participation, with lower rates of participation found among those 'finding it difficult' financially and those living in households below average income, as compared with those who were 'living comfortably' and living in households above average income. The differences remained significant when other factors were taken into account.

Self-assessed financial situation was also significantly associated with frequency of participation. Those describing themselves as 'living comfortably' were more likely than other adults to engage in arts activities at least weekly (70% vs 65% to 66%).

Tables 2:1, 2:2, 2:5, 2:6, 0:1

2.1.6 Employment status and caring responsibilities

- Full-time students were the most likely to take part in arts activities (88% participating), which may in part reflect the relatively high availability of disposable time as well as the breadth and ease of access of opportunities to get involved during student years. They remained more likely than the full-time employed to take part in arts activities after adjusting for other differences between economic activity groups, including their age and qualifications profile.
- There were no differences in overall arts activity participation between those in full-time, part-time or non-employment, after adjusting for the other factors in the model.
- Among participants, frequent weekly participation was more likely among those not working or working full-time, (77% and 68% respectively, vs 60% for part-time employed and 58% for students).

Tables 2:1, 2:5, 0:1

- For unpaid caring responsibilities, simple analysis shows that on average, those providing a high level (20+ hours per week) of care were less likely to participate in the arts than those providing no or some care. This difference was not significant, however, once other factors (such as the relatively lower average economic situation of carers)¹⁶ were taken into account.
- Those providing some care (less than 20 hours) were more likely than non-carers to participate in the arts, even when other factors were taken into account.

Tables 2:1, 0:1

2.2 Arts participation and household dynamics

With its collection of a number of household level indicators and individual data from all people in a household, Understanding Society is well suited for exploring the dynamics of participation within households.

¹⁶ 49% of people providing high levels of care assessed themselves as 'just getting by' or 'having difficulty managing financially', as compared with 33% of people who were providing no informal care or were providing it for fewer than 20 hours per week.

2.2.1 Presence and age of children

Analysis of arts participation by the presence and ages of children in the household showed lower participation rates for those with young children in the household:

- Those with no children in the household or only older children (aged 11–15) had the highest rates of arts activity participation (77%) and those with one or more children aged under five in the household had the lowest (69%).
- Having young children was also associated with lower frequency of participation among those who did participate (58% of participants with under 5s did so weekly, compared with 61 to 62% of those with older children). After controlling for differences between those with and without children in the household in our full model, we found that adults living with children under 5 were significantly less likely to take part in the arts than those with no children or older children.

The pattern is more varied, however, if participation is examined by art form, as illustrated in Figure 2:3:

- Those with **under fives** in the household had significantly lower rates of participation in dance, literature, theatre and combined arts activities.

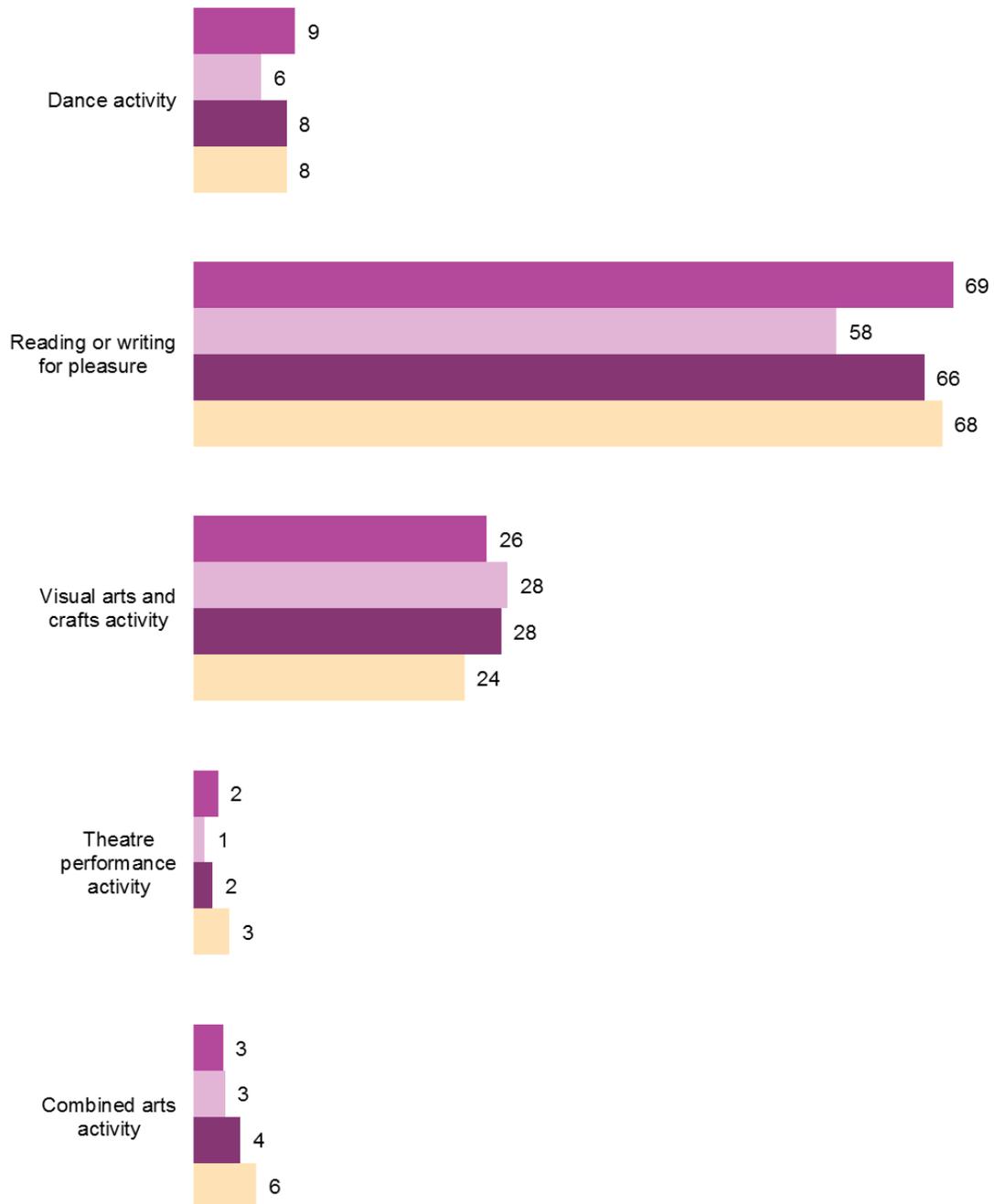
Participation in music, visual arts and digital arts did not differ significantly by the age of children in the household.

Tables 2:2, 2:4, 2:6, 0:1

Figure 2:3 Proportion (%) participating in arts activities, by art form and presence and age of children, England 2013/14

Base: All with known arts participation status, N = 20,007

- No dependent children in household
- Youngest child < 5
- Youngest child 5-10
- Youngest child 11-15



2.2.2 Presence and participation of other adults

Overall, people living as a couple have the highest rates of arts participation (78%), followed by those living in single-adult households (76%) and in complex households (73%).

Those who lived with at least one other adult who participated in the arts had a significantly higher likelihood of participating themselves than single adults did, and those living with other adults, none of whom participated in the arts, had a significantly lower likelihood of doing so themselves compared with single adults, after controlling for other differences between these groups.

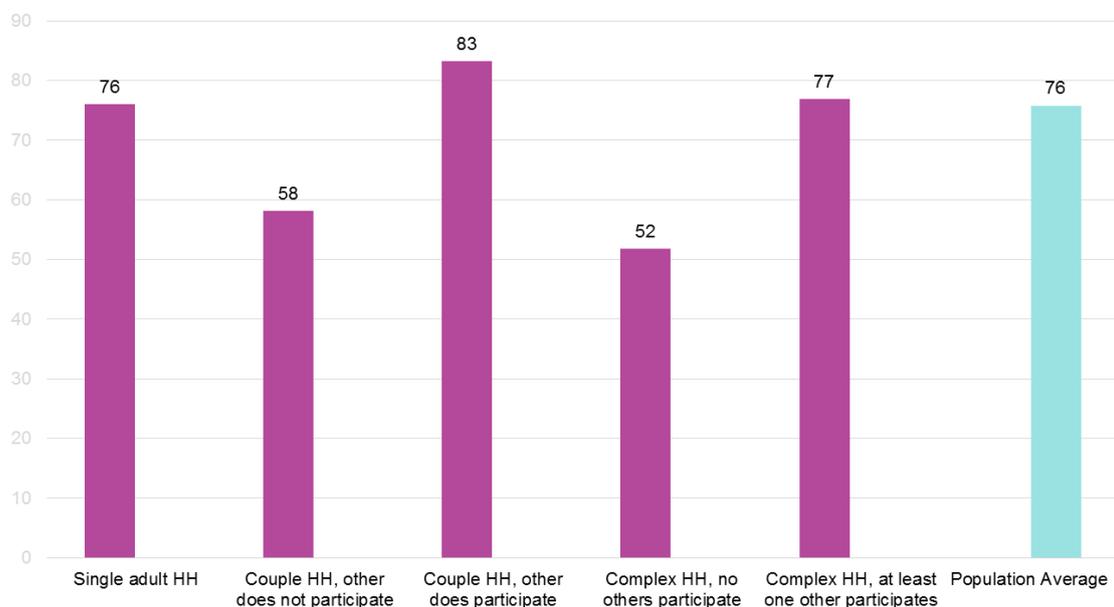
Figure 2:4 shows the proportion of individuals reporting participation in arts activities broken down by their household type and the participation status of other household members (where present).

- For those living as a couple, having a **non-participating spouse/partner was associated with a significantly lower participation rate (58%)** in the past 12 months, as compared with those with a participating spouse (83%).
- Similarly, those living in complex households where no other adult participated had a significantly lower rate (52%) of reporting participation in the arts than those with participating household members (77%).

Tables 2:2, 2:7, 0:1

Figure 2:4 Proportion (%) participating in arts activities, by household type and participation status of household members, 2013/14

Base: In fully productive households, N = 18,335

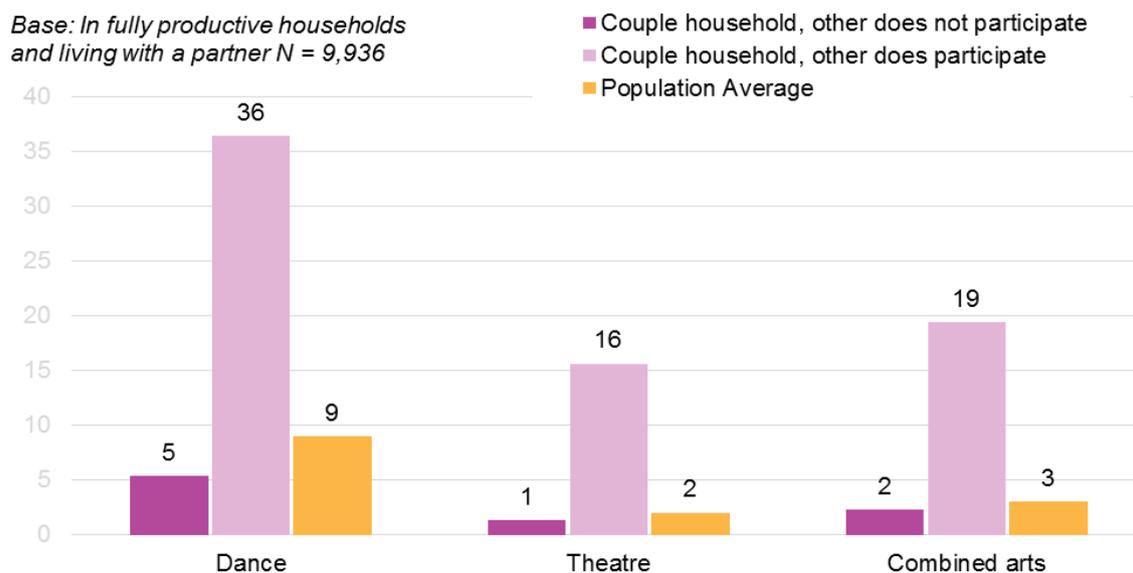


On the one hand, the strength of association between individuals' participation and that of others in their household is likely to reflect the fact that those who have a similar propensity for arts participation for a range of demographic, economic and cultural reasons tend to cluster together in households. On the other hand, the likelihood of participation in certain types of activity, such as dance, theatre and combined arts was increased more than that of participation in other types of activity by the presence of a

participating spouse in the household unit (Figure 2.5). For such activities, in which people tend to participate with others, having others in the household who participate could be an encouraging factor.

Tables 2:8-2.14

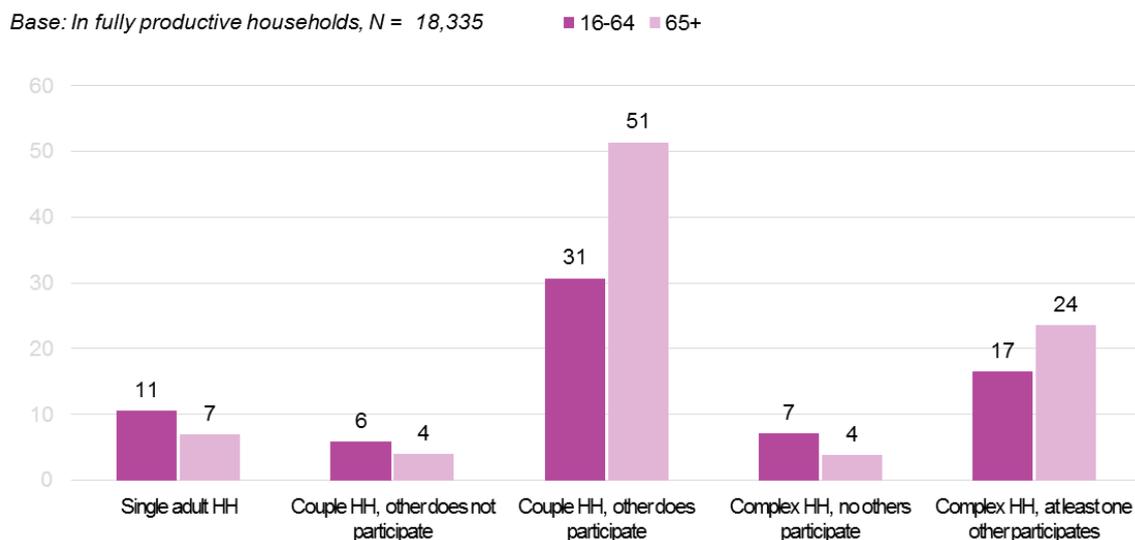
Figure 2:5 Proportion (%) participating in dance, theatre and combined arts activities in the past 12 months, by participation status of cohabiting partner, England 2013/14



On the other hand, some results were suggestive of an encouragement effect for certain types of arts activities. For example, we found that, for engagement in dance, the impact of having a participating spouse/partner, was particularly strong among older adults (Figure 2:6):

- Among adults under 65 living in couple households, 31% of those with a partner who danced participated themselves, compared with 6% of those whose partner did not dance (under 65s with a dancing spouse were 5 times more likely to dance themselves). The equivalent figures for those aged 65 and over were 51% and 4% (older adults with a dancing spouse/partner were 12 times more likely to dance themselves).
- For those living in complex households, having at least one other adult who danced also made a significant difference, and had a larger effect for older adults (more than doubling the chance of dance participation for under 65s, and multiplying this chance by six for those aged 65 and over).

Figure 2:6 Proportion (%) participating in dance in the past 12 months, by participation status of other people in household and age under/over 65+, 2013/14



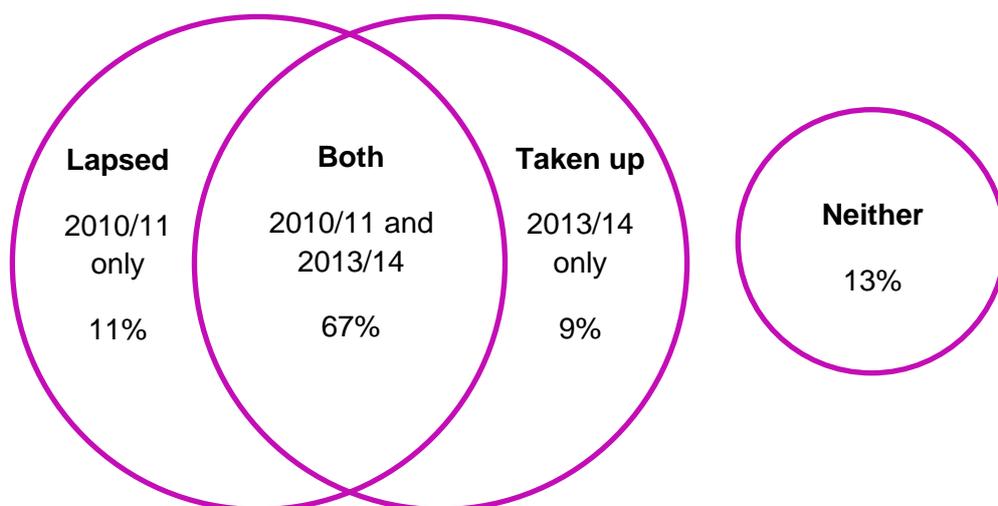
2.3 How has participation changed over time?

Understanding Society also presents an opportunity for looking at changes in arts participation between 2010/11 and 2013/14 and at the factors associated with the changes between these time points.

Overall, among the constant sample of Understanding Society participants interviewed in both 2010/11 and 2013/14, the proportion of people reporting arts participation was fairly comparable at both points in time (78% in 2010/11, 76% in 2013/14).

The picture was not entirely static, however. As illustrated in Figure 2:7, two thirds (67%) of adults reported participation at both time points, and one in eight (13%) at neither. The remaining fifth had participated at just one of the two time points, with nine per cent reporting participation in 2013/14 but not 2010/11 ('taken up') and 11 per cent participation in the earlier time 2010/11 but no longer in 2013/14 ('lapsed').

Figure 2:7 Participation status in arts activities 2010/11 and 2013/14



The proportion of different socio-demographic groups belonging to each of these four categories is provided in Tables 2.15 and 2.16. The people participating at both times form the majority of all arts participants, and the factors we have seen to be associated with higher propensity to participate in arts activities at all – being a women, of white or mixed ethnicity, aged 55 to 64, with higher level of qualifications, and so forth – were also associated with a higher likelihood of belonging to this group of consistent participants.

Conversely, the socio-demographic characteristics within the groups who had not participated at either time and those who had 'lapsed' in their participation were broadly the opposite of those among adults who had participated at both times.

Those who had taken up arts participation between 2010/11 and 2013/14 are of particular interest, since their experiences and characteristics are relevant to the policy ambition of engaging more people with the arts. An examination of this group could help us unpick the factors that act as drivers and barriers to getting people involved in arts activities.

2.3.1 Factors associated with taking up arts participation

Those who had taken up arts participation between 2010/11 and 2013/14 accounted for nine per cent of the full sample and 40 per cent of all those who did not report any arts participation in 2010/11. For this study, we examined how an individual's likelihood of taking up arts participation was related to their basic socio-demographic characteristics, as well as to changes in their lives between 2010/11 to 2013/14¹⁷.

Key demographics

In terms of key demographics, the factors associated with a higher chance of taking up participation were those already seen to be associated with overall likelihood of arts participation in 2013/14. The factors listed below were all significantly associated with the likelihood of taking up participation in the models which adjusted for other

¹⁷ The full range of factors included in regression models of taking up participation is described in section on methods, section 1.5.2.

differences between the groups, though the figures presented are the unadjusted overall percentages:

- **Gender:** Women were more likely than men to take up participation (46% of women vs 36% men who were not participating in 2010/11).
- **Ethnicity:** Adults of Pakistani origin were less likely than those of white UK origin to take up participation in arts activities (22% vs 40% of those who did not previously participate).
- **Education level:** Higher levels of qualifications were associated with an increased likelihood of taking up an arts activity (29% for those with qualifications below GCSE level, increasing to 54% among 2010/11 non-participants with degree level qualifications).
- **Disability status:** Those who reported living with a long-term limiting illness/disability at both time points were less likely than those without such issues to have taken up arts participation (31% vs 42% of those who did not previously participate).

Table 2:17, 0:2

Impact of changes in circumstances

The following statistically significant associations were detected between an individual's chance of taking up arts activities and the types of changes that had occurred in their circumstances between 2010/11 and 2013/14:

- **New child:** Having a new child in the household in 2013/14, after living in a household with no children in 2010/11, was associated with a significantly lower likelihood of having taken up arts activities, when comparisons were made with adults living in households with no children (26% vs 40% after adjusting for other differences between these groups).

Table 2:18, 0:2

Impact of others in the household

The impact of the participation status of other household members for taking up participation was also statistically significant (Table 2.19):

- Those non-participants who were living with (other) non-participants in both 2010/11 and 2013/14 were significantly less likely to take up participation (25% of those living with non-participants vs 39% of those living alone).
- Similarly, those living with an arts participant in 2010/11 but with all non-participants in 2013/14 were also less likely to take up participation (27% vs 39% among those living alone).

Other apparent differences in the results of simple analysis did not reach statistical significance once the other factors were taken into account.

Table 2:19, 0:2

3 Attending arts events

Key findings

- The likelihood of an adult attending arts events was strongly associated with the attendance pattern of others in the household: those who lived with other arts event attenders were more likely to attend themselves.
 - The proportion attending rose with level of highest qualification achieved, and fell as financial circumstances became more difficult.
 - Women were more likely than men to attend or take up attendance at arts events.
 - The 65 to 74 year, 'post-retirement' age group had the highest proportion of people attending arts events. Adults in the oldest (75 plus) and youngest (16 to 24) age groups were less likely to attend, other things being equal.
 - Asian and Black adults had lower overall arts event attendance than white adults. Those of Indian and Pakistani origin were the least likely to have taken up arts event attendance, among those who had not been attending in 2010/11.
 - Other groups of adults who were less likely to attend arts events or to have taken up attending such events were: those living with a long-term limiting health problem or disability, and those not in paid employment.
 - Full-time students and part-time informal carers (providing less than 20 hours of care to another adult per week) had a higher than average likelihood of attending arts events.
 - Adults living with a child under 5 years of age were less likely to attend than those with no children or older children; but those with children aged 5 to 10 years were more likely to attend arts events. Where adults were no longer living in a household with children in 2013/14, they were less likely to have taken up visits to arts events.
 - Factors associated with higher take up of arts event attendance among previous non-attenders included having moved house, and having decreased the amount of informal care provided to other adults.
 - Lesbian, gay and bisexual adults were more likely than heterosexuals to attend most types of arts events, and to attend more frequently.
- In general, different types of arts events appealed to different groups, for example:
- Literary events appealed most to the youngest age group, whereas theatre events appealed most to adults aged 45 to 64.
 - Adults of Pakistani and Bangladeshi origin were the least likely to attend dance events, but those of Indian, Black African or Black Caribbean origin were more likely to do so than white adults.



In this section we turn to look at the socio-demographic patterns in the attendance of arts events present in the Understanding Society 2010/11 and 2013/14 data. We focus on additional insights which can be gained from Understanding Society, including:

1. **Who attends** arts events and how often, focussing on factors not covered in previous research;
2. **Patterns within households**, including analysis by household composition, as well as by the participation status of other adults in the household; and
3. **Changes between 2010/11 and 2013/14**, and the factors associated with change.

What counts as 'arts attendance'

Understanding Society asks people to indicate whether they have attended different types of arts events in the past 12 months.

Overall arts attendance is defined as going to at least one of the following:

1. Exhibition
2. Video/electronic art
3. Books/writing event
4. Street/public art
5. Carnival, culture specific festival
6. Circus
7. Play/pantomime/musical
8. Opera/operetta
9. Classical music
10. Rock/pop/jazz
11. Ballet
12. Contemporary dance
13. African, South Asian, Chinese dance

We also look at subgroups of these activities, divided into six art forms for the purposes of this report:

1. Visual arts exhibitions (events 1 and 2)
2. Theatre (event 7)
3. Music (events 8 to 10)
4. Dance (events 11 to 13)
5. Literature (event 3)
6. Combined arts (events 4 to 6)

3.1 Who attends arts events?

The latest Understanding Society arts attendance data shows that three fifths (61%) of adults in England reported having attended an arts event in the past 12 months in 2013/14.¹⁸ The overall level of arts attendance is slightly lower than that of arts participation (76%) noted in the previous section.

