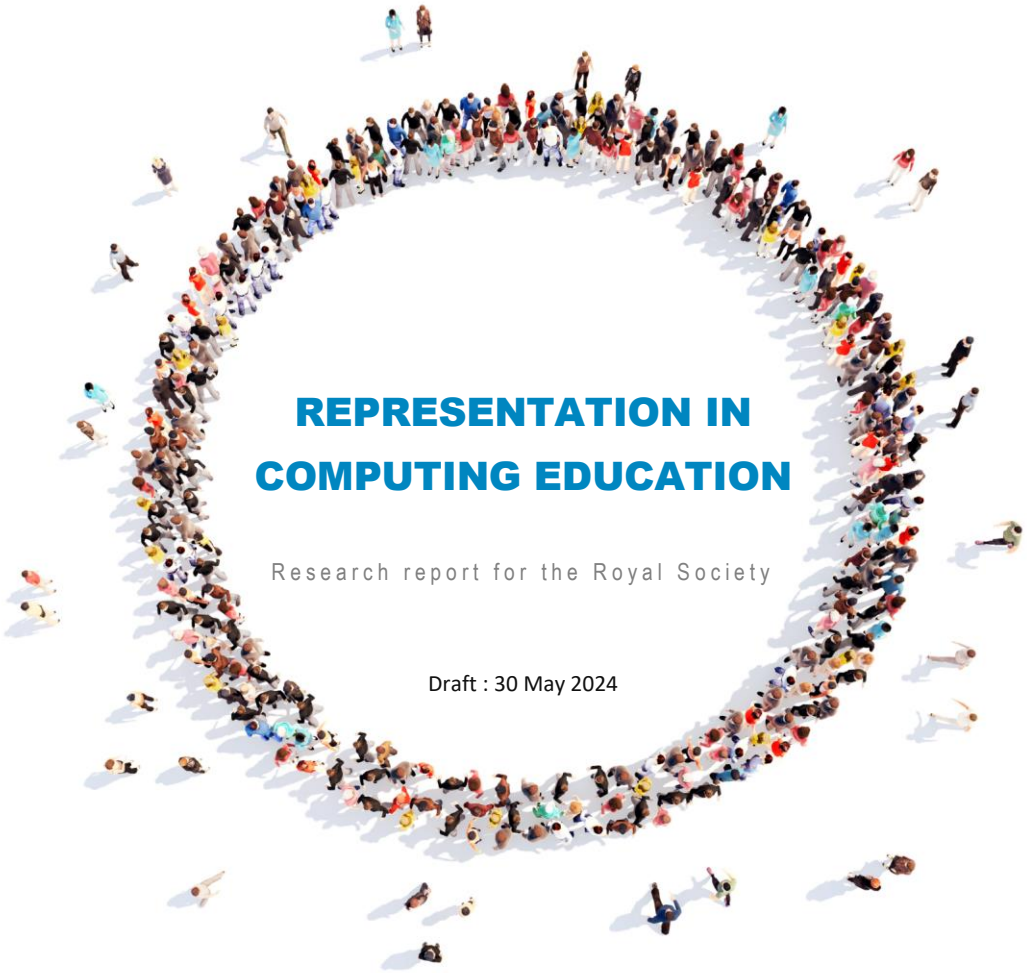
CHILDWISE

Chrysalis research



REPRESENTATION IN COMPUTING EDUCATION

Research report for the Royal Society

Draft : 30 May 2024

www.chrysalisresearch.co.uk

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T 0117 230 9933 www.chrysalisresearch.co.uk

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EXECUTIVE SUMMARY

Profile of participants (p9-26)

Personal qualities (p9-11)

- 'Creative' was chosen as the top word to describe themselves for four of the five sub-groups, participants from ethnic minority groups chose 'smart' as the top word with 'creative' second. ~~Easy to talk to~~ 'Easy to talk to' and 'Competitive' were also selected frequently in most sub-groups.
- 'Logical' and 'ordinary' were generally selected least often.
- Girls are most likely to describe themselves as 'Creative' (56%), 'Easy to talk to' (53%) or 'Competitive' (42%), and least likely to describe themselves as 'Ordinary' (18%), 'Unusual' (22%) or 'Logical' (24%) and participants from areas of high deprivation chose the same order. Participants with a disability or who consider themselves neurodiverse selected 'unusual' and 'determined' respectively as the third word after 'competitive and 'easy to talk to'.
- Young people from ethnic minority background are most likely to describe themselves as 'Smart' (48%), 'Creative' (47%) or 'Easy to talk to' (46%), and least likely to feel they are 'Unusual' (18%), 'Ordinary' (18%) or 'Logical' (29%). They were more likely than white participants to describe themselves as 'Smart' (48% vs 36%).
- Young people aged 11-13 are the most likely to say they are 'Competitive' (50%), but least likely to say they are 'Determined' (36%) or 'Logical' (20%). Those aged 14-16 are more likely than older and younger ~~children~~ cohorts to say they are 'Creative' (58%).
- Those with neurodiverse conditions are more likely than those without these conditions to think of themselves as 'Creative' (59% vs 52%), or 'Unusual' (34% vs. 18%)

Commented [KS1]: Consistency with upper/lower case for the descriptive options

Education (p12-15)

The majority of survey participants, more than 90%, are in education

- All 11-16 year-olds in the survey are in full-time education (at least 12 hours per week): all are in schools apart from a small minority (3%) of 14-16 year-olds who are in FE or sixth-form college

- Nearly four in five (78%) of 17-19 year old participants are in full-time (59%) or part-time (19%) education: around one-third (36%) in schools and one-quarter (24%) in further education or sixth form college and one-third (35%) in higher education
- Yyoung people from ethnic minority backgrounds are more likely than others to be in full time education (89% vs. 84%) and half as likely to say 'I am not currently in education' (4% vs. 8%)
- yYoung people with a neurodiverse condition are less likely than others to be in full time education (84% vs. 89%), twice as likely to be in part time education (9% vs. 5%) and slightly less likely than others to be at an FE or sixth form ccollege (11% vs. 7%).
- Young people living in areas of high deprivation are almost twice more likely than others to say they are 'at an FE or sixth form ccollege' (10% vs. 6%)

Choosing subject options at Key Stage 3 (p16-21)

Between one quarter and one half (24% to 49%) of 11-13 year olds say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school'.

- As would be expected the youngest participants have not chosen their options yet, although 7% of those in school years 7 or 8 (or equivalent) say they have, whereas 80% of those in year 9 (or equivalent) have chosen their options.
- Almost three in ten (28%) of those in year 7 say 'I don't know what {GCSE / NATIONALS} subjects I want to take' and this rises to two in five (38%) in year 8, the year before a choice needs to be made. Only 4% of those in year 9 say this.
- Young people living in areas of high deprivation are much more likely than others to say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' (28% vs. 18%), or 'I don't know what {GCSE / NATIONALS} subjects I want to take' (27% vs. 16%). They are half as likely as others to say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (24% vs. 51%).
- Young people with a neurodiverse condition are much more likely than others to say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (49% vs. 35%).
- Young people from ethnic minority backgrounds are much less likely than others to say 'I haven't thought about this yet' (13% vs. 22%)

Looking across the whole sample of 11-19s, around two thirds of all sub-groups (57% to 66%) said their parents or carers had helped or will help them decide what subjects to choose for their exams, around one in three (23% to 32%) cited their teachers with friends (22% to 27%) similarly important.

Nearly one in five of all participants (17% to 20%) said 'no-one' helped or will help them choose their subjects for GCSE or Nationals.

- Children aged 11-13 are more likely than their older counterparts to say they will / did rely on parents or carers (72% vs. 62% of 14-16s and 59% of 17-19 year olds) or other family members (25% vs. 12% and 10% respectively
- Girls are more likely than other young people to say they have or will rely on teachers (31% vs. 25%).
- Almost twice as many young people from ethnic minority backgrounds compared to others say they have or will rely on 'Other family members' for help (21% vs. 12%).
- Young people with a disability are less likely than others to rely on parents or carers (57% vs. 65%).

Plans for the future (p21-23)

- Around a quarter say 'I know exactly what job I want in the future' between 24% and 27%) and one in seven (14%) say 'I have no idea what job or career I want in the future'
- Most young people say 'I have some ideas of what types of job or career I want in the future' (29% to 35%) or 'I have a particular area of work in mind for the future' (23% to 29%).
- One in three girls say 'I have some ideas of what types of job or career I want in the future' (35%). Around one in four (26%) say 'I have a particular area of work in mind for the future', or 'I know exactly what job I want in the future' (24%).
- Those from ethnic minority backgrounds are more likely than others to say 'I know exactly what job I want in the future' (27% vs. 21% respectively), or that 'I have a particular area of work in mind for the future' (29% vs. 24%) and least likely to say 'I have no idea what job or career I want in the future' (12% vs. 17%).
- Those living in areas of high deprivation (deciles 1-3 on the Indices of Multiple Deprivation) are more likely than others to say 'I have no idea what job or career I want in the future' (17% vs. 13% respectively).

What's important in a career? (p23-26)

'Do something I love' the most important factor for choosing a job or career, followed by earning a lot of money. Following in their parents footsteps was considered least important.

- Girls are most likely to mention 'Do something I love' (62%), 'Earn a lot of money' (61%), or 'Working in a friendly team' (36%), participants with a disability or who consider themselves neurodiverse ranked these factors in the same order
- Young people with a disability are much less likely than their counterparts to want to 'Earn a lot of money' (49% vs. 63%)
- Nearly seven in ten of those from ethnic minority backgrounds mention that they want to 'Earn a lot of money' (68%), whilst half (53%) would like to 'Do something I love'
- Three in five of those living in highly deprived areas say they want to 'Earn a lot of money' (59%), with almost as many (57%) saying they want to 'Do something I love'.

Computing in school (p27-29/71-76)

Around two in three (60% to 66%) across all sub-groups say their **school offers or offered computing qualifications** at level 2 (GCSE Computer Science, Digital Technologies (media and/or programming) or National level 4/5 in Computing Science) and between 27% and 41% are aware their school offers or offered Level 3 qualifications (A Level Computer Science or Scottish Higher Computing Science).

- Around one in five did not know what the school offered in terms of computing qualifications and this rose to 43% among 11-13s
- Girls Young people from ethnic minority backgrounds are more likely than other young people to be aware that their school offered Level 2 or Level 3
- Young people living in areas of high deprivation are more likely than other young people to be aware their school offered Level 2 Computer Science but less likely to be aware they offer Level 3
- Young people with a disability are more likely than other young people to be aware their school offered Level 2 Computer Science
- Young people with a neurodiverse condition are less likely than other young people to be aware their school offered Level 3 or equivalent.

For the majority of participants (52% to 63%), **Computing is or was a distinct subject in the school** timetable between years 7-9 or equivalent, for a further 25% to 30% it was taught within ICT or Business. There was some variation in responses across the different sub-groups but this could be explained by those who weren't sure, which also varied.

- Girls are more likely than others to say that 'Computing is / was a subject in the school timetable' (63% vs. 53% of others)

- Young people living in areas of high deprivation are less likely than others to say 'Computing is / was a subject in the school timetable' (52% vs. 62% of others) and more likely to say it was taught as part of ICT or Business (30% vs. 24%).

Around one in five participants (13% to 21%) who were in education said they are not doing any computing as part of their studies (including school, college and higher education). However the majority (52% and 66%) are doing at least an hour per week.

- 14-16s are the most likely to be doing 'More than 2 hours per week' (29% vs. 3% of 11-13s and 22% of 17-19s), but also most likely to be doing 'None' (31% vs. 6% and 18% respectively).
- Girls are more likely than other young people to say they do 'None' (21% vs. 15% of others), and less likely to be doing 'More than 2 hours per week' (14% vs. 21%)
- Young people living in areas of high deprivation are more likely than other young people to say they do 'More than 2 hours per week' (20% vs. 17%), or '2 hours every week' (19% vs. 12%) and less likely to say they do 'None' (13% vs. 23%).

Level 2 qualifications, including GCSE and Nationals (p29-46/49-60)

Between 28% (neurodiverse) to 42% (high deprivation) of 14-19 year olds said they had studied or were studying a **Level 2 Computing qualification** (e.g. Computer Science / Computing Science / Digital Technologies GCSE / Nationals) and a further one in five to one in four (17% girls to 24% neurodiverse) say 'No, but I have thought about it'

- Girls are much less likely than other young people to say they were studying a level 2 Computing qualification (29% vs. 43%) and much more likely to say they didn't consider it at all' (47% vs. 27%)
- Similarly young people with a neurodiverse condition are less likely than others to say they are studying Computing at Level 2 (28% vs. 37%), but were more likely to say 'No, but I have thought about it' (24% vs. 16%)
- Young people from ethnic minority backgrounds are more likely than other young to say they were studying a level 2 Computing qualification (41% vs. 35%) and less likely to say they didn't consider it at all' (31% vs. 40%) as were young people living in highly deprived areas (42% vs. 33% were studying a Level 2 and 28% vs. 42% said they did not consider doing so).

Much smaller numbers of 14-19 year olds were studying a **iMedia or Creative iMedia** (Cambridge Nationals) qualifications, between 10% of girls and to 21% of neurodiverse young people), a further one in five to one in four said 'No, but I have thought about it' (19% to 23%).

- Girls, young people from ethnic minority backgrounds and those living in highly deprived areas are less likely than other young people to say they were studying iMedia (10% vs. 15% or 16% of others outside the respective groups)
- Young people with a neurodiverse condition are twice more likely than others to say they are or were studying those subjects

Also around one in ten 14-19 year-olds (7% of girls to 13% of young people from ethnic minorities) say they have studied or are studying **Cambridge Nationals in IT**

- Girls are half as likely as other young people to be studying Cambridge Nationals in IT (7% vs. 13% of others) or to have considered it (12% vs. 23%). They are much more likely than others to say they didn't consider it at all (53% vs. 35%),
- Young people from ethnic minority backgrounds are almost twice more likely than other young people to say they had studied or were studying them (13% vs. 8%).

Up to one in nine (5% of girls to 11% of neurodiverse young people) said they had studied or were studying **Digital Information Technology (BTEC)**. Up to a further one in four say 'No, but I have thought about it' (12% of girls to 24% of neurodiverse young people).

- Girls are half as likely as other young people to have studied or be studying the BTEC (5% vs. 10%) and more likely to say they didn't consider it at all (51% vs. 41%)

Between 8% (of ethnic minority young people) and 20% (neurodiverse) in the 14-19 age range said they had studied or are studying **Creative Media Production (BTEC)**

- Girls are less likely than other young people to say they had or were studying it (9% vs. 15%).
- Young people from ethnic minority backgrounds are less likely than others (8% vs. 14%) to have or be studying this BTEC and more likely to say they didn't consider it at all (42% vs. 35%)
- Young people with a neurodiverse condition are twice more likely than others to say they were or had studied this BTEC (20% vs. 9) or to have considered it (27% vs. 15%). Only one-quarter of this group did not consider it at all (25% vs. 42%).

From 4% of girls up to 11% of neurodiverse young people aged 14-19 said they were studying or had studied **Digital Production, Design and Development (T Level)**, although up to three in ten (18% ethnic minority to 29% of neurodiverse) said they had thought about it.

- Girls and young people from ethnic minority backgrounds are less likely than other young people to be studying or have studied the T-level (4% vs. 12% and 6% vs. 10% respectively

- Young people with a neurodiverse condition are twice more likely than others to say they were or had studied it (11% vs. 6%) and more likely to have considered doing so (29% vs. 18%)

The story was similar for other related T-levels – between 4% and 9% of young people aged 14-19 said they had studied or were studying **Another T Level in Digital or Engineering**

- Girls and young people from ethnic minority backgrounds are less likely than other young people to say they had considered it (13% vs. 22% and 14% vs. 21%)
- Young people with a neurodiverse condition are more likely than others to be or have studied related T levels (9% vs. 3%) and more likely to say they had thought about doing so (29% vs. 18%)

11-13 year olds were asked if they **think they will study Computing GCSE or National qualifications** (*e.g. Computer Science / Computing Science / Digital Technologies*)**:** between 40% of girls up to 55% of young people with a disability said they did not think they would take these qualifications; between 8% (of girls and of young people with a disability) and 13% young people in areas of high deprivation) say they 'will definitely' take one and up to one in three (21% to 33%) saying 'Maybe'

- Girls are more likely than other young people to say 'No, I will not take this' (49% vs. 37% of others), and half as likely to say 'Yes, I will definitely take this' (8% vs. 16%)
- Those living in highly deprived areas are less likely than other young people to say 'No, I will not take this' (40% vs. 49% of others).

