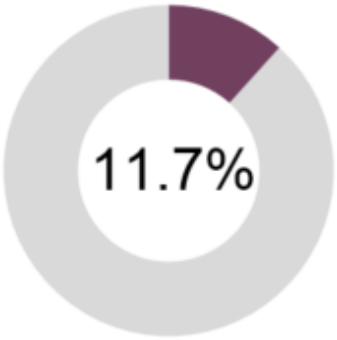
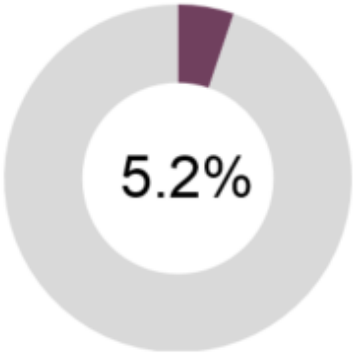
Taking Part focus on: Digital

In 2016/17, the following proportions of adults had participated in digital activities in the last 12 months:

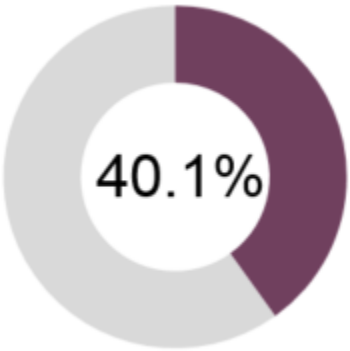


Uploaded creative content such as music, artistic photos, creative writing, films or videos they had created to the internet



Written code to create a computer programme or app, or modified a video or computer game

In 2016/17, the following proportion of children aged 11 to 15 years had participated in digital activities in the last 12 months:



Carried out creative computer activities, such as creating computer games, animations and websites

Taking Part is a household survey in England and measures engagement with the cultural sectors. The data are widely used by policy officials, practitioners, academics and charities.

Statistics on adults' digital participation and engagement are published in the Taking Part 2016/17: quarter 4 statistical release.

Statistics on children's computer activities are available in the Taking Part 2016/17: annual child release.

This report supplements the main releases by exploring these activities and themes in greater detail, with further analysis of demographic differences.

Responsible statistician:

Katy Nicholls

020 7211 6787

Statistical enquiries:

takingpart@culture.gov.uk

@DCMSInsight

Media enquiries:

020 7211 2210

Date: 31st October 2017

Contents

Chapter 1: Uploading creative content

In 2016/17, more than 1 in 10 (11.7%) adults had uploaded content such as music, artistic photos, creative writing, films or videos that they had created to the internet in the last 12 months.

Of the different types of digital content that are asked about on the Taking Part Survey, uploading photos for artistic purposes was the most popular type of content uploaded by adults, with 7.3% having done this at least once in the last year in 2016/17. Uploading creative writing (2.9%), music (2.6%), and films or videos (1.8%) were carried out by smaller proportions of adults.

There were differences observed between demographic groups which will be explored further in this chapter.

What is uploading creative content?

The Taking Part survey asks adults whether they have used a computer, website or app to upload the following types of content that they had created to the internet in the last 12 months:

- *Music;*
- *Artistic photos (excluding family or holiday photos);*
- *Films or videos;*

The survey also asks adults whether they have uploaded *creative writing* using a computer, website or app. Users should note that this activity is asked as part of a separate question with different routing.

These questions were asked for the first time in 2016/17.

What is a 95% confidence interval?

A confidence interval provides a range in which there is a specific probability that the true value for the population will fall. For the Taking Part survey, 95% confidence intervals are used which means, had the sampling been conducted 100 times, creating 100 confidence intervals, then 95 of these intervals would contain the true value for adults in England. When sample sizes are smaller we can be less certain in our estimates so confidence intervals are wider.

Figure 1.1: Proportion of adults that had uploaded music, artistic photos, creative writing, films or videos they had created to the internet in the last 12 months, 2016/17

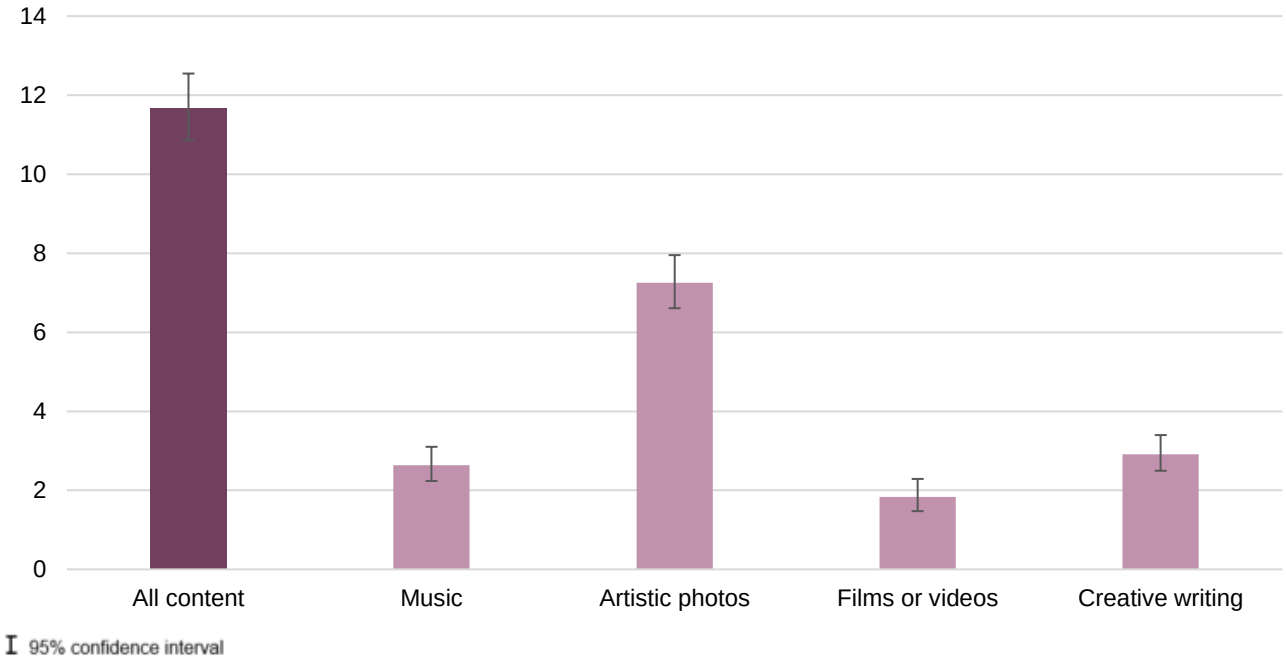
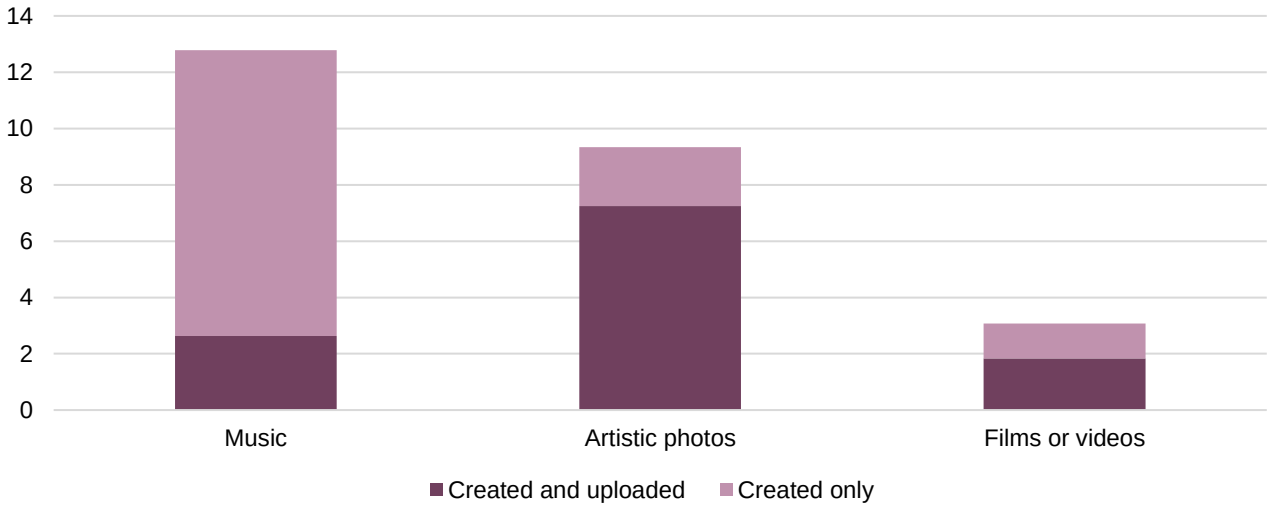