Among those who had attended, a quarter (23%) had gone to arts events regularly at least once a month, two fifths (44%) three or four times a year and the remaining third (33%) once or twice a year.

Similarly to arts participation, our analysis of the Understanding Society data confirms the presence of persistent socio-demographic differences in the levels of arts attendance as noted in previous research (e.g. DCMS, 2010, 2016a, 2016b), with significantly lower levels of overall arts attendance found for example among:

- men;
- people aged 75 and over;
- black and minority ethnic groups;
- those with lower levels of education;
- social renters;
- those living in urban areas; and
- those with a long-standard limiting disability or illness.

Tables 3:1, 3:2, 3:5

¹⁸ This is slightly lower than the level of attendance reported in 2013/14 based on the Taking Part survey, 68%, a difference is likely to be related to the differences in questionnaire design.

Further analysis by frequency and art form, and by new variables available in Understanding Society, will allow us to validate and extend the existing evidence base.

3.1.1 Age

Understanding Society data shows that adults aged 75 and over were the least likely to have attended arts events in the past year (37% had done so, compared with 58% of adults aged 65 to 74 and more than 60% of other age groups). After controlling for other differences between age groups, including the presence of limiting health problems and differences in financial circumstances, our models showed that both the group aged 75 or over and the group aged 16 to 24 years were less likely than those aged 25 to 44 to have attended arts events. Adults aged 65 to 74 years were significantly more likely than 25 to 44 year olds to have attended arts events after adjusting for other factors.

Tables 3:1. 0:1

Beneath these overall patterns, analysis by art form indicates that different groups had a propensity to attend different types of arts events, for example:

- Literary events were most popular among 16 to 24 year olds (8% reported attendance vs 6% overall); and
- theatre event attendance was highest among people aged 45 to 64 (40% vs 35% overall).

Table 3:3

3.1.2 Gender

Women were more likely than men to have attended arts events overall (63% vs 59% respectively), although the gap between the sexes was not as large for arts events attendance as that seen in arts participation (81% vs 70%). Among those who did attend, frequency of attendance was not significantly different for men and women.

The gender pattern is again more varied if attendance is examined by art form, with dance events and theatre events in particular being more attended by women than by men (10% and 41% of women vs 6% and 30% of men attending respectively).

Tables 3:1. 3:3, 3:5, 0:1

3.1.3 Sexual orientation

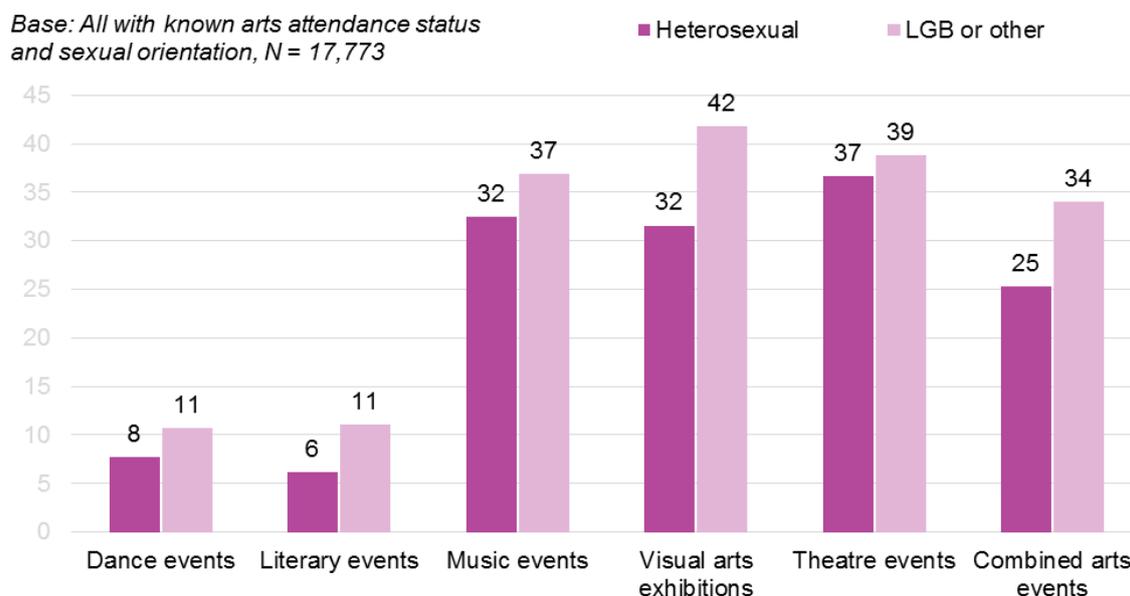
In terms of overall arts attendance, there were no statistically significant differences in reported levels of arts attendance between heterosexuals and those defining themselves as lesbian, gay and bisexual or other. Similarly to arts participation, however, some significant differences can be seen in the typical frequency of attendance and art form preference:

- As per arts participation, those lesbian, gay or bisexual adults who did attend tended to do so more frequently than heterosexual attenders, with a third (34%) reporting attendance at least monthly as compared with a quarter (23%) of heterosexual attenders.

- Lesbian, gay and bisexual adults were significantly more likely to attend events involving dance (11% vs 8% of heterosexuals), literature (11% vs 6%), music (37% vs 32%), visual arts (42% vs 32%) and combined arts (34% vs 25%) (Figure 3:1).

Tables 3:3, 3:5, 0:1

Figure 3:1 Attendance (%) at arts events, by art form and sexual orientation, England 2013/14



3.1.4 Ethnic group

In terms of overall attendance at arts events, people of Pakistani, Bangladeshi and Black African origin were the least likely to attend arts events in general, after taking account of other differences between the groups. Adults of Indian, Black Caribbean and 'other' ethnic origin were also less likely to attend than white UK adults were.

Some distinct patterns by ethnic group were apparent when looking at events by art form (Figure 3:2):

- Adults of Bangladeshi and Pakistani origin were the least likely to attend dance events (3% and 4% respectively vs 7% for white UK adults and at least 8% of all other ethnic minority groups). They were also the least likely to attend literary events (3%, vs 5% of Indian, 6% of white UK and at least 7% of all other ethnic minority groups).
- Around a third of white and mixed ethnicity adults had attended music events (33 to 35%) but fewer than a fifth of Black Caribbean adults had done so (18%) and the proportions for those of Black African and Asian origin were even lower (ranging from 5 to 10%).
- A similar pattern of ethnic differences was evident for attendance at visual arts exhibitions and theatre events, where the white and mixed ethnicity groups had the highest proportions of attenders, followed by Caribbean, 'other' ethnicity and Indian adults, with those of African, Pakistani and Bangladeshi origin having the lowest attendance rates.

-
- The picture for attendance at combined arts events was different, probably reflecting the types of events in this group, which includes carnival and culturally specific events such as mela. Adults of mixed, Indian, other and white non-UK ethnicity had the highest attendance for combined arts events (32 to 36%) followed, in order, by Caribbean, Bangladeshi, white UK, African and Pakistani groups (ranging from 29% down to 18%).

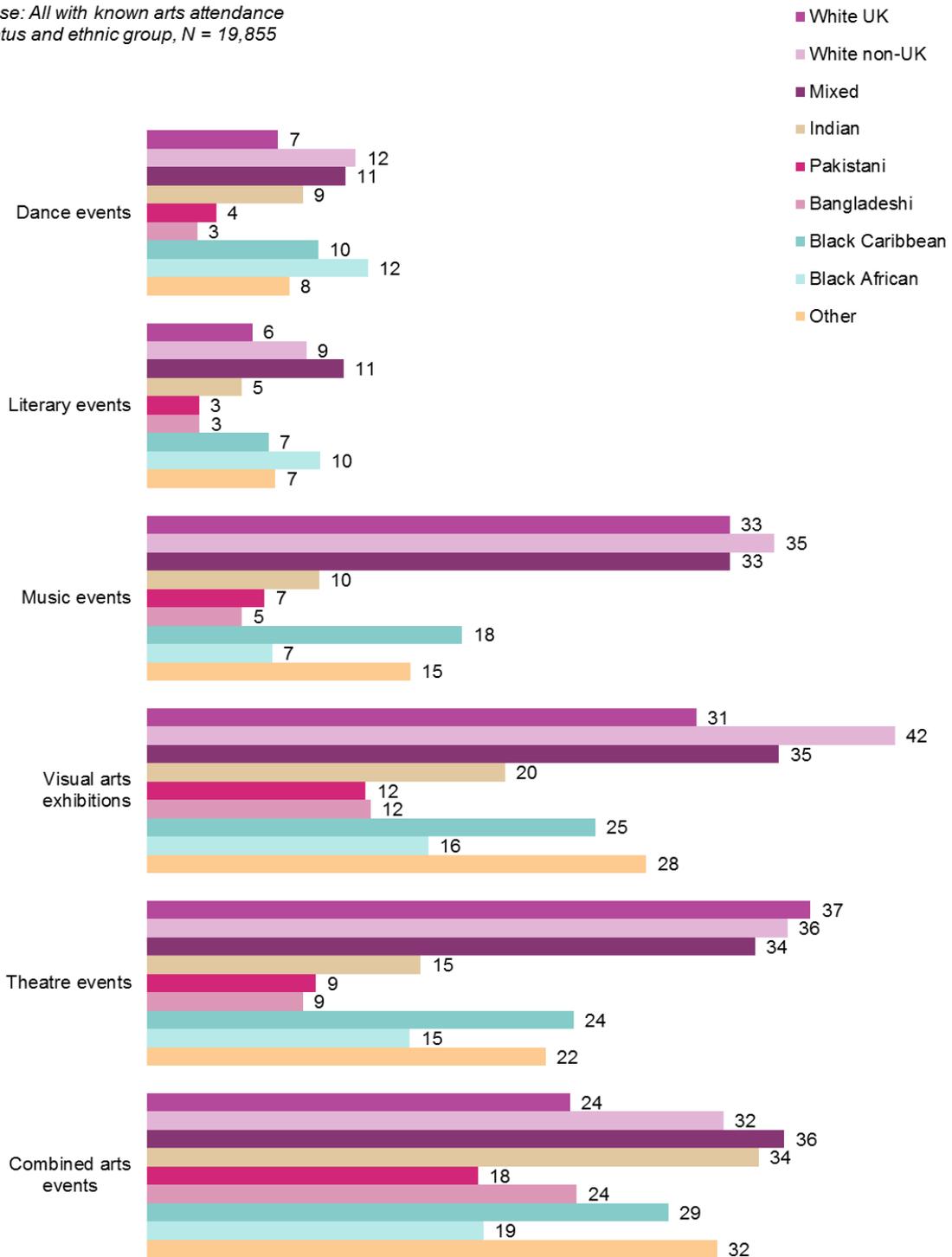
Tables 3:1, 3:3, 3:5, 0:1

What about religion, country of origin, English as a first language ?

The headline patterns of participation by these variables are provided in Table 3:1. Given the correlations with ethnicity, it is not unexpected that we see lower levels of arts attendance among those whose first language is not English, those not born in the UK, and Muslim and Hindu adults.

Figure 3:2 Attendance (%) at arts events, by art form and ethnicity, England 2013/14

Base: All with known arts attendance status and ethnic group, N = 19,855



3.1.5 Personal and household income

Using the measures of self-assessed financial circumstances and household income, lower rates of arts event attendance were found among those finding it more difficult to

manage financially and those living in households with lower income. This association held for all types of arts events. The differences remained statistically significant in complex analysis, holding other factors constant.

Among adults who did attend arts events, financial circumstances were also directly related to the frequency of attendance, with 71 per cent of those who said they were living comfortably managing to attend more than once or twice per year, falling to 56 per cent of those who said they had difficulty managing financially.

Tables 3:1, 3:2, 3:3, 3:4, 3:5, 3:6, 0:1

3.1.6 Employment status and caring responsibilities

There was a clear pattern of higher arts attendance among full-time students compared with other economic activity groups:

- After controlling for differences between economic activity groups, full-time students were more likely to attend arts events than were those in full-time employment, but those who were not in employment were less likely to do so.
- Full-time students were the most likely to have attended literary, music visual arts and combined arts events but not dance and theatre events.
- Among those who did attend arts events, full-time students were the most likely to have done so at least monthly (34% vs 23% overall) – a pattern different to arts participation where non-employed people had relatively the highest rates of participation.

Tables 3:1, 3:3, 3:5, 0:1

As with other types of cultural engagement, those who provided less than 20 hours of unpaid care to other adults each week had a higher likelihood of attending arts events than those who did not provide unpaid care, after controlling for other differences between these groups including those of age, gender and financial circumstances.

Those providing more than 20 hours of unpaid care per week were less likely overall to attend arts events (44% vs 61% of non-carers) but the association became non-significant in models adjusting for other differences between these groups. Their lower likelihood of participation was evident across all types of arts events.

These results suggest that relatively low rates of arts event attendance among those responsible for providing high levels of care were driven by factors such as poorer financial circumstances.

Tables 3:1, 3:3, 3:5, 0:1

3.2 Arts attendance and household dynamics

With its collection of a number of household level indicators and individual data from all people in a household, Understanding Society is well suited for exploring the dynamics within households.

3.2.1 Presence and age of children

After controlling for other differences, we found that adults living in households with a child under 5 were less likely to attend arts events than those in households with no

children (adjusted figures of 59% vs 63%), whereas those living in households where the youngest child was aged 5 to 10 years were more likely to attend arts events (adjusted figures of 66% vs 63% for attendance in the last year).

Table 0:1

These findings resonate with earlier research showing that encouraging children's interests and learning is among the most frequently cited levers for increased arts attendance among adults (Matthews et al, 2016). The relationship between the engagement of adults and children is discussed further in the associated report on the Understanding Society youth data, *Culture, sport and wellbeing: Findings from the Understanding Society youth survey*.

Figure 3:3 shows attendance at different types of arts events by households including children of different ages (households with no children are also included but it should be born in mind that these households have a different age profile from that which is typical among households with children). The chart shows theatre and combined arts events had particular appeal for adults in households where the youngest child was aged 5 to 10, whereas attendance at music events was higher for those living with older children aged 11 to 15. Those living with children under 5 years of age had the lowest attendance at all types of arts events with the exception of those in the combined arts category, which might be expected to have an informal atmosphere more conducive to the participation of the youngest children.

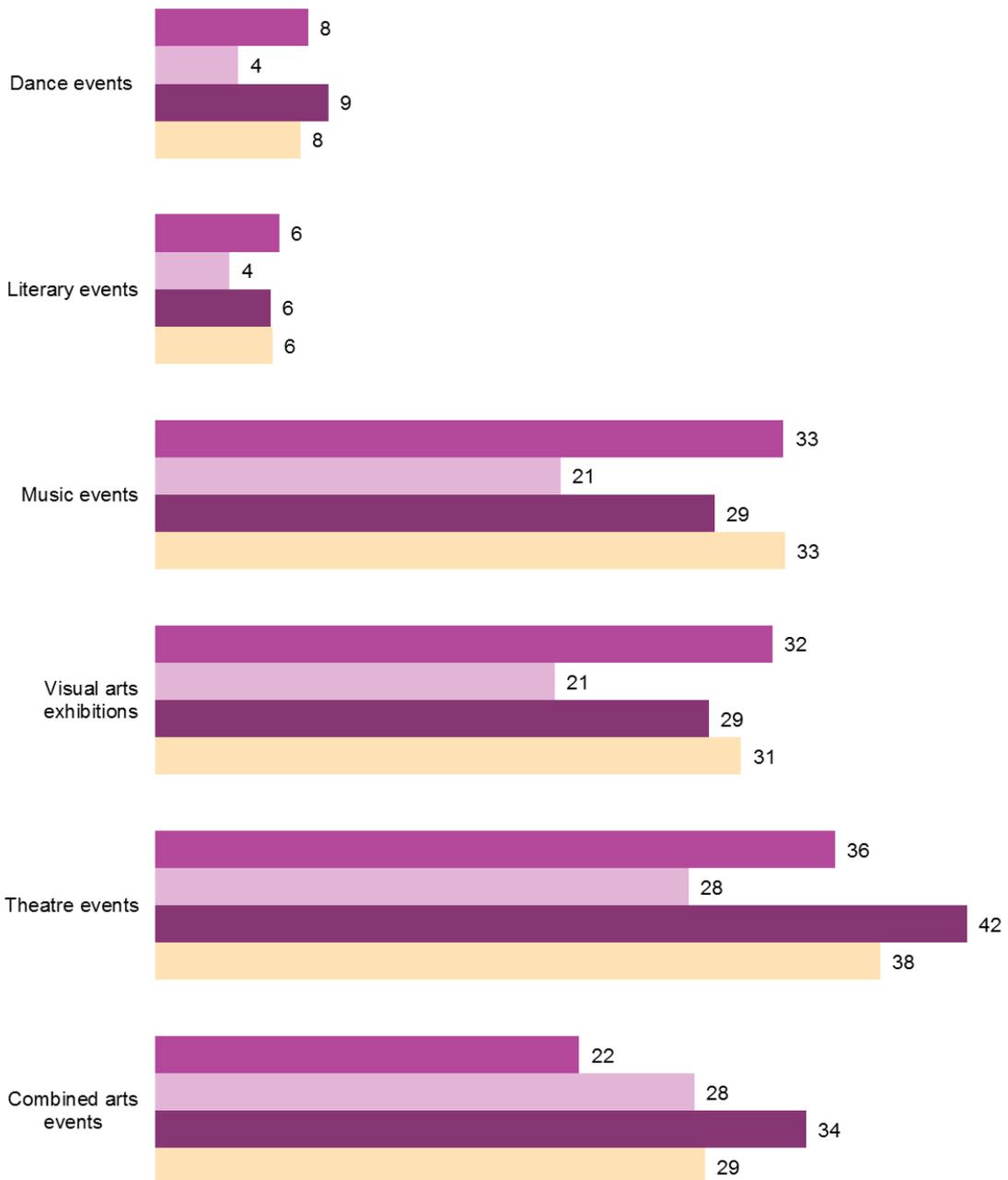
Arts events attendees who were living with a child under 5 were the most likely to have attended infrequently, just once or twice in the year (44% vs 33% overall).

Tables 3:2, 3:4, 3:6

Figure 3:3 Proportion (%) attending arts events, by presence and age of children and art form, England 2013/14

Base: All with known arts attendance status, N = 20,007

- No dependent children in household
- Youngest child < 5
- Youngest child 5-10
- Youngest child 11-15



3.2.2 Presence and participation of other adults

Models controlling for the full range of factors, including financial circumstances, showed that those adults who lived with at least one other adult arts event attender were significantly more likely than single adults to attend arts events themselves

whereas those who lived only with adult non-attenders were significantly less likely to do so.

Table 0:1

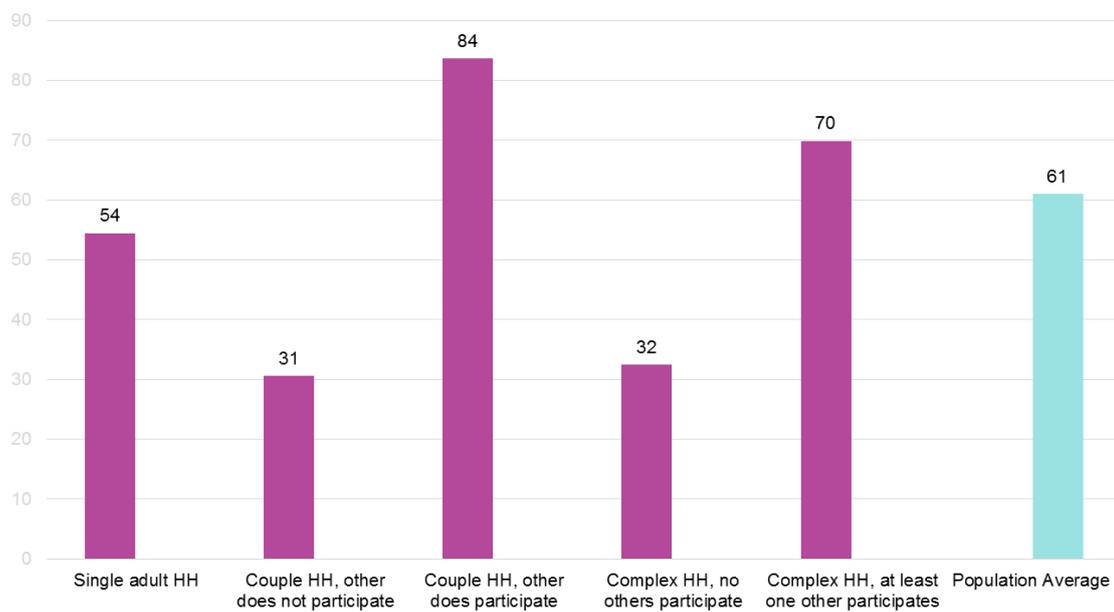
Large differences in the levels of arts attendance between those with and without other adult attenders in the household probably reflect tendencies for people to enjoy attending arts events with others, and to go out relatively frequently with close family members. Figure 3:4 shows the proportion of individuals reporting attendance at arts events, broken down by their household type and the participation status of spouse/other household members (where present). It shows that:

- For those living as a couple, those with an **attending spouse/partner** were two and a half times more likely to have attended arts events in the past 12 months than those without (84% vs 31%).
- Those living in **complex households including other arts attenders** were also more than twice as likely to have attended than those living in complex households without other attenders (70% vs 32%).

Table 3.07

Figure 3:4 Proportion (%) attending arts events, by household type and attendance status of household members, 2013/14

Base: In fully productive households, N = 18,335



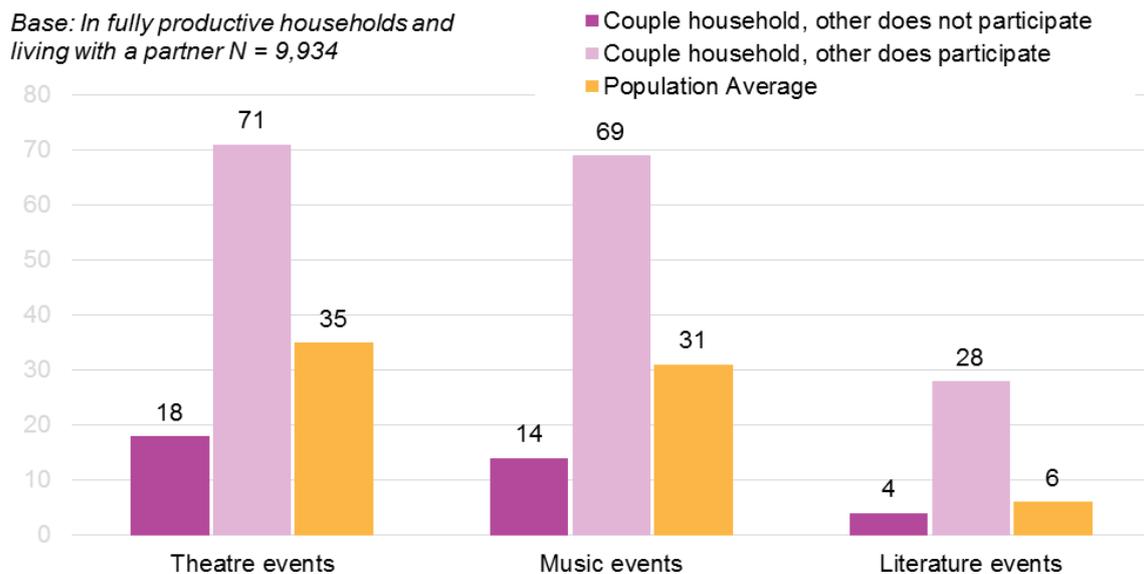
The relationship with the attendance of others in the household was particularly marked among couples and for certain types of events. For example, Figure 3:5 shows that:

- For those living in a couple, the likelihood of theatre attendance was four times higher among those whose spouse/partner reported going to the theatre in the past 12 months (71% vs 18% of those living with a non-attending spouse/partner).

- Music event attendance was five times higher among those living with an attending partner than it was among those living with a non-attending partner (69% and 14% respectively).
- Literary event attendance was seven times higher among adults living with a spouse or partner who attended such events (28% vs 4% among those living with a non-attending spouse/partner).