11-13 year olds were also asked whether they were **likely to study (Cambridge Nationals)**

- only 2% of girls and 6% of young people with a neurodiverse condition said they definitely will although around one in five (18% to 23%) said they were considering **iMedia or Creative iMedia**
- between only 2% of girls and 8% of young people with a disability said they would definitely take the **IT (Cambridge Nationals)** qualification**,**

Very small numbers of 11-13 year-olds also said they intended to study **BTECs**

- Between 2% of girls and 7% of young people with a disability say 'Yes, I will definitely take the **Digital Information Technology BTEC**
- Between 3% (girls) and 7% (young people in areas of high deprivation and those with a disability) say 'Yes, I will definitely take' the **Creative Media Production BTEC.**

Level 3 qualifications (A levels and Highers) (p47-49)

Up to one in six 16-19 year-olds (7% of girls to 16% of ethnic minority young people) say they had studied or were studying a Level 3 Computing qualification (eg Computer Science or Digital Technology AS or A Level, or Computer Science or Computing Higher qualifications

- Girls are less likely than other young people to study or have studied these Level 3 qualifications (7% vs. 17%) and more likely to say they didn't consider them (57% vs. 41%).
- Young people from ethnic minority backgrounds are more likely than other young people to be or have studied them (16% vs. 11%).

Reasons for choosing computing (p60-63)

Survey participants who said they had studied, were studying or considering studying one of the computing qualifications were asked why they chose to do so, choosing from a range of options.

- **Computing is important for a range of jobs** (or will be in the future) was in the top 3 most popular choices for all five sub-groups. It was at the top of the list for girls (31% chose this reason) young people from ethnic minorities (36%) and those from areas of high deprivation (36%)
- **I enjoy computing** (or enjoyed it) is also in the top 3 for all five sub-groups and the top choice for young people with a neurodiverse condition (chosen by 33% of this group) and those with a disability (33%)
- **Computing would help me to get a well-paid job** (25% to 32%) and 'I am naturally good at computing' (22% and 29%) make up the rest of the top threes.
- Small numbers of students selected options related to options scheduling, what their friends did and whether family or teachers encouraged them to do computing.

There are no significant differences between young people living in areas of high deprivation and others for this question, however, all the other sub-groups vary in their selections compared to those outside those groups:

- Girls are much less likely than others to say 'I enjoy(ed) computing' (28% vs. 39%), 'I am naturally good at computing' (13% vs. 26%), 'I need computing to get into my chosen career' (10% vs. 16%), or 'My friends do / did computing' (9% vs. 15%).
- Young people from ethnic minority backgrounds are more likely than other young people to choose 'Computing is / will be important for a range of jobs now / in the future' (36% vs. 31%),

'Computing would help me to get a well-paid job' (32% vs. 21%), or 'Computing would help me to get into my preferred university or onto my preferred course' (15% vs. 8%).

- Young people with a disability are much more likely than other young people to choose 'I am naturally good at computing' (29% vs. 18%), that 'My friends do / did computing' (19% vs. 11%), or 'My teacher(s) encouraged me to study computing' (18% vs. 10%).
- Young people with a neurodiverse condition are more likely than other young people to choose 'I like(d) my computing teacher' (17% vs. 10%), less likely to say 'Computing would help me to get a well-paid job' (19% vs. 27%).

Reasons for not choosing computing (p63-66)

Those who did not choose a computing qualification were also asked why that was.

- **I am not good at computing** is at the top of the list for all but one of the sub-groups (ranging from 26% of young people in areas of high deprivation to 42% of those with a disability), only girls did not choose it most often (although 34% did choose this reason)
- **Other subjects are more important to help me get into my chosen career** is in the top three of four sub-groups (21% to 39%) and **I dislike(d) computing** is top for one girls (chosen by 39%) and in the top three of two more (21% and 30%).
- Other popular choices focused on a lack of interest in computing jobs or finding computing (or maths) too difficult. The influence of teachers, family and friends, and timetabling/options issues were chosen by small numbers of participants.

There were considerable differences between the sub-groups

- Girls are more likely than others to choose 'I dislike(d) computing' (39% vs. 13%), and 'I am not good at computing' (34% vs. 23%). They were also more likely to focus on issues related to their careers, grades or further education than are other young people.
- Young people from ethnic minority backgrounds are more likely than other young people to say 'Other subjects are more important to help me get into my preferred university or onto my preferred course' (26% vs. 20%)
- Young people with a disability are more likely than other young people to say 'I am not good at computing' (42% vs. 28%), 'Other subjects are more important to help me get into my chosen career' (39% vs. 26%) or 'I could / can get better grades in other subjects' (37% vs. 23%).

- Young people with a neurodiverse condition are more likely than other young people to say 'I am not good at computing' (39% vs. 28%), or 'I could / can get better grades in other subjects' (32% vs. 24%).
- Young people living in areas of high deprivation are **less** likely than other young people to say 'Other subjects are more important to help me get into my chosen career' (21% vs. 32%), 'I dislike(d) computing' (21% vs. 31%), 'I could / can get better grades in other subjects' (21% vs. 29%) and 'Computing jobs are boring' (15% vs. 24%).

Perceptions of computing in school (p66-71)

Most participants were positive about computing as a subject. Well over one-third said they like computing, either 'a lot' (11% to 20%) or 'a bit' (20% to 24%) and between 32% (young people with a disability) and 35% (girls and young people in areas of high deprivation) said they think computing is 'ok'.

- 17-19 year olds are the most likely to say they like computing either 'a lot' or 'a bit' (44% vs. 37% of 14-16s and 38% of 11-13s)
- Girls are much more likely than others to not like computing (30% vs. 12% of others) and less likely to say they like computing (31% vs. 48%), as are young people with a disability (28% vs. 20%) and young people with a neurodiverse condition (25% vs. 20%).
- Young people from ethnic minority backgrounds are more likely than others to like computing (42% vs. 37%) as are young people living in areas of high deprivation (44% vs. 38%).

Careers in computing (p77-95)

Knowledge (p77-79)

- More than half of participants said they know 'a lot' or 'a bit' about computing, although only around 10% said they know 'a lot'.
- Around one-third said they don't know anything about computing, of whom slightly more said they weren't interested in learning more compared with those saying they wanted to learn more.
- Girls are more likely than boys and non-binary young people to say 'I am not interested in finding out about careers in computing' (22% vs. 14%), but also more likely to say 'I don't know anything about careers in computing but I would be interested to find out more' (17% vs. 12%). They are half as likely to claim 'I know a lot about careers in computing' (7% vs. 13%),

- Three in five young people from ethnic minority backgrounds say they know something about careers in computing (62%), including one in eight (12%) who say 'I know a lot about careers in computing' compared to 10% of others
- Fewer disabled young people say they know at least a bit about careers in computing (47%) compared with the other groups and more describe themselves as 'not interested in finding out about careers in computing' (27% vs. 17%).

Perceptions of careers in computing (p80-87)

- Around 7 in 10 participants agree that **Computing is relevant to many different jobs** and one in three strongly agree. Very few (between 4% and 6%) disagree. Few younger than older participants agree with the statement.
    - There are no significant differences between the responses of girls and other young people to this question
    - Young people from ethnic minority backgrounds are most likely to agree with the statement (75% vs. 70% of others) and young people living in areas of deprivation are more likely than others to 'Strongly agree' (38% vs. 32%).
    - Young people with a disability are less likely than those without to agree (63% vs. 73%).
- There is no clear consensus on whether '**Studying computing is only useful if you want to work in programming or codin**g'. Around one in three across all sub-groups agree and the same proportion disagree
    - Slightly more girls disagree than agree with the statement (36% vs 32%)
    - young people from an ethnic minority are more likely to agree than disagree with the statement (36% vs 22%) as are those with a disability (36% vs 28%).
- More than half of the young people across agree that '**In general, I know about the types of jobs that studying computing can lead to',** 13% strongly agree
    - Girls are less likely to agree with the statement compared with others (51% vs. 59%) and they are also more likely than others to disagree with this statement (15% vs 10%).
    - More young people from ethnic minority backgrounds agree with this statement compared with others (58% vs. 53%) and fewer say they 'don't know' (9% vs. 12%).

Perceptions of girls and careers in computing (p87-95)

- Nearly half of all participants disagree with the statement **'There are differences between men and women that make men better suited to a career in computing'** and including one in four who 'strongly disagree'
    - Girls are more likely than others to disagree with this statement (49% vs. 40%), with one in three saying they 'strongly disagree' (32% vs. 23%).
    - 17-19 year olds are more likely than younger children to agree with this statement (23% vs. 9% of 14-16s and 14% of 11-13s)
- More young people disagree than agree with the statement '**There are differences between men and women that make women better suited to a career in computing'**, between 15% and 21% across the sub-groups agree with the statement while between 31% and 40% disagree.
    - 17-19 year olds are again much more likely than younger children to agree with this statement (24% vs. 11% of 14-16s and 12% of 17-19s)
    - Disabled young people are more likely than others to say they agree with this statement (21% vs. 15%) and less likely to disagree (31% vs 40%)
- Across most sub-groups, more young people agree than disagree that **'It is harder for women to get ahead in computing than men because there are many obstacles'**, this was the case for girls (40% vs 28%) young people with a disability (34% vs 18%) and those who are neurodiverse (36% vs 26%), although not for young people from an ethnic minority group (32% vs. 33%) and those from high IMD areas (29% vs. 35%)
    - 17-19 year olds are much more likely than younger children to agree with this statement (43% vs. 28% of 14-16s and 22% of 17-19s)
    - Girls are much more likely to agree with the statement 40% vs. 23% of boys), and also more likely to 'Strongly agree' (12% vs. 8%). They are less likely to disagree at all (28% vs. 34%)
    - Young people with a disability are much less likely than others to disagree at all with the statement (18% vs. 33%) and to 'Strongly disagree' (9% vs. 17%).
    - Young people living in areas of high deprivation are marginally more likely to disagree with this statement compared with those in more affluent areas who are more likely to agree. They are more likely to disagree at all (35% vs. 29%), and also more likely to 'Strongly disagree' (19% vs. 15%).

Engagement in Computing: extra-curricular (p98-121)

Around nine in ten young people across the sub-groups at least occasionally **use programs** such as Word, PowerPoint or Photoshop to do projects, more than half use such programs at least weekly

- Again, older participants are the most frequent users: 17-19 are more likely than younger children to use programs to do projects 'Every day' (17% vs. 11% of 14-16s and 3% of 11-13s) and those aged 11-13 are less likely than their older counterparts to use programs at all (82% vs. 90% of 14-16s and 93% of 17-19 year olds)
- Girls are more likely than others to ever use programs for projects (92% vs. 85%)
- Young people with a neurodiverse condition are more likely than others do so weekly or more often (60% vs. 52%)
- Young people from areas of high deprivation are less likely than others to ever use programs to do projects (85% vs. 91%)

Social media (p103-105)

Around three-quarters of young people in the survey (70% to 79% across the sub-groups) said they **use social media** every day and a further one in ten (7% to 11%) use it most days. Only a small minority (between 2% and 6%) said they never use social media.

- Older participants are the most frequent users, 93% of those aged 17-19 used social media weekly or more often (93% vs. 85% of younger participants)
- Girls are more likely than other young people to use social media, ever (95% vs. 91%), weekly or more often (91% vs. 84%) or every day (79% vs. 67%)
- Young people from deprived areas are more likely than others to use social media every day (75% vs. 71%),
- Young people from ethnic minority backgrounds are less likely than others to use social media every day (70% vs. 75%)

Gaming (p105-110)

Between two-thirds and three-quarters of young people(from 62% of girls to 75% of young people with a neurodiverse condition) say they **play video games that involve an element of coding** at least occasionally and between 9% (girls) to 22% (neurodiverse) do this 'Every day'

- More girls than other groups say they never play such games; girls and young people from ethnic minorities play least often
- Girls are much less likely than other young people to do so (62% vs. 79%) and less likely to say this is 'Every day'. They are twice as likely to say they 'Never' do this (35% vs. 16% of others)
- Young people from ethnic minority backgrounds are less likely than other young people to play video games with an element of coding weekly or more often (36% vs. 43%) and less likely to say this is 'Every day' (11% vs. 17%),
- Young people with a disability are more likely than other young people to play video games that involve an element of coding 'Every day' (20% vs. 14%)
- Young people with a neurodiverse condition are more likely than other young people to play video games that involve an element of coding weekly or more often (45% vs. 37%), 'Every day' (22% vs. 13%), and less likely to say they 'Never' do this (19% vs. 27

The majority of young people across all sub-groups **play other games on a computer, console or tablet** (from 85% to 90% across the sub-groups), there is more disparity between those who do this every day, from 20% of girls to 43% of young people with a disability

- Young people aged 11-13 are more likely than their older counterparts to play other games on a computer, console or tablet 'Every day' (41% vs. 28% of 14-16s and 29% of 17-19s)
- Girls are less likely than other young people to do so (85% vs. 93%), and where they do this, much less likely to do this weekly or more often (58% vs. 81%) and are much more likely to say they 'Never' do this (13% vs. 3% of others)
- Young people from ethnic minority backgrounds are less likely than other young people to play these games weekly or more often (67% vs. 72%)
- Young people with a disability are more likely than other young people to play other games on a computer, console or tablet 'Every day' (43% vs. 31%), as are young people with a neurodiverse condition (39% vs. 31%). Those with a neurodiverse condition are less likely than other young people to say they 'Never' do this (5% vs. 9%).

Digital creation (p110-119)

Between 59% and 78% across the sub-groups say they never **build their own computers** (using things like micro:bit, Raspberry Pi, Arduino) and there are similar patterns to designing video games

- Older participants, aged 17-19, are more likely than younger to ever build their own computers (34% vs. 15% of 14-16s and 23% of 11-13 year olds)

- Girls are much less likely than other young people to ever build their own computers (18% vs. 30%),
- Young people with a disability are more likely than other young people to build their own computers weekly or more often (17% vs. 8%) and are much less likely to say they never do this (59% vs. 73% of others)
- Young people with a neurodiverse condition (12% vs. 7%) are more likely than other young people to build their own computers weekly or more often, although 67% say they never do this.

Most participants said they **edit their own videos** at least occasionally (between 64% and 71% across the sub-groups)

- Young people with a disability or neurodiversity are relatively frequent users (around 55% do so at least weekly) whereas girls and young people from ethnic minorities are less so (around 40%)
- Older participants are more likely than their younger counterparts to ever edit their own videos (76% of 17-19s vs. 62% of 14-16s and 60% of 11-13 year olds), and more likely to say they do this weekly or more often (38% vs. 27% and 29% respectively).