Figure 1.2 shows that the proportions of adults that had created their own artistic photos, films or videos and uploaded them to the internet were higher than those who had created the content but not uploaded. However, for music, a higher proportion of adults had created their own music but did not upload it to the internet. This could be because photos and videos might be easier to upload as they are already in a digital format, whereas music can be created without being

digitally recorded. It could also suggest that content such as photos and videos are being created with the intention of uploading and sharing, whereas music may be more for personal use.

It is not possible to break down creative writing into those that have and have not uploaded it to the internet due to different routing used in the questionnaire. Therefore creative writing has been excluded from Figure 1.2.

Figure 1.2: Proportion of adults that had created music, artistic photos, films or videos and whether they had uploaded them to the internet in the last 12 months, 2016/17



Age Group

In 2016/17, adults aged 16 to 24 years were the age group most likely to upload content they had created to the internet with more than 1 in 5 (21.7%) doing so in the last 12 months. Engagement levels decreased with age for each content type – music, artistic photos, creative writing, films or videos.

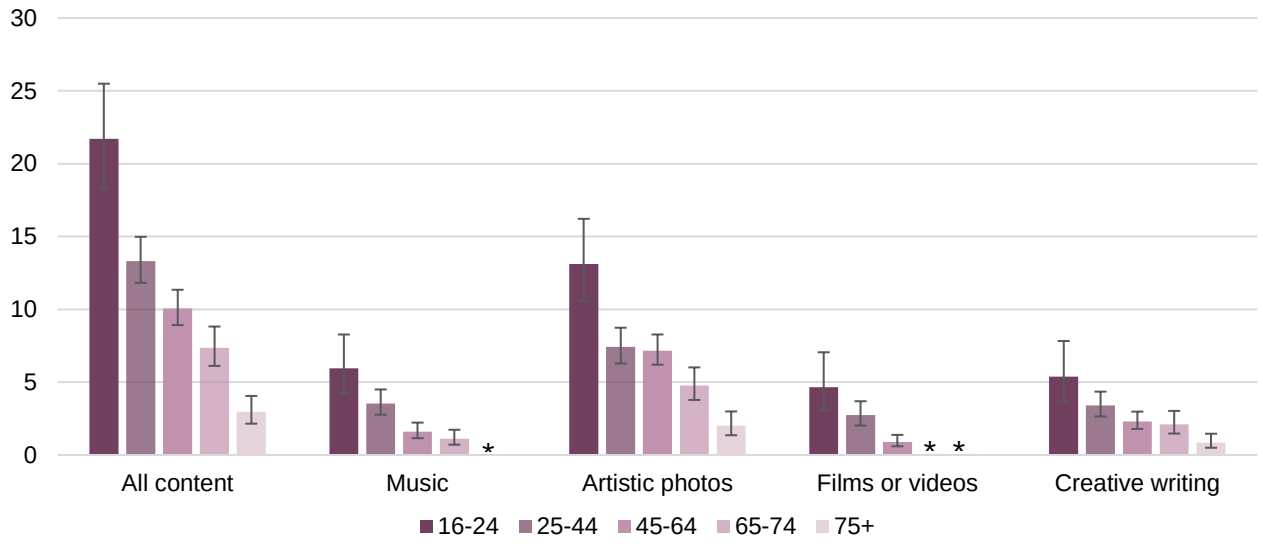
This pattern observed across the age groups is coherent with other related official statistics, such as the ONS Internet Users in the UK 2017 publication[1] which presents a similar trend for adults who have uploaded content they have created to a website to be shared. Research from Ofcom on Adults' Media Literacy[2] suggests that younger adults are more confident than older adults in carrying out creative activities online such as uploading photos and videos.

Differences between age groups were the most pronounced and consistent of all demographic groups. As a result, users should be mindful of this when interpreting differences between other demographic groups such as disability status and ethnic group as they will be influenced by the age of respondents belonging to these groups.

[1] Internet Users in the UK: 2017, Office for National Statistics (ONS), https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/bulletins/internetaccesshouseholdsandindividuals/2017

[2] Adults' media use and attitudes: 2017, Ofcom, https://www.ofcom.org.uk/__data/assets/pdf_file/0020/102755/adults-media-use-attitudes-2017.pdf

Figure 1.3: Proportion of adults that had uploaded music, artistic photos, creative writing, films or videos they had created to the internet in the last 12 months by age group, 2016/17



* data not available due to low respondent numbers

I 95% confidence interval

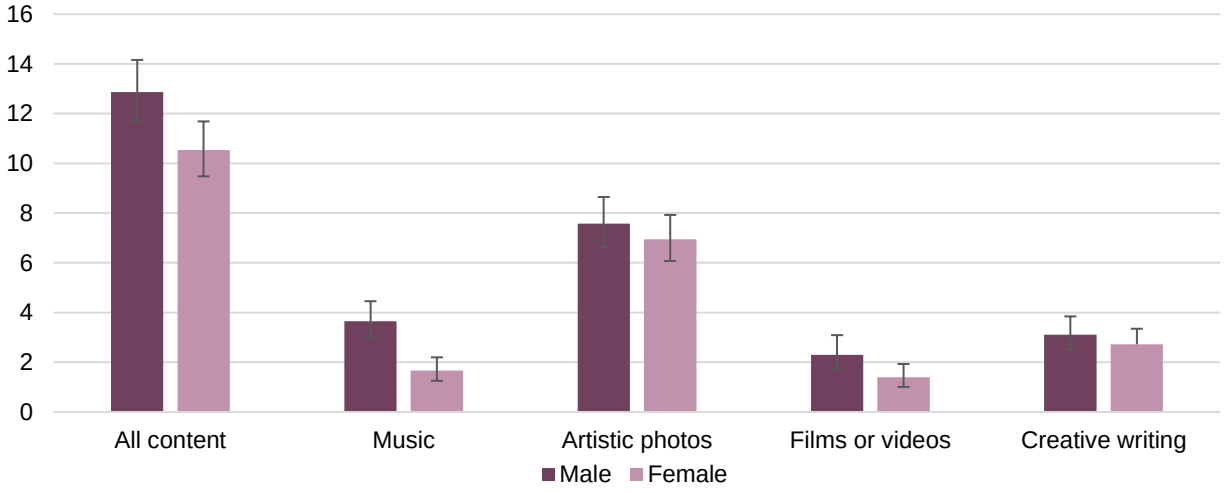
As shown in Figure 1.3, there was a broadly similar pattern observed across all types of content uploaded, however the difference between the youngest age group (16 to 24 years) and the second youngest (25 to 44 years) for uploading artistic photos was particularly striking – with 16 to 24 year olds being almost twice as likely to do so in 2016/17.