Tables 3.08-3.13

Figure 3:5 Proportion (%) attending theatre, music and literature events, by household type and attendance status of household members, 2013/14

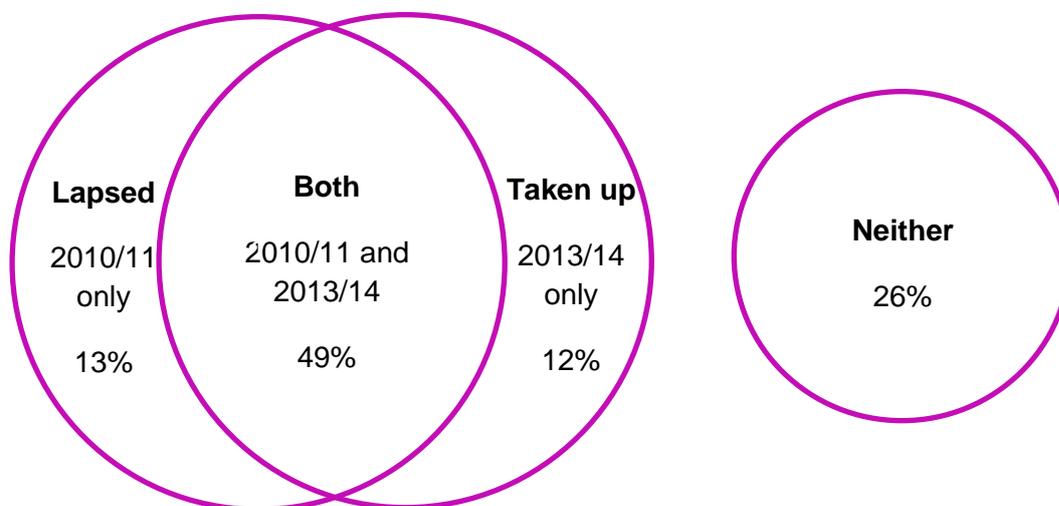


3.3 How has attendance changed over time?

Understanding Society also presents an opportunity for looking at changes in arts attendance between the two points of cultural data collection in 2010/11 and 2013/14 and at the factors associated with the changes between these time points.

Overall, the proportion of people reporting having attended at least one arts event in the past 12 months was comparable in 2010/11 and 2013/14 (62% and 61%). The people attending arts events were not exactly the same group both times, however. As illustrated in Figure 3:6, three quarters (75%) of people had not changed their attendance status between 2010/11 and 2013/14: 49 per cent of adults reported attendance at both time points, while 26 did not report attendance at either interview. The remaining quarter reported attendance only in one or the other of these two time points, with 13 per cent having ‘lapsed’ in their attendance and 12 per cent having ‘taken up’ attendance between 2010/11 and 2013/14.

Figure 3:6 Arts event attendance status in 2010/11 and 2013/14



The proportion of different socio-demographic groups belonging to each of these four categories is provided in Tables 3.14 and 3.15. A group of particular interest comprises those who had taken up attendance at arts events after not having reported any in the 12 months prior to 2010/11. This group constitutes a third (31%) of all non-attenders at 2010/11 and may offer insights into the factors which can act as drivers for encouraging further people to attend.

Tables 3.14 and 3.15

3.3.1 Factors associated with taking up arts attendance

Key demographics

In terms of key demographics, the factors associated with a higher chance of taking up arts attendance were largely the same as those found to be associated with attendance overall in the 2013/14 data. The following associations were statistically significant in the models adjusting for differences between groups:

- **Gender:** Women were more likely than men to take up arts events attendance.
- **Age:** There were no differences between age groups in the proportion of non-attenders at arts events taking up attendance.
- **Ethnicity:** Indian and Pakistani adults were less likely to take up attendance than non-attending adults of white UK origin.
- **Education level:** Higher levels of qualifications were associated with a higher likelihood of taking up attendance.

Table 3:16, 0:2

Impact of changes in circumstances

An individual's chance of taking up arts attendance was also significantly associated with certain changes in their circumstances between 2010/11 and 2013/14:

- **Employment status:** Adults who were non-employed at both time points were less likely than the full-time employed to have taken up arts attendance after adjusting for other differences.
- **Change in household income:** Living in a household with below average income in either 2010/11 or 2013/14 was associated with a lower likelihood of taking up arts events attendance compared with living in a household with above average income at both these time points.
- **Disability status:** Those with a long-term limiting illness or disability in both 2010/11 and 2013/14 were less likely to take up arts attendance. There were no statistically significant results for those who only experienced limiting health problems or disabilities at one of these time points, once other factors were held constant.
- **Relocation:** People who had moved house between 2010/11 and 2013/14 were more likely than non-movers to have taken up attendance once other factors were held constant (unadjusted figures show 40% of moving non-attenders taking up attendance, vs 30% of those who had not moved).
- **Children in the household:** Those living in a household with children in 2010/11 but not in 2013/14 were less likely to have taken up arts attendance than those who lived in households without children at both time points.
- **Provision of unpaid care:** Previous non-attenders providing less than 20 hours per week of unpaid care to other adults at both time points were more likely than those who were non-carers at both time points to have taken up attendance at arts events, as were those who had decreased the amount of care they provided by 2013/14.

Table 3.17, 0:2

Impact of others in the household

Having other household members who attend the arts also had a significant impact on the chances of taking up arts attendance among those who had not attended in 2010/11. Once other factors were held constant, adults in the following circumstances were shown to be more likely than single adults to have taken up attendance at arts events:

- Those who lived with another adult who attended arts events in 2013/14 were more likely to have taken up attendance themselves, regardless of their circumstances in 2010/11.
- Those who were single in 2013/14 after living with an arts event attender in 2010/11 were more likely than those who were single both times to have taken up arts event attendance.

Those in the following circumstances were less likely to have taken up arts event attendance:

- Those who lived with other adults who were all non-attenders at both time points were the least likely to have taken up attendance themselves.

-
- Those who changed from living with an arts event attender to living with a non-attender were also less likely than adults who were single both times to have taken up attendance themselves.

Table 3.18, 0:2

4 Visiting heritage sites

Key findings

- Like other forms of cultural engagement, visiting heritage sites was more likely among those who lived with other adults who also visited.
- Full-time students and part-time informal carers (those providing less than 20 hours care per week to other adults) had higher than average attendance at heritage sites.
- Women, people in the 'post-retirement' age bracket (65-74) and those with higher levels of qualifications were more likely than other adults to have taken up heritage visiting in 2013/14 after not having previously visited in 2010/11.
- Other things being equal, adults were less likely to visit heritage sites or to have taken up visiting if they were aged 16 to 24 years, of Asian or black ethnic origin, or in poorer financial circumstances .
- Other groups less likely to have taken up visiting heritage sites were people: living with long-standing limiting health problems or disabilities, those who were non-employed and those who increased their working hours between the surveys, and people living in urban areas.



This section looks at visits to heritage sites. We focus on additional insights which can be gained from Understanding Society, including:

1. **Who visits** heritage sites and how often, focussing on factors not covered in previous research;
2. **Patterns within households**, including analysis by household composition, as well as by the participation status of other adults in the household; and
3. **Changes between 2010/11 and 2013/14**, and the factors associated with change.

What counts as 'visiting heritage sites'?

Understanding Society asks people to indicate whether they have visited any of the eight different types of heritage sites listed below in the past 12 months.

'Visiting heritage sites' is defined as having visited at least one of them.

1. A city or town with historic character
2. A historic building open to the public (non-religious)
3. A historic park or garden open to the public
4. A place connected with industrial history (e.g. factory, dockyard or mine)
5. A historic place of worship attended as a visitor (not to worship)
6. A monument such as a castle, fort or ruin
7. A site of archaeological interest (e.g. Roman villa, ancient burial site)
8. A site connected with sports heritage (e.g. Wimbledon)

4.1 Who visits heritage sites?

The latest Understanding Society cultural data shows that the majority of adults in England visit heritage sites, with nearly two thirds (63%) reporting heritage site visits in the 12 months preceding 2013/14.¹⁹

Among those who had visited heritage sites, one in five (17%) had done so regularly at least once a month, with two fifths visiting three or four times a year (42%) and once or twice a year (40%) each.

A simple analysis of the socio-demographic distribution of heritage visits confirms many persisting patterns of inequity observed in previous research, with significantly lower levels of heritage visits found among:

- Younger (16 – 24) and older (75+) adults, with those in the middle of the age distribution more likely to visit at all, and also to visit more frequently;
- Those with lower levels of education;
- Those who were finding it difficult to manage financially or living in households with low incomes;
- Social renters;
- Those living in urban areas; and
- Those with a long-standard limiting disability or illness.

Tables 4:1, 4:2, 4:5

After adjusting for other differences between the sexes, results showed that women were more likely than men to have visited heritage sites (66% vs 64%).

Table 0:1

Further analysis by frequency, and by new variables available in Understanding Society, will allow us to validate and extend the existing evidence base.

4.1.1 Sexual orientation

One variable newly available in Understanding Society is the individual's self-defined sexual orientation. In terms of the overall likelihood of having visited heritage sites, there was no significant difference by sexual orientation.

Among heritage visitors, those defining themselves as lesbian, gay or bisexual were more likely to visit heritage sites relatively frequently, at least three times per year (69% vs 60% among heterosexual). The tendency of those LGB adults who engage to do so more frequently is a pattern shared with arts participation and attendance.

Table 4:3

4.1.2 Ethnic group

Previous analysis has shown lower levels of heritage visiting among black and minority ethnic groups. Understanding Society enables us to look at the patterns in more detail by ethnic subgroups.

¹⁹ This is somewhat lower than the 2013/14 level reported in Taking Part, 73%. The categories used on USOC showcards are the same as Taking Part except that TP has specific prompts for visits to historic transport systems. TP also asks a specific question about visits made in own time, for academic study and for voluntary work, whereas USOC asks people only to include such visits.

As illustrated in Figure 4:1, the proportion of heritage site visitors was highest among white adults (65% of those born in the UK, and 70% of those born outside of the UK), followed by those of other and mixed ethnicity (55% and 57%), those of Indian origin (45%) and those of Bangladeshi and Caribbean origin (38% and 39%). The likelihood of having visited heritage sites was the lowest among people in Pakistani and black African ethnic groups (29% and 31% respectively).

Table 4:1

After controlling for other relevant factors, there was no significant difference in the proportion of white adults visiting heritage sites by whether or not they were born in the UK. All other ethnic groups were less likely than white UK adults to visit heritage sites, once other factors were held constant.

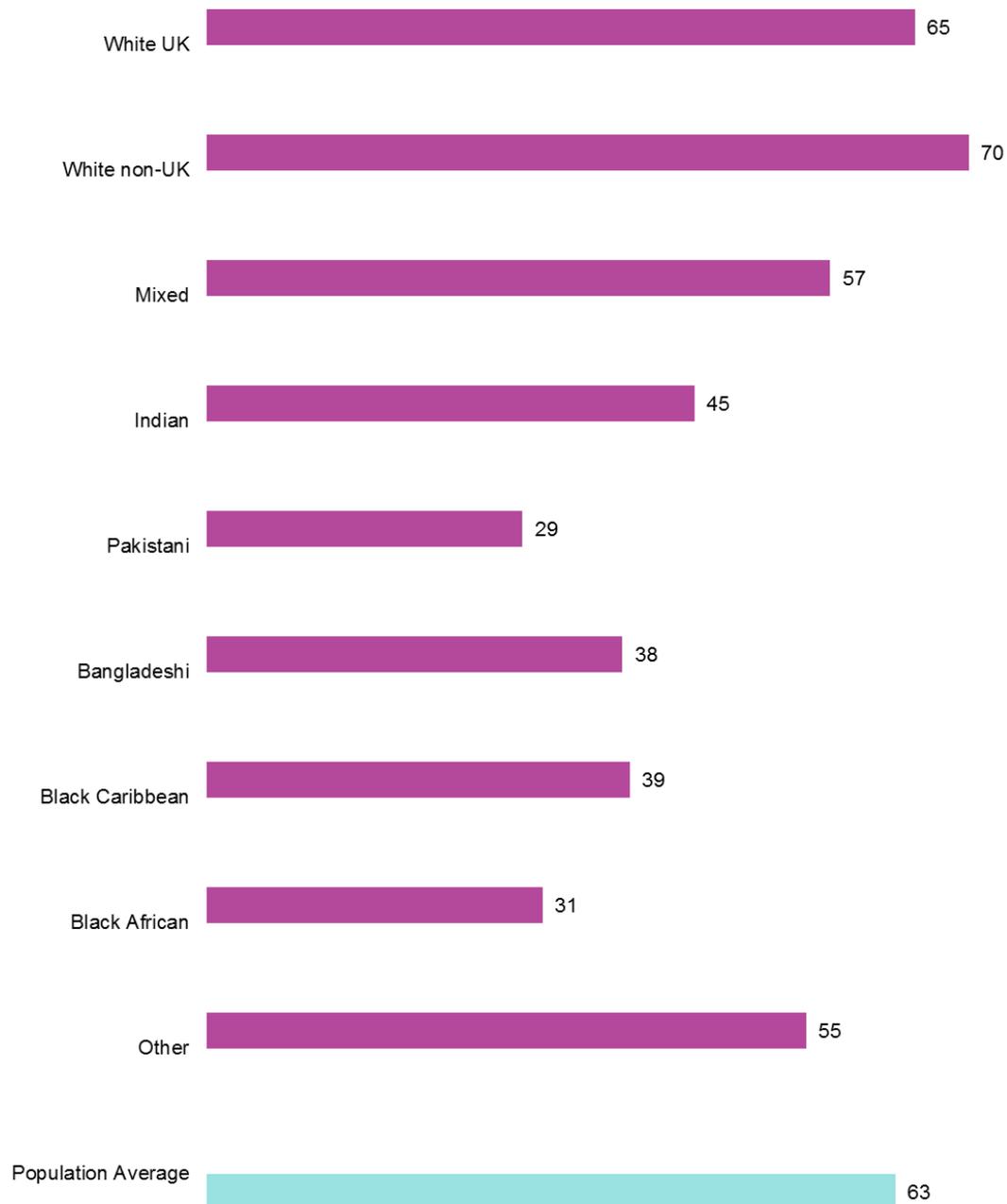
Table 0:1

What about religion, country of origin, English as a first language ?

The headline patterns of participation by these variables are provided in Table 4:1. Given the correlations with ethnicity, it is not unexpected that we see lower levels of heritage visits among those whose first language is not English, and Muslim and Hindu adults. Although heritage visits were relatively high among white adults born outside the UK, they were significantly lower among non-white adults born outside the UK, suggesting the complexity of these relationships.

Figure 4:1 Proportion (%) visiting heritage sites in the past 12 months by ethnic group, England 2013/14

Base: All with known heritage visit status and ethnic group, N = 20,083



Although adults of Black Caribbean origin had a relatively low likelihood of visiting heritage sites at all, when we look at those who did visit we can see that they were among those most likely to have visited frequently, suggesting that there was a keen interest from some members of this group. Among those who had visited heritage sites, white and black Caribbean adults were the most likely to have done so at least monthly (17% to 18% vs 13% or lower for other ethnic groups). Visitors of Pakistani origin were

the most likely to have made only one or two visits in the previous year (75% vs 39% of white UK heritage site visitors).

Table 4:3

4.1.3 Personal and household income

The impact of an individual's overall economic situation was also examined making use of the broad range of economic indicators in Understanding Society. The economic indicators used were individual's self-assessed financial wellbeing and the household income level. Results showed that:

- Adults in better financial circumstances were more likely to have visited heritage sites (73% visited among those 'living comfortably' vs 45% among those who were 'finding it difficult' to manage).
- Adults with low household income were less likely to have visited heritage sites (for example, 49% of those from households with below average incomes (HBAI) vs 69% of those from households with higher incomes).
- Among those who did visit heritage sites, those who were 'finding it difficult' to manage financially were less likely to have done so more than once or twice in the year (52% vs 66% of those who were 'living comfortably').
- Similarly, heritage visitors from households with below average incomes were more likely than others to have visited only once or twice in the past year (47% vs 38%).

Tables 4:1, 4:2, 4:3

Model results showed that this pattern of lower levels of heritage visiting by individuals who were less financially well off remained significant once other factors were held constant.

Table 0:1

4.1.4 Employment status and caring responsibilities

There was no direct association between lower hours of employment or care and increased likelihood of engagement overall. For paid employment:

- Those who were non-employed were less likely to visit than those who were working full or part time or studying full time (53% vs 63% overall). After controlling for relevant factors including levels of financial well-being, those who were non-employed remained significantly less likely to visit heritage sites than the full-time employed, but those who were full-time students were more likely to visit.
- Among those who did visit heritage sites, non-employed people and full-time students were the most likely to have done so at least monthly, perhaps related to the higher degree of available time and flexibility in schedules as compared with those in formal paid work (20% monthly visitors vs 16% for those in paid employment).

For unpaid caring:

- The additional demands placed on people's time and energy by a high level of caring responsibilities did appear to be associated with a lower likelihood of visiting heritage sites, with people providing a high level of care less likely than non-carers to have visited heritage sites (49% vs 63%). However, this difference was not significant, once other factors, including income, were taken into account.
- Those high-level carers who did visit heritage sites were more likely to have done so relatively infrequently, just once or twice a year (46% visiting just once or twice a year, vs 41% overall).
- Similarly to arts engagement, those providing a lower level of care were more likely to visit heritage sites than those not providing care, even when other factors were taken into account.

Tables 4:1, 4:3, 0:1

4.2 Heritage visits and household dynamics

With its collection of a number of household level indicators and individual data from all people in a household, Understanding Society is well suited for exploring the dynamics of participation within households.

4.2.1 Presence and age of children

Adults living in households with a child aged 5 to 10 years were more likely than others to visit heritage sites (68% vs 63%). This finding is in line with previous research indicating that families are more likely than non-families to visit heritage sites (DCMS 2010), and suggests that families with primary-school age children are perhaps particularly likely to be drawn to heritage opportunities. However, the difference in heritage visiting by age of children in the household was not significant once other relevant factors were held constant.

Among those who did visit heritage sites, those without children in the household were somewhat more likely to do so monthly (18% vs 15 to 16% for those with children).

Tables 4:2, 4:4, 0:1

4.2.2 Presence and participation of other adults

Looking at the number of adults in a household overall, people living as a couple had on average higher rates of heritage visiting (70%) than other groups. The lowest rates of attendance were found among those living without other adults (53%). These differences between people living without other adults and living in a couple were even more marked for heritage visits than they were for arts attendance (corresponding figures 64% and 54% for couple and single adult households).

Beneath these headline figures, we can explore the relationships between households further by also taking into account the heritage site visiting status of other household members (where present).

Figure 4:2 Proportion (%) visiting heritage sites in the past 12 months, by household type and heritage participation status of household members, 2013/14

Figure 4.2 illustrates how an individual's likelihood of visiting varied by the household type and the engagement of other adults in their household. Similarly to arts attendance (and to a slightly lesser degree arts participation), the data suggests that heritage visitors (and non-visitors) were 'clustered' within the same households:

- Those living with other people who visited heritage sites were significantly more likely to report having visited heritage sites as well.
- As it was for arts attendance, the relationship was particularly strong for **people living as a couple**. Heritage visits were reported by nine in ten (89%) adults living in couple households where their spouse had visited heritage sites, as compared with a quarter (27%) of those living with a non-visiting partner.
- Those living in complex households were also significantly more likely to have visited if others in their household had also done so (70% compared with 28% of people living in complex households without other visitors).

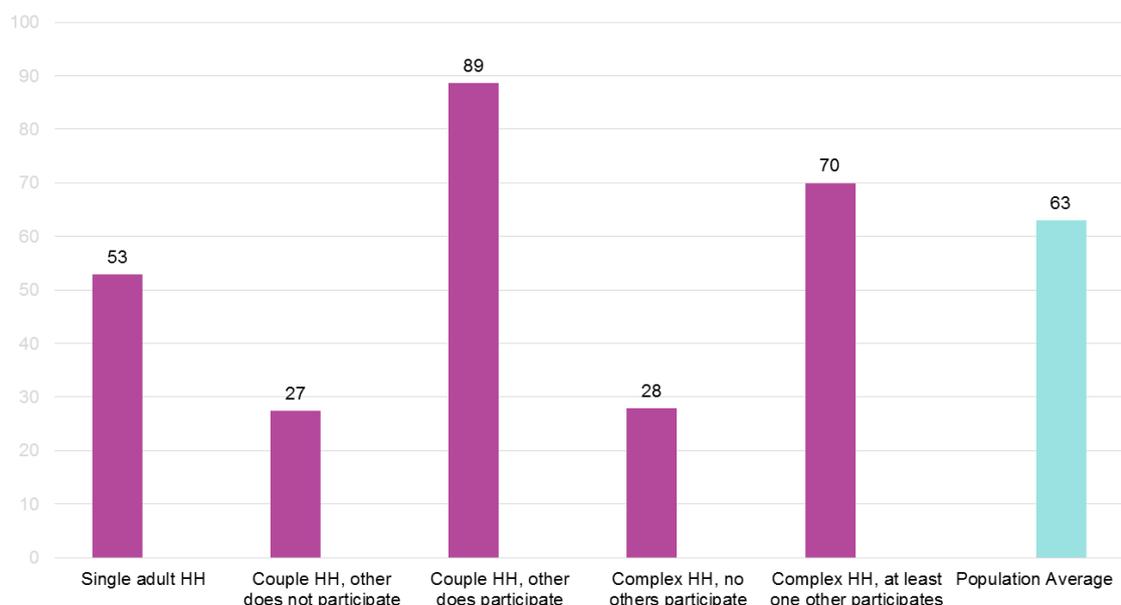
Tables 4:2, 4:5

After other factors were held constant in the multivariate model, those living in households with other heritage visitors were significantly more likely than single adults to visit heritage sites themselves, and those living with non-visitors were significantly less likely to do so.

Table 0:1

Figure 4:2 Proportion (%) visiting heritage sites in the past 12 months, by household type and heritage participation status of household members, 2013/14

Base: In fully productive households, N = 18,514



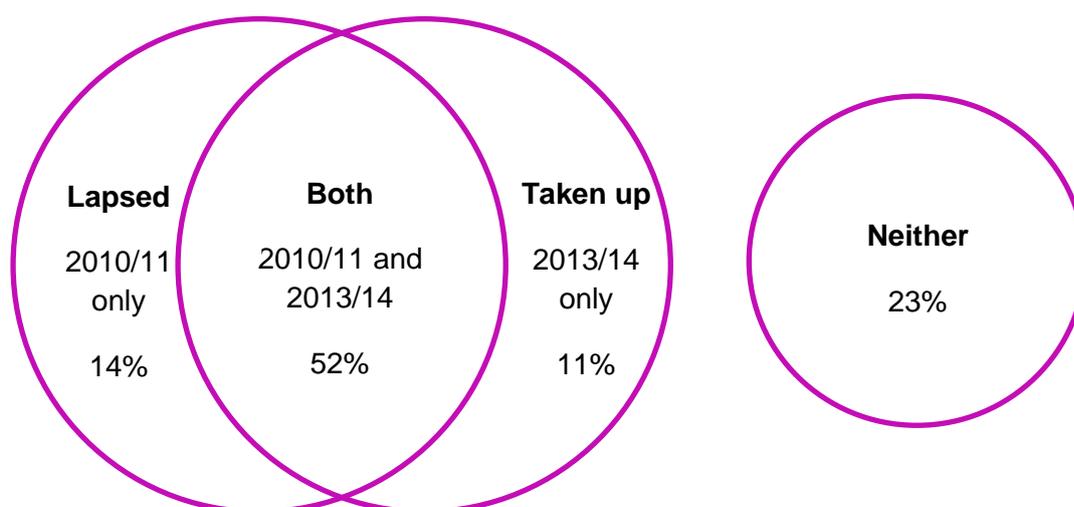
4.3 How has visiting heritage sites changed over time?

Understanding Society also presents an opportunity to look at changes in the patterns of heritage visiting between the two points of cultural data collection in 2010/11 and 2013/14 and the factors associated with these changes.

Overall, the proportion of people reporting having visited at least one heritage site in the past 12 months was comparable in 2010/11 and 2013/14 (66% and 63%).