Most young people never **build or edit web pages** (between 49% and 69% across the sub-groups), older participants were more likely than younger ones to build or edit web pages at all (47% vs. 25% of 14-16s and 28% of 11-13 year olds) and at least weekly (22% vs. 6% and 8% respectively

- More than two-thirds of girls never build or edit web pages (69% compared with 55% of others)
- Young people with a disability and those with a neurodiverse condition are more likely than others to say they ever build or edit web pages (respectively 42% vs. 32% and 40% vs. 31%) and are also more frequent users

Nor do many design their own video games or build their own computers**:** although more than one-third of young people with a disability or neurodiversity **design their own video games** at least occasionally, less than one-quarter of the other sub-groups do so and only 18% of girls

- Young people aged 17-19 are more likely than their younger counterparts to ever design their own video games (36% vs. 17% of 14-16s and 27% of 11-13 year olds
- Girls are half as likely as other young people to ever design their own video games (18% vs. 36%),
- Young people with disabilities (38% vs. 25% of others) and those with a neurodiverse condition (35% vs. 24%) are more likely than other young people to ever design their own video games

Programming (p119-121)

Similarly, most young people across all sub-groups say they never **solve coding challenges** (between 47% and 62%)

- Again older participants are more likely than their younger counterparts to ever solve coding challenges ever (49% of 17-19s vs. 27% of 14-16s and 40% of 11-13 year olds) and at least weekly (24% vs. 8% and 12% respectively)

Nearly two-thirds of girls (62%) say they never solve coding challenges, just over one-third say they do so at least occasionally (34% compared with 42% of others).

INTRODUCTION

Background

As the UK's independent national academy of science and technology, the Royal Society provides independent, timely and authoritative scientific advice to decision-makers at the highest level.

Computing education has become an increasingly important skill for young people to acquire, if they are to keep up with the pace of technological change, to be prepared for the workplace of the future and be well-informed and empowered citizens. Evidence suggests however, that some demographic groups are underrepresented on computing courses at secondary and post-16 educational stages suggesting that targeted interventions are required to ensure fair access to this vital component of a modern education.

The Society therefore wishes to understand the sources of inequity in participation in computing education, with the intention of providing robust advice on how to tackle them. Previous research commissioned by the Society was representative of the UK population as a whole but did not sample enough young people from underrepresented groups to make statistically robust conclusions. However, the research did identify six distinct typologies in relation to young people and their propensity to study computing. Further (more targeted) research was required to enable a more in-depth analysis of the underrepresented groups highlighted within these typologies below.

Aims and objectives

Table 1: Demographic profile by Typology:

Education Enthusiasts	Future Planners	Easy-going	Socially Influenced	School Dissenters	Cautious Thinkers
More likely to be **female** and from **Black** ethnic groups. **ABC1**	More likely to be **male** and of **Asian** ethnicity. **High deprivation** areas	Few distinguishing features. **Low deprivation** areas / **ABC1**	More likely to be from **White** ethnic groups. **Lower academic** achievement	Highest instance of **neurodiversity,** plus higher levels of disability. **Lower academic** achievement	More likely to be **non-binary,** and **neurodiverse** – plus high levels of disability. **C2DE**

The Society's primary objective for this research is to understand the decision-making of young people from groups that are currently underrepresented in computing education and ultimately why they decide to take computer science courses (or not). The table above highlights key demographics that feature within the six typologies. An underrepresented group describes a subset of the population that holds a smaller percentage within a significant subgroup than the subgroup holds in the general population. On this basis, the following subgroups of young people were targeted for over-representation in this research.

- Girls
- Those from ethnic minority backgrounds
- Those living in areas of high deprivation (deciles 1-3 of the Indices of Multiple Deprivation [IMD])
- Those with a disability
- Those with a neurodiverse condition

The request for statistically robust conclusions, along with the possibility that data may be revisited for further analysis in the future as a baseline against which to track changes, meant that a quantitative approach was adopted for this project.

METHODS

Our approach to this research focused on delivering robust and credible data from an inclusive sample of young people via a large-scale quantitative survey of around 20 questions / 15 minutes.

We used the CHILDWISE Schools Panel of schools and colleges across the UK to target children and young people aged 11 to 16 for this research, along with a proprietary online panel of adults to reach parents of 17 to 19 year olds, or 18 to 19 year olds directly.

CHILDWISE Schools Panel

CHILDWISE manage a panel of around 1000 schools and colleges across the UK who regularly help us with research projects, predominantly online surveys. The panel can be used to provide reliable access to a representative sample of children, including those from minority and hard to reach groups – but we can also oversample in areas to ensure inclusion and overrepresentation of minority and disadvantaged groups. CHILDWISE schools are sourced from all levels of deprivation, across urban, suburban and rural areas – and we focus on all school types (academies, state, independent, and gender-specific), giving us access to the widest group of young people possible.

We typically ask for around a class of children per school to ensure a broad spread of participants, and to help reduce any clustering of responses. Our approach to the schools is usually via heads of year, but also via subject specific teachers, or less regularly heads of school. Young people complete online surveys in school in form time, PSHE, ICT, or other lessons relevant to the survey topic. Consent to take part in our surveys is collected from the teacher, as a responsible adult acting in loco-parentis (as per Market Research Society rules). The children themselves also provide informed consent at the beginning of the survey, and they can skip questions or stop at any time. We generally find that young people enjoy taking part in surveys about their lives though, and are happy that their voice is being heard, and their experience and opinion valued.

Surveys are completed independently (with support from teachers available to those who need it), and anonymously – we do not collect any personally identifiable information.

Proprietary online panel of adults

The online panel we use is one of the largest in the UK. The panel strives to be as representative as possible, including recruiting members from the top and bottom socio-economic groups (As and Es).

They are very active in recruiting those from diverse backgrounds, designing recruitment campaigns to target hard-to-reach population segments by selecting unique sources and applying tailored campaigns. To guarantee detailed knowledge of the specifics of their panellists, they employ hundreds of profiling attributes on the panel, and due to the size of the panel, low incidence groups are accessible. Our approach when using the online panel is via an adult, which could be a parent for the younger end of the age group (under 18), or direct to the respondent in the case of those aged 18 or over.

Boosting sub-groups

We employed a number of methods to help boost the sub-group samples. For sampling via schools, we alerted school contacts to the sub-groups of interest, and asked if they could provide a sample that included students matching these requirements if possible. Other more targeted methods included:

- **Girls**
  - Schools - We targeted some girls' only schools, and in mixed gender schools asked some to provide a sample of girls only.
  - Panel – Profile information was used to target girls who were members of the panel, and filter questions were asked of parents to target girls.
- **Young people from ethnic minority backgrounds**
  - *Schools* – We used geographic data to target schools in areas where ethnic minority population was high, to ensure over-sampling of young people in this sub-group.
  - *Panel* – Profile information was used to target panel members from ethnic minority backgrounds, and filter questions were asked to determine ethnic background.
- **Young people living in areas of high deprivation**
  - *Schools* – We used geographic data to target schools in areas in deciles 1 to 3 of the IMD. All students sampled via that school were treated as being from areas of high deprivation.
  - *Panel* – We provided postcode data to the panel specifically for postcodes in deciles 1 to 3 of the IMD. This was matched with their panellists to enable targeting.
- **Young people with a disability**
  - *Schools* – We used schools data to target schools with high levels of SEND students, to ensure over-sampling of young people in this sub-group.
  - *Panel* – Filter questions were asked to determine whether respondents had a disability.
- **Young people with a neurodiverse condition**
  - *Schools* – Filter questions were asked to determine whether respondents had a neurodiverse condition.

- *Panel* – Filter questions were asked to determine whether respondents had a neurodiverse condition.

Achieved sample

We targeted a sample of 2000 11-19 year olds across the UK, with 1250 responses from 11-16 year olds targeted via the CHILDWISE Schools Panel, and 750 responses from 17-19s via the online proprietary panel. Our overall achieved sample was 2475 11-19s - 1458 via 33 schools from the schools panel, and 1017 via the online panel.

Sampling took place between Monday 11th March and Friday 10th May 2024 for respondents recruited via the schools panel, and between Tuesday 2nd April and Sunday 12th May 2024 for respondents recruited via the online panel.

Within each of the sub-groups, balance by age across three core groups (11-13s, 14-16s, and 17-19s), and by gender was restored using weighting.

The table below shows the targeted and achieved samples by sub-group:

Table 2: Sample by key sub-groups

	Number achieved on RS segmentation survey (Base: 2273)	Boosted Sample	
		Target (Base: 2000)	Achieved sample (Base: 2475)
Girls	1126	1500	**1765**
Ethnic minorities	450	800	**1080**
High deprivation	485	900	**917**
Disability	148	200	**447**
Neurodiversity	252	300	**611**
None of the above	*n/a*	*n/a*	***67***

67 young people did not fit any of the sub-group definitions (e.g. boys who were not from an ethnic minority, from an area of low deprivation, and who neither described themselves as disabled of neurodiverse). These young people were left in the sample as they fitted into the comparison groups (e.g. when comparing girls with boys and non-binary young people).

We proposed sampling 150 participants in each of Wales, Scotland and Northern Ireland, with the balance spread across the English regions. Geographical spread was skewed towards major

conurbations because of the requirements to target of areas of high deprivation. The final sample by geographic region is shown in the table below:

Table 3: Sampling by geography

	Achieved sample (Base: 2475)	Achieved sample %	Actual % of 11-19s (ONS Mid-Year 2022)
North West	314	13%	11%
North East	71	3%	4%
Yorkshire	57	2%	8%
West Midlands	309	13%	9%
East Midlands	314	13%	7%
East Anglia	147	6%	10%
London	307	12%	13%
South West	163	7%	8%
South East	199	8%	14%
Wales	237	10%	5%
Scotland	164	7%	8%
Northern Ireland	193	8%	3%

We anticipated sampling an even spread of sample per single year of age across age 11 to 19. In practice, because of the revised timing of fieldwork, some young people had started their exam period, either taking part in mock exams, or at the end of fieldwork, actual exams. This meant that they became hard-to-reach, with schools unwilling to place extra pressures on these young people, resulting in a smaller sample than anticipated across these age groups. Imbalance by age (and gender) within the targeted sub-groups was restored with weighting. The final sample by age is shown in the table below:

Table 4: Sampling by age group

Age (years)	Achieved sample (Base: 2,475)
11	346
12	314
13	416
14	147
15	82
16	102
17	100
18	557
19	411
11-13	*1,076*
14-16	*331*
17-19	*1,068*

Notes on analysis

Weighting

Within each of the sub-groups, balance by age across three core reporting groups (11-13s, 14-16s, and 17-19s), and by gender was restored using weighting. Age and gender tend to be the key differentiators for young people and we weight all of our research by these two factors as standard. By restoring balance like this we minimize the impact of age and gender on the results from the sub-groups.

Most weights used were down-weights (e.g. multiplying the sample cell by 0.5), or minor upweights (e.g. 1.5) but as our sample was deliberately skewed towards girls as a key sub-group, this meant there were more girls (1765) than boys (671) in our sample, which, along with the lower sample across age 14 to 17, meant that the largest weightings were applied to boys this age. The largest weight applied was X7 for boys aged 14-16 who were neurodiverse.

Clustering by school

We ask for around a class of young people to take part per school, but this can vary, as some schools find it easier and more practical to allow more young people to take part (e.g. a full year group). Where this happens, we limit participation per school to 100 responses. We do this by removing responses at random (e.g. every nth response) across the total responses from that school to bring this total down to 100. We had four of the 34 schools taking part that we had to apply this process to.

Reporting by sub-groups

In the report that follows, for each question, we show charted data for each of the five sub-groups. We then provide some commentary on the overall results, which forms a summary of results for that question. We then look at the results across three age ranges (11-13s, 14-16s, 17-19s), and finally look at the results for each sub-group and their counterparts (e.g. girls vs. boys and non-binary young people, those with a disability vs. those without).

Any listed differences by age or by sub-group are shown in the report as they are statistically significant at the standard 95% confidence level.

PROFILE OF PARTICIPANTS

This section adds more detail to the sample profile focusing on the individual survey participants' personal qualities and their motivations and interests in relation to education and future career.

Personal qualities

Figure 1. Please pick up to five words or phrases that describe you best (Q1)

Base: 2,468 participants aged 11-19

Girls	Ethnic minority	High deprivation	Disability	Neurodiversity
n=1,762	n=1,077	n=916	n=446	n=610
Creative 55%	**Smart** 48%	**Creative** 53%	**Creative** 54%	**Creative** 59%
Easy to talk to 53%	**Creative** 47%	**Easy to talk to** 46%	**Easy to talk to** 54%	**Easy to talk to** 49%
Competitive 42%	**Easy to talk to** 46%	**Competitive** 44%	**Unusual** 40%	**Determined** 36%
Determined 40%	**Competitive** 45%	**Smart** 44%	**Good at solving problems** 36%	**Competitive** 35%
Organised 38%	**Determined** 45%	**Determined** 43%	**Determined** 35%	**Up for a challenge** 35%
Smart 35%	**Organised** 35%	**Up for a challenge** 33%	**Smart** 35%	**Unusual** 34%
Good at solving problems 30%	**Good at solving problems** 33%	**Team player** 32%	**Organised** 34%	**Team player** 30%
Team player 29%	**Up for a challenge** 33%	**Organised** 31%	**Competitive** 33%	**Good at solving problems** 31%
Up for a challenge 29%	**Team player** 31%	**Good at solving problems** 30%	**Team player** 29%	**Smart** 26%
Logical 24%	**Logical** 29%	**Logical** 28%	**Up for a challenge** 28%	**Logical** 26%
Unusual 22%	**Ordinary** 18%	**Unusual** 19%	**Logical** 22%	**Organised** 24%
Ordinary 18%	**Unusual** 18%	**Ordinary** 18%	**Ordinary** 15%	**Ordinary** 9%
***None of these** 1%*	***None of these** 1%*	***None of these** 2%*	***None of these** 3%*	***None of these** 2%*
***Don't know** 5%*	***Don't know** 2%*	***Don't know** 3%*	***Don't know** 4%*	***Don't know** 7%*

Overall

- ‘Creative’ is chosen as the top word to describe themselves for four of the five sub-groups (53% to 59%).
- ‘Easy to talk to’ appears in the top three for all five sub-groups (46% to 54%).
- ‘Competitive’ appears in the top three for two sub-groups (42% and 44%).
- ‘Ordinary’ is the least chosen word across four of the five sub-groups (9% to 18%).
- ‘Logical’ appears in the bottom three words for all five sub-groups (22% to 29%).
- ‘Unusual’ appears in the bottom three words for three of the sub-groups (18% to 22%).

By age

- Young people aged 11-13 are the most likely to say they are ‘Competitive’ (50%), but least likely to say they are ‘Determined’ (36%) or ‘Logical’ (20%).
- Those aged 14-16 are more likely than older and younger children cohorts to say they are ‘Creative’ (58%).

Girls

Girls are most likely to describe themselves as ‘Creative’ (55%), ‘Easy to talk to’ (53%) or ‘Competitive’ (42%), and least likely to describe themselves as ‘Ordinary’ (18%), ‘Unusual’ (22%) or ‘Logical’ (24%).

Girls are more likely than other young people to describe themselves as ‘Easy to talk to’ (53% vs. 36% of others), or ‘Organised’ (38% vs. 24%). Girls are less likely to describe themselves as ‘Smart’ (35% vs. 46%), a ‘Team player’ (29% vs. 35%), ‘Up for a challenge’ (29% vs. 34%), or ‘Logical’ (24% vs. 32%).

Ethnic minority

Young people from ethnic minority background are most likely to describe themselves as ‘Smart’ (48%), ‘Creative’ (47%) or ‘Easy to talk to’ (46%), and least likely to feel they are ‘Unusual’ (18%), ‘Ordinary’ (18%) or ‘Logical’ (29%).

Those from ethnic minority backgrounds are more likely than others to describe themselves as ‘Smart’ (48% vs 36%), or ‘Organised’ (35% vs. 28%). They are less likely to describe themselves as ‘Creative’ (47% vs. 58%), or ‘Unusual’ (18% vs. 24%).

High deprivation

Young people living in areas of high deprivation are most likely to describe themselves as ‘Creative’ (53%), ‘Easy to talk to’ (46%) or ‘Competitive’ (44%), and least likely to describe themselves as ‘Ordinary’ (18%), ‘Unusual’ (19%) or ‘Logical’ (28%).

Those from highly deprived areas are more likely than others to describe themselves as ‘Smart’ (44% vs. 38%).