Sex

In 2016/17, a higher proportion of males than females had uploaded content they had created to the internet, with 12.9% of males compared with 10.5% of females having done so in the last 12 months.

This difference was driven largely by the proportion of males compared with females who had uploaded music they had created to the internet in the last 12 months, with 3.7% of males compared with 1.7% of females having done so. There were no significant differences between males and females for uploading artistic photos, creative writing, films or videos.

Figure 1.4: Proportion of adults that had uploaded music, artistic photos, creative writing, films or videos they had created to the internet in the last 12 months by sex, 2016/17



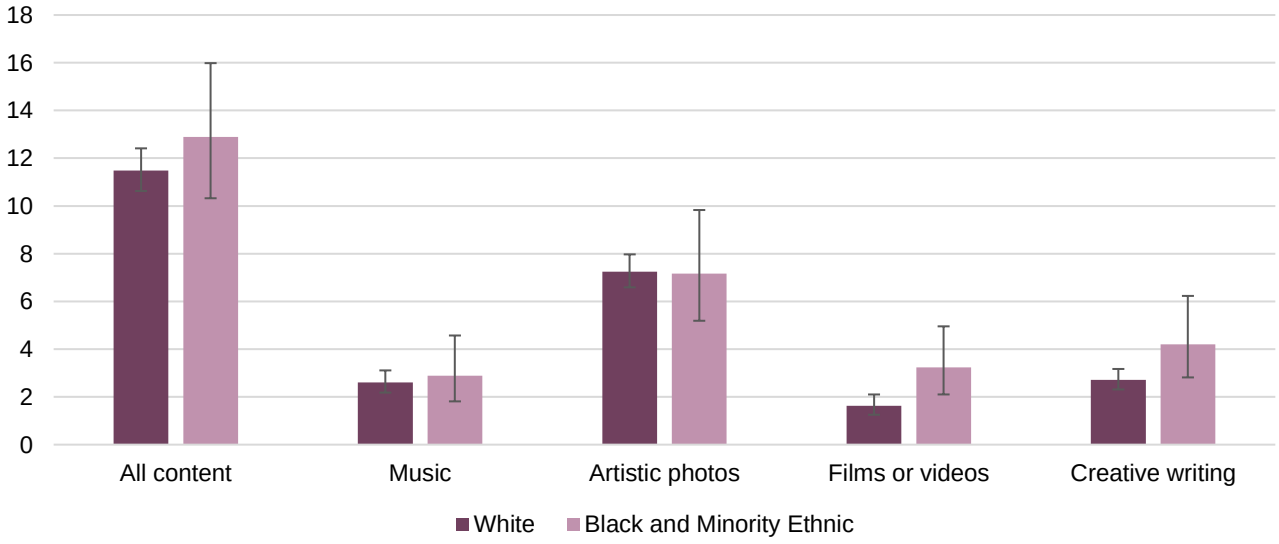
I 95% confidence interval

Ethnicity

In 2016/17, a higher proportion of adults in the Black and Minority ethnic group than in the White ethnic group had uploaded creative writing (4.2% compared with 2.7%) or films and videos (3.2% compared with 1.6%) they had made to the internet in the last 12 months.

There were no significant differences between ethnic groups for uploading artistic photos or music they had created to the internet.

Figure 1.5: Proportion of adults that had uploaded music, artistic photos, creative writing, films or videos they had created to the internet in the last 12 months by ethnicity, 2016/17



I 95% confidence interval

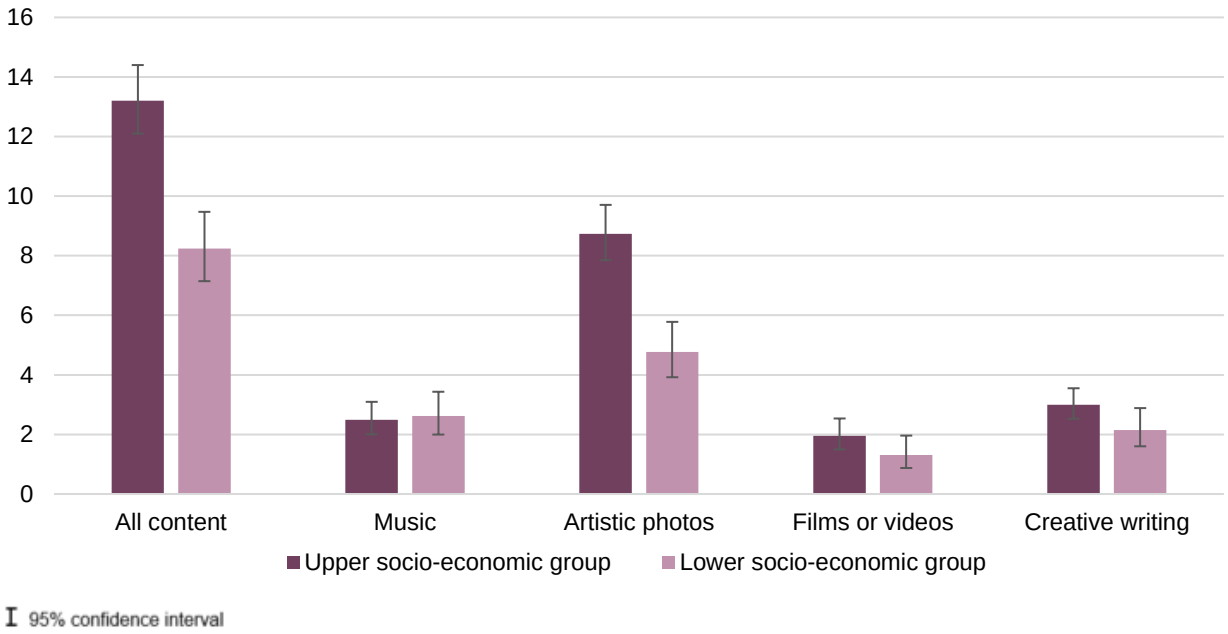
Socio-economic group

In 2016/17, a higher proportion of adults in the upper socio-economic group (13.2%) had uploaded content they had created to the internet in the last 12 months than in the lower socio-economic group (8.2%). This difference was most pronounced between the proportions of adults

that had uploaded artistic photos to the internet, with 8.7% of adults in the upper socio-economic group compared with 4.8% of adults in the lower socio-economic group having done so. There were also observable differences between these groups for uploading creative writing, with adults belonging to the upper socio-economic group again being more likely to.

Although adults in the upper socio-economic group were almost twice as likely as those in the lower socio-economic group to create their own music, there were no observable differences between the likelihood that they would upload this to the internet.

Figure 1.6: Proportion of adults that had uploaded music, artistic photos, creative writing, films or videos they had created to the internet in the last 12 months by socio-economic group, 2016/17