The people visiting heritage sites were not the same group both times, however. As illustrated in Figure 4:3, three quarters (75%) of people had not changed their heritage visiting status between 2010/11 and 2013/14: a 'consistent' core (52%) comprising half of adults reported visits at both time points, while an 'unengaged' quarter of adults did not report visits at either time. The remaining quarter said they had visited heritage sites only in the 12 months preceding one or the other of these two time points, with 14 per cent having 'lapsed' in their visiting after 2010/11 and 11 per cent newly reporting visits in 2013/14 after not having done so in 2010/11.

Figure 4:3 Heritage site visit status in 2010/11 and 2013/14



Proportions of different socio-demographic groups belonging to each of these four categories are shown in Tables 4.6 and 4.7. A group of particular interest for policy and practice are those 11 per cent of 'adopters' who had taken up (or resumed if they had engaged prior to 2010/11) visiting heritage sites at some point during the three year period between 2010/11 and 2013/14. This group constitutes a third (33%) of all heritage non-visitors at 2010/11. In what follows, we compare this group with those who had visited at neither time point to determine the characteristics associated with taking up visits to heritage sites.

Tables 4:6, 4:7

4.3.1 Key demographics

In terms of key demographics, a number of characteristics were significantly associated with taking up heritage visits between the 12 months preceding 2010/11 and 2013/14:

- **Gender:** While simple analysis shows no gender differences, women were significantly more likely than men to take up visiting heritage sites by 2013/14 once other factors were taken into account
- **Age:** Non-visitors in the 25 to 44 year age group were the most likely to have taken up heritage visiting (37% vs 33% overall). However, multivariate analysis showed, however, that when other differences between the age groups were held constant, 2010/11 non-visitors aged 65 to 74 were the most likely to have subsequently taken up visiting heritage sites.
- **Education level:** Non-visitors with higher level qualifications were significantly more likely to become visitors by 2013/14 than those with lower levels of qualification (49% of non-visitors with degree level qualifications took up visits, vs 19% of those with qualifications below GCSE level), a pattern which remained significant when other factors were taken into account.
- **Ethnic group:** 2010/11 non-visitors from Asian and black ethnic groups were significantly less likely than white non-visitors to have taken up visits to heritage sites. Once other factors were held constant, this pattern remained significant for those of Indian, Pakistani and Black ethnic origin.

Tables 4:8, 0:2

Impact of changes in circumstances

We also examined whether a number of other changes that could be taking place in people's lives were associated with the likelihood of a non-visitor taking up visiting heritage sites. The factors which significantly reduced the likelihood of a non-visitor taking up visiting heritage sites, even when holding other factors constant, included:

- having a **limiting long-standing health problem or disability** in both 2010/11 and 2013/14;
- being **non-employed** in both 2010/11 and 2013/14;
- being employed at both time points but **increasing working hours** over the period; and
- living in a **household below average** income in 2013/14.

Becoming a carer in 2013/14 increased the likelihood of taking up heritage visiting.

Table 4.9, 0:2

4.3.2 Impact of others in the household

There was also a clear association between the likelihood of a non-visitor taking up heritage visits and the participation status of their other household members (where present).

When those living with other adults were compared with those who were single, a positive effect on an individual's chances of taking up heritage visits was observed when they were:

- **Living with 'consistent' visitors** (both 2010/11 and 2013/14); or
- **Living with others who took up visiting** (did not report visits in 2010/11 but did in 2013/14).

Conversely, when others in the household stopped visiting heritage sites, or when all adult household members were non-visitors at both time points, taking up heritage visiting was less likely.

These findings suggest that the heritage interests of other household members might act as a trigger for visiting heritage sites.

Table 4.10, 0:2

5 Visiting museums and galleries

Key findings

- Other things being equal, adults were less likely to visit museums and galleries if they were: aged 16 to 24 or 75 plus, of Pakistani, Black African, Indian or Black Caribbean origin or living with other adults who did not visit.
- Having a long-term limiting illness or disability and finding it more difficult to manage financially were factors that reduced the likelihood of visiting museums and that of taking up visiting.
- Women, adults of white non-UK origin, those who identified as lesbian, gay or bisexual, those living with children aged 5 to 10 and those who were caring for other adults, but for less than 20 hours per week were all more likely to visit museums, other things being equal.
- Full-time students, those with higher levels of qualifications, those aged 65 to 74 and those who lived with another adult who visited museums were both more likely to visit and more likely to have taken up visiting.

In this section we look at Understanding Society data on museum visits collected in 2010/11 and 2013/14. The survey question asks people to report whether they have 'visited a museum or gallery' in the 12 months prior to their interview.²⁰ We focus on additional insights which can be gained from Understanding Society, including:

1. **Who visits** museums and galleries and how often, focussing on factors not covered in previous research;
2. **Patterns within households**, including analysis by household composition, as well as by the participation status of other adults in the household; and
3. **Changes between 2010/11 and 2013/14**, and the factors associated with change.



5.1 Who visits museums and galleries?

The latest Understanding Society data shows that two in five (40%) had visited museums or galleries in the 12 months prior to 2013/14²¹.

²⁰ Given that the words 'art gallery' and 'art exhibition' are often used interchangeably in popular parlance, there is likely to be some unintended overlap between the reporting of museum/gallery attendance and attendance at visual arts exhibitions (described in the survey as 'exhibition or collection of art, photography or sculpture or a craft exhibition') already considered under arts attendance.

²¹ As with visits to heritage sites, this is lower than the 53% reported in Taking Part for the same year, a difference that could be related to sampling factors or small differences in the design of questionnaires

Among those who had visited museums or galleries, the majority (57%) had done so relatively infrequently, once or twice a year, with a third (34%) visiting three or four times a year and one in ten (9%) once a month.

Overall museum and gallery visiting was lowest among adults aged 75 and over (23% visited in the past year vs 42-43% of those aged 25 to 74), and it was also lower among adults from the youngest (16 to 24) age group (37%). After adjusting for the range of factors in our model, multivariate results showed that 65 to 74 year olds were the most likely to visit museums, with both 16 to 24 year olds and those aged 75 and over less likely to do so than those aged 25 to 64.

Men and women were equally likely to have visited a museum/gallery²², and there was no gender difference in the frequency of visits. This is similar to visual arts exhibition attendance, where the gender difference was also negligible.

Tables 5:1, 5:2, 5:3, 0:1

Further analysis by frequency, and by new variables available in Understanding Society, will allow us to validate and extend the existing evidence base.

5.1.1 Sexual orientation

An additional socio-demographic dimension available for analysis in Understanding Society is people's self-defined sexual orientation.

There were some statistically significant differences in the relative likelihood of museum/gallery attendance by heterosexuals and lesbian, gay or bisexual adults:

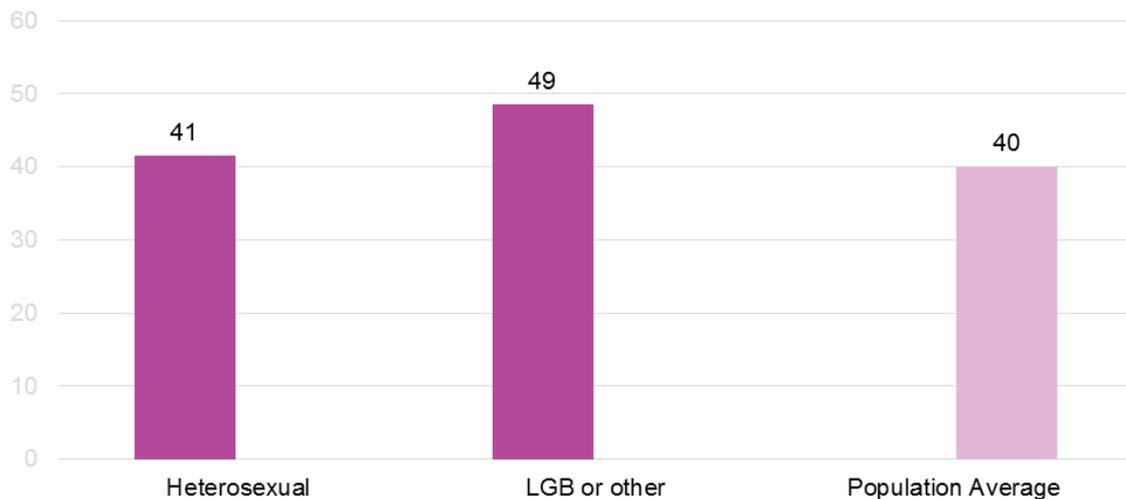
- Overall, museum/gallery visits were more common among lesbian, gay or bisexual adults than heterosexuals (49% vs 41% reporting attending in the past 12 months in 2013/14) (Figure 5:1), and this difference remained significant in models adjusting for other differences between these groups.
- Among visitors, lesbian, gay and bisexual adults were also more likely to be frequent visitors (17% visiting at least monthly, as compared with 9% among heterosexuals).

Tables 5:1, 5:3, 0:1

²² Adjusted results suggested that women were more likely to do so

Figure5:1 Proportion (%) visiting museums/galleries in the past 12 months by sexual orientation, England 2013/14

Base: All with known museum visit status and sexual orientation, N = 17,773



5.1.2 Ethnic group

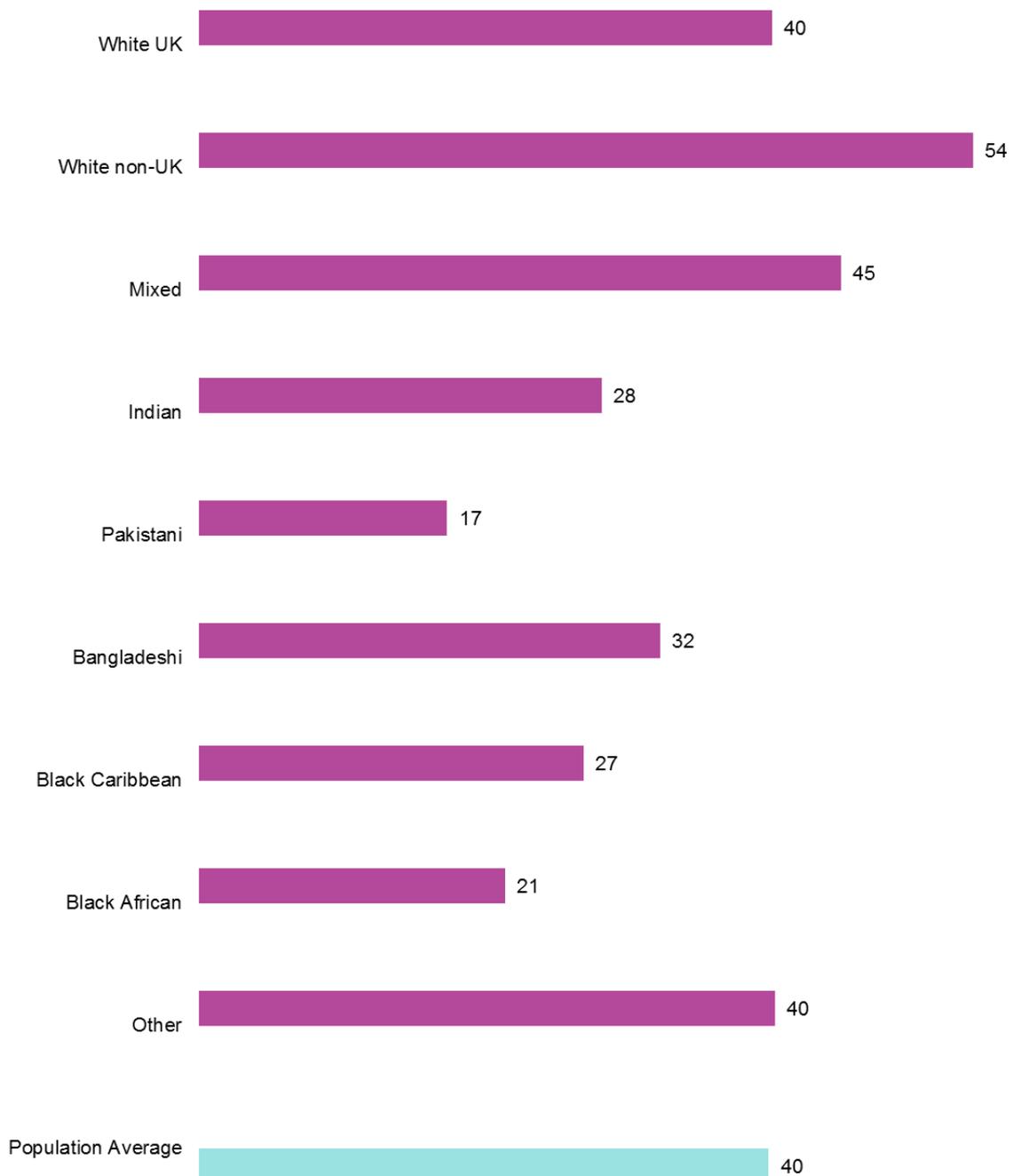
Previous analysis has shown persistently lower levels of museum/gallery visiting among black and minority ethnic groups. The more detailed ethnic group data in Understanding Society reveals more detailed patterns by ethnic subgroups. As Figure5:2 illustrates:

- The lowest levels of museum/gallery visiting were seen among adults of **Pakistani and black African** ethnic group (17% and 21% reporting visits in the past 12 months in 2013/14), followed by those of black Caribbean and Indian origin (27% , 28%).
- The most likely ethnic group to have visited museums/galleries was **white adults born outside of the UK** (54%), followed by mixed ethnicity, white UK and other ethnicity adults (40% to 45%).

Models adjusting for other differences between the ethnic groups confirmed the significance of higher levels of museum visiting among white non-UK born adults compared with those born in the UK, and the lower levels of visiting among Black African, Pakistani, Indian and Black Caribbean adults compared with those of white UK origin.

Figure 5:2 Proportion (%) visiting museums/galleries in the past 12 months by ethnic group, England 2013/14

Base: All with known museum visit status and ethnic group, N = 19,855



The same patterns are further reinforced in the frequency data, with:

- Those of Pakistani origin also the most likely to have visited only once or twice in the past 12 months, if they had visited (83% of visitors), followed by those of Indian and Bangladeshi origin (71%);

- White non-UK visitors also had the highest visiting frequency, with half (50%) having made more than two visits in the past year.

Tables 5:1, 5:3, 0:1

What about religion, country of origin, English as a first language ?

The headline patterns of participation by these variables are provided in Table 5:1. Given the correlations with ethnicity, it is not unexpected that we see lower levels of museum and gallery visits among those whose first language is not English, and Muslim and Hindu adults.

5.1.3 Personal and household income

Previous research has shown an association between museum/gallery visits and indicators of personal income. To investigate these patterns, we used the Understanding Society measures of self-assessed financial circumstances and household income. Clear associations with the likelihood of museum/gallery visiting were observed, with lower rates of visiting found among those assessing themselves as 'finding it difficult' financially and those living in households with lower income in 2013/14, as compared with those defining themselves as 'living comfortably' and living in higher income households. These were significant in both simple and adjusted analyses.

Tables 5:1, 5:2, 0:1

5.1.4 Employment status and caring responsibilities

The patterns are similar to those already observed for arts attendance and visits to heritage sites. For paid employment:

- Overall, those not spending any time in paid employment or education were the least likely to visit museums/galleries, as compared with students and people in part-time or full-time employment (32%, 51%, 45% and 44% respectively). However, results adjusting for other differences between the employment status groups, including financial circumstances, show no significant difference between those who were in or not in employment. Full-time students were more likely to visit museums, when they were compared with similar adults from other groups (adjusted figures).
- Among those who did visit, those in employment were less likely to have done so at least monthly, suggesting the demands of work may make it more difficult to make time for frequent engagement (7% for part-time employed and 10% for full-time, vs 11% of non-employed and 15% of student visitors).

For unpaid care:

- Those providing a high level of unpaid care (20+ hours per week) were less likely to have visited museums/galleries (28% vs 43% of carers providing fewer than 20 hours per week and 40% of non-carers). The adjusted figures show that this difference was not significant after controlling for other differences between these groups, including differences in financial circumstances. When carers and non-carers with otherwise similar characteristics were compared, it was the adults providing smaller amounts of care (less than 20 hours per week) who were the most likely to have visited museums.

- Among those who did visit, there were no differences in frequency by the amount of care provided.

Tables 5:1, 5:3, 0:1

5.2 Visiting museums or galleries and household dynamics

With its collection of a number of household level indicators and individual data from all people in a household, Understanding Society is well suited for exploring the dynamics within households.

5.2.1 Presence and age of children

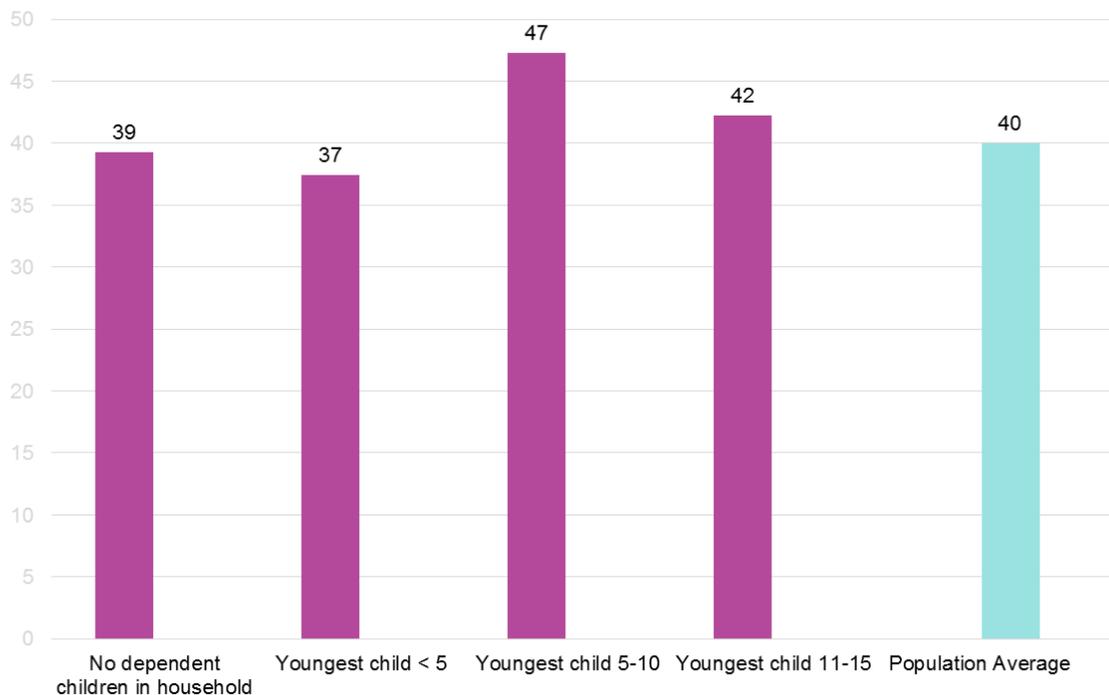
First we look at the impact of having children of different ages in the household. Both adjusted and unadjusted figures showed that adults living in a household with primary school age children (but no young children) had a significantly higher likelihood of visiting museums/galleries, compared with other groups:

- 47 per cent of those living in households where the youngest child was aged 5 to 10 had visited a museum or gallery in the 12 months prior to 2013/14, compared with 37 per cent of those living with children under 5 years of age and 39 per cent of those with no children in the household (Figure 5:3).
- This is similar to the pattern seen earlier for visits to arts events and heritage sites.

Table 5:2, 0:1

Figure 5:3 Proportion (%) visiting museums/galleries in the past 12 months by presence and age of children, England 2013/14

Base: All with known museum visit status, N = 20,007



5.2.2 Presence and participation of other adults

Overall, people living in a two-adult household with their partner had the highest likelihood of having visited museums/galleries (44% reported visits compared with 36% of those living in single adult households and 35% of those in complex households).

We explored museum/gallery visiting patterns within households further by examining the visiting status of other household members. This is illustrated in Figure 5:4 which shows the variation in an individual's likelihood of visiting museums/galleries by the household type and the visitor status of other adults in their household (where present). As with arts attendance and heritage visits, the data suggest that museum/gallery visiting was clustered within households:

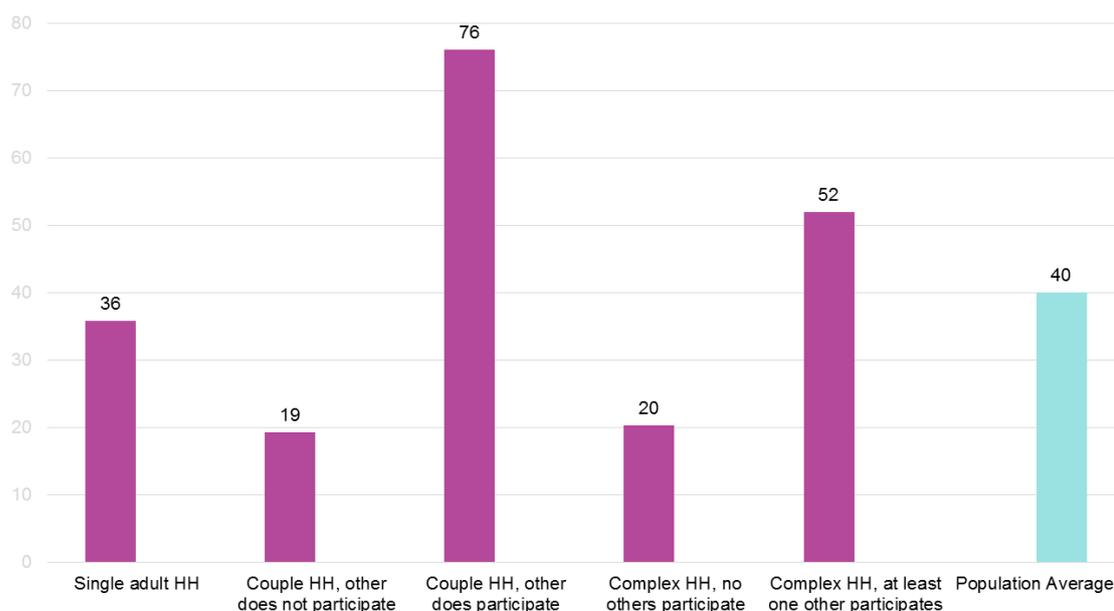
- Those living with other people who visited museums and galleries were significantly more likely to report having visited themselves, even after adjusting for other differences between the groups.
- The relationship was again particularly strong for **people living as a couple**. Museum/gallery visits were reported by three quarters (76%) of adults living in couple households where their spouse had visited museums/galleries, as compared with a fifth (19%) of those living with a non-visiting partner.

- Those living in complex households were also significantly more likely to visit if others in their household did so (52%), as compared with people living in complex households without other visitors (20%).

Tables 5:2, 5:5, 0:1

Figure 5:4 Proportion (%) attending museums/galleries, by household type and museum visitor status of household members, 2013/14

Base: In fully productive households, N = 18,336



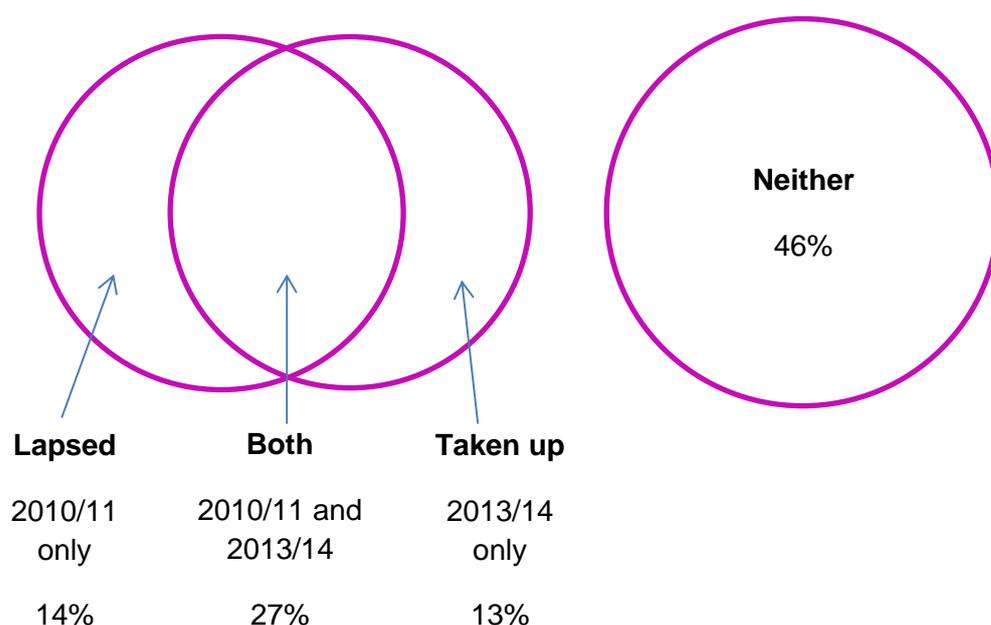
5.3 How has museum and gallery visiting changed over time?