Disability

Young people with a disability are most likely to describe themselves as ‘Creative’ (54%), ‘Easy to talk to’ (54%), or ‘Unusual’ (40%), and least likely to describe themselves as ‘Ordinary’ (15%), ‘Logical’ (22%) or ‘Up for a challenge’ (28%).

Young people with a disability are more likely than others to say they are ‘Easy to talk to’ (54% vs. 44%), or ‘Unusual’ (40% vs. 18%), and less likely to describe themselves as ‘Competitive’ (33% vs. 45%), or ‘Logical’ (22% vs. 29%).

Neurodiversity

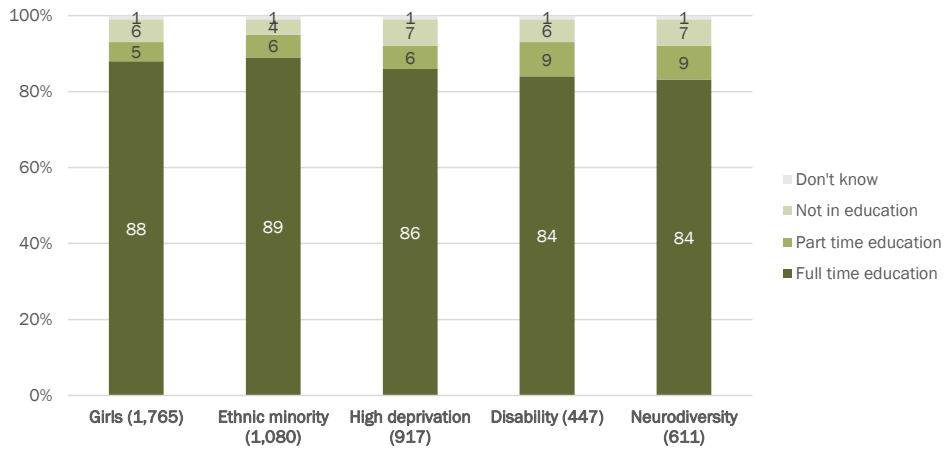
Young people with a neurodiverse condition are most likely to describe themselves as ‘Creative’ (59%), ‘Easy to talk to’ (49%), or ‘Determined’ (36%), and least likely to describe themselves as ‘Ordinary’ (9%), ‘Organised’ (24%) or ‘Logical’ (26%).

Those with neurodiverse conditions are more likely than others to think of themselves as ‘Creative’ (59% vs 52%), or ‘Unusual’ (34% vs. 18%), and less likely to say they are ‘Determined’ (36% vs. 43%), ‘Competitive’ (35% vs. 45%), ‘Smart’ (26% vs. 44%), ‘Organised’ (24% vs. 33%), or ‘Ordinary’ (9% vs. 19%).

Education

Figure 2. Please select which of the following statements is most applicable to you (Qp5).

Base: 2,475 participants aged 11-19



Overall

- Generally, a majority of around nine in ten (84% to 89%) say 'I am in full time education (12+ hours per week)' across all sub-groups.
- Between 5% and 9% across all sub-groups say 'I am in part time education (up to 11 hours per week)'.
- Between 4% and 7% say 'I am not currently in education'.

By age

- All of our 11-13s sample say 'I am in full time education (12+ hours per week)'.
- All of our 14-16s sample say 'I am in full time education (12+ hours per week)'.
- Three in five (59%) of our 17-19 year old sample say 'I am in full time education (12+ hours per week)', whilst one in five (19%) say 'I am in part time education (up to 11 hours per week)' and a further fifth (18%) say 'I am not currently in education'.

Girls

There are no differences between girls and others in our sample in relation to their level of education.

Ethnic minority

In our sample, young people from ethnic minority backgrounds are more likely than others to say 'I am in full time education (12+ hours per week)' (89% vs. 84%) and half as likely to say 'I am not currently in education' (4% vs. 8%).

High deprivation

There are no differences between those living in areas of high deprivation and others in our sample in relation to their level of education.

Disability

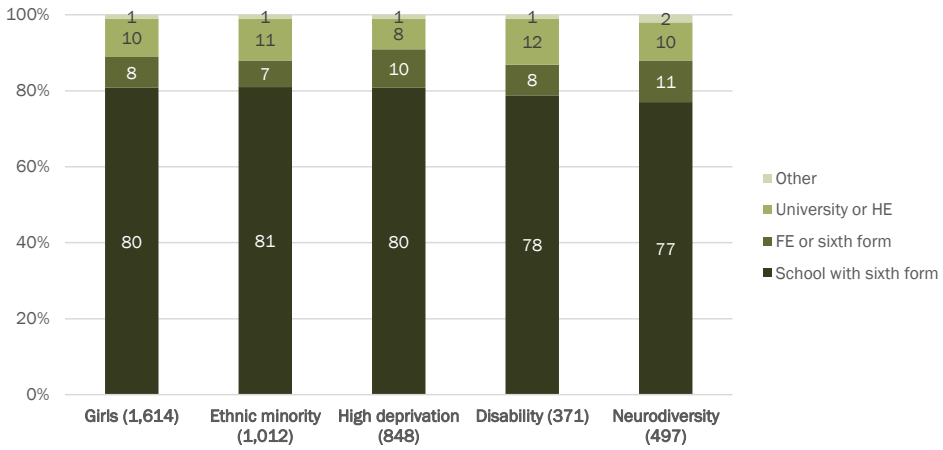
There are no differences between young people with a disability and others in our sample in relation to their level of education.

Neurodiversity

In our sample, young people with a neurodiverse condition are less likely than others to say 'I am in full time education (12+ hours per week)' (84% vs. 89%), and twice as likely to say 'I am in part time education (up to 11 hours per week)' (9% vs. 5%).

Figure 3. Where are you currently studying? (Qp6)

Base: 2,249 participants in education aged 11-19



Overall

- A majority of around four in five (77% to 81%) across all sub-groups are in education 'At a school with a sixth form' (either at school or at sixth form).
- Around one in ten or fewer (7% to 11%) of all sub-groups is 'At an FE or sixth form College'.
- Around one in ten (8% to 12%) are 'At university or HE college'.

By age

- All of our 11-13s in education are 'At a school with a sixth form' (either at school or at sixth form).
- 97% of our 14-16 year olds in education are 'At a school with a sixth form' (either at school or at sixth form), with the balance 'At an FE or sixth form College'.
- One in three (36%) of our 17-19 year olds in education are 'At a school with a sixth form' (at sixth form), with one in four (24%) 'At an FE or sixth form College'. A further one in three (35%) are 'At university or HE college', and 4% are studying elsewhere, including being home educated or doing distance learning from home, in an apprenticeship, or on a training course.

Girls

There are no differences between girls and others in our sample in relation to where they are currently studying.

Ethnic minority

There are no differences between young people from ethnic minority backgrounds and others in our sample in relation to where they are currently studying.

High deprivation

Young people living in areas of high deprivation are almost twice more likely than others to say they are ‘At an FE or sixth form College’ (10% vs. 6%).

Disability

There are no differences between young people with disabilities and others in our sample in relation to where they are currently studying.

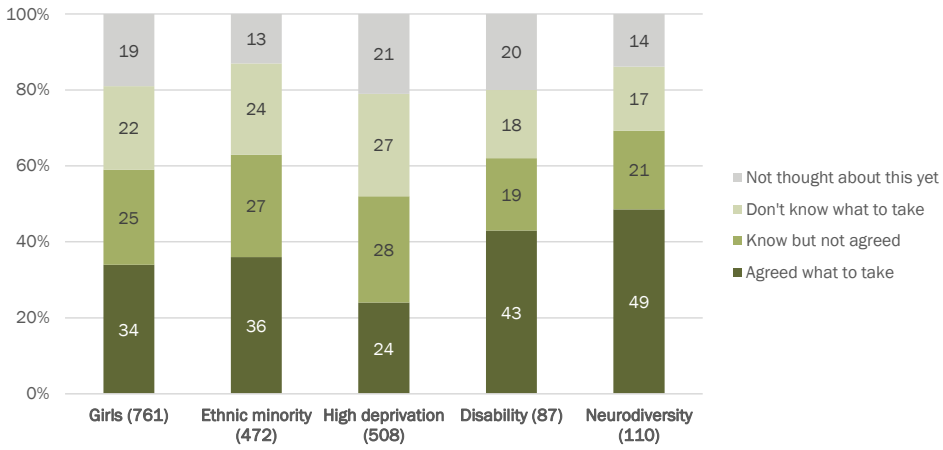
Neurodiversity

Young people with neurodiverse conditions are slightly less likely than others to be ‘At an FE or sixth form College’ (11% vs. 7%).

Choosing subject options at Key Stage 3

Figure 4. Which of these statements best describes you? (Q4)

Base: 1,050 participants in school years 7 to 9 or equivalent



Overall

- Between one in four and one in two (24% and 49%) say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school'.
- The second most common answer is 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' with around one in four to one in five choosing this (19% to 28%).
- One in four to one in five say 'I don't know what {GCSE / NATIONALS} subjects I want to take' (17% to 27%).
- A minority across all sub-groups say 'I haven't thought about this yet' (13% to 21%).

By age

- Only 7% of those in school years 7 or 8 (or equivalent) say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school', compared to four in five (80%) of those in year 9 (or equivalent) who will have chosen their options recently.
- One in four (26%) of those in year 7 say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet', increasing to almost two in five (38%) of

those in year 8, dropping back to one in nine (11%) in year 9 when students should have already chosen their options.

- Almost three in ten (28%) of those in year 7 say 'I don't know what {GCSE / NATIONALS} subjects I want to take', rising to two in five (38%) in year 8, the year before a choice needs to be made. Only 4% of those in year 9 say this.
- Two in five of those in year 7 (41%) say 'I haven't thought about this yet', dropping to one in seven (15%) of those in year 8, the year prior to taking their options, and falls further to one in twenty (5%) of those in year 9 when a decision should have been made.

Girls

One in three girls say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (34%), whilst a further one in four say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' (25%). More than one in five girls say 'I don't know what {GCSE / NATIONALS} subjects I want to take' (22%), and a further one in five (19%) say 'I haven't thought about this yet'.

There are no significant differences between girls and other young people aged 11-13 asked this question.

Ethnic minority

More than one in three of those from ethnic minority backgrounds say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (36%), whilst more than one in four say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' (27%). One in four say 'I don't know what {GCSE / NATIONALS} subjects I want to take' (24%), and one in eight say 'I haven't thought about this yet' (13%).

Young people from ethnic minority backgrounds are much less likely than others to say 'I haven't thought about this yet' (13% vs. 22%)

High deprivation

Around three in ten young people living in areas of high deprivation say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' (28%), with around the same proportion saying 'I don't know what {GCSE / NATIONALS} subjects I want to take' (27%). Only one in four say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (24%), whilst one in five say 'I haven't thought about this yet' (21%).

Young people living in areas of high deprivation are much more likely than others to say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' (28% vs. 18%), or 'I don't know what {GCSE / NATIONALS} subjects I want to take' (27% vs. 16%). They are half as likely as others to say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (24% vs. 51%).

Disability

More than two in five young people with a disability say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (43%), but one in five say 'I haven't thought about this yet' (20%). A further one in five say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' (19%), with around the same proportion saying 'I don't know what {GCSE / NATIONALS} subjects I want to take' (18%).

There are no significant differences between young people with a disability and others aged 11-13 asked this question.

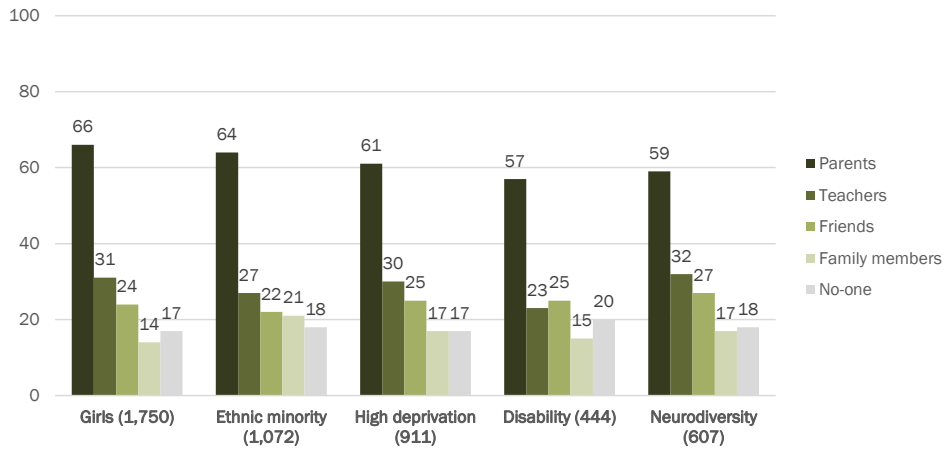
Neurodiversity

Half of young people with a neurodiverse condition say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (49%), and one in five say 'I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet' (21%). 17% say 'I don't know what {GCSE / NATIONALS} subjects I want to take' and one in seven say 'I haven't thought about this yet' (14%).

Young people with a neurodiverse condition are much more likely than others to say 'I have agreed what {GCSE / NATIONALS} subjects I am taking with my school' (49% vs. 35%).

Figure 5. Who, if anyone helped / will help you decide what subjects you chose / will choose for {GCSE / NATIONALS}? (Q5)

Base: 2,450 participants aged 11-19



Overall

- A majority of around two thirds of all sub-groups (57% to 66%) relied on 'Parent(s) or carer(s)' to help them decide what subjects to choose for their exams.
- 'Teachers' are the next most likely advisors for around three in ten of most sub-groups (23% to 32%).
- Around one in four turned to their 'Friends' for help with choosing their exam subjects (22% to 27%), whilst a minority relied on 'Other family members' (14% to 21%), and just under a fifth said they relied on 'No-one' (17% to 20%).

By age

- Children aged 11-13 are more likely than their older counterparts to say they will / did rely on 'Parent(s) or carer(s)' to help choose their exam subjects (72% vs. 62% of 14-16s and 59% of 17-19 year olds), and also more likely to turn to 'Other family members' (25% vs. 12% and 10% respectively).
- They are less likely than older children to have turned to 'No-one' (12% compared to 19% of 14-16s and 20% of 17-19s).

Girls

Two in three girls (66%) say their 'Parent(s) or carer(s)' are most important when choosing their exam subjects, with other mentions trailing some distance behind. Only three in ten (31%) mention their 'Teachers', one in four (24%) their 'Friends', and one in seven mention 'Other family members' (14%). 17% of girls will / have turned to 'No-one' for help choosing their exam subjects.

Girls are more likely than other young people to say they have or will rely on 'Teachers' when it comes to making decisions about their exam subjects (31% vs. 25%).

Ethnic minority

Around two in three of those from ethnic minority backgrounds say their 'Parent(s) or carer(s)' are most important when choosing their exam subjects (64%). Only just over one in four (27%) mention their 'Teachers', and one in five (22%) turn to their 'Friends', or 'Other family members' (21%). Almost one in five (18%) will or have turned to 'No-one' for help choosing their exam subjects.

Those from ethnic minority backgrounds are almost twice more likely than others to say they have or will rely on 'Other family members' when it comes to making decisions about their exam subjects (21% vs. 12%).

High deprivation

Three in five of those living in highly deprived areas say their 'Parent(s) or carer(s)' are most important when choosing their exam subjects (61%), with half as many mentioning other helpers. Three in ten mention their 'Teachers' (30%), and one in four (25%) mention their 'Friends', and 17% mention 'Other family members'. 17% will or have turned to 'No-one' for help choosing their exam subjects.

There are no significant differences between those young people living in highly deprived areas and other young people, when asked this question.

Disability

Just under three in five young people with a disability say their 'Parent(s) or carer(s)' are most important when choosing their exam subjects (57%). One in four mention their 'Friends' (25%) or 'Teachers' (23%), and 15% turn to 'Other family members' for help. One in five (20%) will or have turned to 'No-one' for help choosing their exam subjects.