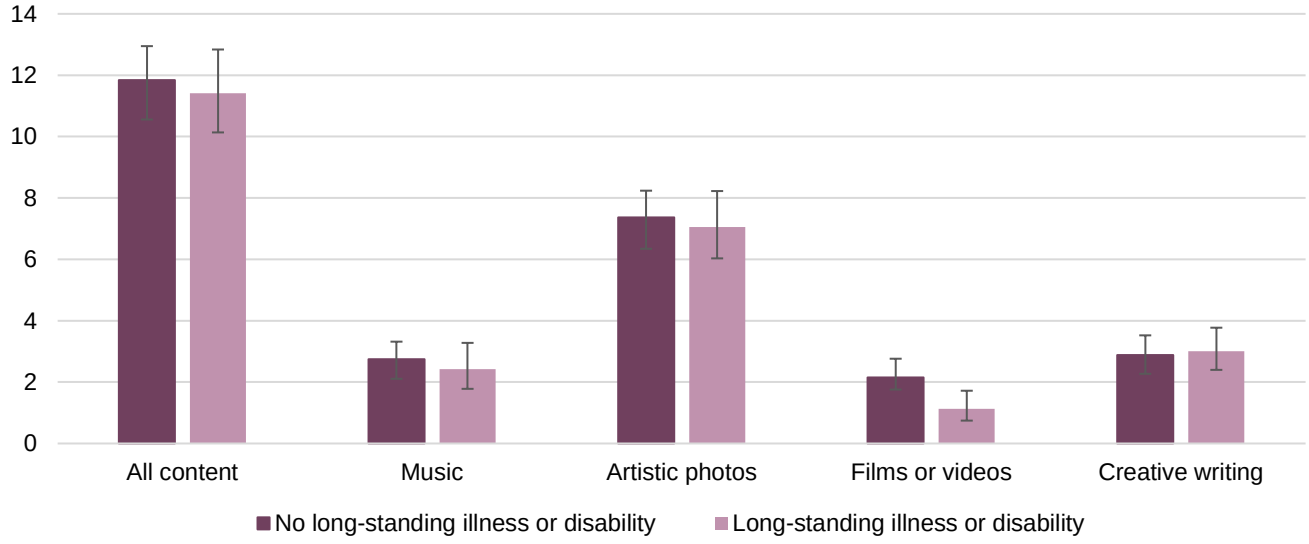


Disability status

In 2016/17, a higher proportion of adults without a long-standing illness or disability compared to those with had uploaded films or videos that they had created to the internet in the last 12 months.

Although statistically significant, the differences between these groups was smaller than for some of the other demographic breakdowns, and there were no significant differences in the proportions of adults who uploaded music, artistic photos or creative writing between those with and without a long-standing illness or disability.

Figure 1.7: Proportion of adults that had uploaded music, artistic photos, creative writing, films or videos they had created to the internet in the last 12 months by disability status, 2016/17



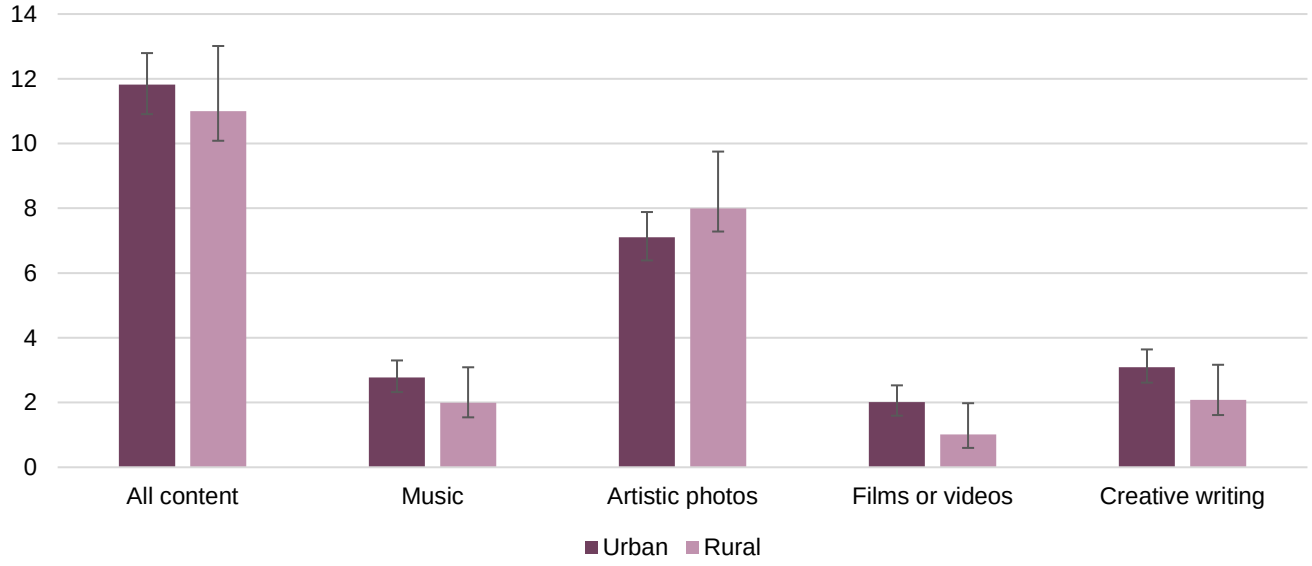
95% confidence interval

Urban or rural

In 2016/17, a higher proportion of adults living in rural areas compared with urban areas had uploaded artistic photos they had created to the internet in the last 12 months.

There were no significant differences in the proportions of adults who uploaded music, creative writing, films or videos they had created between adults living in rural or urban areas.

Figure 1.8: Proportion of adults that had uploaded music, artistic photos, creative writing, films or videos they had created to the internet in the last 12 months by urban or rural, 2016/17



95% confidence interval

Chapter 2: Specialist digital activities

In 2016/17, around 1 in 20 adults (5.2%) had written code to create a computer programme or app, or modified a video or computer game in the last 12 months - both activities which are likely to require specialist digital skills to complete.

Writing code to create a computer programme or app was carried out by 3.8% of adults, while a smaller proportion of adults had modified a video or computer game, with 2.3% having done so.

What are specialist digital activities?

The Taking Part Survey asks adults if they have done the following activities in the last 12 months:

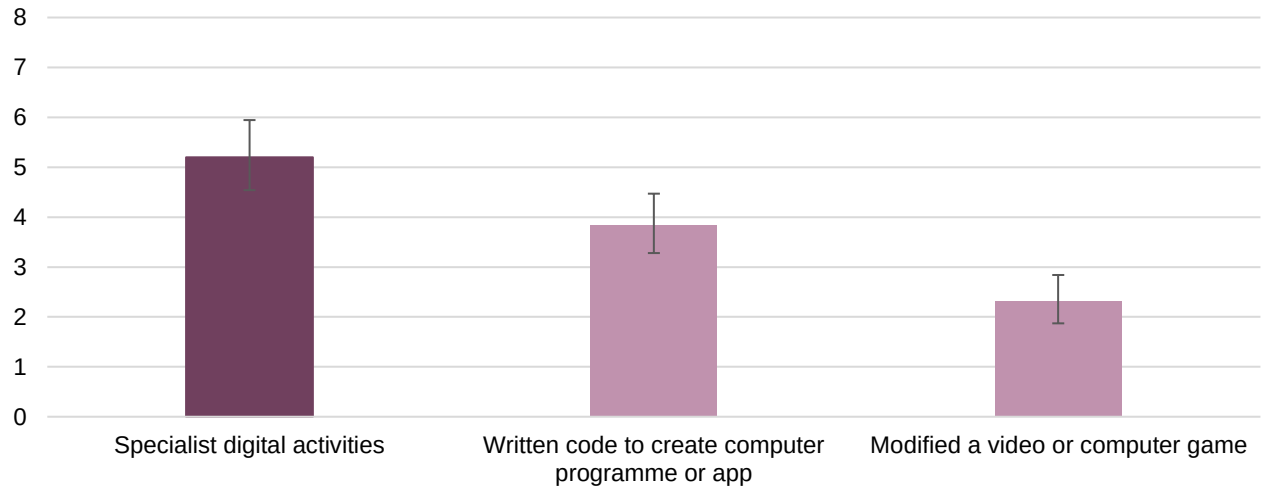
- *Written their own code to create a computer programme or app;*
- *Modified a video or computer game.*

These creative activities may require digital skills that are considered 'specialist'.

This section does not include adults *playing* or *using* computer games or programmes.

As outlined in the UK Digital Strategy[3], these types of specialist digital skills are in demand and as the digital economy grows there is likely to be an even greater demand for these types of specialist skills. It is therefore important to understand the prevalence of these activities by adults in the UK to help inform policy in this area.