Understanding Society also presents an opportunity to look at changes in the patterns of museum/gallery visiting between the two points of cultural data collection in 2010/11 and 2013/14 and at the factors associated with these changes.

Overall, the proportion of people reporting having visited a museum or gallery in the past 12 months was comparable in 2010/11 and 2013/14 (41% and 40%).

The people visiting were not the same group both times, however. As illustrated in Figure 5:5, three quarters (73%) of people had not changed their museum/gallery visiting status between 2010/11 and 2013/14: a 'consistent' core (27%) of visitors at both time points and the 46 per cent of 'unengaged' adults who did not report visiting museums/galleries in either 2010/11 or 2013/14. The remaining quarter said they had visited museums/galleries only in the 12 months preceding one or the other of these two time points, with 14 per cent having 'lapsed' in their visiting while 13 per cent of 'adopters' newly reporting visits in 2013/14. As noted in the Taking Part longitudinal report (Matthews et al, 2016), some adults tend to visit museums and galleries less frequently than once a year. Our 'lapsed' and 'taken up' categories would contain a proportion of these infrequent visitors.

Figure 5:5 Museum or gallery visit status in 2010/11 and 2013/14



The proportion of different socio-demographic groups belonging to each of these four categories is provided in Tables 5:6 and 5:7. A group of particular interest for policy and practice are those 13 per cent of ‘adopters’ who had taken up (or resumed if they had engaged prior to 2010/11) visiting museums/galleries at some point during the three year period between 2010/11 and 2013/14. This group constitutes a fifth (22%) of all museum non-visitors at 2010/11. In what follows, we look at the features of this group in the context of all people who did not report museum visits in 2010/11.

Tables 5:6, 5:7

5.3.1 Key demographics

In terms of key demographics, the following characteristics were significantly associated with taking up museum/gallery visits between the 12 months preceding 2010/11 and 2013/14, even when other things were held constant:

- **Age group:** Although in simple analysis, non-visitors in younger age groups are in absolute terms more likely to have taken up museum visiting, complex analysis shows that this overall pattern is driven by factors other than age. When other differences between the age groups have been taken into account, people aged 65 to 74 were the most likely to have taken up visiting museums/galleries.
- **Education level:** Non-visitors with higher levels of qualifications are more likely to take up visiting museums/galleries, with a third (35%) of 2010/11 non-visitors with degree level qualifications adopting visiting by 2013/14, as compared with just one in ten (9%) of those with no qualifications.
- **Ethnic group:** Other things being equal, 2010/11 non-visitors of Black African, Pakistani or Indian ethnicity were less likely to have taken up visiting museums/galleries between 2010/11 and 2013/14.

Table 5:8, 0:2

5.3.2 Impact of changes in circumstances

In terms of other life changes, four factors remained statistically significant when holding others constant:

- **Full-time education:** Those who were full-time students in either 2010/11 or 2013/14 were more likely to have taken up visiting museums/galleries in between these points in time.
- **Care responsibilities:** Those who started providing informal care to other adults between 2010/11 and 2013/14 were also more likely to take up visits to museums or galleries.
- **Health:** Those who reported a long-term limiting health problem or disability in both 2010/11 and 2013/14 were less likely to have taken up museum/gallery visiting.
- **Household income:** Those living in a household below average income in 2013/14 were less likely than those in better-off households to have taken up museum/gallery visiting.

Table 5:9, 0:2

5.3.3 Impact of others in the household

As with arts event and heritage visiting, there was also a clear and statistically significant association between the likelihood of a non-visitor taking up museum/gallery visits and the participation status of other adults in their household.

All other things being equal, a higher likelihood of taking up museum/gallery visits was observed among two groups of 2010/11 non-visitors:

- Those who were living with a visitor in 2013/14.
- Those who lived with a visitor in 2010/11 but had no other adults in their household in 2013/14.

Those who lived with non-visitors in 2013/14 were also less likely to have taken up museum/gallery visiting themselves.

Table 5:10, 0:2

6 Visiting libraries

Key findings

- As with other forms of engagement, the likelihood of an individual visiting libraries was linked to whether or not people other adults in their household did so.
- After adjusting for a wide range of factors, we found that people with long-standing limiting health problems or disabilities were less likely than those without to visit libraries.
- The full-time employed were also less likely to visit than other groups, as were younger adults aged 16 to 24, with the exception of those who were full-time students.
- Take-up of library visiting was lower than that for other forms of cultural engagement, with just 14 per cent of those who did not visit libraries in 2010/11 having visited in 2013/14. People aged 45 and over were particularly unlikely to have taken up library visiting if they were not doing so in 2010/11.
- The groups more likely to visit or take up visiting libraries were: women, people of Black African or 'other' ethnic origin, full-time students, those living with children aged under 11, and those providing unpaid care to other adults for less than 20 hours per week.
- Adults with higher levels of qualifications were more likely to visit libraries overall, but among those who did visit, those with qualifications below GCSE level did so more frequently.
- Other more frequent library visitors were people aged 65 and over, full-time students, those with children under 11 and unpaid carers.

In this section we examine Understanding Society data on library visits collected in interviews conducted in 2010/11 and 2013/14. The survey question asks people to report whether they have 'visited a public library' in the 12 months prior to their interview. We focus on additional insights which can be gained from Understanding Society, including:

1. **Who visits** libraries and how often, focussing on factors not covered in previous research;
2. **Patterns within households**, including analysis by household composition, as well as by the participation status of other adults in the household; and
3. **Changes between 2010/11 and 2013/14**, and the factors associated with change.



6.1 Who visits libraries?

The latest Understanding Society data shows that overall one in three adults (30%) in England had visited museums in the 12 months prior to 2013/14 (Table 6.1). Among

those who had visited libraries, the majority (46%) had used them regularly at least once a month²³.

Our analysis confirms findings from previous research (e.g. DCMS, 2016b) that the socio-demographic patterns of visiting public libraries are quite distinct in several respects from other cultural activities related to arts, heritage and museums.

Gender: Women were more likely to visit libraries than men (34% vs 26%), and among those who did visit, women did so more frequently (49% of female visitors went to the library at least monthly, compared with 43% of male visitors).

Age: After adjusting for other differences between age groups, we found that young adults aged 16 to 24 years were less likely to visit libraries than older adults. Among library visitors, older people tended to visit more frequently (62% of visitors aged 75 plus and 55% of those aged 65 to 74 visited a library at least monthly, compared with around 43% of younger visitors).

Educational level: People with higher levels of qualifications were more likely to have visited libraries (39% of those with degree level falling to 16% of those with below-GCSE level qualifications). However, among library users, those with qualifications below GCSE level were the most likely to visit at least once a month (a factor which might be related to age).

Disability status: Adults with limiting long-standing health problems or disability were less likely to visit libraries overall (27% vs 31%), and after adjusting for other differences between them and other groups.

Further analysis by frequency, and by new variables available in Understanding Society, will allow us to validate and extend the existing evidence base.

Tables 6:1, 6:3, 0:1

6.1.1 Sexual orientation

For this new dimension of analysis, there were no statistically significant differences in overall library visiting or the frequency of visiting by sexual orientation.

Table 6:1

6.1.2 Ethnic group

We know from earlier research that adults from ethnic minority groups have tended to have higher rates of library use than white adults, a participation pattern which is different from that in all other cultural and sport sectors (DCMS 2016b). Understanding Society provides the opportunity to make further distinctions by ethnic group.

Figure 6.1 shows the overall proportion of different ethnic groups who reported visiting libraries in the past 12 months. It shows that:

- The highest library use was among black Africans, over half (55%) of whom had used a library in the 12 months prior to 2013/14.

²³ Taking Part results for the same year showed that 35% of adults had visited a library in the previous 12 months.

-
- The next highest groups in terms of library visits, at around two in five visiting, were people from mixed ethnicity, Indian, Pakistani, Bangladeshi and 'other' ethnic groups.
 - The lowest levels of library use were observed among black Caribbean (33%) and white (29% UK, 31% non-UK) adults.

After adjusting for other differences between the ethnic groups, Black Africans and those from 'other' ethnic groups remained significantly more likely than white UK adults to have visited libraries. For those who had visited, those of Black African, Bangladeshi and White non-UK origin were the most likely to have done so at least once a month (58%, 57% and 56% respectively, with those of Black Caribbean origin least likely to have visited this frequently (39%)).

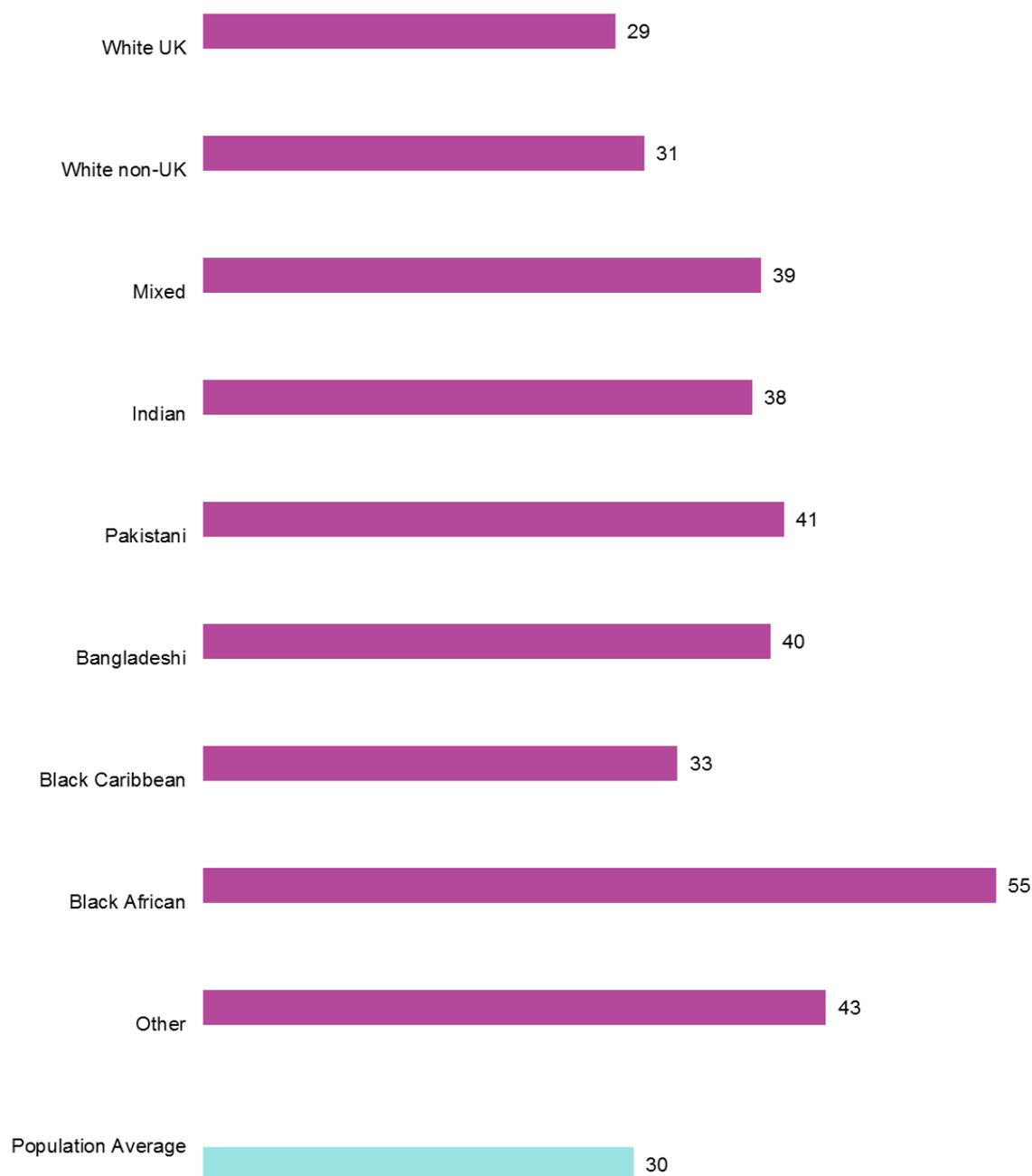
Table 6:1, 6:3, 0:1

What about religion, country of origin, English as a first language ?

The headline patterns of participation by these variables are provided in Table 6:1. Given the correlations with ethnicity, it is not unexpected that we see **higher** levels of library visits among those whose first language is not English, those not born in the UK, and Muslim and Hindu adults.

Figure 6:1 Proportion (%) visiting libraries in the past 12 months by ethnic group, England 2013/14

Base: All with known library visit status and ethnic group, N = 19,855



6.1.3 Personal and household income

Previous analysis, spanning over more than a decade of data from a range of sources, has consistently shown that while participation in other culture and sport sectors tend to be positively associated with income, the opposite is the case with library use: those in lower income brackets have been shown to have a higher propensity to use libraries as compared to those with higher income (e.g. Delaney & Keaney, 2006; DCMS 2010).

To explore this relationship, we selected two economic indicators from Understanding Society which help paint a more comprehensive picture of an individual's financial circumstances than personal income alone: self-assessed financial situation and overall household income. Using these indicators, there was **no significant difference in library visiting between groups of adults related to their financial circumstances** – whether it be their subjective self-assessed circumstances or their (objectively captured) household income.

Tables 6:1, 6:2, 0:1

6.1.4 Employment status and caring responsibilities

In terms of economic activity status, two clear patterns emerged:

- Full-time students were the most likely to visit libraries overall (50% had done so vs 30% of adults overall) and also after adjusting for other differences between economic activity groups.
- After adjusting for other differences between groups, those in full-time paid employment were the least likely to have visited libraries.
- Among those who had visited, the part-time employed were the least likely to have done so regularly at least once a month (33%, vs 46% for full-time employed, 55% for non-employed and 60% for student library visitors).

Adults who provided less than 20 hours per week of unpaid care for other adults were somewhat more likely than those who did not provide care or those who provided more care to visit libraries (32% did so vs 30% of adults overall). This result remained significant after adjusting for other differences between the care groups. Among those who had visited libraries, there were no significant differences in the frequency of visiting by care status.

Tables 6:1, 6:2, 6:3, 0:1

6.2 Visiting libraries and household dynamics

With its collection of a number of household level indicators and individual data from all people in a household, Understanding Society is well suited for exploring the dynamics within households.

6.2.1 Presence and age of children

First we look at the impact of having children of different ages in the household:

- Two fifths of individuals living in households where the youngest child was under 11 years of age reported visiting a library, as compared with 30 per cent among those with older children only in the household and 27 per cent among those with no children. The higher likelihood of visiting libraries for people living with children under 11 remained significant after adjusting for other differences between households with and without children of different ages.
- The most frequent library visitors lived in households where the youngest child was aged between 5 and 10 years, with 81 per cent visiting at least three times in the past year (vs 74% among those with older children in the household).

Tables 6:2, 6:4, 0:1

6.2.2 Presence and participation of other adults

The likelihood of visiting libraries was different for adults living alone, with other adult library visitors and with library non-visitors.

Around a third (32%) of individuals living in both single-adult and couple households had visited libraries, whereas only a quarter (25%) of those living in complex households had done so.

Looking at library visits by whether other adults in the household visited libraries, Figure 6.2 shows that:

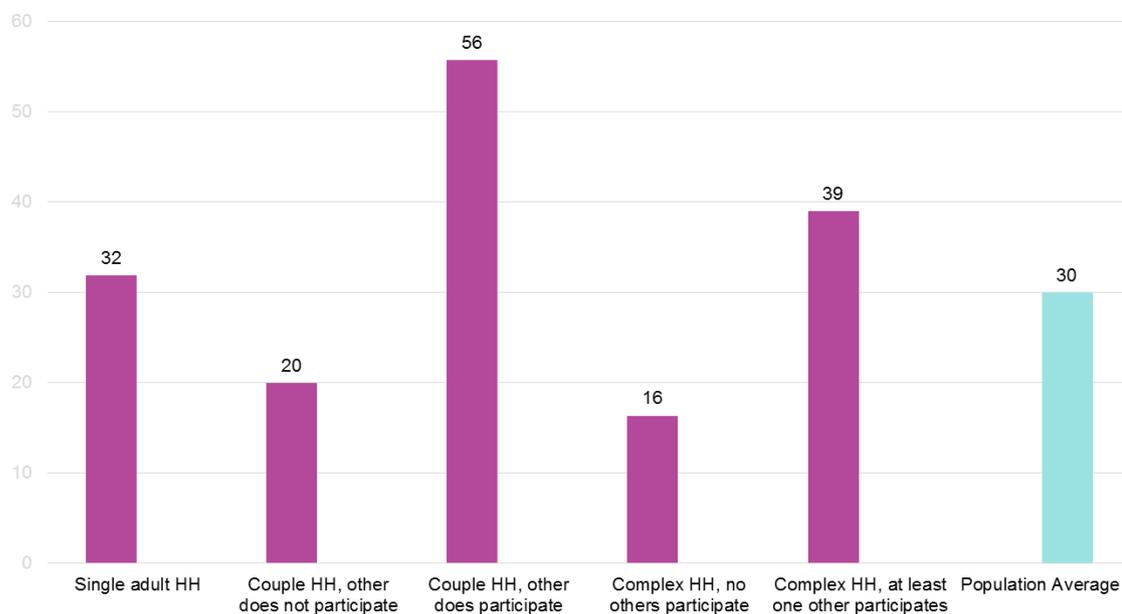
Figure 6:2 Proportion (%) visiting libraries, by household type and library visitor status of household members, 2013/14

- For those living as a couple, the likelihood of library use was three times higher if their spouse also used libraries (56% vs 20%).
- For people living in complex households, the likelihood of visiting libraries was doubled if another adult in the household also visited (39% vs 16%).

Tables 6:2, 6:4, 6:5

Figure 6:2 Proportion (%) visiting libraries, by household type and library visitor status of household members, 2013/14

Base: In fully productive households, N = 18,336

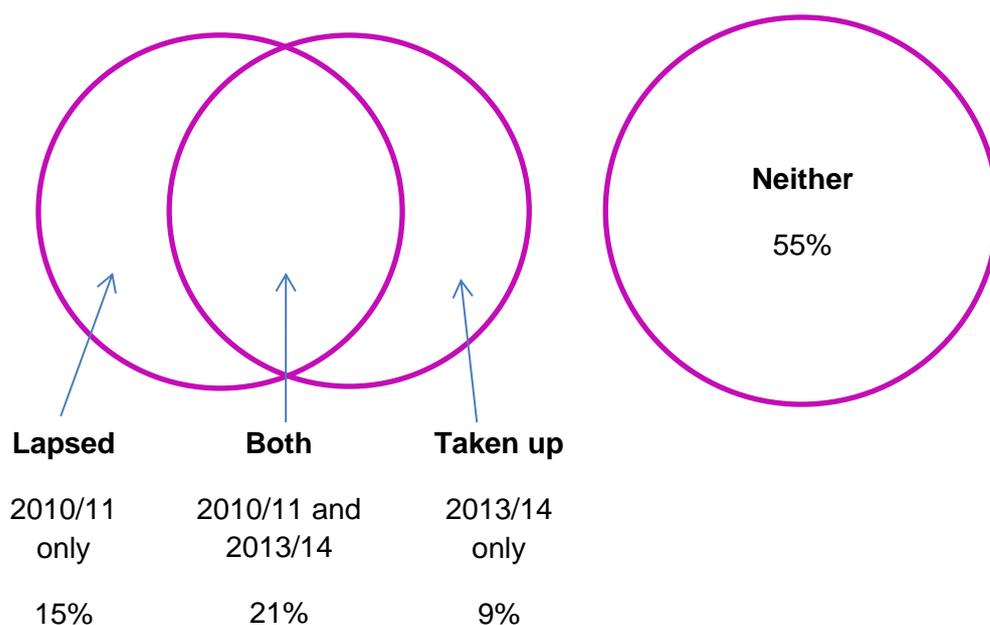


6.3 How has library visiting changed over time?

Understanding Society also presents an opportunity to look at changes in the patterns of library visiting between the two points of cultural data collection in 2010/11 and 2013/14 and at the factors associated with these changes.

Figure 6.3 shows that more than half of adults (55%) did not mention visiting a library at either time point while one in five (21%) mentioned visiting in both 2010/11 and 2013/14. The remaining quarter reported visiting at only one of the two time points, with 15 per cent having 'lapsed' in their visiting and 9 per cent having 'taken up' library visiting between 2010/11 and 2013/14. Given the higher proportion of lapsed users than those taking up visits, overall the proportion of people reporting library visits in the past 12 months fell between 2010/11 and 2013/14, from 36 to 30 per cent.

Figure 6:3 Library visit status in 2010/11 and 2013/14



The proportions of different socio-demographic groups belonging to each of these four categories are shown in Tables 6.6 and 6.7. A group of particular interest for policy and practice are those nine per cent of 'adopters' who had taken up (or resumed if they had engaged prior to 2010/11) visiting libraries at some point during the three year period between 2010/11 and 2013/14. This group constitutes just 14 per cent of all non-users of libraries in 2010/11. In what follows, we look at the features of this compared with those who did not visit libraries at either time point.

Tables 6:6, 6:7

6.3.1 Key demographics

In terms of key demographics, the following factors were significantly associated with taking up library visits between 2010/11 and 2013/14, after adjusting for other differences between the groups:

- **Gender:** Women non-visitors were more likely to start using libraries.
- **Age:** Other things held constant, those aged 45 or over were less likely than those aged 25 to 44 to have started visiting libraries between 2010/11 and 2013/14.
- **Ethnicity:** those of Black African or 'other' ethnicity were more likely than other ethnic groups to have started using libraries between 2010/11 and 2013/14.

- **Education level:** Having a higher level of qualifications was associated with a higher chance of starting to use libraries between 2010/11 and 2013/14.

Table 6:8, 0:2

6.3.2 Impact of changes in circumstances

In terms of other life changes, three factors had statistically significant association with the likelihood of having started to visit libraries between 2010/11 and 2013/14 when other factors were taken into account:

- **Children in the household:** Those who lived in households with children in 2013/14 were more likely than those without to have started to visit libraries between 2010/11 and 2013/14.
- **Working hours:** Those working full-time in both time points were less likely than other groups to have started visiting libraries.
- **Unpaid caring:** Those who had started to provide informal care (after not having caring responsibilities in 2010/11) and those providing fewer than 20 hours of care per week in both time points were more likely to report increased library use between 2010/11 and 2013/14.

Table 6:9, 0:2

6.3.3 Impact of others in the household

Similarly to what has already been seen with arts and heritage, there was also a clear and statistically significant association between the likelihood of a non-visitor taking up library visits and the participation status of their other household members.

When holding other things constant, compared with those living in single adult households:

- Those who lived with adults who had not visited libraries at both time points were less likely to have taken up visiting libraries themselves.
- Those who lived with adults who visited libraries in 2013/14 after living with adults who did not visit in 2010/11 were also more likely to have taken up library visiting themselves.

Table 6:1, 0:2

7 Participation in sport



Key findings

- Women, older people, those of Pakistani or Black African origin and those living with a long-standing limiting illness or disability all had reduced chances of participating in sports.
- The same was true for people living in more difficult financial circumstances, those who were neither in employment nor in full-time education, those living with children under 5 years of age, and those who were providing 20 or more hours of unpaid care per week to other adults.
- Although engagement in sports declined with age, among those who did participate, older people were the most likely to do so at least weekly.
- Walking was most popular among 45 to 74 year olds. Swimming, fitness and leisure sports were also popular among older people.
- Different sports appealed to different cultural and ethnic groups. For example, while walking was most popular among white adults, yoga and racket sports were most popular among those of Indian origin, and team sports were most popular among those of Pakistani origin.
- Those who were sports club members were more likely to participate in weekly sport. Among those who were 75 or over, four fifths of those who were sports club members still engaged in weekly sports.