Young people with a disability are less likely than others to rely on their 'Parent(s) or carer(s)' when it comes to making decisions about their exam subjects (57% vs. 65%).

Neurodiversity

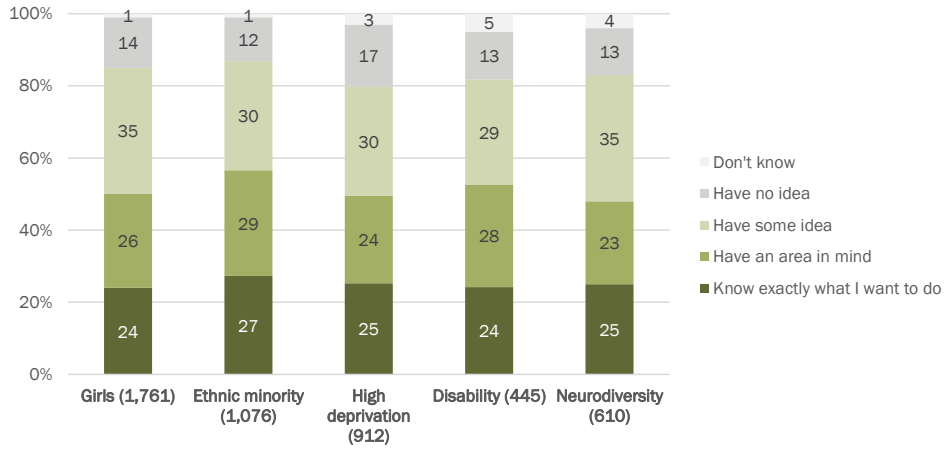
Three in five young people with a neurodiverse condition say their 'Parent(s) or carer(s)' are most important when choosing their exam subjects (59%), whilst one in three (32%) mention their 'Teachers', and just fewer than this their 'Friends' (27%). 17% turn to 'Other family members' for help, and 18% have turned to 'No-one' for help choosing their exam subjects.

Young people with a neurodiverse condition are more likely than others to say they 'Don't know' in response to this question (7% vs. 3%).

Plans for the future

Figure 6. Which of these statements best describes you? (Q2)

Base: 2,466 participants aged 11-19



Overall

- Generally, around a third say 'I have some ideas of what types of job or career I want in the future' (29% to 35%).
- Slightly fewer say 'I have a particular area of work in mind for the future' (23% to 29%).

- Around a quarter say ‘I know exactly what job I want in the future’ (24% to 27%).
- A minority of around one in seven say (12% to 17%) ‘I have no idea what job or career I want in the future’.
- Very few say they ‘Don’t know’ (1% to 5%).

By age

- Young people aged 14-16 are more likely than their younger and older counterparts to say ‘I have a particular area of work in mind for the future’ (30% vs. 24% of 11-13 and 17-19s).

Girls

One in three girls say ‘I have some ideas of what types of job or career I want in the future’ (35%). Around one in four (26%) say ‘I have a particular area of work in mind for the future’, or ‘I know exactly what job I want in the future’ (24%). One in seven (14%) say ‘I have no idea what job or career I want in the future’.

Girls are more likely than others to say ‘I have some ideas of what types of job or career I want in the future’ (35% vs. 30% respectively). Girls (1%) are also less likely than others (4%) to say they ‘Don’t know’.

Ethnic minority

Three in ten young people from ethnic minority backgrounds say ‘I have some ideas of what types of job or career I want in the future’ (30%) or ‘I have a particular area of work in mind for the future’ (29%). Around one in four (27%) say ‘I know exactly what job I want in the future’, and one in eight (12%) say ‘I have no idea what job or career I want in the future’.

Those from ethnic minority backgrounds appear more focused than other young people. They are more likely to say ‘I know exactly what job I want in the future’ (27% vs. 21% respectively), or that ‘I have a particular area of work in mind for the future’ (29% vs. 24%). They are less likely to say ‘I have no idea what job or career I want in the future’ (12% vs. 17%). They are also less likely to say they ‘Don’t know’ (1% vs. 4%).

High deprivation

Three in ten young people living in highly deprived areas say ‘I have some ideas of what types of job or career I want in the future’ (30%). One in four (25%) say ‘I know exactly what job I want in the

future', or 'I have a particular area of work in mind for the future' (24%). One in six (17%) say 'I have no idea what job or career I want in the future'.

Those living in areas of high deprivation (deciles 1-3 on the Indices of Multiple Deprivation) are more likely than others to say 'I have no idea what job or career I want in the future' (17% vs. 13% respectively). They are also less likely to say 'I have a particular area of work in mind for the future' (24% vs. 28% of others).

Disability

Around three in ten young people with a disability say 'I have some ideas of what types of job or career I want in the future' (29%) or 'I have a particular area of work in mind for the future' (28%). Around one in four (24%) say 'I know exactly what job I want in the future', and one in eight (13%) say 'I have no idea what job or career I want in the future'.

Young people with a disability are more likely than others to say they 'Don't know' when asked this question (5% vs. 2% respectively).

Neurodiversity

One in three young people with a neurodiverse condition say 'I have some ideas of what types of job or career I want in the future' (35%). Around one in four (25%) say 'I know exactly what job I want in the future', or 'I have a particular area of work in mind for the future' (23%). One in eight (13%) say 'I have no idea what job or career I want in the future'.

There are no differences between those young people with a neurodiverse condition, and other young people, when asked this question.

What's important in a career?

Figure 7. Below is a list of things that you might consider when choosing a job / career. Which, if any, of these are important to you? Please choose up to five responses. (Q3)

Base: 2,467 participants aged 11-19

Girls	Ethnic minority	High deprivation	Disability	Neurodiversity
n=1,762	n=1,077	n=913	n=446	n=610
Something love 62%	**Lots of money** 68%	**Lots of money** 59%	**Something love** 58%	**Something love** 57%
Lots of money 61%	**Something love** 53%	**Something love** 57%	**Lots of money** 49%	**Lots of money** 47%
Friendly team 36%	**Free time** 29%	**Friendly team** 32%	**Friendly team** 31%	**Friendly team** 33%

Free time 30%	**Friendly team** 28%	**Learn new skills** 29%	**Free time** 28%	**Learn new skills** 29%
Learn new skills 25%	**Learn new skills** 28%	**Free time** 25%	**Learn new skills** 24%	**Help others** 25%
Make difference 25%	**Use my skills** 24%	**Help others** 22%	**Help others** 22%	**Use my skills** 22%
Help others 24%	**Travel overseas** 23%	**Use my skills** 21%	**Use my skills** 18%	**Free time** 22%
Travel overseas 23%	**Make difference** 21%	**Make difference** 21%	**Make difference** 17%	**Make difference** 20%
"Good job" 21%	**Help others** 19%	**Travel overseas** 21%	**Close to home** 16%	**"Good job"** 16%
Use my skills 20%	**"Good job"** 19%	**"Good job"** 20%	**Job security** 16%	**Close to home** 16%
Impressive title 14%	**Impressive title** 18%	**Impressive title** 16%	**"In charge"** 16%	**Doing different** 16%
Live new place 14%	**Progress quickly** 16%	**Progress quickly** 16%	**"Good job"** 15%	**Travel overseas** 15%
Job security 14%	**Live new place** 15%	**Live new place** 15%	**Travel overseas** 15%	**Impressive title** 14%
Close to home 13%	**Close to home** 15%	**Close to home** 13%	**Progress quickly** 14%	**Well respected** 14%
Doing different 12%	**Job security** 14%	**"In charge"** 12%	**Impressive title** 13%	**"In charge"** 13%
Progress quickly 11%	**"In charge"** 12%	**Doing different** 11%	**Live new place** 12%	**Job security** 12%
Well respected 10%	**Well respected** 10%	**Well respected** 11%	**Doing different** 9%	**Live new place** 11%
"In charge" 10%	**Doing different** 10%	**Job security** 9%	**Well respected** 6%	**Progress quickly** 9%
Parent footsteps 3%	**Parent footsteps** 4%	**Parent footsteps** 5%	**Parent footsteps** 5%	**Parent footsteps** 4%
***Other** 1%*	***Other** 1%*	***Other** 1%*	***Other** 1%*	***Other** 1%*
***Don't know** 2%*	***Don't know** 2%*	***Don't know** 3%*	***Don't know** 3%*	***Don't know** 4%*

Overall'

- 'Do something I love' is at the top of the list for three of five sub-groups (57% to 62%), whilst 'Earn a lot of money' is top for the other two groups (59% and 68%).
- These two options make up the top two chosen across all sub-groups.
- 'Working in a friendly team' is in the top three for four of five sub-groups (31% to 36%), with 'Having plenty of free time outside work to see family, friends or to do my hobbies' making up the top three for the other group (29%).
- 'Lets me follow in my parents' footsteps' is bottom choice for all sub-groups (3% to 5%), with 'Working for a well-known / respected employer' in the bottom three for four of five sub-groups (6% to 11%), and a mixture of other responses completing the bottom three.

By age

- Children aged 11-13 are more likely than their older counterparts to choose 'Be seen as having a "good job" by my family and friends' (27% vs. 16% of 14-16s and 14% of 17-19s), but less likely to choose 'Opportunities to progress quickly' (10% vs. 16% and 15%), or 'Offering job-security (so I feel confident that I'll always have a job)' (7% vs. 12% and 14% respectively).
- Those aged 14-16 in the middle age group are more likely to mention 'Having plenty of free time outside work to see family, friends or to do my hobbies' (35% vs. 28% of 11-13 and 23% of 17-19s), 'Opportunities to use the skills I already have' (26% vs. 21% and 20%), 'Opportunities to travel overseas' (25% vs. 18% of others), or 'Opportunity to live somewhere new' (18% vs. 13% of 11-13s and 11% of 17-19s).
- The oldest aged 17-19 are less likely than younger children to mention 'Earn a lot of money' (52% vs. 65% of younger children), 'Do something I love' (47% vs. 59% of 11-13s and 64% of 14-16s), 'Having plenty of free time outside work to see family, friends or to do my hobbies' (23% vs. 28% and 35% respectively), or 'Have an impressive job title' (12% vs. 18% and 17%).

Girls

Girls are most likely to mention 'Do something I love' (62%), 'Earn a lot of money' (61%), or 'Working in a friendly team' (36%).

Girls are more likely than other young people to choose 'Do something I love' (62% vs. 52%), 'Working in a friendly team' (36% vs. 27%), 'Doing something that makes a difference to people's lives' (25% vs. 15%), 'Opportunities to help other people' (24% vs. 16%), 'Opportunities to travel overseas' (23% vs. 18%), or 'Offering job-security (so I feel confident that I'll always have a job)' (14% vs. 10%) . Girls are less likely to mention 'Opportunities to progress quickly' (11% vs. 16%) or 'Doing something where I am "in charge"' (10% vs. 15%).

Ethnic minority

Nearly seven in ten of those from ethnic minority backgrounds mention that they want to 'Earn a lot of money' (68%), whilst half (53%) would like to 'Do something I love', and three in ten mention 'Having plenty of free time outside work to see family, friends or to do my hobbies' (29%).

Young people from ethnic minority backgrounds are more likely than others to say they would like to 'Earn a lot of money' (68% vs. 55%), have 'Opportunities to travel overseas' (23% vs 19%), 'Have an impressive job title' (18% vs. 14%), have 'Opportunities to progress quickly' (16% vs. 12%), or 'Offering job-security (so I feel confident that I'll always have a job)' (14% vs. 10%). They are less

likely to want to ‘Do something I love’ (53% vs. 60%), or want to be ‘Working in a friendly team’ (28% vs. 33%).

High deprivation

Three in five of those living in highly deprived areas say they want to ‘Earn a lot of money’ (59%), with almost as many (57%) saying they want to ‘Do something I love’, with one in three (32%) hoping they will be ‘Working in a friendly team’.

Young people living in highly deprived areas are more likely than others to want ‘Opportunities to learn new skills’ (29% vs. 24%), or ‘Opportunities to progress quickly’ (16% vs. 13%). They are less likely than others to place importance on ‘Having plenty of free time outside work to see family, friends or to do my hobbies’ (25% vs. 32%), or ‘Offering job-security (so I feel confident that I’ll always have a job)’ (9% vs. 13%).

Disability

Just under three in five young people with a disability say they want to ‘Do something I love’ (58%), whilst half (49%) want to ‘Earn a lot of money’, and three in ten hope to be ‘Working in a friendly team’ (31%).

Young people with a disability are much less likely than others to want to ‘Earn a lot of money’ (49% vs. 63%), or have ‘Opportunities to travel overseas’ (15% vs. 21%).

Neurodiversity

More than half of young people with a neurodiverse condition say they want to ‘Do something I love’ (57%), whilst almost half (47%) want to ‘Earn a lot of money’, and one in three hope to be ‘Working in a friendly team’ (33%).

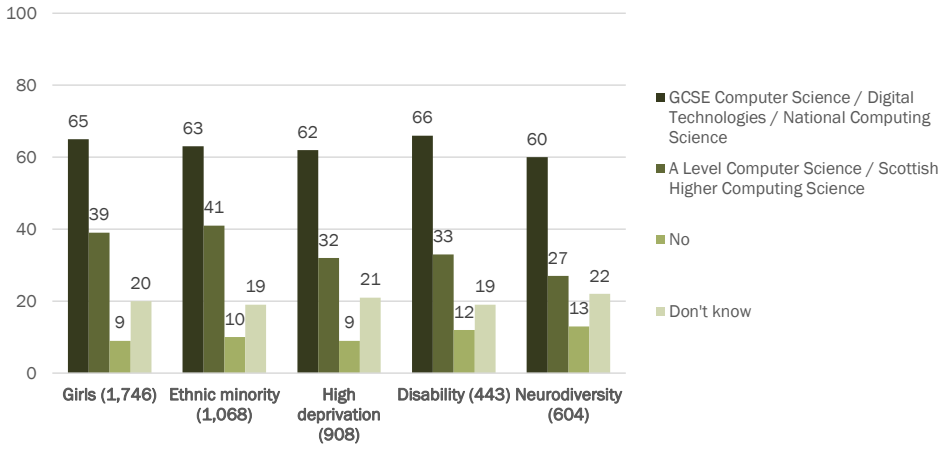
Young people with a neurodiverse condition are more likely than others to put value on ‘Opportunities to help other people’ (25% vs. 19%), having ‘A job where I’d be doing something different every day, week or year’ (16% vs. 10%), or ‘Working for a well-known / respected employer’ (14% vs. 10%). They are much less likely than their counterparts to say they want to ‘Earn a lot of money’ (47% vs. 64%), or value ‘Having plenty of free time outside work to see family, friends or to do my hobbies’ (22% vs. 29%), have ‘Opportunities to travel overseas’ (15% vs. 22%), or ‘Opportunities to progress quickly’ (9% vs. 15%).

ENGAGEMENT IN COMPUTING

In school and college

Figure 8. **Does / Did your school or college offer any of the following qualifications? For this question, we only need to know if these courses are available, we don't need to know if you are studying them. (Q8)**

Base: 2,441 participants aged 11-13



Overall

- Around two in three (60% to 66%) across all sub-groups say their school offers / offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science'.
- Between one in four and two in five (27% to 41%) are aware their school offers / offered 'A Level Computer Science / Scottish Higher Computing Science'.
- Around one in ten (9% to 13%) say their school offered none of these, but one in five did not know.

By age

- Young people aged 11-13 are the most likely to say 'Don't know' at this question (43% vs. 18% of 14-16s and 7% of 17-19s). They are also least likely to say their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (47% vs. 67% and 62% respectively), or 'A Level Computer Science / Scottish Higher Computing Science' (16% vs. 40% and 47% respectively).
- 17-19 year olds are most likely to say their college offered 'A Level Computer Science / Scottish Higher Computing Science' (47% vs. 40% of 14-16s and 16% of 11-13s), or that it didn't offer any of these (16% vs. 5% and 8% respectively). They are also least likely to say they 'Don't know' (7% vs. 18% and 43% respectively).