Figure 2.1: Proportion of adults that had done specialist digital activities in the last 12 months by type, 2016/17



There were differences in adults' participation in specialist digital activities between demographic groups which are described below.

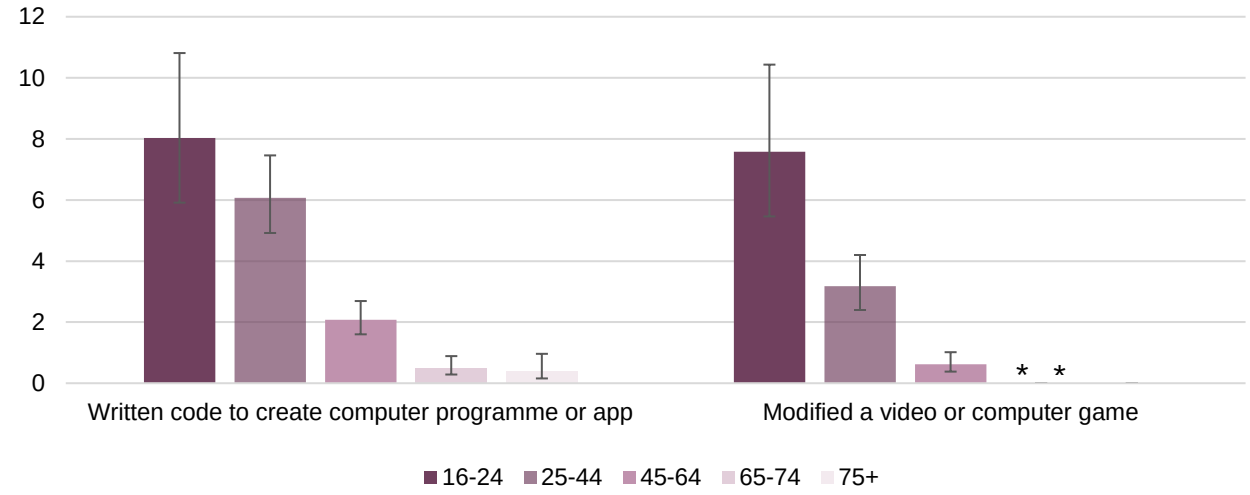
Age Group

In 2016/17, adults aged 16 to 24 years and 25 to 44 years were most likely to have written code to create a computer programme or app, with 8.0% and 6.1% respectively having done so in the last 12 months. Adults in the youngest age group (16 to 24 years) were significantly more likely to have modified a video or computer game than adults belonging to any other age group, with 7.6% having done so. Similar to other computer-related activities discussed in previous chapters, and as shown in Figure 2.2, participation in these activities generally decreased with age.

[3] UK Digital Strategy, March 2017, https://www.gov.uk/government/publications/uk-digital-strategy/2-digital-skills-and-inclusion-giving-everyone-access-to-the-digital-skills-they-need

Once again, differences between age groups may have an effect on other demographic groups and users should be mindful of this when interpreting differences between groups such as disability status and ethnicity as they may be influenced by the age of respondents belonging to these groups.

Figure 2.2: Proportion of adults that had written code to create a computer programme or app or had modified a video or computer game in the last 12 months by age group, 2016/17



*data not available due to low respondent numbers

I 95% confidence interval

Sex

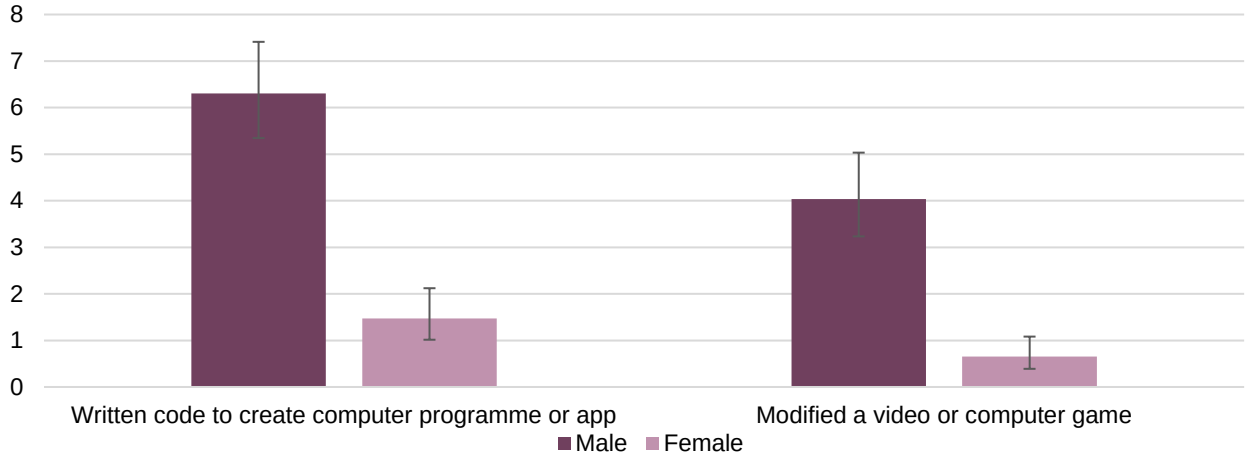
In 2016/17, a higher proportion of males than females had written code to create a computer programme or app in the last 12 months, with males being more than 4 times as likely to have done so (6.3% compared with 1.5%). A similar finding was also observed for modifying a video or computer game, with only 0.7% of females having done so, compared with 4.0% of males.

These differences are coherent with other official statistics such as the ONS Internet Access release[4] which also suggests that men were significantly more likely than women to write computer code in a programming language. Statistics from the ONS Labour Force Survey[5] also show that women account for only 12% of programmers and software development professionals.

[4] Internet Access – households and individuals: 2017, Office for National Statistics (ONS), https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/bulletins/internetaccesshouseholdsandindividuals/2017/relateddata

[5] Labour Market Statistics: 2017, Office for National Statistics (ONS), https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/employmentbyoccupationemp04

Figure 2.3: Proportion of adults that had written code to create a computer programme or app or had modified a video or computer game in the last 12 months by sex, 2016/17

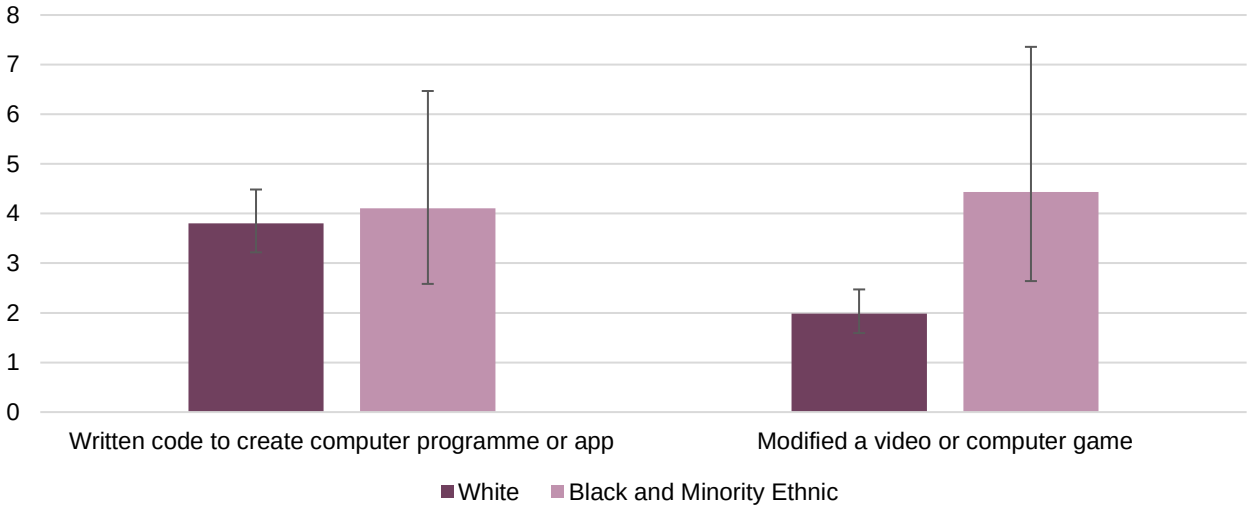


95% confidence interval

Ethnicity

In 2016/17, a higher proportion of adults in the Black and Minority ethnic group than in the White ethnic group had modified a video or computer game in the last 12 months (4.4% compared with 2.0%). However, there were no observable differences between ethnic groups for writing code to create a computer programme or app.