Associations between individuals' sports engagement and that of other adults in their households were strong and significant. They were particularly strong for adults living in couple households, where:

- Participation in cycling, running, outdoor/adventure sports and sports clubs was more than three times as likely if a partner living in the household also participated.
- Participation in walking, swimming, fitness, team sports, and leisure sports was more than twice as likely if a partner living in the household also participated.

Among those who did not participate in weekly sports in 2010/11, 18 per cent had taken up participation by 2013/14.

- They were more likely to have done so if they were male, aged under 45, more highly qualified and with above average incomes.
- Africans, people with limiting health problems, and those who newly had a child in the household were less likely to have taken up weekly sports.

In this section we look at the patterns of sport participation based on Understanding Society data collected in 2010/11 and 2013/14. We focus on additional insights which can be gained from Understanding Society, including:

1. **Who participates** in sport and how often, focussing on factors not covered in previous research;
2. **Patterns within households**, including analysis by household composition, as well as by the participation status of other adults in the household; and
3. **Changes between 2010/11 and 2013/14**, and the factors associated with change.

What counts as 'participation in sport'?

Two indicators are used to discuss the levels of sport participation:

- Participation in any **moderate or high intensity** sport **at least once** in the past 12 months
- Participation in any **moderate or high intensity** sport **at least weekly** in the past 12 months

'Moderate or high' intensity sport is defined as items 1-25 on the list below for those aged below 65, and activities 1-29 for those aged 65 or over. Understanding Society also collects information on other leisure activities, items 30-34, which do not count towards this definition of sport participation but are examined separately.

Moderate/high for everyone

1. Health, fitness, gym or conditioning activities (including aerobics, keep-fit classes, weight-training or weight-lifting)
2. Gymnastics
3. Swimming or diving
4. Cycling, BMX or mountain biking (for sport or recreation)
5. Football (including 5 or 6-a-side)
6. Rugby (Union or League) or American Football
7. Track and field athletics
8. Jogging, cross-country, road-running
9. Hill trekking, backpacking, climbing or mountaineering
10. Golf (including pitch and putt)
11. Boxing
12. Martial arts (including tai chi, taekwondo, karate and judo)
13. Water sports, including yachting, dinghy sailing, canoeing, rowing, windsurfing, waterski-ing etc.
14. Horse riding
15. Basketball
16. Netball
17. Volleyball
18. Cricket
19. Hockey (exclude ice, roller or street hockey but include in 'other')
20. Baseball, softball or rounders
21. Racquet sports such as table tennis, tennis, badminton or squash
22. Ice-skating
23. Ski-ing (on snow, or an artificial surface: on slopes or grass)
24. Motor sports
25. Angling or Fishing
26. Other sporting activities such as triathlon, fencing, lacrosse, orienteering, curling, gaelic sports, skateboarding, parachuting or scuba diving or anything else

Moderate intensity for those aged 65+, mild intensity for >64 years,

27. Archery
28. Yoga or pilates
29. Bowls (indoors or outdoors)
30. Croquet

Mild intensity for everyone

31. Snooker, pool or billiards

32. Darts
33. Ten-pin bowling
34. Rambling, walking for pleasure or recreation
35. Shooting

Participation by type of sport: The above analysed individually or in smaller groupings:

1. Walking (activity 34)
2. Swimming (activity 3)
3. Fitness (not gymnastics or yoga) (activity 1)
4. Yoga (activity 28)
5. Cycling (activity 4)
6. Running, track and field athletics (activities 7 and 8)
7. Racquet sports (activity 21)
8. Team sports (activities 5, 6, 15, 16, 17, 18, 19, 20)
9. Combat sports, martial arts and target sports (activities 11, 12, 27, 35)
10. Adventure, outdoor and water sports (activities 9, 14, 22, 23, 25)
11. Leisure activities and games (activities 10, 29, 30, 31, 32, 33)

7.1 Who participates in sport?

The Understanding Society sport participation data shows that around three fifths (60%) had participated in some moderate or high intensity sport in the past 12 months (abbreviated to ‘sport’ for ease of reading) and a third (33%) had participated at least weekly in the 12 months prior to 2013/14.

We know from previous research that participation in sport is not equally divided among all socio-demographic groups. Results from our analysis of Understanding Society data are consistent with those from previous research (e.g. DCMS, 2010), with significantly lower levels of overall sport participation found among:

- women;
- people aged 75 and over;
- those with lower levels of education;
- those in ethnic minority groups and
- those with a long-standard limiting disability or illness.

Table 7:1

Further analysis by frequency and type of sport, and by new variables available in Understanding Society, will allow us to validate and extend the existing evidence base.

7.1.1 Age

Beneath the overall trend of declining sport participation by age, from 81 per cent among 16 to 24 year olds to 22 per cent among those aged 75 or over, more variation can be detected if participation is analysed by frequency and type of sport.

In terms of frequency, among those who had participated, those aged 75 plus were **the most likely to have done so at least weekly** (44% vs 30% overall). This is an interesting result which suggests that those older people who were engaged in sporting activities had a strong commitment to regular participation. The most frequent core of participants were found among those aged 16 to 24, where a third of all participants reported participating three or more times a week (32% vs 25% overall).

Tables 7:1, 7:10

Analysis by type of sport also suggests specific age group preferences:

- Unlike most sporting activities, walking grew **more popular with age**. Almost half (46 to 47%) of 45 to 74 year olds engaged in walking for pleasure in the previous year, as compared with a third (31%) of 16 to 24 year olds. Although only 15 per cent of people aged over 75 were involved in weekly moderate or high intensity sport, 21 per cent were still engaged in walking for pleasure at least once in the past 12 months.
- While participation in sports other than walking tended to fall by age, there were substantial proportions of older people still involved in several types of sport including **swimming** (19% of 65 to 74 year olds and 5% of over 75s participated; **fitness** (14% of 65 to 74 year olds and 8% of over 75s) and **leisure sports** (17% of 65 to 74 year olds and 10% of over 75s). These figures suggest that engagement in sport can remain an important part of life for older people when the activities are tailored to their level of health and fitness.

Tables 7:3, 7:5

Age and sports club membership

On average, sports club membership fell with age, from one in four (24%) among 16 to 24 year olds to one in ten (9%) of those over 75. As we might expect, sports club membership was also found to be associated with higher levels of participation in weekly sport. Three quarters (77%) of members of sports clubs reported weekly sport participation in the past 12 months as compared with a quarter (22%) of non-members.

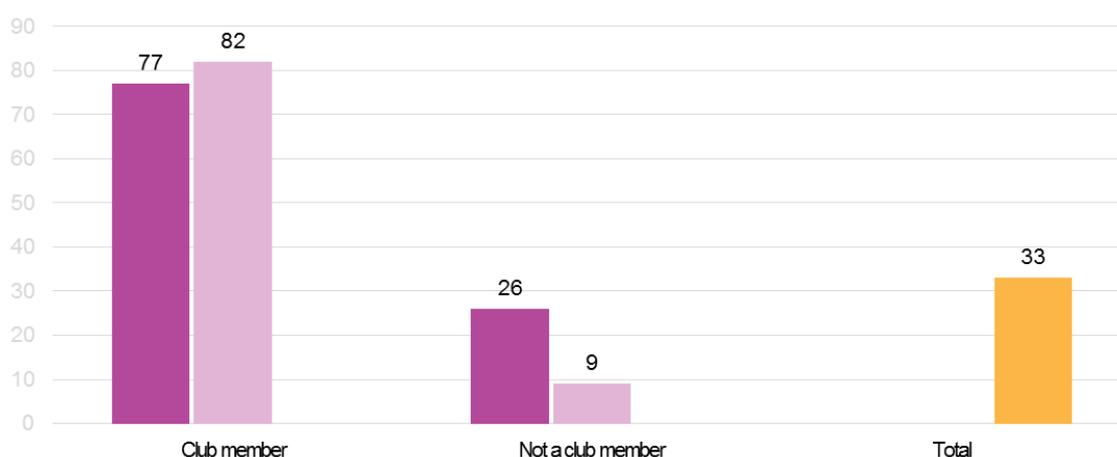
Tables 7:7, 7:9

Notably, this association was particularly strong for people aged 75 and over. As illustrated in Figure 7:1, more than four fifths (82%) of sports club members who were aged 75 and over still engaged in weekly high or moderate intensity sport, which was slightly higher than the weekly sports participation rate of club members under the age of 75 (77%). Among those who were not sports club members, participation rates for the over and under 75s were 9 and 26 per cent respectively. This suggests that the support or companionship of others who are engaged in sport may be a particular lever for regular sport participation for older people.

Figure 7:1 Proportion (%) engaging in weekly sport, by sport club membership and age group, 2013/14

Base: All with known club membership status, N = 20,243

■ 16-74 ■ 75+ ■ Total



7.1.2 Gender

In line with previous research, men were more likely than women to have participated in sport (65% vs 56%), and in weekly sport (37% vs 30%). Male sports participants were more likely than women to take part at least three times per week (27% vs 22%).

Tables 7:1, 7:10

Beneath this overall pattern, however, analysis by type of sport indicates clear gender preferences in sport participation. A higher proportion of **men** reported taking part in:

- Cycling (24% of men vs 13% of women);
- Running and athletics (17% vs 11%);
- Racquet sports (11% vs 5%);
- Team sports (19% vs 4%);
- Combat and target sports (11% vs 5%);
- Outdoor and adventure sports (23% vs 16%);
- Leisure sports (41% vs 24%); and
- Membership of a sports club (23% vs 14%)

In contrast, the types of sport more popular among women included:

- Swimming (34% vs 30% of men);
- Fitness (29% vs 27%); and
- Yoga (12% vs 3%).

Tables 7:3, 7:5, 7:7

7.1.3 Sexual orientation

We also examined sport participation differences by self-reported sexual orientation. Although there were no statistically significant differences in overall sport participation by sexual orientation, those defining themselves as lesbian, gay or bisexual were less likely than heterosexuals to report involvement in team sports in the past 12 months (8% vs 12%).

Tables 7:1, 7:5

7.1.4 Ethnic group

After adjusting for other differences between ethnic groups, adults of Pakistani and Black African origin were found to have lower weekly sports participation rates than white UK born adults. There were no other statistically significant differences between ethnic groups.

Among those who did participate in sport, ethnic origin made no significant difference to the frequency of participation.

Tables 7:1, 7:10, 0:1

There were ethnic differences in the popularity of specific types of sport. For example, Figure 7.2 shows that:

- **White** adults were the most likely to report:
 - walking for pleasure (42% of white UK-born adults had participated, vs between 6% and 17% of adults of black and Asian origin)
 - cycling (19% of white UK-born vs 12% or fewer from black and Asian ethnic groups); and

- outdoor and adventure sports (20% of white UK-born vs 9% of fewer of those from black and Asian groups).
- White adults were however the **least** likely to report participation in team sports (10% of white UK-born vs 17% to 25% among black and Asian groups).
- **Indian** adults were twice as likely as white UK adults to have participated in yoga (14% vs 7%).
- **Pakistani** adults were the most likely to have participated in team sports (25%), and also had the highest rates of participation in combat and target sports along with mixed ethnic adults (11% and 10% respectively vs at most 8% of any other ethnic group).

Swimming was an activity which clearly appealed to some ethnic groups more than others:

- swimming was popular among adults of white, mixed, Bangladeshi and any 'other' ethnic origin (between 30% and 34% participated);
- among those of Pakistani, Caribbean and African origin, however, less than one in five had been swimming the past 12 months (15%, 17% and 19% respectively).

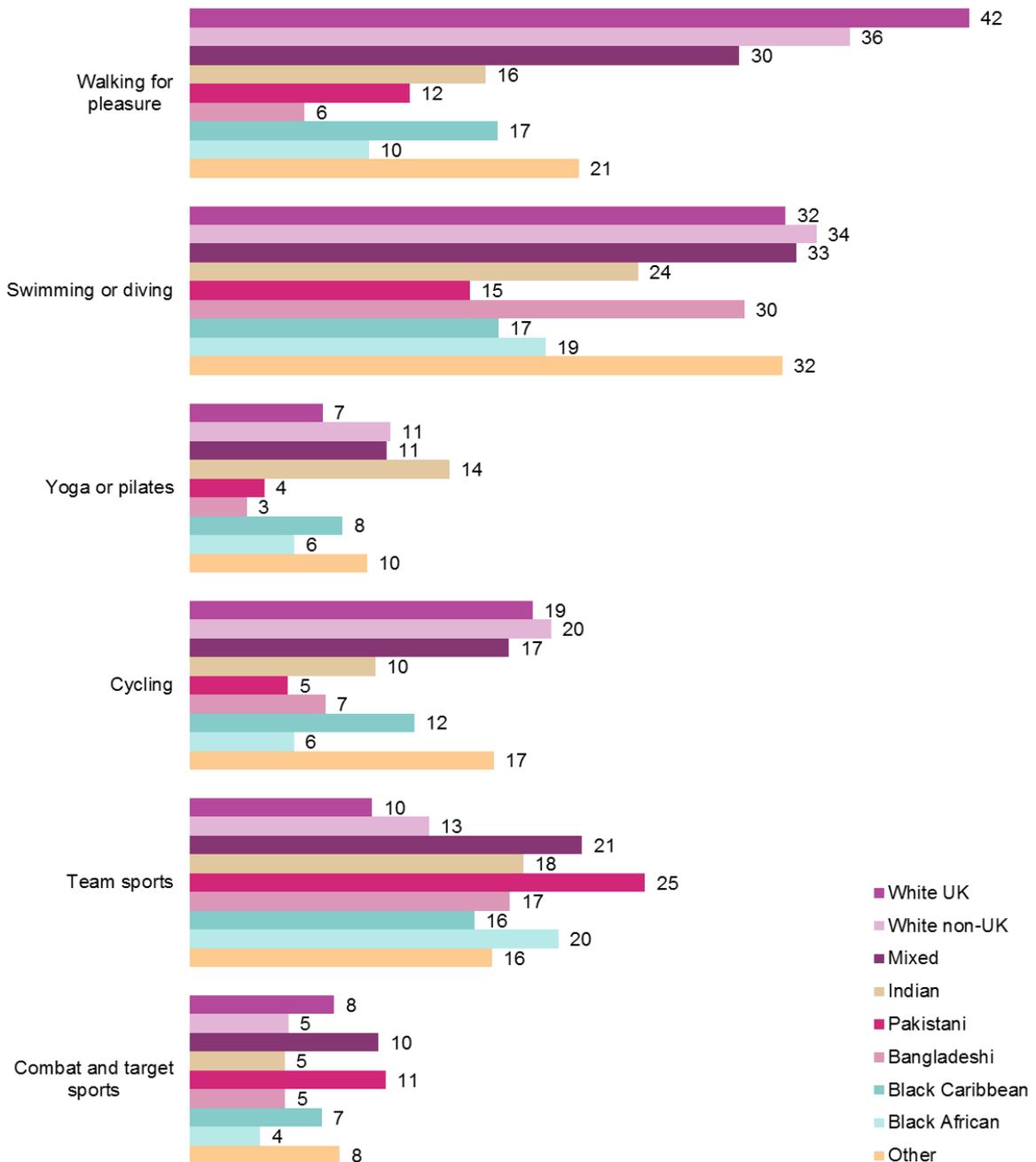
Tables 7:3, 7:5

Sports club membership was lowest among Bangladeshis (6%) and highest among white UK adults (19%).

Table 7:7

Figure 7:2 Proportion (%) engaging in weekly sport, by ethnic group, 2013/14

Base: All with known sports participation status and ethnic group, N = 19,854



What about religion, country of origin, English as a first language ?

The headline patterns of participation by these variables are provided in Table 7:1. Unlike in the cultural sectors, the differences in sport participation by English as first language were not statistically significant, and Muslim and Hindu adults had comparable levels of weekly sport participation to other religious groups.

7.1.5 Personal and household income

Sports participation was analysed by two indicators of economic circumstances available in Understanding Society: self-reported financial circumstances and household income. The pattern observed was similar to the findings of previous research using other economic indicators:

- The proportion engaging in sports fell as financial circumstances became more difficult (from 65% of those living comfortably to 47% of those finding it difficult to manage), as did the proportion engaging in weekly sports (from 39% to 22%).
- Those living in households of above average income were more likely to report participation in sport (66% vs 47%) and in weekly sport (37% vs 25%).

Tables 7:1, 7:2, 0:1

7.1.6 Employment status and caring responsibilities

Several patterns emerged when looking at associations between sports participation and economic activity status:

- Full-time students had particularly high rates of sports participation (84%) and weekly sports participation (51%), with the lowest rates found among those not in employment or education (40% and 23% for sports and weekly sports respectively). After adjusting for other differences between economic activity groups, the difference in weekly sports participation became non-significant for students, but the lower proportion of non-employed adults taking part in weekly sports remained significant when they were compared with adults who were employed full-time.
- Among all those who participated in sport in the 12 months prior to 2013/14, students and the part-time employed were the most likely to do so at least three times per week (33% and 26% respectively, vs 21 to 23% of others).

For unpaid care:

- People who spent 20 or more hours per week providing unpaid care for other adults were much less likely than those who provide less or no such informal care to participate in sport (38% vs 61% overall), and in weekly sport (19% vs 32 to 35%). Their lower likelihood of participation remained significant once other differences between the three groups were adjusted for, suggesting that it was not just related to factors such as gender, age profile or lower income, which were all included in the model.

Tables 7:1, 7:10, 0:1

7.1.7 Access to sports facilities

The 2010/11 Understanding Society survey included specific questions on whether people found it difficult to access sports or leisure facilities (such as leisure centre or a park) and if so, what were the main reasons for difficulty.

Overall, eight per cent of people mentioned having difficulties accessing sports facilities, with certain socio-demographic features making a person more susceptible including:

- living in a rural area (9% vs 7% of adults in urban areas reporting access difficulties);
- lack of driving licence and/or access to a car (15% vs 4% of those with a licence & access to a car)
- having a long-standing limiting illness or disability (16% vs 5% of those without); and
- living in a household below average income (11% vs 6% of those in better-off households).

Among those who found access difficult, a number of reasons for this were cited:

- 35% mentioned health or disability issues;
- 24% said that lack of time made access difficult;
- 22% said that they could not afford the costs of accessing sports facilities;
- 20% lack of access to a car; and
- 16% lack of local facilities.

Tables 7:12, 7:13, 7:14

7.2 Sport participation and household dynamics

With its collection of a number of household level indicators and individual data from all people in a household, Understanding Society is well suited for exploring the dynamics within households.

7.2.1 Presence and age of children

After adjusting for other differences between individuals in households with and without children of different ages²⁴, analysis showed that those in households with children under the age of 5 were less likely to take part in weekly sports than were those with no children in the household. There were no significant differences in weekly sports participation for adults living in households with older children.

Table 0:1

7.2.2 Presence and participation of other adults

People living in households with more than one adult were more likely to participate in sport (both overall and weekly) than those living in one-adult households, but this finding could reflect life-stage differences among people living in different types of households.

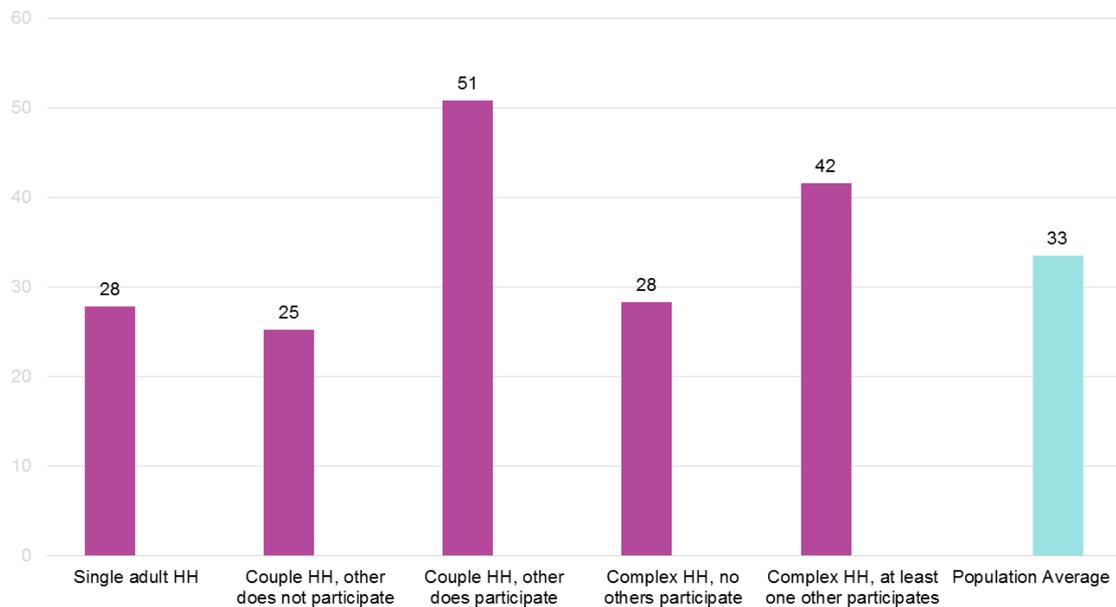
²⁴ The model adjusted for gender, age, ethnicity, sexual orientation, presence of long-standing limiting illness/disability, highest educational qualification, work status, provision of informal care to others, having children in the household, participation of others in the household in similar sports activity, urban/rural residence,,

Our adjusted results show that, comparing adults who were similar in other respects, those who lived with non-participants in weekly sport were less likely to participate themselves, compared with those living in households without other adults. Conversely, those who lived with other adults who did participate, were more likely to participate themselves.

Figure 7.3 shows that this relationship was strongest for couple households, with over half of people living with a participating spouse also participating in weekly sport themselves, twice as many as among those living in single-adult households (51% vs 25%), whereas, in complex adult households, the equivalent figures were 42% vs 28%. (Figure 7:3).

Figure 7:3 Proportion (%) participating in weekly sport, by household type and sport participation status of household members, 2013/14

Base: In fully productive households, N = 18,514

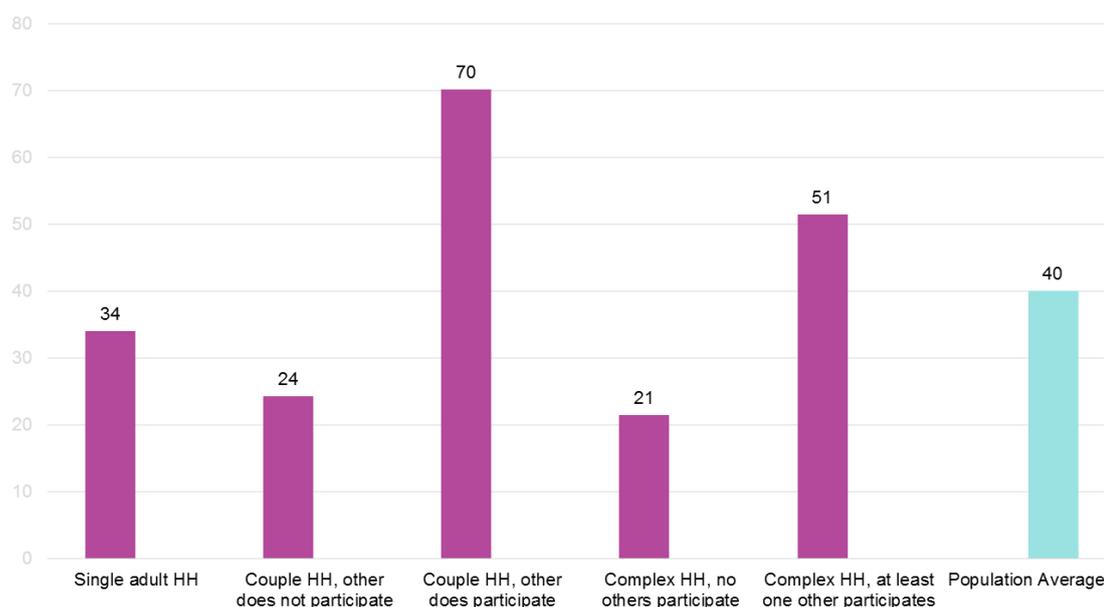


There were strong correlations between individual engagement and that of other adults in the household, for different types of sport. In each case, the correlation was stronger for those living in couple households than it was for those living in complex households, but living in a complex household with at least one adult who also participated also raised the likelihood that an individual would participate themselves. Figure 7:4 illustrates this pattern for engagement in walking: 70 per cent of adults who lived in a couple household with a spouse who engaged in walking also walked for pleasure themselves, compared with 24% of those living with a spouse who did not participate. Equivalent figures were 51% and 21% for those living in complex households.