Girls

Two in three girls are aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (65%), and two in five that it offered 'A Level Computer Science / Scottish Higher Computing Science' (39%). One in ten (9%) say it offered neither of these, but one in five (20%) say they 'Don't know'.

Girls are more likely than other young people to be aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (65% vs. 52% of others), or 'A Level Computer Science / Scottish Higher Computing Science' (39% vs. 29%). They are also less likely to say they 'Don't know' (20% vs. 27%).

Ethnic minority

Two in three of those from ethnic minority backgrounds are aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (63%), and two in five that it offered 'A Level Computer Science / Scottish Higher Computing Science' (41%). One in ten (10%) say it offered neither of these, but one in five (19%) say they 'Don't know'.

Young people from ethnic minority backgrounds are more likely than other young people to be aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (63% vs. 57% of others), or 'A Level Computer Science / Scottish Higher Computing Science' (41% vs. 30%). They are also less likely to say they 'Don't know' (19% vs. 25%).

High deprivation

Three in five young people living in areas of high deprivation are aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (62%), and one in three that it offered 'A Level Computer Science / Scottish Higher Computing Science' (32%). One in ten (9%) say it offered neither of these, but one in five (21%) say they 'Don't know'.

Young people living in areas of high deprivation are more likely than other young people to be aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (62% vs. 56% of others), but less likely to be aware they offer 'A Level Computer Science / Scottish Higher Computing Science' (32% vs. 37%).

Disability

Two in three young people with a disability are aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (66%), and one in three that it offered 'A Level Computer Science / Scottish Higher Computing Science' (33%). One in eight (12%) say it offered neither of these, but one in five (19%) say they 'Don't know'.

Young people with a disability are more likely than other young people to be aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (66% vs. 57% of others).

Neurodiversity

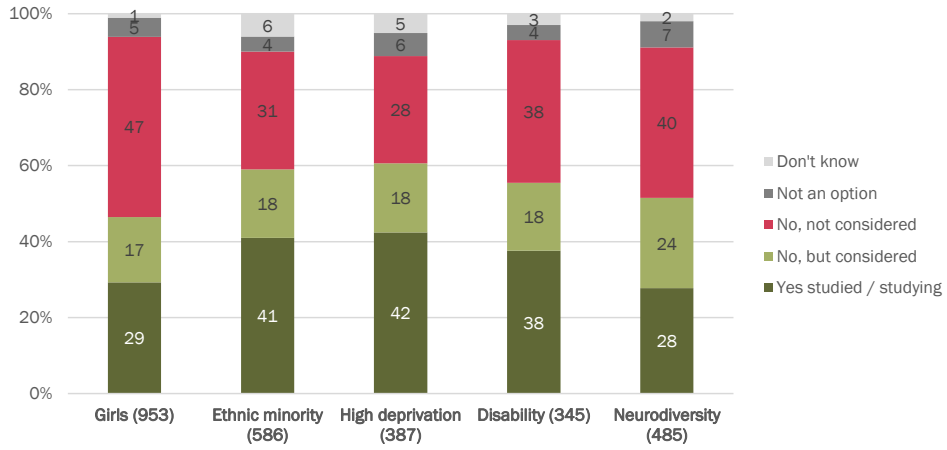
Three in five young people with a neurodiverse condition are aware their school offered 'GCSE Computer Science / Digital Technologies (media and/or programming) / National 4/5 Computing Science' (60%), and one in four that it offered 'A Level Computer Science / Scottish Higher Computing Science' (27%). One in eight (13%) say it offered neither of these, but one in five (22%) say they 'Don't know'.

Young people with a neurodiverse condition are less likely than other young people to be aware their school offered 'A Level Computer Science / Scottish Higher Computing Science' (27% vs. 36% of others).

Figure 9. Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a a/b)

a/b) Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals)

Base: 1,344 participants aged 14-19



Overall

- Between three in ten and four in ten (28% to 42%) across the sub-groups say 'Yes studied / studying' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals), and a further one in five to one in four (17% to 24%) say 'No, but I have thought about it'.
- Three in ten to around half (28% to 47%) across the sub-groups say 'No, didn't consider it at all'.
- A small minority say 'No, not an option at my school / college' (4% to 7%) or 'Don't know what this is' (1% to 6%).

By age

- 14-16 year olds are more likely than 17-19s to say 'No, didn't consider it at all' (40% vs. 34% respectively) thinking about Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals), more likely to say 'Don't know what this is' (5% vs. 2%).
- Young people aged 17-19 were more likely than those aged 14-16 to say 'No, but I have thought about it' (22% vs. 12% respectively). They are also more likely to say 'No, not an option at my school / college' (7% vs. 4% of 14-16s).

Girls

Half of girls (47%) say 'No, didn't consider it at all' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals). One in six (17%) say 'No, but I have thought about it', but three in ten (29%) say 'Yes studied / studying'. One in twenty (5%) say 'No, not an option at my school / college' but only 1% say 'Don't know what this is'.

Girls are much less likely than other young people to say 'Yes studied / studying' (29% vs. 43%), much more likely to say 'No, didn't consider it at all' (47% vs. 27%), but less likely to say 'Don't know what this is' (1% vs. 6%).

Ethnic minority

Two in five of those from ethnic minority backgrounds (41%) say 'Yes studied / studying' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals). A further one in five (18%) say 'No, but I have thought about it', but three in ten (31%) say 'No, didn't consider it at all'. A minority of 4% say 'No, not an option at my school / college' but only 6% say 'Don't know what this is'.

Young people from ethnic minority backgrounds are more likely than other young people to say 'Yes studied / studying' (41% vs. 35%), less likely to say 'No, didn't consider it at all' (31% vs. 40%), but more likely to say 'Don't know what this is' (6% vs. 2%).

High deprivation

Two in five of those living in highly deprived areas (42%) say 'Yes studied / studying' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals). A further one in five (18%) say 'No, but I have thought about it', with three in ten (28%) saying 'No, didn't consider it at all'. 6% say 'No, not an option at my school / college', and 5% say 'Don't know what this is'.

Young people living in highly deprived areas are more likely than other young people to say 'Yes studied / studying' (42% vs. 33%), less likely to say 'No, didn't consider it at all' (28% vs. 42%), but more likely to say 'Don't know what this is' (5% vs. 2%).

Disability

Two in five young people with a disability (38%) say 'Yes studied / studying' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals). A further one in five (18%) say 'No, but I have thought about it', but two in five (38%) say 'No, didn't

consider it at all'. 4% say 'No, not an option at my school / college', and 3% say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

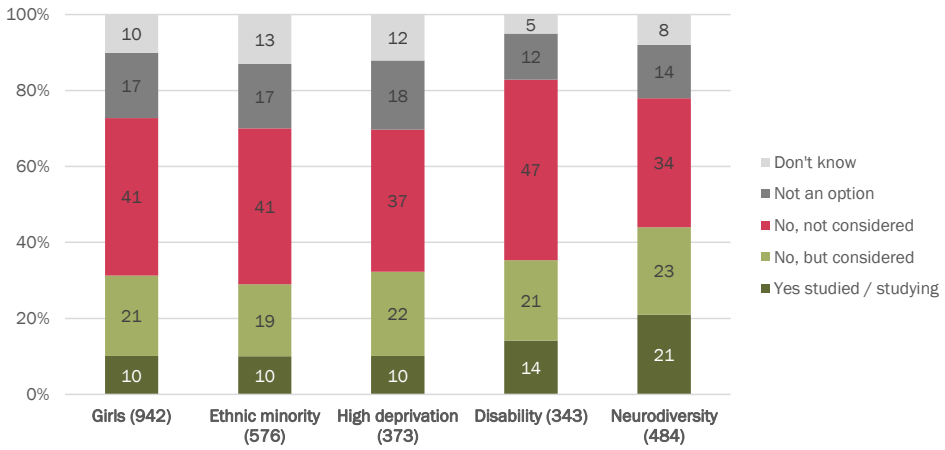
Three in ten young people with a neurodiverse condition (28%) say 'Yes studied / studying' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE / Nationals), with a further one in four (24%) say 'No, but I have thought about it'. However, two in five (40%) say 'No, didn't consider it at all'. 7% say 'No, not an option at my school / college', and 2% say 'Don't know what this is'.

Young people with a neurodiverse condition are less likely than others to say 'Yes studied / studying' (28% vs. 37%), but more likely to say 'No, but I have thought about it' (24% vs. 16%).

Figure 10. **Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a c)**

c) iMedia / Creative iMedia (Cambridge Nationals)

Base: 1,328 participants aged 14-19



Overall

- Around one in ten to two in ten (10% to 21%) across the sub-groups say 'Yes studied / studying' when asked about iMedia / Creative iMedia (Cambridge Nationals). A further one in five to one in four say 'No, but I have thought about it' (19% to 23%).
- One in three to around half (34% to 47%) across the sub-groups say 'No, didn't consider it at all'.
- Around one in six (12% to 18%) say 'No, not an option at my school / college', with around one in eight saying 'Don't know what this is' (5% to 13%).

By age

- 14-16 year olds are more likely than 17-19s to say 'No, didn't consider it at all' (46% vs. 33% respectively) thinking about iMedia / Creative iMedia (Cambridge Nationals), more likely to say 'Don't know what this is' (16% vs. 8%).
- Young people aged 17-19 were more likely than those aged 14-16 to say 'No, but I have thought about it' (24% vs. 16% respectively). They are also more likely to say 'No, not an option at my school / college' (21% vs. 11% of 14-16s).

Girls

Two in five girls (41%) say 'No, didn't consider it at all' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in five (21%) say 'No, but I have thought about it', with one in ten (10%) saying 'Yes studied / studying' this subject. One in six (17%) say 'No, not an option at my school / college', with one in ten (10%) saying 'Don't know what this is'.

Girls are less likely than other young people to say 'Yes studied / studying' (10% vs. 16%).

Ethnic minority

Two in five of those from ethnic minority backgrounds (41%) say 'No, didn't consider it at all' when asked about iMedia / Creative iMedia (Cambridge Nationals), with one in five (19%) saying 'No, but I have thought about it'. One in ten (10%) say 'Yes studied / studying'. One in six (17%) say 'No, not an option at my school / college' and one in eight (13%) say 'Don't know what this is'.

Young people from ethnic minority backgrounds are less likely than other young people to say 'Yes studied / studying' (10% vs. 15%).

High deprivation

More than one in three of those living in highly deprived areas (37%) say 'No, didn't consider it at all' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in five (22%) say 'No, but I have thought about it', with one in ten (10%) saying 'Yes studied / studying'. One in five (18%) say 'No, not an option at my school / college', and one in eight (12%) say 'Don't know what this is'.

Young people living in highly deprived areas are less likely than other young people to say 'Yes studied / studying' (10% vs. 15%).

Disability

Almost half of young people with a disability (47%) say 'No, didn't consider it at all' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in five (21%) say 'No, but I have thought about it', with one in seven (14%) saying 'Yes studied / studying'. One in eight (12%) say 'No, not an option at my school / college', and 5% say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

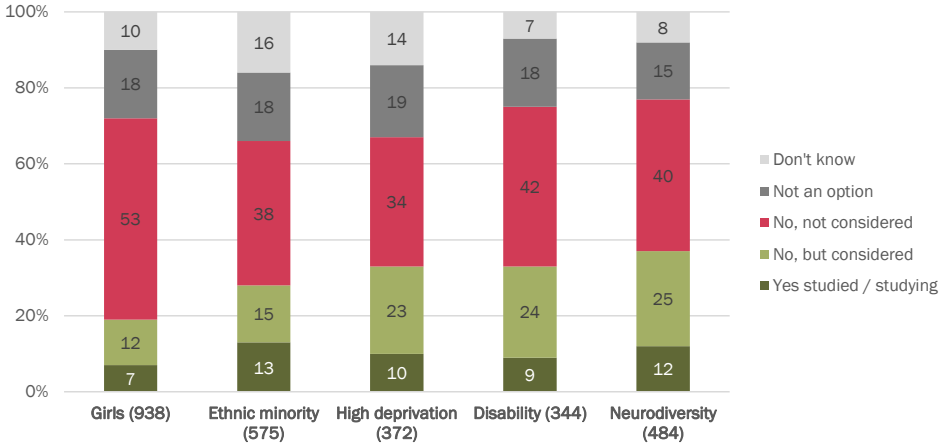
One in three young people with a neurodiverse condition (34%) say 'No, didn't consider it at all' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in four (23%) say 'No, but I have thought about it', and one in five (21%) say 'Yes studied / studying'. One in seven (14%) say 'No, not an option at my school / college', and 8% say 'Don't know what this is'.

Young people with a neurodiverse condition are twice more likely than others to say 'Yes studied / studying' (21% vs. 10%).

Figure 11. **Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a d)**

d) IT (Cambridge Nationals)

Base: 1,323 participants aged 14-19



Overall

- Around one in ten (7% to 13%) across most sub-groups say 'Yes studied / studying' when asked about IT (Cambridge Nationals), with up to a further one in four saying 'No, but I have thought about it' (12% to 25%).
- One in three to around half (34% to 53%) across the sub-groups say 'No, didn't consider it at all'.
- Around one in five say 'No, not an option at my school / college' (15% to 19%), with around one in eight saying 'Don't know what this is' (7% to 16%).

By age

- 14-16 year olds are more likely than 17-19s to say 'No, didn't consider it at all' (48% vs. 40% respectively) thinking about IT (Cambridge Nationals), more likely to say 'Don't know what this is' (18% vs. 8%).
- Young people aged 17-19 were more likely than those aged 14-16 to say 'Yes studied / studying' (11% vs. 8%), or 'No, but I have thought about it' (21% vs. 15% respectively). They are also more likely to say 'No, not an option at my school / college' (20% vs. 12% of 14-16s).

Girls

More than half of girls (53%) say 'No, didn't consider it at all' when asked about IT (Cambridge Nationals). One in eight (12%) say 'No, but I have thought about it', with fewer than one in ten (7%) saying 'Yes studied / studying' this subject. One in five (18%) say 'No, not an option at my school / college', with one in ten (10%) saying 'Don't know what this is'.

Girls are half as likely as other young people to say 'Yes studied / studying' (7% vs. 13%), or 'No, but I have thought about it' (12% vs. 23%). They are much more likely to say 'No, didn't consider it at all' (53% vs. 35%), but less likely to say 'Don't know what this is' (10% vs. 16%).

Ethnic minority

Two in five of those from ethnic minority backgrounds (38%) say 'No, didn't consider it at all' when asked about IT (Cambridge Nationals), with one in six (15%) saying 'No, but I have thought about it', and one in eight (13%) say 'Yes studied / studying'. One in five (18%) say 'No, not an option at my school / college' and one in six (16%) say 'Don't know what this is'.

Young people from ethnic minority backgrounds are almost twice more likely than other young people to say 'Yes studied / studying' (13% vs. 8%), but less likely to say 'No, but I have thought about it' (15% vs. 20%) or 'No, didn't consider it at all' (38% vs. 45%). They are more likely to say 'Don't know what this is' (16% vs. 11%).

High deprivation

One in three of those living in highly deprived areas (34%) say 'No, didn't consider it at all' when asked about IT (Cambridge Nationals). One in four (23%) say 'No, but I have thought about it', with one in ten (10%) saying 'Yes studied / studying'. One in five (19%) say 'No, not an option at my school / college', and one in seven (14%) say 'Don't know what this is'.

Young people living in highly deprived areas are more likely than other young people to say 'No, but I have thought about it' (23% vs. 14%), less likely to say 'No, didn't consider it at all' (34% vs. 50%), more likely to say 'Don't know what this is' (14% vs. 10%).