Figure 2.4: Proportion of adults that had written code to create a computer programme or app or had modified a video or computer game in the last 12 months by ethnicity, 2016/17



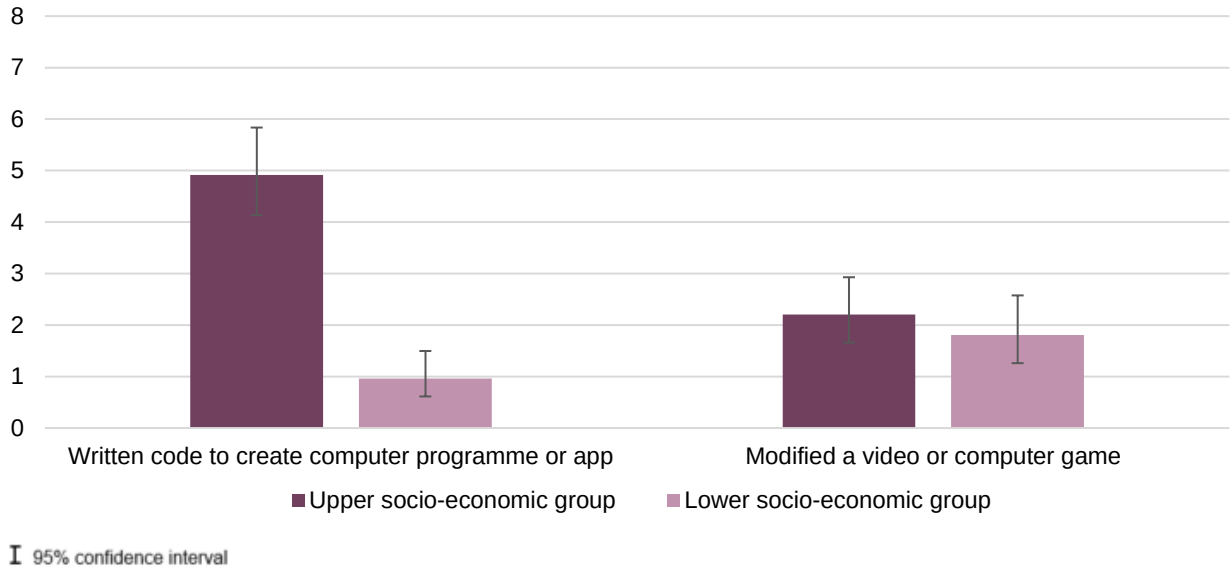
95% confidence interval

Socio-economic group

In 2016/17, a higher proportion of adults in the upper socio-economic group had written code to create a computer programme or app than in the lower socio-economic group, with adults in the

upper group being almost 5 times more likely to do so. However, there were no observable differences between these groups for modifying a video or computer game.

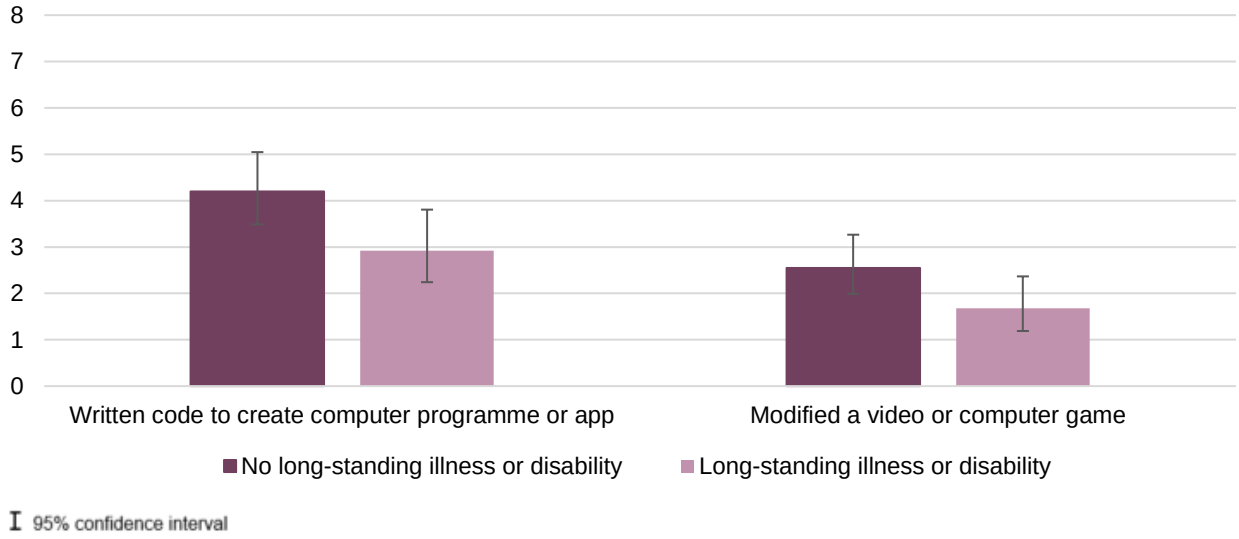
Figure 2.5: Proportion of adults that had written code to create a computer programme or app or had modified a video or computer game in the last 12 months by socio-economic group, 2016/17



Disability status

In 2016/17, a higher proportion of adults without a long-standing illness or disability compared to those with a long-standing illness or disability had written code to create a computer programme or app, or had modified a video or computer game in the last 12 months.

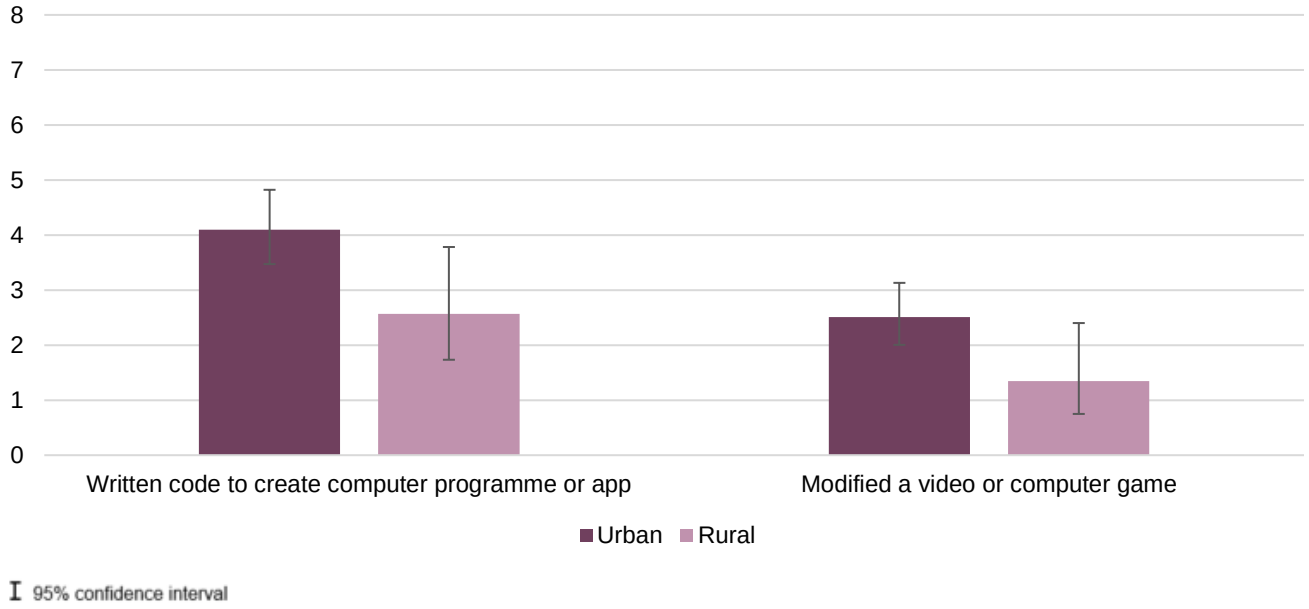
Figure 2.6: Proportion of adults that had written code to create a computer programme or app or had modified a video or computer game in the last 12 months by disability status, 2016/17