Tables 7:15-7:23

Figure 7:4 Proportion (%) participating in walking, by household type and walking participation status of household members, 2013/14

Base: In fully productive households, N = 18,335

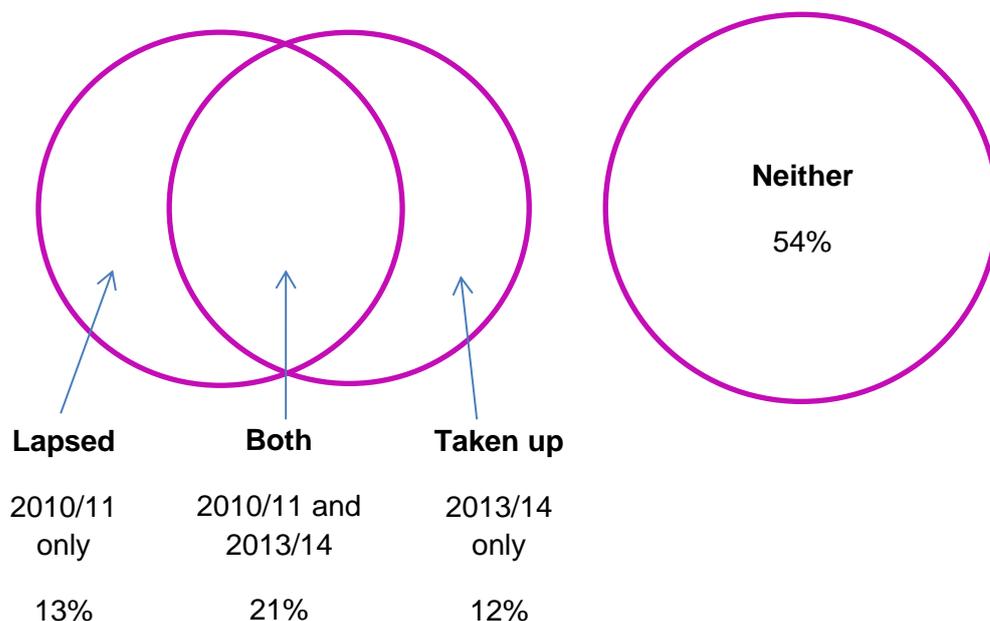


7.3 How has sports participation changed over time?

Understanding Society also presents an opportunity to look at changes in the patterns of sports participation between 2010/11 and 2013/14 and at the factors associated with these changes.

The overlap of weekly sports participation in 2010/11 and 2013/14 is illustrated in Figure 7:5. Overall, the proportion reporting weekly sport participation is comparable at both time points (34% and 33%). More than half of adults (54%) did not report taking part in sport at least weekly in either 2010/11 or 2013/14, while one in five (21%) did so at both time points. The remaining quarter reported weekly participation at only one of the two time points, with 13 per cent having ‘lapsed’ in their participation and 12 per cent ‘taking up’ weekly sporting activities between 2010/11 and 2013/14.

Figure 7:5 Weekly sport participation status in 2010/11 and 2013/14



The proportion of different socio-demographic groups belonging to each of these four categories – lapsed, adopters, consistent and unengaged – is provided in Tables 7.25 and 7.26. A group of particular interest for policy and practice are those 12 per cent of ‘adopters’ who had taken up (or resumed if they had engaged prior to 2010/11) weekly sport participation at some point during the three year period between 2010/11 and 2013/14. This group constitutes just under one in five (18%) of all people who did not engage in sport weekly in 2010/11. In what follows, we look at the features of this group in the context of all people who did not report weekly sport participation in 2010/11.

7.3.1 Key demographics

In terms of key demographics, the factors that were associated with the likelihood of taking up weekly sports participation between the 12 months preceding 2010/11 and 2013/14, included:

- **Gender:** when other factors were held constant, women were less likely than men to have taken up weekly sport.
- **Age:** Other things held constant, those aged 45 or over were less likely than younger age groups to have taken up weekly sports participation between 2010/11 and 2013/14.
- **Education level:** Having a higher level of qualifications was associated with a higher chance of taking up weekly sport participation between 2010/11 and 2013/14.

Table 7.27, 0:2

7.3.2 Impact of changes in circumstances

In terms of other life changes, three factors had statistically significant **negative association** with the likelihood of taking up weekly sports participation between 2010/11 and 2013/14 when other factors were taken into account:

- **New child in the household:** Having a child in the household in 2013/14, after not having lived with children in 2010/11, was associated with lower likelihood of taking up sport participation.
- **Disability status:** Those with a limiting long-standing health problem or disability in 2013/14 only or in both 2010/11 and 2013/14 were less likely to have taken up weekly sport participation.
- **Household income:** Those in households below average income in both 2010/11 and 2013/14 were less likely to have taken up weekly sport.

Table 7.28, 0:2

7.3.3 Impact of others in the household

After controlling for other differences between the groups, we found two significant associations between the likelihood of individuals' taking up weekly sport participation and the sports participation status of other household members:

- **Consistently living with non-participants in weekly sports:** Those who lived with other adults who did not participate in weekly sports in both 2010/11 and 2013/14 were less likely than single adults to have taken up weekly sports themselves.
- **Status of other household members changed from non-participants to participants in weekly sports:** Adults living in these circumstances were more likely than single adults to have taken up weekly sports.

Table 7.29, 0:2

8 Participation, health and wellbeing among adults

Key findings

- Adults who engaged in arts, culture and sports activities tended to be more healthy than those who did not, but the cross-sectional data does not allow us to determine whether or not there were direct causal relationships between engagement and better health.
- Adults who made more frequent visits to arts events or cultural sites tended to have better health and well-being than those who visited infrequently, but this could reflect other differences in incomes and lifestyle between the groups.
- Frequency of taking part in sport was strongly linked with health and wellbeing, with those who participated in sports more consistently having higher levels of health and wellbeing.

Comparisons between those who had taken up engagement, those who engaged or did not engage at both surveys, and those who stopped engagement showed that:

- Adults who had taken up engagement in weekly sports had the most positive changes in physical health and life satisfaction, compared with those who were engaged or non-engaged both times, or who stopped engagement;
- Those who had taken up participation in arts activities had the most positive results for changes in mental health, compared with other engagement groups; and
- Those who had taken up attendance at arts events had the most positive changes in life satisfaction compared with other engagement groups.
- Conversely, those who had stopped visiting heritage sites had the most negative changes in mental health and life satisfaction compared with other engagement groups.

Looking at unadjusted results for more specific types of cultural and sports activities, showed that:

- Taking up engagement in music, walking, fitness, running, combat/target sports, and sports club membership was associated with the most positive changes in physical health.
- Taking up or consistently engaging in cycling and outdoor/adventure sports were also associated with more positive changes in physical health.
- Taking up engagement in dance and theatre activity was associated with the most positive changes in mental health.
- Lapsed (stopping) participation in visits to music events, walking, fitness, running, cycling, outdoor/adventure sports and sports club membership was associated with the most negative changes in physical health, compared with other engagement groups in these activities.
- Taking up engagement in dance, music or a sports club was associated with the most positive changes in life satisfaction. The social component of club membership may be protective against the development of poorer health, supplementing the beneficial effects on health of physical activity.

In this section we look at the relationships between cultural and sports participation based on Understanding Society data collected in 2010/11 and 2013/14, and health and well-being information collected in the same years.²⁵

We begin by describing the relationships between participation frequency in different types of activity in the preceding year, and health and wellbeing in 2013/14. It is important to be aware that these cross-sectional findings do not allow for the

²⁵ Overviews of recent work on links between music, sports, dance and wellbeing are presented in publications by the What Works Centre for Wellbeing (WWCW, 2016; Mansfield, 2017)

establishment of causality. Cross-sectional data does not allow us to distinguish between situations where healthier people were more likely to take part in activities and those where engagement in the activities had a positive effect on health and wellbeing.

However, the availability of longitudinal data on health and participation from Understanding Society, while not fully resolving causality issues, does allow us to address them to some extent. The subsequent part of this section examines associations between changes in participation and changes in three health outcomes: physical health, mental health and life satisfaction. It provides information on the extent to which taking up certain activities was associated with more positive changes in health and well-being, and also the extent to which stopping activities was associated with more negative changes in health and well-being.

8.1 Background

There has been growing national and international interest in using measures of subjective wellbeing to assess social progress and to evaluate policies and interventions. Subjective - or personal – wellbeing relates to how well people feel (hedonic wellbeing), how well they function or get on (eudaimonic wellbeing), and their satisfaction with their life (evaluative).

The Office of National Statistics (ONS) led on the ‘Measuring National Well-being’ programme. Four harmonised, personal wellbeing questions were developed, including one capturing overall satisfaction with life. A ‘wheel of measures’ was also launched in 2012, including more general wellbeing indicators relating to physical health, mental health, activities, relationships, neighbourhood, personal finance, education and skills, and views of the economy, the environment and governance. Cultural and sports participation was added to the wheel in May 2013, reflecting growing recognition of the role that these sectors may play in people’s wellbeing.

Analysis of cross-sectional data from Understanding Society has shown that people with higher wellbeing are more likely than those with low to engage in arts, cultural, and sports activities. Involvement with arts, heritage sites, libraries, museums and sports was also associated with other positive physical and mental health outcomes (Fujiwara et al. 2014a, 2014b, 2015).

There is a need to further unpack the nature of these associations with health and wellbeing, both in terms of controlling for other factors that might explain the relationship, and to examine patterns of change over time. A recent review of longitudinal data sources on arts and health recently concluded that Understanding Society presents a unique opportunity for such analyses (Gordon-Nesbitt 2015).

8.2 Health and wellbeing measures

Understanding Society waves 2 and 5 (2010/11 and 2013/14) contain a range of health and wellbeing measures,²⁶ which tend to be closely correlated.²⁷ Those used in this report are:

²⁶ Understanding Society also provides data on the 12-item General Health Questionnaire (GHQ), a screening tool for common psychiatric disorders that was included in the survey to assess psychological distress. Our exploratory analyses showed more association between participation and the SF12 measure of mental health than they did with the GHQ measure so, in the interests of reducing the complexity of the report we have opted to focus on SF12.

Long-term limiting illness or disability (LTI) was defined as a physical or mental impairment, illness or disability that had troubled someone, or was likely to trouble them, for a period of at least 12 months. LTIs were classified as limiting if participants felt their ability to function was affected.²⁸ Since this variable refers to long-standing issues relating to the year preceding the survey, it is mainly used as a predictor of participation rather than as a health outcome.

Short Form 12 Health Survey (SF12) is a reduced version of the SF36.²⁹ It consists of 12 items that measure physical and mental functioning.³⁰ Both the physical component (PCS) and the mental component (MCS) scales are normalised to a mean score of 50.³¹

Self-rated general health (SRH) is an individual question in the SF12, and is included in the calculation of both the physical and mental component scales. Participants were asked: 'In general, would you say your health is... excellent, very good, good, fair or poor'. The response options were collapsed into two groups for the purposes of our study: those who described their health as fair or poor, and those who said it was good, very good or excellent.

Life satisfaction is a self-rated scale from 1 (completely dissatisfied) to 7 (completely satisfied) based on a question about how satisfied participants are with life overall. In this report people reporting high life satisfaction (a score of 6 or 7) are compared with the rest of the population. While presence of poor health identifies those struggling most, high life satisfaction identifies a group who may be considered to be 'flourishing'.

Self-efficacy is measured on the Generalised Self-Efficacy (GSE) scale. This measures how well people deal with daily challenges and adapt to stressful life events. The score sums responses to ten questions, giving a range of 10 to 40, with a higher score indicating greater self-efficacy. The GSE was included at wave 5 (2013/14) but not wave 2 (2010/11), so changes in self-efficacy between waves could not be examined.

8.3 Participation frequency and health

The following section describes the relationships between participation frequency in different types of activity in the preceding year, and health and wellbeing in 2013/14. It is important to be aware that these cross-sectional findings do not allow for the establishment of causality. For example, although health and well-being tended to be

²⁷ For example, 29% of people who rated general health as poor had high life satisfaction, compared with 60% of people who rated their general health as good to excellent.

²⁸ Areas of functionality asked about were: mobility, lifting, manual dexterity, continence, hearing, sight, communication and speech, memory and concentration, recognition of physical danger, co-ordination, personal care, and other ways.

²⁹ The Medical Outcomes Study SF-36 and SF-12 are multi-item generic health surveys intended to measure "general health concepts not specific to any age, disease, or treatment group". The SF-12 is a shorter version of the SF-36 and uses only 12 questions to measure functional health and well-being from the patient's perspective. The original objective was to develop a short, generic health-status measure that reproduces the physical component summary (PCS) score and the mental component summary (MCS) score from the SF-36.

³⁰ See Appendix A for details.

³¹ With reference to the 1998 United States population.

poorer among people who engaged less in arts activities, it is not possible from the cross-sectional data to distinguish between situations where healthier people were more likely to take part in such activities and situations where engagement in the activities had a positive effect on health and wellbeing.

Arts activities, health and wellbeing

Physical health, mental health, self-rated general health, self-efficacy and self-rated life satisfaction were all poorest among people who did not participate at all in arts activities in the previous year. Among those who did engage, frequency of participation (for example whether someone took part weekly or just once or twice a year) was not strongly associated with health and wellbeing.

Tables 8:7, 8:8, 8:9

Arts events, health and wellbeing

The association between poorer health and non-participation was replicated for non-attendance. Those who did not attend an arts event in the past year reported worse physical health, mental health, and self-efficacy. Those who attended arts events more frequently had significantly higher scores for physical health (52.2 for those who attended monthly falling to 43.5 for those who did not attend in the last year) and also for self-efficacy (31.7 for those who attended monthly falling to 30 for those who did not attend in the last year). Those who had not attended arts events in the past year were more than twice as likely as those who had attended to report poorer general health (37% vs between 12 and 19% for those who had attended). There was also a positive association between more frequent attendance at arts events and high life satisfaction (45% of those who had not attended had high life satisfaction, rising to 58% of those who attended at least monthly).

Tables 8:11, 8:12, 8:13

Visiting heritage sites, health and wellbeing

People who hadn't visited a heritage site in the previous year reported poorer physical, mental and general health as well as lower life satisfaction and lower self-efficacy. There was a weak but positive relationship between visit frequency and health, and this association was strongest for life satisfaction.

Tables 8:15, 8:16, 8:17

Visiting museums, health and wellbeing

There was a clear association between increased frequency of museum visits and better self-rated general health (26% of those who had not visited in the past year reported poorer general health, falling to 11% of those who visited at least monthly).

Other measures (self-efficacy, life satisfaction, and physical and mental health) also showed that health and wellbeing was poorest among those who had not visited a museum in the past year. However, among those who had visited a museum, other aspects of health and wellbeing varied little between those who attended occasionally and those who attended more frequently.

Tables 8:19, 8:20, 8:21

Visiting libraries, health and wellbeing

Unadjusted figures showed that rating one’s own general health as poor or fair was less common among library visitors than non-visitors (16 to 18% of those who visited with different levels of frequency had poor health, vs 22% of non-visitors). Among users of libraries, however, the number of library visits did not show a clear link with general health. Visiting libraries had little association with other health and wellbeing indicators.

Although other research studies have found clearer associations between library visiting and wellbeing, using a modelling approach,³² it is important to be clear that such results do not show that library visits were beneficial for health, but could also reflect the fact that people in better health were more able to visit libraries. Similarly, results showing no association between library visiting and levels of health could also indicate that libraries were more accessible than other types of cultural sites to people experiencing poor health, and thus potentially more able to offer benefits to these groups.

Tables 8:23, 8:24, 8:25

Sports activity, health and wellbeing

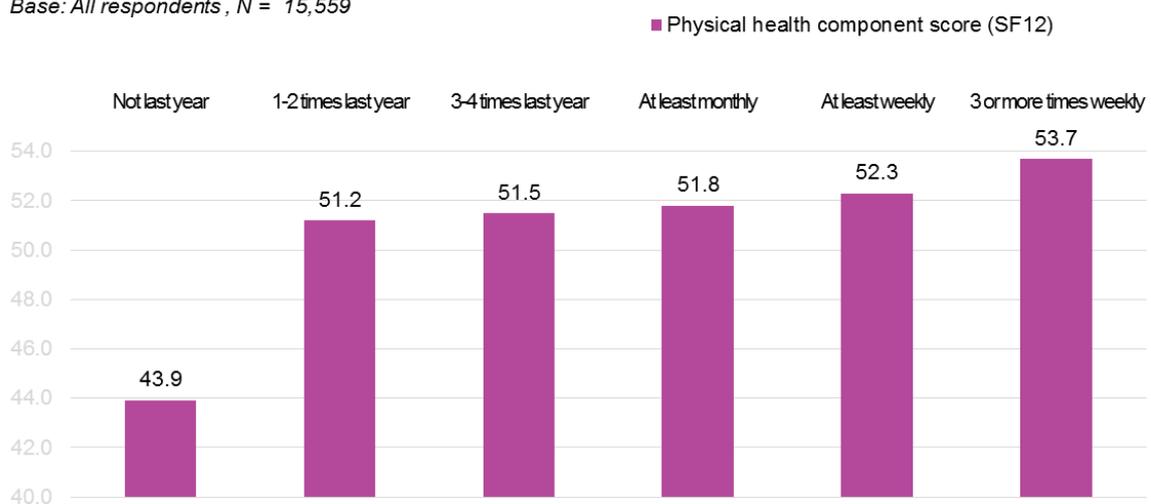
Engagement in moderate to high intensity sports showed a strong, dose-response relationship with all the indicators of health and wellbeing examined:

- Physical health scores increased from 43.9 among those who did not engage in the past year, to 53.7 among those who participated at least three times per week (Figure 8.1);
- Mental health scores rose from 48.5 to 50.2;
- Self-efficacy scores rose from 30.2 to 31.9;
- The proportion with high life satisfaction rose from 48% to 61%; and
- The proportion with poorer health fell from 35% to 8%.

Tables 8:27, 8:28, 8:29

Figure 8:1 Average physical health scores by frequency of participation in moderate to high intensity sports

Base: All respondents, N = 15,559



³² Fujiwara et al, 2015

8.4 Changes in participation and health

The findings presented so far have been cross-sectional and do not allow for the direction of causation to be established. It is not possible to disentangle whether healthier people are more likely to take part in activities or visits, or if engagement in activities or visits improves health and wellbeing.

The availability of longitudinal data on health and participation from Understanding Society does not fully resolve this issue, although it does allow it to be addressed to some extent.

The following section estimates associations between changes in participation and changes in three health outcomes: physical health, mental health and life satisfaction³³.

We compare the health change scores³⁴ for those who:

- Did not participate in either in 2010/11 or 2013/14 (in the tables, referred to as 'Neither')
- Participated in 2010/11 only ('Lapsed')
- Participated in 2013/14 only ('Taken up')
- Took part at both time points ('Both')

Overall mean physical health scores declined by 0.7 over this period, mean mental health scores declined by 0.9 and life satisfaction scores declined by 0.2 (Table 8.10). Declining physical health scores could partly be explained by the ageing of the sample, since they tended to get lower as people got older (see Table 8.1). The reasons for a decline in mental health and life-satisfaction scores are less clear, since there is no clear decline with age for these variables. Table 8.31 shows that for all of these variables the overall proportion experiencing a decline was larger than the proportion experiencing improvement:

- 46% improved their physical health score, but 50% had a lower score in 2013/14
 - 44% improved their mental health score but 52% had a lower score in 2013/14
 - 25% improved their life satisfaction score, but 33% had a lower score in 2013/14.
- In addition, the table shows that average declines in these scores tended to be larger than average improvements.

In order to take account of the health changes for everyone in the sample, we show average changes over the period, which represent the sum of declines for some people and improvements for others. Since declines outweigh improvements overall, this means that the results shown in the tables and charts tend to be dominated by negative figures. Within this context, relatively smaller declines in health should be seen as representing positive results. We focus on describing the relative differences between engagement groups, i.e. those who achieved the most and least positive changes in health and well-being.

The results present are based on simple bivariate analyses (Tables 8.1 to 8.31) and on models providing results for different patterns of longitudinal engagement in the various activities after adjusting for other socio-demographic factors and changes in circumstances.

³³ It was not possible to track changes in self-efficacy as it was measured in the 2013/14 survey only. Changes in general health scores are not shown as the average levels of variation were extremely low and hence uninformative.

³⁴ The score change in health status was calculated by subtracting the respective 2013/14 score from the 2010/11 score.

The variables included in the final models of change in health scores are shown in the box below. The adjusted table (Table 0:3) shows only the values for the effects of different longitudinal patterns of participation in cultural and sports activities on changing health scores, after adjusting for the other variables in the model.

Models of change in health scores:

Variables included :

Gender
Sexual orientation
Age
Ethnicity
Highest educational qualification
Change in whether children in the household
Change in economic activity status
Change in informal care provided
Change in whether household is above/below average income
Change between urban and rural areas
Whether moved house
Longitudinal participation in cultural/sports activity

Changes in participation in arts activities

Adults who took up participation in arts activities between 2010/11 and 2013/14 had the smallest decrease in mental health scores (Figure 8.2 shows the decline of 0.4 for those who took up arts activities, compared with declines of 0.8 for those who participated both times, 1.2 for those who participated at neither time point and 1.5 for those with lapsed participation). This association between better mental health and the take-up of arts activities remained significant after controlling for a range of other factors including age and financial circumstances.³⁵

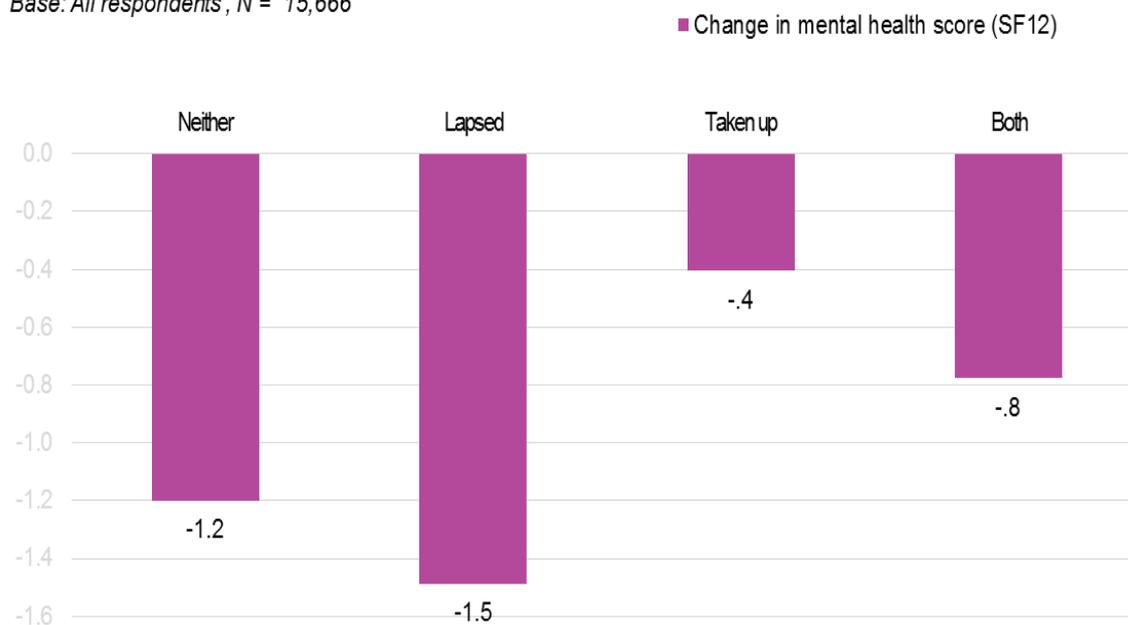
Overall results showing a smaller decline in life satisfaction among those who took up participation in arts activities became non-significant after controlling for other relevant factors.

Table 8:10, 0:3

³⁵ See box above

Figure 8:2 Change in mental health scores by participation in any arts activities in 2010/11 and 2013/14

Base: All respondents, N = 15,666



In terms of specific types of arts activities, there were no significant associations between health status and changes in literary, arts and crafts, digital arts and combined arts participation. However, those who took up participation in dance activities had the most positive results for changes in mental health (an improvement of 0.4 compared with declines of 0.7 for those who took part both times, 0.9 for those who took part at neither time, and 1 for those with lapsed participation). Those who took up participation in dance activities also had the most positive results for changes in life satisfaction (no change, compared with declines of 0.2 or more for other groups).