Disability

Two in five young people with a disability (42%) say 'No, didn't consider it at all' when asked about IT (Cambridge Nationals). One in four (24%) say 'No, but I have thought about it', with one in ten (9%) saying 'Yes studied / studying'. One in five (18%) say 'No, not an option at my school / college', and 7% say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

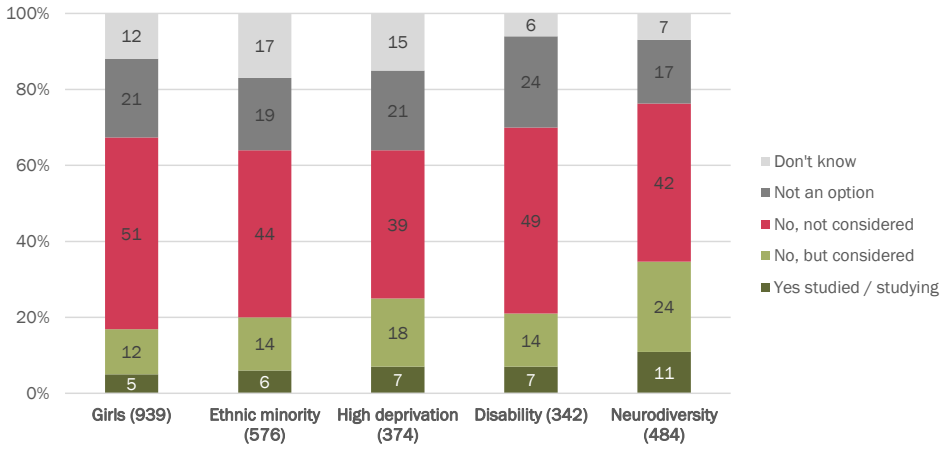
Two in five young people with a neurodiverse condition (40%) say 'No, didn't consider it at all' when asked about IT (Cambridge Nationals). One in four (25%) say 'No, but I have thought about it', and one in eight (12%) say 'Yes studied / studying'. One in seven (15%) say 'No, not an option at my school / college', and 8% say 'Don't know what this is'.

Young people with a neurodiverse condition are more likely than others to say 'No, but I have thought about it' (25% vs. 16%).

Figure 12. **Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a e)**

e) Digital Information Technology (BTEC)

Base: 1,322 participants aged 14-19



Overall

- Up to one in nine (5% to 11%) across the sub-groups say 'Yes studied / studying' when asked about Digital Information Technology (BTEC). Up to a further one in four say 'No, but I have thought about it' (12% to 24%).
- Two in five to half (39% to 51%) across the sub-groups say 'No, didn't consider it at all'.

- Around one in five to one in four say 'No, not an option at my school / college' (17% to 24%), with fewer saying 'Don't know what this is' (7% to 17%).

By age

- 14-16 year olds are more likely than 17-19s to say 'No, didn't consider it at all' (54% vs. 39% respectively) thinking about Digital Information Technology (BTEC), more likely to say 'Don't know what this is' (19% vs. 8%).
- Young people aged 17-19 were more likely than those aged 14-16 to say 'Yes studied / studying' (10% vs. 5%), or 'No, but I have thought about it' (20% vs. 9% respectively). They are also more likely to say 'No, not an option at my school / college' (23% vs. 13% of 14-16s).

Girls

Half of girls (51%) say 'No, didn't consider it at all' when asked about Digital Information Technology (BTEC). One in eight (12%) say 'No, but I have thought about it', with one in twenty (5%) saying 'Yes studied / studying' this subject. One in five (21%) say 'No, not an option at my school / college', with one in eight (12%) saying 'Don't know what this is'.

Girls are half as likely as other young people to say 'Yes studied / studying' (5% vs. 10%), less likely to say 'No, but I have thought about it' (12% vs. 18%). They are more likely to say 'No, didn't consider it at all' (51% vs. 41%), but less likely to say 'No, not an option at my school / college' (21% vs. 15%).

Ethnic minority

More than two in five of those from ethnic minority backgrounds (44%) say 'No, didn't consider it at all' when asked about Digital Information Technology (BTEC), with one in seven (14%) saying 'No, but I have thought about it', and only 6% saying 'Yes studied / studying'. One in five (19%) say 'No, not an option at my school / college' and one in six (17%) say 'Don't know what this is'.

Young people from ethnic minority backgrounds are more likely than other young people to say 'Don't know what this is' (17% vs. 11%).

High deprivation

Two in five of those living in highly deprived areas (39%) say 'No, didn't consider it at all' when asked about Digital Information Technology (BTEC). One in five (18%) say 'No, but I have thought about it', with fewer than one in ten (7%) saying 'Yes studied / studying'. One in five (21%) say 'No, not an option at my school / college', and one in seven (15%) say 'Don't know what this is'.

Young people living in highly deprived areas are less likely than other young people to say 'No, didn't consider it at all' (39% vs. 50%), more likely to say 'No, not an option at my school / college' (21% vs. 17%).

Disability

Half of young people with a disability (49%) say 'No, didn't consider it at all' when asked about Digital Information Technology (BTEC). One in seven (14%) say 'No, but I have thought about it', with fewer than one in ten (7%) saying 'Yes studied / studying'. One in four (24%) say 'No, not an option at my school / college', and 6% say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

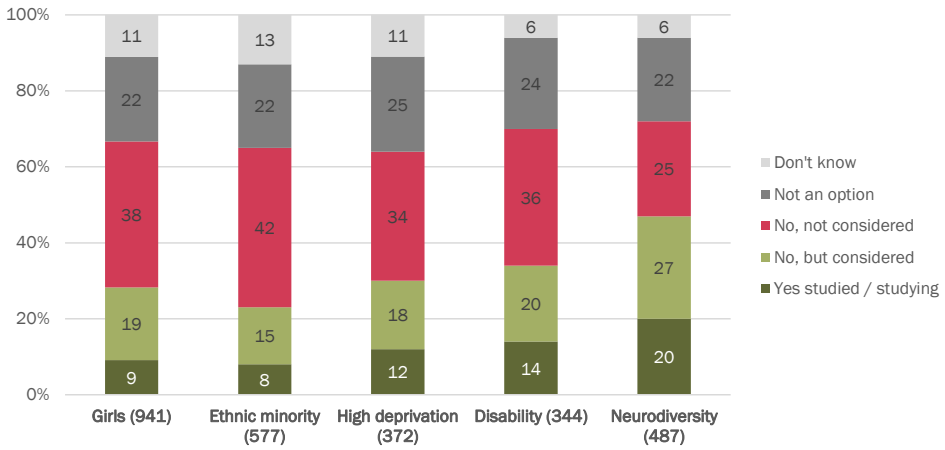
Two in five young people with a neurodiverse condition (42%) say 'No, didn't consider it at all' when asked about Digital Information Technology (BTEC). One in four (24%) say 'No, but I have thought about it', and one in nine (11%) say 'Yes studied / studying'. One in six (17%) say 'No, not an option at my school / college', and 7% say 'Don't know what this is'.

Young people with a neurodiverse condition are more likely than others to say 'No, but I have thought about it' (24% vs. 13%), half as likely to say 'Don't know what this is' (7% vs. 14%).

Figure 13. **Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a f)**

f) Creative Media Production (BTEC)

Base: 1,329 participants aged 14-19



Overall

- Up to one in five (8% to 20%) across the sub-groups say 'Yes studied / studying' when asked about Creative Media Production (BTEC). Up to a further one in four (15% to 27%) say 'No, but I have thought about it'.
- One in four to two in five (25% to 42%) across the sub-groups say 'No, didn't consider it at all'.
- Around one in five to one in four say 'No, not an option at my school / college' (22% to 25%), with fewer saying 'Don't know what this is' (6% to 13%).
- **By age**
- 14-16 year olds are more likely than 17-19s to say 'No, didn't consider it at all' (45% vs. 32% respectively) thinking about Creative Media Production (BTEC), more likely to say 'Don't know what this is' (17% vs. 7%).
- Young people aged 17-19 were more likely than those aged 14-16 to say 'No, but I have thought about it' (23% vs. 12% respectively). They are also more likely to say 'No, not an option at my school / college' (25% vs. 16% of 14-16s).

Girls

Two in five girls (38%) say 'No, didn't consider it at all' when asked about Creative Media Production (BTEC). One in five (19%) say 'No, but I have thought about it', with one in ten (9%) saying 'Yes studied / studying' this subject. One in five (22%) say 'No, not an option at my school / college', with one in nine (11%) saying 'Don't know what this is'.

Girls are less likely than other young people to say 'Yes studied / studying' (9% vs. 15%).

Ethnic minority

Two in five of those from ethnic minority backgrounds (42%) say 'No, didn't consider it at all' when asked about Creative Media Production (BTEC), with one in seven (15%) saying 'No, but I have thought about it', and only 8% saying 'Yes studied / studying'. One in five (22%) say 'No, not an option at my school / college' and one in eight (13%) say 'Don't know what this is'.

Young people from ethnic minority backgrounds are less likely than other young people to say 'Yes studied / studying' (8% vs. 14%), 'No, but I have thought about it' (15% vs. 21%), and more likely to say 'No, didn't consider it at all' (42% vs. 35%).

High deprivation

One in three of those living in highly deprived areas (34%) say 'No, didn't consider it at all' when asked about Creative Media Production (BTEC). One in five (18%) say 'No, but I have thought about it', with one in eight (12%) saying 'Yes studied / studying'. One in four (25%) say 'No, not an option at my school / college', and one in nine (11%) say 'Don't know what this is'.

Young people living in highly deprived areas are less likely than other young people to say 'No, didn't consider it at all' (34% vs. 40%), more likely to say 'No, not an option at my school / college' (25% vs. 19%).

Disability

One in three young people with a disability (36%) say 'No, didn't consider it at all' when asked about Creative Media Production (BTEC), with one in five (20%) saying 'No, but I have thought about it', one in seven (14%) saying 'Yes studied / studying'. One in four (24%) say 'No, not an option at my school / college', and 6% say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

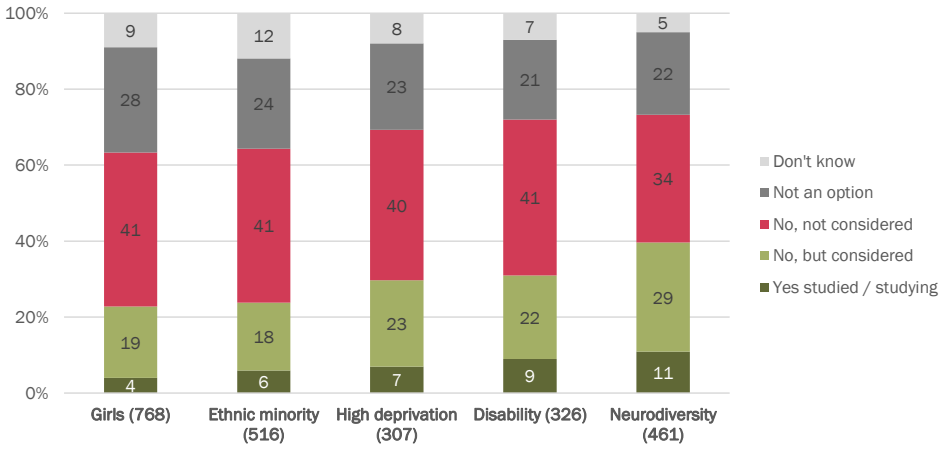
One in four young people with a neurodiverse condition (25%) say 'No, didn't consider it at all' when asked about Creative Media Production (BTEC), but more than one in four (27%) say 'No, but I have thought about it', and one in five (20%) say 'Yes studied / studying'. One in five (22%) say 'No, not an option at my school / college', and 6% say 'Don't know what this is'.

Young people with a neurodiverse condition are twice more likely than others to say 'Yes studied / studying' (20% vs. 9), or 'No, but I have thought about it' (27% vs. 15%), less likely to say 'No, didn't consider it at all' (25% vs. 42%), or 'Don't know what this is' (6% vs. 12%).

Figure 14. **Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a g)**

g) Digital Production, Design and Development (T Level)

Base: 1,130 participants aged 16-19



Overall

- One in nine or fewer across the sub-groups (4% to 11%) say 'Yes studied / studying' when asked about Digital Production, Design and Development (T Level), with up to three in ten (18% to 29%) saying 'No, but I have thought about it'.
- One in three to two in five (34% to 41%) across the sub-groups say 'No, didn't consider it at all'.
- Around one in five to one in four say 'No, not an option at my school / college' (21% to 28%), with fewer saying 'Don't know what this is' (5% to 12%).

By age

- 16 year olds are less likely than 17-19s to say 'Yes studied / studying' (4% vs. 10%), more likely to say 'No, didn't consider it at all' (52% vs. 35% respectively) thinking about Digital Production, Design and Development (T Level). But they are less likely to say 'No, not an option at my school / college'(8% vs. 27%).

Girls

Two in five girls (41%) say 'No, didn't consider it at all' when asked about Digital Production, Design and Development (T Level). One in five (19%) say 'No, but I have thought about it', with only 4% saying 'Yes studied / studying' this subject. Three in ten (28%) say 'No, not an option at my school / college', with one in ten (9%) saying 'Don't know what this is'.

Girls are less likely than other young people to say 'Yes studied / studying' (4% vs. 12%), more likely to say 'No, not an option at my school / college' (28% vs. 18%).

Ethnic minority

Two in five of those from ethnic minority backgrounds (41%) say 'No, didn't consider it at all' when asked about Digital Production, Design and Development (T Level), with one in five (18%) saying 'No, but I have thought about it', and only 6% saying 'Yes studied / studying'. One in four (24%) say 'No, not an option at my school / college' and one in eight (12%) say 'Don't know what this is'.

Young people from ethnic minority backgrounds are less likely than other young people to say 'Yes studied / studying' (6% vs. 10%), 'No, but I have thought about it' (18% vs. 25%), and more likely to say 'Don't know what this is' (12% vs. 7%).

High deprivation

Two in five of those living in highly deprived areas (40%) say 'No, didn't consider it at all' when asked about Digital Production, Design and Development (T Level). One in four (23%) say 'No, but I have thought about it', with 7% saying 'Yes studied / studying'. One in four (23%) say 'No, not an option at my school / college', and 8% say 'Don't know what this is'.

There are no significant differences between young people living in highly deprived areas and others for this question.

Disability

Two in five young people with a disability (41%) say 'No, didn't consider it at all' when asked about Digital Production, Design and Development (T Level), with one in five (22%) saying 'No, but I have thought about it', one in ten (9%) saying 'Yes studied / studying'. One in five (21%) say 'No, not an option at my school / college', and 7% say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

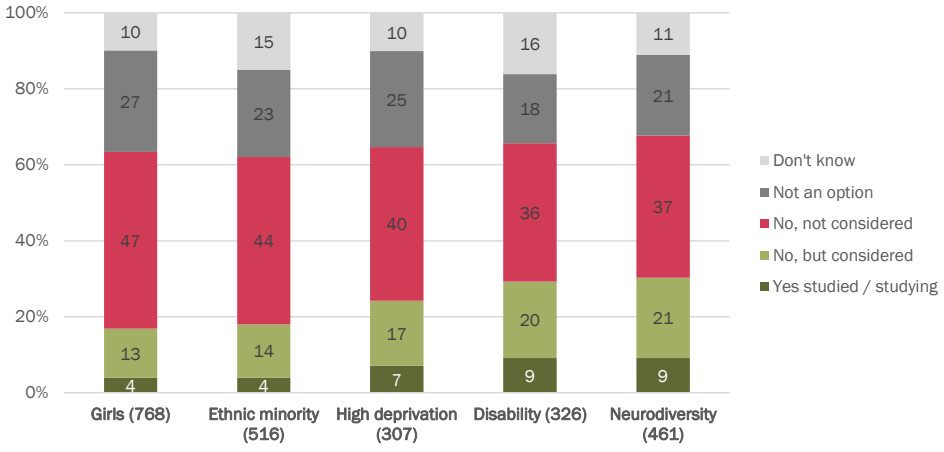
One in three young people with a neurodiverse condition (34%) say 'No, didn't consider it at all' when asked about Digital Production, Design and Development (T Level), but three in ten (29%) say 'No, but I have thought about it', and one in nine (11%) say 'Yes studied / studying'. One in five (22%) say 'No, not an option at my school / college', and 5% say 'Don't know what this is'.