Urban or rural

In 2016/17, a higher proportion of adults living in urban areas compared with rural areas had written code to create a computer programme or app, or had modified a video or computer game in the last 12 months. This may be reflective of the differing age structures in urban and rural areas.

Figure 2.7: Proportion of adults that had written code to create a computer programme or app or had modified a video or computer game in the last 12 months by urban or rural, 2016/17



Chapter 3: Children's creative computer activities

In 2016/17, 40.1% of children aged 11 to 15 years had carried out creative computer activities in the last 12 months, such as creating their own computer games, animations or websites.

As shown in Figure 3.1, more than a quarter (26.1%) of 11 to 15 year olds had used a computer to create original artworks or animations, with just over 1 in 5 making or revising computer games (21.1%) and a smaller proportion of 13.3% who had made or revised a blog, website or podcast.

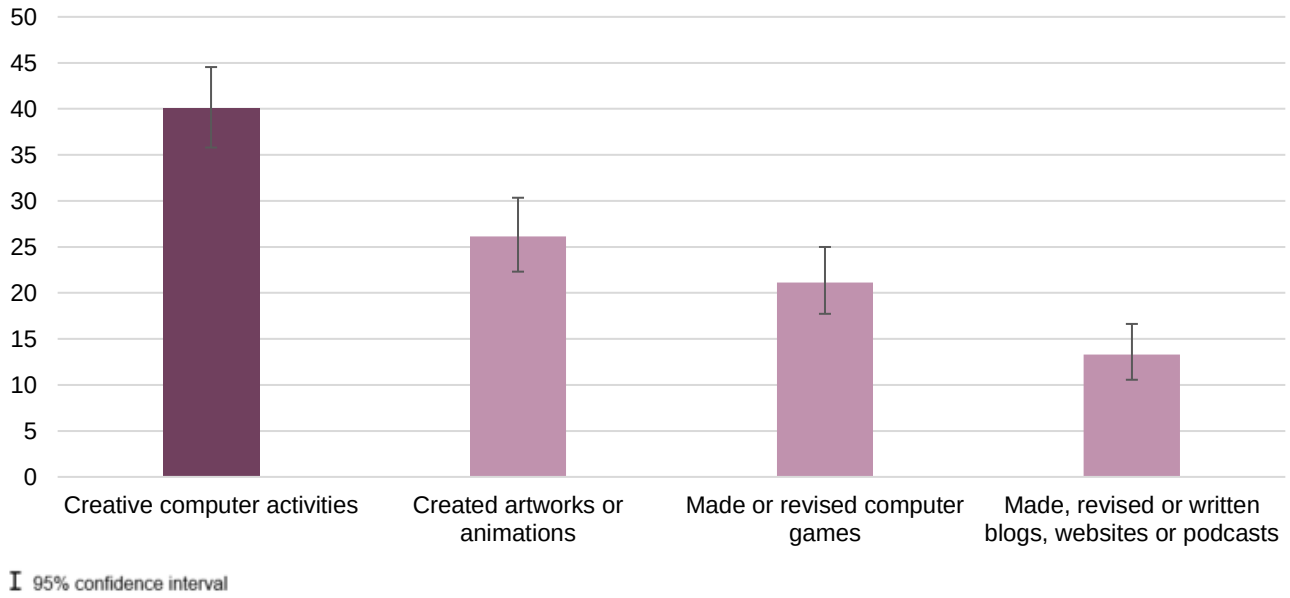
What are creative computer activities?

The Taking Part Survey asks respondents aged 11 to 15 years whether they have done the following computer based activities in the last 12 months:

- *Used a computer to create original artworks or animations;*
- *Made or revised their own computer game;*
- *Made, revised or written their own blog, website or podcast.*

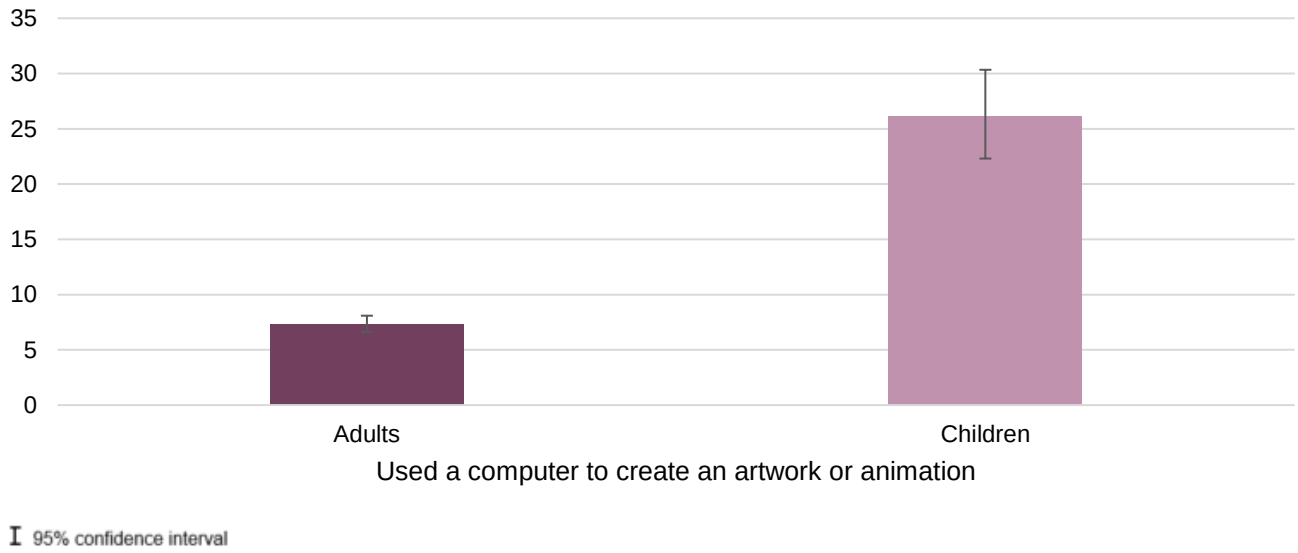
The category explicitly excludes *playing computer games* or *surfing the internet*, focusing solely on **creative computer** activities.

Figure 3.1: Proportion of children aged 11 to 15 years that had done creative computer activities in the last 12 months by activity type, 2016/17



The question regarding creating original artworks or animations is also asked as part of the adult Taking Part survey and so comparisons between the prevalence of these activities for adults and children are therefore possible[6]. Figure 3.2 shows that while over a quarter (26.1%) of children aged 11 to 15 years had carried out this activity, a smaller proportion (7.3%) of adults had done so. This difference may partly be attributable to this activity being undertaken by 11 to 15 year olds in school as part of the national curriculum, as well as being a potential generational difference.