Adults who took up participation in musical activities had the most positive results for changes in physical health (an improvement of 0.3 compared with declines of 0.1 for those who participated both times, 0.8 for those who participated at neither time and 1.5 for those with lapsed participation). Like adults who took up dance, those who took up musical activity also had the most positive results for life satisfaction (no change, compared with declines for other groups).

Adults who took up participation in theatre activities had the most positive results for change in mental health (a decline of 0.1, compared with declines of between 1.2 for those who took part both times, 0.8 for those who took part at neither time and 2.8 for those with lapsed participation).

Table 8:10

Changes in attendance at arts events

There was no significant relationship between physical or mental health status over time and patterns of attendance at any arts events in the past year. Although life satisfaction declined in all groups over time, it declined to a significantly lesser extent for those who reported a take up of attendance at arts events, and this result remained significant after adjusting for other factors in the model.

The group reporting lapsed attendance tended to show the greatest declines in health status across all measures. However, this was statistically significant only for the association between physical health and music attendance (where it might suggest that people with poorer physical health found it more difficult to attend), and for life satisfaction and dance events.

Table 8:14

Changes in engagement with heritage sites

The group which reported a lapse in visits to heritage sites over time also reported the greatest declines in health, significantly so for mental health and life satisfaction. For example, Figure 8:3 shows that those who visited heritage sites in 2010/11 but were no longer doing so in the year before the 2013/14 survey, had a decline of 1.4 points in their mental health score, compared with declines of between 0.7 and 1.1 for other groups. The same group had the biggest decline of 0.3 in their average life satisfaction score, whereas those who had taken up visits to heritage sites had the smallest decline in life satisfaction, averaging 0.1 points. These results remained significant after controlling for the full range of factors in the model. They are in line with those of the previous analysis of arts attendance which also observed a greater decline in health status in the group which no longer participated in 2013/14 but which did so in 2010/11. Although it is not possible to fully establish patterns of causality, these results are suggestive of a situation where declining ability to participate in former activities could have a negative impact on well-being.

Figure 8:3 Physical, mental health and life satisfaction scores by visits to any heritage sites in 2010/11 and 2013/14

Base: All respondents, N = 15,666

■ Change in mental health score (SF12)

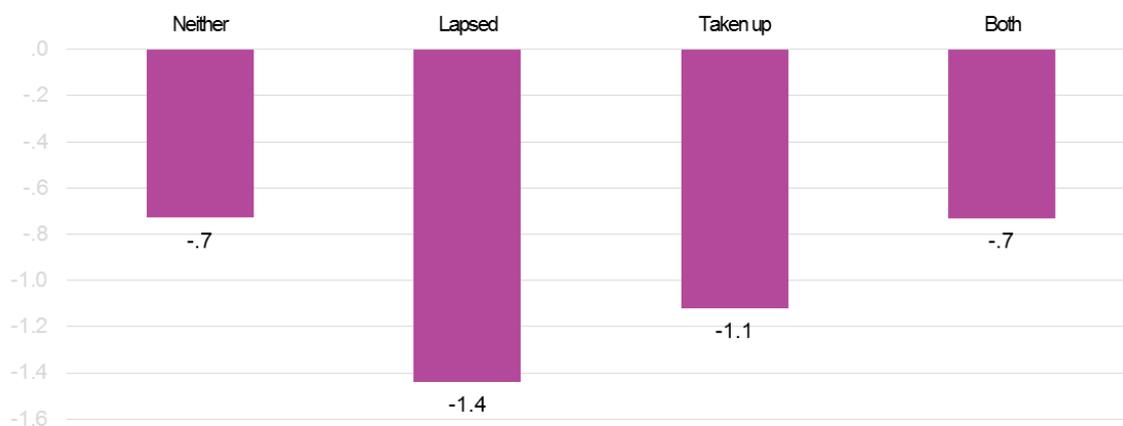


Table 8:18, 0:3

Changes in engagement with museums

There were no significant associations between changing patterns of museum visits and physical, mental health and life satisfaction scores, either before or after controlling for other relevant factors.

Table 8:22, 0:3

Changes in engagement with libraries

As was observed for the relationship between museum visits and health, there was no significant relationship between changing patterns of library attendance over time and health status, either before or after controlling for other relevant factors.

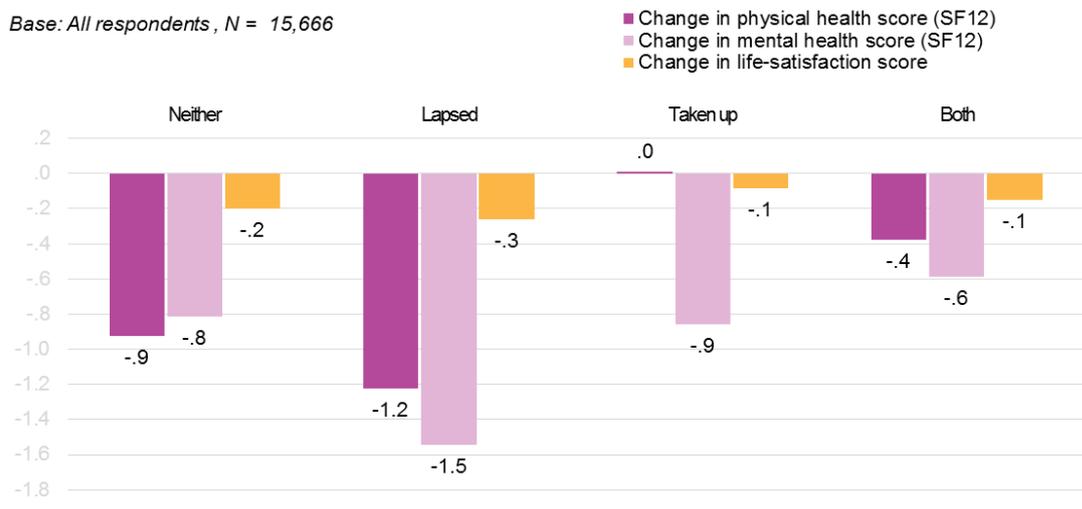
Table 8:26, 0:3

Changes in sporting engagement

Changes in sports participation were significantly related to all three health measures, both before and after adjusting for the other factors in our model. For example, Figure 8.4 shows that those who participated weekly in moderate to high intensity sports in 2010/11 but had stopped doing so by 2013/14, had on average the most negative results for changes in physical and mental health, and life satisfaction. Those who took up participation in weekly sports in 2013/14 after not having participated to this extent in 2010/11 had the most positive average changes in physical health and life satisfaction.

Table 8:30, 0:3

Figure 8:4 Physical, mental health and life satisfaction scores by any moderate to high intensity sporting participation in 2010/11 and 2013/14



Patterns of participation and associated health status were investigated for a range of specific sports activities. There was a consistent trend across the majority of activities whereby the group with lapsed participation also reported the greatest declines in health, on all three measures. This effect was particularly strong for physical health and to a lesser extent mental health and life satisfaction.

Taking up participation in walking, fitness, running and athletics, combat and target sports, and sports club membership were significantly associated with the most positive changes in physical health. Taking up and consistent participation in cycling and outdoor/adventure sports were also significantly associated with the most positive changes in physical health. With the exception of combat and target sports, lapsed participation in all of these activities was significantly associated with the most negative changes in physical health.

Results for mental health were less easy to interpret. Those who did not participate in walking at either time point had the most negative average results for mental health change. However, those who did not participate in leisure sports at either time point had the least negative results for mental health change.

It is noteworthy that sports club membership was significantly associated with life satisfaction as well physical health. Those who had taken up sports club membership had the most positive average results for change in life satisfaction and physical health, whereas those whose membership had lapsed had the most negative results. One possible explanation is that the social component of club membership may be additionally protective against the development of poorer health, supplementing the beneficial health effects of physical activity.

Table 8:30

9 Summary and recommendations

This report has used data from the Understanding Society adult surveys 2010/11 and 2013/14 to uncover new insights about patterns of engagement in culture and sport, and the associated health and wellbeing benefits of such engagement. In this final section, we discuss key findings from the research and offer suggestions for areas where further investigations would be useful.

9.1 Key cross-sector findings

The discussion highlights some key themes which apply across the culture and sport sectors: diversity of engagement patterns across different groups, social dimensions of engagement, persisting inequalities in access to some types of engagement opportunities, and associations between engagement, health and wellbeing.

Diversity of engagement patterns

Our findings add to the evidence from other research that different groups of people engage in different types of cultural and sports activities. Certain activities were more popular among men or women, some appealed more to younger people and others appealed more to those who were older. While there may be scope for expanding the appeal of activities beyond the groups which traditionally tend to engage, it is also important for policy makers to ensure that they are supporting the diversity of activities engaged in by different communities or groups.

The large sample of respondents from ethnic minorities included in the Understanding Society surveys made it possible for us to provide a detailed picture of engagement in different activities by nine different ethnic groups. This provided a number of interesting findings:

- Whereas in general, adults of Pakistani, Indian, Bangladeshi, Caribbean and African origin were less likely than white UK adults to have engaged in arts activities, or attended arts events, those of African and Caribbean origin were most likely to actively participate in dance and they were as likely as white and mixed ethnicity adults to actively participate in music.
- Adults of African ethnicity were the most likely to have visited libraries.
- Although only around four in ten adults of Caribbean origin visited heritage sites, white and Caribbean visitors were the most likely to engage at least once a month.
- White adults born outside the UK were the group most likely to have visited museums and galleries.
- Pakistani and African adults were the least likely to have engaged in weekly sports, but Pakistani adults were the most likely to have engaged in some form of team sports.
- Indian adults were the most likely to have engaged in yoga.
- Adults of Pakistani, Caribbean and African origin were the least likely to have engaged in swimming.

High levels of engagement in certain types of cultural and sports activity by different ethnic groups provide an indication of the way that these activities are embedded within social and cultural histories and networks. Supporting the development of opportunities for engagement among specific communities could provide ways of strengthening bonds within those communities and could also help to strengthen and develop intercommunity interactions and links, through shared participation in culture and sport.

Social dimensions of engagement

With its collection of a number of household level indicators and individual data from all people in a household, Understanding Society is well suited for exploring the dynamics of participation within households. Our results suggested several ways in which individual participation appeared to relate to the participation of others in the family, household or community, key examples of which are given below.

Across all of the arts, culture and sports sectors, we found that adults were **markedly more likely to take part in an activity if they lived with other adults who did so**. Engagement was lowest among those living with others who did not take part, and highest among those living with at least one other adult who did take part, with single adults in an intermediate position. These findings suggest that other household members might play a key role in encouraging – or dampening – enthusiasm for leisure activities of different types, while also reflecting the probable clustering of people with similar characteristics and interests into households.

The findings suggest potential opportunities for using household networks as a hook to get further adults to participate, for example with offers to ‘bring a friend’. On the other hand, they also draw attention to the challenges involved in encouraging participation among those living in households where culture and sport do not form a part of the usual routines. There would appear to be scope for development of policy initiatives which support the development of social networks around leisure engagement, targeting those who are currently put off engagement because they do not have friends and family readily available to engage with them.

Previous research has also shown that a key driver for adult engagement in cultural activity is the desire to introduce children to new experiences in a way that expands their overall horizons (DCMS, 2010). Our research provides further evidence of this, through findings that adults living with children aged 5 to 10 years were more likely than others to have attended arts events, museums and galleries, and that adults living with any children under 11 were more likely than others to have visited libraries. On the other hand, adults living with children under 5 years of age were less likely to participate in dance, literature, theatre and combined arts activities, attend arts events or engage in sports.

Policymakers could build on these results by supporting the development of cultural activities which appeal to children as well as adults, and which could offer potential health and wellbeing benefits to both groups. It would be helpful to have a better

understanding of the reason for dips in activity among those living with pre-school children, to learn more about whether different types of provision could offer new engagement opportunities for this group.

In addition to being a valuable source of information about engagement patterns within households, Understanding Society also contains information about other forms of engagement with a social dimension, such as membership of sports clubs. As we might expect, results showed that sports club members were much more likely than others to actively participate in sports on at least a weekly basis. Results also showed that sports club membership fell with age. However, among those older people who were sports club members more than four fifths engaged in sports at least weekly, suggesting that the support or companionship of others who are engaged in sport may be a particular lever for regular sports participation among older people.

Caring and engagement

Our results showed higher levels of engagement across all arts and cultural sectors among adults providing a moderate level of unpaid care (less than 20 hours per week).

Those who had newly become carers in 2013/14 were also more likely than non-carers to have taken up visits to museums, heritage sites and libraries. It would be interesting to know more about whether carers engaged in arts and cultural activities with the people they cared for, or whether the adoption of a caring role had changed their lifestyles in a way that left more time for leisure activities.

Why engagement matters

Our results added to the weight of existing evidence³⁶ showing that disadvantaged groups (with lower incomes, qualification levels and problems with health, for example) tended to engage less in culture and sports than those who were more advantaged. For the wellbeing benefits of sports and culture to be spread more widely, attention needs to be focused on ways of overcoming barriers to access.

Libraries stood out from the other sectors by being most accessible to disadvantaged groups, including those with limiting illnesses and disabilities, people who were not in employment, and those with young children. In contrast to most other forms of cultural activity, engagement with libraries was higher among adults from ethnic minority groups, with black Africans being particularly likely to visit.

³⁶ Such as that contained in the Taking Part: focus on diversity report (DCMS, 2016b)

Despite this, and as other research has shown,³⁷ libraries saw more decline in engagement compared with other sectors, and fewer increases in engagement. These findings suggest that careful consideration should be given to the protection of facilities such as libraries which provide benefits for groups across the social spectrum, including more disadvantaged groups. Libraries can also provide valuable gateways to other types of cultural and sports engagement for their users. As sites which facilitate social connections, and which attract visitors from across the social spectrum, they offer opportunities for advertising other types of engagement opportunities to a broad range of potentially interested parties.

Health, wellbeing and engagement

Recent research suggests that connecting with others and keeping active, both physically and mentally, provide ways of achieving better wellbeing (New Economics Foundation, 2011; Yaxley et al, 2012). As we have seen above, engagement in culture and sports is a popular way for adults to keep active. Our results also suggest that social connections play an important role in making engagement more attractive and enjoyable. This section presents a summary of key findings about relationships between engagement, health and wellbeing.

Our findings show that adults who engaged in arts, culture and sports activities tended to be more healthy than those who did not, and that adults who made more frequent visits to arts events or cultural sites tended to have better health and well-being than those who visited infrequently. Frequency of taking part in sport was also strongly and positively linked with health and wellbeing. Adults who took part in sports had better physical health, mental health and life satisfaction than those who did not, and those who participated more frequently saw more benefits than those who did so less frequently.

The links are likely to result both from healthier people being more likely to engage, and from positive benefits of engagement for health. As we have seen, engagement in culture and sport was higher among those with higher incomes and higher levels of educational qualifications, so engagement should be seen as part of an overall package of advantages that tended to bring better health and wellbeing.

By linking information about engagement and wellbeing of the same individuals in 2010/11 and 2013/14 we were able to distinguish between those who increased their cultural or sports engagement, those whose level of engagement was similar at both points, and those whose engagement lapsed over time.

³⁷ Matthews et al, 2016

We found that people who increased their active engagement in arts and sports tended to experience more positive health trajectories, compared with those who decreased or maintained similar levels of engagement. Active involvement in music, dance and theatre appeared to have particularly positive associations with different health and wellbeing indicators. Adults who had recently taken up visiting arts events had more positive changes in life satisfaction than those whose participation had lapsed or been maintained at a constant level. Those who increased their engagement in sports had more positive trajectories for physical health and life satisfaction.

Decreasing engagement in arts activities was linked with more negative results for mental health and life satisfaction, and lapsed engagement in weekly sport was linked with more negative results for physical and mental health, as well as life satisfaction. Lapsed engagement in music, walking, fitness, cycling, and running was linked with more negative results for physical health, and giving up sports club membership was linked with more negative results for life satisfaction.

Decreased cultural engagement was also linked to more negative wellbeing trajectories. For example, adults who had previously engaged in visits to heritage sites but had not done so more recently showed evidence of declines in mental health and life satisfaction scores that were greater than those experienced by people who maintained or increased their levels of participation. Decreased attendance at music events was linked to more negative trajectories for life satisfaction.

9.2 Suggestions for further research

Results from our analysis suggest numerous ways in which increasing culture and sports engagement is linked with more positive developments in individual health and wellbeing, and where decreasing engagement is linked with health and wellbeing declines. In this section, we present a few suggestions for ways to build on this research.

Diaries for more precise linkage of wellbeing and engagement activity

Data based on repeated cross-sectional measures only provides a partial picture of the relationships we are interested in. Questions refer to broad periods in which engagement has or has not taken place, and there are gaps in time where no information is available about engagement or wellbeing. Recent analyses (e.g. Dolan and Testoni, 2017) used data from the American Time Use survey to provide more precise linkage between experiences of engagement in music and sports, and feelings (such as happiness) at the time of engagement. There is also a UK Time Use survey (Gershuny and Sullivan, 2017) which asks about levels of enjoyment experienced when carrying out daily activities. It would be useful to explore whether data from this

offers sufficient information about cultural and sports engagement to allow further analysis of engagement and experiential wellbeing.

Different wellbeing indicators

The main wellbeing indicator available from the Understanding Society adult surveys is satisfaction with life overall. Research suggests that evaluative wellbeing indicators such as this can only provide a partial measure of the benefits that engagement might offer, and that more experiential measures, such as indicators of happiness and sense of purpose, would be more appropriate (Dolan and Testoni, 2016; 2017).

Randomised control trials

Positive health changes linked to increasing engagement could also result from other changes in people's lives too diverse (or insufficiently specified) to be fully addressed by surveys. In order to attribute health and well-being changes directly to the effects of engagement it would be necessary to run randomised control trials, or quasi-experimental studies, comparing the well-being of similar individuals who did and did not engage. These are most appropriate for evaluation of specific initiatives, for example, those which offered a tailored package of engagement opportunities for a particular group of people³⁸. Analysis of long-term health benefits would require follow-up data over a longer period. The limitation of this type of outcome-based research is that it provides little information about the way that relationships work³⁹.

Qualitative studies of ways that engagement affects wellbeing

Therefore, we would also suggest that more qualitative research would be helpful, exploring the ways in which culture and sports engagement affect health and wellbeing for particular groups. Our research has suggested several areas where interesting associations would benefit from further exploration using qualitative methods. They include:

Research to explore the importance of social connections both in encouraging engagement and in enhancing the experience of engagement; and

Research aimed at learning more about the ways in which cultural and sports engagement fit into the lifestyles of people from different groups and communities, including older people, those from different ethnic groups, and informal carers.

³⁸ Examples of such studies in the areas of music, dance and sport engagement have been reviewed by the What Works Centre for Wellbeing (WWCW, 2016; Mansfield, 2017).

³⁹ There is also a useful discussion of the potential and limitations of such studies in the report of the Arts and Humanities Research Council's Cultural Value Project (Crossick and Kazynska, 2016)

Overall, existing evidence suggests that there is huge potential for people to enhance their health and wellbeing through engagement in culture and sports (APPG, 2017). Our research has focussed on experiences of engagement in specific sectors, defined by policy makers responsible for allocating public funds to support culture and sports engagement. The positive associations that we have found in these areas are indicative of what could be achieved through encouraging participation in a broad range of activities that promote social connections, active lifestyles and creative approaches to life. Learning more about the ways in which engagement can benefit wellbeing will help policy-makers to target their funding to support a broad range of individuals, including those from disadvantaged groups.

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Appendix A. Methodology

Analytical sample

This report is based on both cross-sectional analyses of wave 5 (2013/14) data and longitudinal analyses of data from waves 2 and 5 (2010/11 and 2013/14). In order for the report to be based on the same population throughout, all the analysis is based on a constant sample of respondents present in both waves 2 and 5 data. Specifically, the analytical sample is those individuals who:

- were themselves interviewed at both wave 2 and wave 5;
- lived in England at both of these time points; and
- have a valid longitudinal weight, present only for people whose households have taken part consistently between waves 2 and 5.

As shown in Table A:1, the analytical sample is further restricted for the analyses looking at participation across households, requiring all eligible adults in a household to have been interviewed in both waves 2 and 5; and in the section looking at wellbeing to those completing the Understanding Society adult self-completion questionnaire, where the wellbeing indicator questions are placed.

Type of analysis	Sample description	Unweighted sample
Analysis of participation patterns	Constant sample between waves 2 and 5	20,244
Analysis of household participation	Constant sample of individuals in fully participating households at waves 2 and 5	18,514
Analysis of wellbeing	Constant sample of self-completion respondents between waves 2 and 5	15,674

Weighting

All analysis is weighted. Weighting is required to adjust the estimates on Understanding Society to account for the unequal selection probabilities of the sample (given the ethnic minority boost in particular), patterns of differential non-response among different demographic groups and potential sampling error. In the current project in particular, given the focus on the continuing sample interviewed on both waves 2 and 5, it is necessary to use the longitudinal weights which adjust the estimates for survey non-response between the two points of data collection.

Adult analysis weights

- The weight used in analysis of the patterns of participation is the combined sample (former BHPS, core Understanding Society and ethnic boost samples) longitudinal weight (e_indinub_lw for wave 5).
- The weight used throughout Part 2, when looking at the relationship between participation and health and wellbeing, is the combined sample adult self-completion weight (e_indscub_lw for wave 5), given that a number of the key

variables used in the model originate in the adult self-completion module in the Understanding Society questionnaire.

Youth analysis weights *[to go in the youth report, unless Methodological appendix is a shared document]*

The Understanding Society standard data releases do not include longitudinal non-response weights for the youth questionnaire data. Some of the analysis in this report looks at the trajectories of the same cohort of young people over the years and requires a longitudinal weight to adjust for the impact of differential non-response on the estimates.

Therefore, new longitudinal youth weights were computed for this project for the 2012/13 (wave 4) and 2014/15 (wave 6) youth data. The longitudinal non-response weights were computed by adjusting the cross-sectional youth weights to account for attrition, in four steps:

1. Determine the eligibility of each young person aged 10/11 at wave 2 in the wave 4 and wave 6 surveys based on:
 - **Age:** Variable `f_ivfio` indicating whether or not aged 16 or over at wave 6. Only those aged 10–15 are eligible for the youth self-completion, with those who have already turned 16 becoming eligible for the adult survey instead.
 - **Other eligibility criteria:** Variables `c_ivfio`, `d_ivfio`, `e_ivfio` and `f_ivfio`: waves 3 to 6 variable indicating whether the household as a whole has become ineligible due to death or emigration
2. Among those aged 10 or 11 at wave 2 and still eligible at wave 4/wave 6, created a 0/1 indicator to show whether or not they completed a questionnaire on wave 4/wave 6.
3. Modelled the response of those eligible at wave 4/wave 6 using logistic regression analysis on a range of household and individual-level information collected at wave 2. The results showed significant differences between respondents and non-respondents on a number of characteristics:
 - Age by sex
 - Government Office Region
 - Whether lives in rural or urban area
 - Tenure status of the household
 - Income group of the household
 - Whether household has a landline phone
4. Used the results of the logistic regression model to create the longitudinal non-response weight for wave 4/wave 6. Specifically, the inverse of the estimated probability of response was used to create a non-response weight for wave 6, which was then multiplied by the wave 2 longitudinal weight (and scaled to a mean of 1) to produce the wave 4/wave 6 longitudinal weight. In total:
 - wave 4 longitudinal weight was created for 2,104 young people who responded at wave 2 and were still eligible at wave 4
 - wave 6 longitudinal weight was created for 786 young people who responded at wave 2 and were still eligible at wave 6

Reporting of results

Only results significant at the 95 per cent statistical confidence level are reported. This means that, statistically, there is less than one in 20 chance of the difference observed to have occurred through chance.

- For simple (bivariate) cross-tabulations, a Wald test (with results equivalent to chi square) was used to assess the overall relationship between the two variables.
- The results for pairs of variables where the relationship was found to be statistically significant are annotated with blue shading in the simple tables and asterisks * in the tables reporting regression results. Reference categories for regression analyses are shown using †.