Figure 3.2: Proportion of adults and children (aged 11 to 15 years) that had used a computer to create artworks or animations in the last 12 months, 2016/17

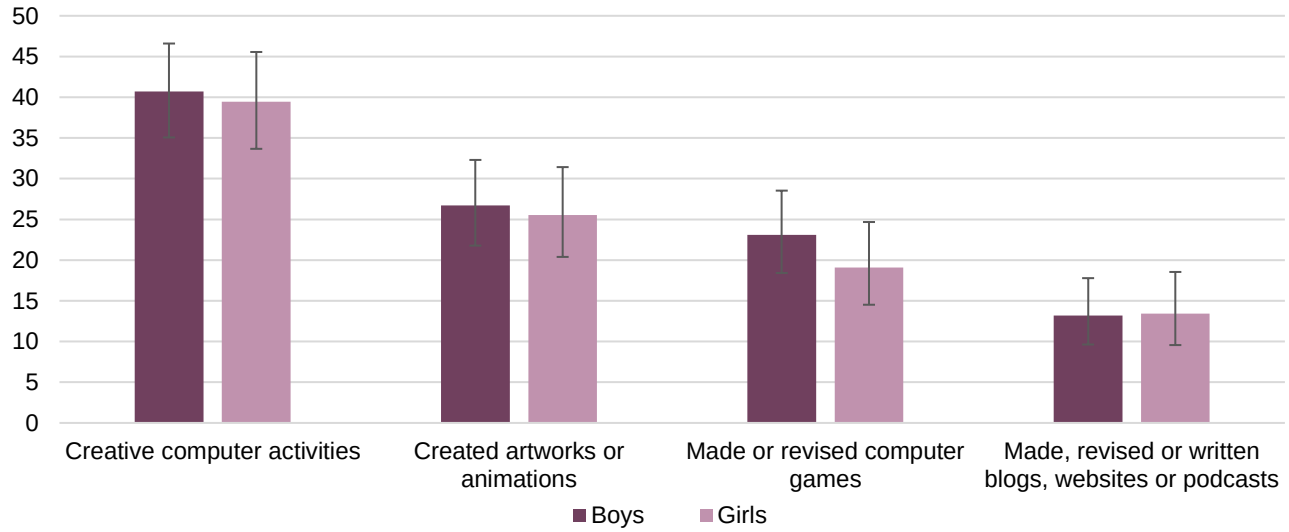


[6] Adults and children are asked whether they have "*used a computer to create original artworks or animations*". However, the questionnaires are structured differently with adults being asked about this within the arts question, and children asked within the computer activities question. Users should therefore be mindful of this when comparing groups.

Sex

There were no significant differences between the proportions of boys compared with girls who had done creative computer activities overall and by type of activity (as shown in Figure 3.3) in the last 12 months. Although not directly comparable, this finding is in contrast with those outlined in the previous chapter regarding adults writing code to create a programme or app and modifying computer games, where there were differences in the proportions of males and females undertaking these activities.

Figure 3.3: Proportion of children aged 11 to 15 years that had done creative computer activities in the last 12 months by activity type and sex, 2016/17



Annex A: Background

1. The Taking Part survey is commissioned by the Department for Digital, Culture, Media and Sport and its partner Arm's Length Bodies. For 2011 to 2017, these are Arts Council England, Historic England and Sport England.

2. The fieldwork for the Taking Part survey for 2016/17 was conducted by Ipsos Mori and NatCen Social Research.

3. The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

   Designation can be broadly interpreted to mean that the statistics:

   - meet identified user needs
   - are well explained and readily accessible
   - are produced according to sound methods
   - are managed impartially and objectively in the public interest

   Once statistics have been designated as National Statistics, it is a statutory requirement that the Code of Practice shall continue to be observed.

4. Stringent quality assurance procedures have been adopted for this statistical release. All data and analysis has been checked and verified by at least two different members of the DCMS team to ensure the highest level of quality.

5. Guidance on the quality that is expected of Taking Part statistical releases is provided in a quality indicators document. These quality indicators outline how statistics from the Taking Part survey match up to the six dimensions of quality defined by the European Statistical System (ESS). These are: relevance, accuracy, timeliness, accessibility, comparability and coherence.

6. The Taking Part survey measures participation by adults (aged 16 and over) and children (5 to 10 and 11 to 15) living in private households in England. No geographical restriction is placed on where the activity or event occurred. Further information on data for Scotland, Wales and Northern Ireland can be found in question 2 of the "Taking Part: Guidance Note".

7. Unless stated, participation in activities must be for the purpose of recreation or leisure, including voluntary work. It excludes involvement in activities where the prime motivation is paid work or academic studies. The exception to this is engagement with heritage which includes visits made for academic study.

8. Sample sizes for each year and data breakdown can be found in the accompanying tables.

9. All estimates have been rounded to one decimal place.

10. Statistical significant tests have been run at the 95% level. A significant increase at the 95% level means that there is less than 1 in 20 chance that the difference observed within the sampled respondents was not also observed in the population of England as a whole.

11. The upper and lower bounds presented in this report have been calculated using a 95% confidence interval. This means that had the sample been conducted 100 times, creating 100 confidence intervals, then 95 of these intervals would contain the true value. When the sample size is smaller, as is the case for certain groups and in certain years, the confidence intervals are wider as we can be less certain that the individuals in the sample are representative of the population. This means that it is more difficult to draw inferences from the results.

12. The data are weighted to ensure representativeness of the Taking Part sample. There are two types of weighting:

    - to compensate for unequal probabilities of selection
    - to adjust for non-response

    Weighting is based on mid-2016 population estimates from the Office for National Statistics.

13. For more information about the Taking Part survey and to access previous publications and the questionnaires, see the Taking Part survey webpages.

14. The responsible statistician for this release is Katy Nicholls. For enquiries on this release, please contact Katy on 0207 211 6787.

15. To be kept informed about Taking Part publications and user events, please sign up to the Taking Part online newsletter here. You can follow us on Twitter @DCMSInsight.

Annex B: Key terms and definitions

Term	Definitions
2016/17	This is the time period covering April 2016 to March 2017. In this release, this refers to the date that the interviews were conducted. The activities reported on took place in the year prior to interview.
Black and Minority Ethnic (BME)	The 'Black and minority ethnic' group includes adults who have identified as being in the following ethnic groups: - White and Black Caribbean - White and Black African - White and Asian - Any other Mixed/Multiple Ethnic background - Indian - Pakistani - Bangladeshi - Chinese - Any other Asian background - African - Caribbean - Any other Black/African/Caribbean background - Arab - Any other ethnic group
Confidence interval	This provides a range in which there is a specific probability that the true value will lie within. For the Taking Part survey, 95 per cent confidence intervals are used which means, had the sampling been conducted 100 times, creating 100 confidence intervals, then 95 of these intervals would contain the true value.
Significant difference	A significant difference at the 95% level means that if we carried out the same survey on different random samples of the population, 95 times out of 100 we would observe this difference.
Socio-economic group	This is a form of socio-economic classification based on the employment status and occupation of the household reference person. The household reference person is the person responsible for owning or renting, or who is otherwise responsible for the accommodation. In the case of joint householders, the person with the highest income is the household reference person. In the case of joint incomes, the oldest person is taken as the household reference person. More information about the NS-SEC socio-economic classification, please see this page on the Office for National Statistics website.
'White' ethnic group	The 'White' ethnic group includes adults who have identified as being in the following ethnic groups: - English / Welsh / Scottish / Northern Irish / British - Irish - Gypsy or Irish Traveller - Any other White background

Department
for Culture
Media & Sport

4th Floor
100 Parliament Street
London
SW1A 2BQ