Young people with a neurodiverse condition are twice more likely than others to say 'Yes studied / studying' (11% vs. 6%), more likely to say 'No, but I have thought about it' (29% vs. 18%), less likely to say 'No, didn't consider it at all' (34% vs. 44%).

Figure 15. **Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a h)**

h) Another T Level in Digital or Engineering

Base: 1,128 participants aged 16-19



Overall

- Up to one in ten across the sub-groups (4% to 9%) say 'Yes studied / studying' when asked about Another T Level in Digital or Engineering, with up to one in five (13% to 21%) saying 'No, but I have thought about it'.
- One in three to two in five (36% to 47%) across the sub-groups say 'No, didn't consider it at all'.
- Around one in five to one in four (18% to 27%) say 'No, not an option at my school / college', with fewer saying 'Don't know what this is' (11% to 16%).

By age

- Thinking about Another T Level in Digital or Engineering, 16 year olds are less likely than 17-19s to say 'Yes studied / studying' (1% vs. 8%), 'No, but I have thought about it' (13% vs. 19%), much more likely to say 'No, didn't consider it at all' (60% vs. 37% respectively). They are less likely to say 'No, not an option at my school / college'(10% vs. 27%), more likely to say 'Don't know what this is' (16% vs. 9%).

Girls

Half of girls (47%) say 'No, didn't consider it at all' when asked about Another T Level in Digital or Engineering. One in eight (13%) say 'No, but I have thought about it', with only 4% saying 'Yes studied / studying' this subject. More than one in four (27%) say 'No, not an option at my school / college', with one in ten (10%) saying 'Don't know what this is'.

Girls are less likely than other young people to say 'No, but I have thought about it' (13% vs. 22%), more likely to say 'No, not an option at my school / college' (27% vs. 19%).

Ethnic minority

Two in five of those from ethnic minority backgrounds (44%) say 'No, didn't consider it at all' when asked about Another T Level in Digital or Engineering, with one in seven (14%) saying 'No, but I have thought about it', and only 4% saying 'Yes studied / studying'. One in four (23%) say 'No, not an option at my school / college' and one in seven (15%) say 'Don't know what this is'.

Young people from ethnic minority backgrounds are less likely than other young people to say 'No, but I have thought about it' (14% vs. 21%), and more likely to say 'Don't know what this is' (15% vs. 8%).

High deprivation

Two in five of those living in highly deprived areas (40%) say 'No, didn't consider it at all' when asked about Another T Level in Digital or Engineering. One in six (17%) say 'No, but I have thought about it', with 7% saying 'Yes studied / studying'. One in four (25%) say 'No, not an option at my school / college', and one in ten (10%) say 'Don't know what this is'.

There are no significant differences between young people living in highly deprived areas and others for this question.

Disability

One in three young people with a disability (36%) say 'No, didn't consider it at all' when asked about Another T Level in Digital or Engineering, with one in five (20%) saying 'No, but I have thought about it', one in ten (9%) saying 'Yes studied / studying'. One in five (18%) say 'No, not an option at my school / college', and one in six (16%) say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

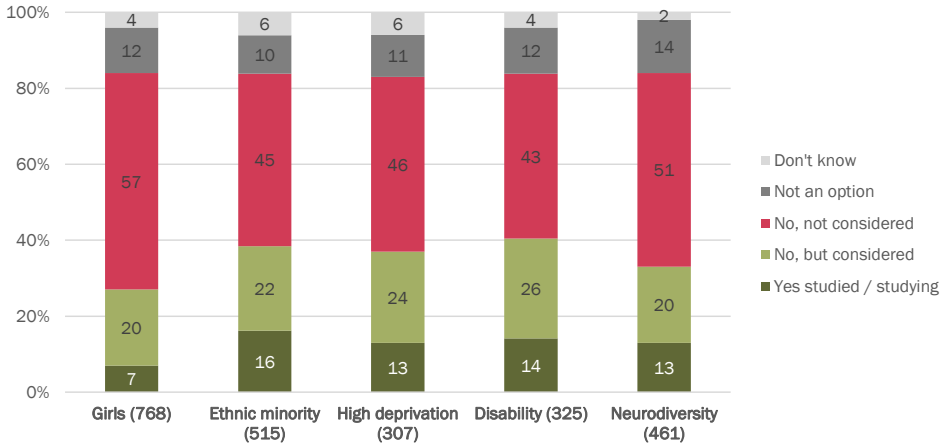
Neurodiversity

More than one in three young people with a neurodiverse condition (37%) say 'No, didn't consider it at all' when asked about Another T Level in Digital or Engineering, with one in five (21%) saying 'No, but I have thought about it', and one in ten (9%) say 'Yes studied / studying'. One in five (21%) say 'No, not an option at my school / college', and one in nine (11%) say 'Don't know what this is'.

Young people with a neurodiverse condition are more likely than others to say 'Yes studied / studying' (9% vs. 3%), more likely to say 'No, but I have thought about it' (29% vs. 18%), less likely to say 'No, didn't consider it at all' (34% vs. 44%).

Figure 16. Have you studied, are you studying, or would you like to study any of the following subjects? (Q9a i)
i) Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers)

Base: 1,128 participants aged 16-19



Overall

- Up to one in six (7% to 16%) say 'Yes studied / studying' when asked about Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers), with up to one in four (20% to 26%) saying 'No, but I have thought about it'.
- Around half (43% to 57%) across the sub-groups say 'No, didn't consider it at all'.
- Around one in ten to one in seven (10% to 14%) say 'No, not an option at my school / college', with fewer saying 'Don't know what this is' (2% to 6%).

By age

- Thinking about Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers), 16 year olds are less likely than 17-19s to say 'Yes studied / studying' (3% vs. 16%), 'No, but I have thought about it' (12% vs. 26%), much more likely to say 'No, didn't consider it at all' (69% vs. 41% respectively). They are less likely to say 'No, not an option at my school / college'(6% vs. 14%), more likely to say 'Don't know what this is' (10% vs. 3%).

Girls

More than half of girls (57%) say 'No, didn't consider it at all' when asked about Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers). One in five (20%) say 'No, but I have thought about it', with only 7% saying 'Yes studied / studying' this subject. One in eight (12%) say 'No, not an option at my school / college', with 4% saying 'Don't know what this is'.

Girls are less likely than other young people to say 'Yes studied / studying' (7% vs. 17%), more likely to say 'No, didn't consider it at all' (57% vs. 41%).

Ethnic minority

More than two in five of those from ethnic minority backgrounds (45%) say 'No, didn't consider it at all' when asked about Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers), with one in five (22%) saying 'No, but I have thought about it', and one in six (16%) saying 'Yes studied / studying'. One in ten (10%) say 'No, not an option at my school / college' and 6% say 'Don't know what this is'.

Young people from ethnic minority backgrounds are more likely than other young people to say 'Yes studied / studying' (16% vs. 11%).

High deprivation

Almost half of those living in highly deprived areas (46%) say 'No, didn't consider it at all' when asked about Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers). One in four (24%) say 'No, but I have thought about it', with one in eight (13%) saying 'Yes studied / studying'. One in nine (11%) say 'No, not an option at my school / college', and 6% say 'Don't know what this is'.

There are no significant differences between young people living in highly deprived areas and others for this question.

Disability

More than two in five young people with a disability (43%) say 'No, didn't consider it at all' when asked about Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers), with one in four (26%) saying 'No, but I have thought about it', one in seven (14%) saying 'Yes studied / studying'. One in eight (12%) say 'No, not an option at my school / college', and one in twenty (5%) say 'Don't know what this is'.

There are no significant differences between young people with a disability and others for this question.

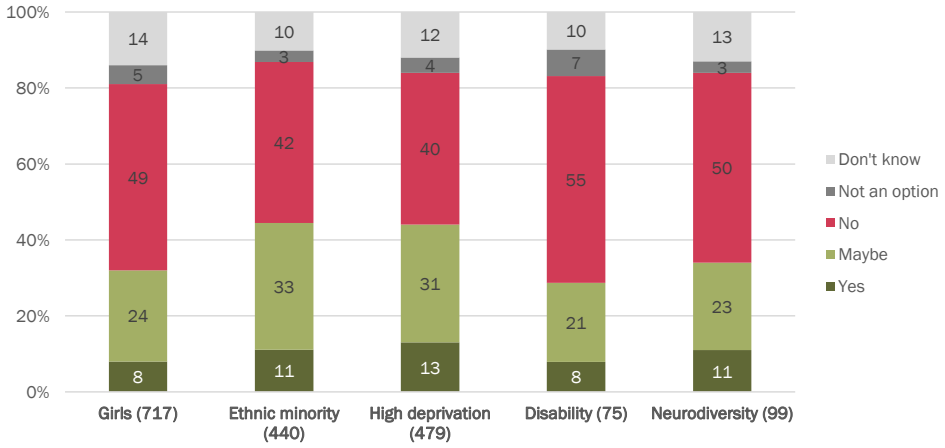
Neurodiversity

Half of young people with a neurodiverse condition (51%) say 'No, didn't consider it at all' when asked about Computer Science / Digital Technology (AS/A Level), Computer Science / Computing (Highers), with one in five (20%) saying 'No, but I have thought about it', and one in eight (13%) saying 'Yes studied / studying'. One in seven (14%) say 'No, not an option at my school / college', and only 2% say 'Don't know what this is'.

There are no significant differences between young people with a neurodiverse condition and others for this question.

Figure 17. **Do you think you will study Computing (e.g. Computer Science / Computing Science / Digital Technologies) at GCSE / NATIONALS or equivalent? (Q9b a)**
a) Computing e.g. Computer Science / Computing Science / Digital Technologies

Base: 971 participants aged 11-13



Overall

- Between two in five and more than half (40% to 55%) across the sub-groups say 'No, I will not take this' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies.

- Up to one in eight (8% to 13%) across the sub-groups say 'Yes, I will definitely take this', with up to one in three (21% to 33%) saying 'Maybe, I am considering this' for this subject.
- A small minority say 'This isn't an option at my school / college' (3% to 7%), and one in ten or more say 'Don't know / Not sure what this is' (10% to 14%).

By age

- This question was only asked of those aged 11-13.

Girls

Half of girls (49%) say 'No, I will not take this' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies. One in four (24%) say 'Maybe, I am considering this' but only 8% say 'Yes, I will definitely take this'. For one in twenty (5%) 'This isn't an option at my school / college', and one in seven (14%) say 'Don't know / Not sure what this is'.

Girls are more likely than other young people to say 'No, I will not take this' (49% vs. 37% of others), and half as likely to say 'Yes, I will definitely take this' (8% vs. 16%).

Ethnic minority

Two in five of those from ethnic minority backgrounds (42%) say 'No, I will not take this' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies. One in three (33%) say 'Maybe, I am considering this', whilst one in nine (11%) say 'Yes, I will definitely take this'. A minority of 3% say 'This isn't an option at my school / college', but one in ten (10%) say 'Don't know / Not sure what this is'.

Those from ethnic minority backgrounds are more likely than other young people to say 'Maybe, I am considering this' (33% vs. 24% of others).

High deprivation

Two in five of those living in highly deprived areas (40%) say 'No, I will not take this' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies. Three in ten (31%) say 'Maybe, I am considering this', whilst one in eight (13%) say 'Yes, I will definitely take this'. A minority of 4% say 'This isn't an option at my school / college', but one in eight (12%) say 'Don't know / Not sure what this is'.

Those living in highly deprived areas are less likely than other young people to say 'No, I will not take this' (40% vs. 49% of others).

Disability

More than half young people with a disability (55%) say 'No, I will not take this' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies. One in five (21%) say 'Maybe, I am considering this', whilst only 8% say 'Yes, I will definitely take this'. A minority of 7% say 'This isn't an option at my school / college', but one in ten (10%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a disability and others for this question.

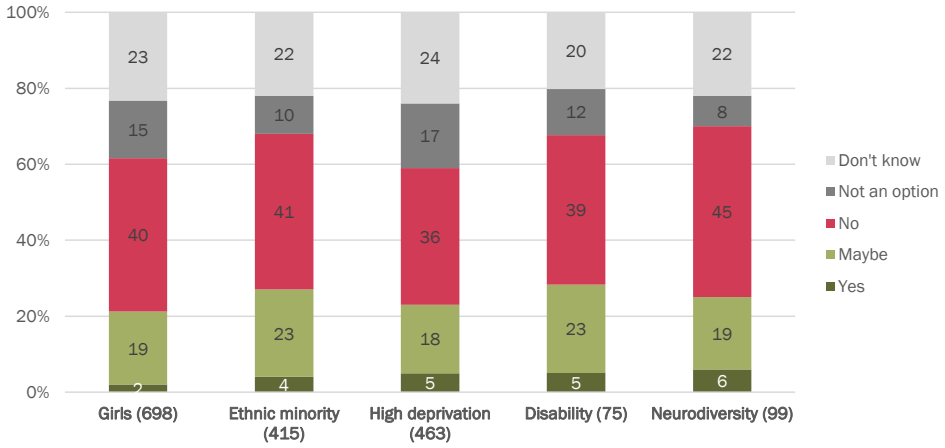
Neurodiversity

Half of young people with a neurodiverse condition (50%) say 'No, I will not take this' when asked about Computing e.g. Computer Science / Computing Science / Digital Technologies. One in four (23%) say 'Maybe, I am considering this', whilst one in nine (11%) say 'Yes, I will definitely take this'. A minority of 3% say 'This isn't an option at my school / college', but one in eight (13%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a neurodiverse condition and others for this question.

Figure 18. **Do you think you will study Computing (e.g. Computer Science / Computing Science / Digital Technologies) at GCSE / NATIONALS or equivalent? (Q9b b)**
b) iMedia / Creative iMedia (Cambridge Nationals)

Base: 945 participants aged 11-13



Overall

- Between one in three and just under half (36% to 45%) across the sub-groups say 'No, I will not take this' when asked about iMedia / Creative iMedia (Cambridge Nationals).
- Up to one in twenty (2% to 6%) across the sub-groups say 'Yes, I will definitely take this', whilst up to one in four (18% to 23%) say 'Maybe, I am considering this' for this subject.
- Up to one in six (8% to 17%) say 'This isn't an option at my school / college', and one in five or more (20% to 24%) say 'Don't know / Not sure what this is'.

By age

- This question was only asked of those aged 11-13.

Girls

Two in five girls (40%) say 'No, I will not take this' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in five (19%) say 'Maybe, I am considering this' but only 2% say 'Yes, I will definitely take this'. For one in seven (15%) 'This isn't an option at my school / college', and one in four (23%) say 'Don't know / Not sure what this is'.

Girls are less likely than others to say 'Yes, I will definitely take this' (2% vs. 6%), and twice more likely than other young people to say 'This isn't an option at my school / college' (15% vs. 7% of others.

Ethnic minority

Two in five of those from ethnic minority backgrounds (41%) say 'No, I will not take this' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in four (23%) say 'Maybe, I am considering this', whilst only 4% say 'Yes, I will definitely take this'. One in ten (10%) say 'This isn't an option at my school / college', but one in five (22%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people from ethnic minority backgrounds and others for this question.

High deprivation

One in three of those living in highly deprived areas (36%) say 'No, I will not take this' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in five (18%) say 'Maybe, I am considering this', whilst one in twenty (5%) say 'Yes, I will definitely take this'. One in six (17%) say 'This isn't an option at my school / college', but one in four (24%) say 'Don't know / Not sure what this is'.

Those living in highly deprived areas are more likely than other young people to say 'Yes, I will definitely take this' (5% vs. 2%), less likely to say 'No, I will not take this' (36% vs. 49% of others), but more likely to say 'This isn't an option at my school / college' (17% vs. 7%).

Disability

Two in five young people with a disability (39%) say 'No, I will not take this' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in four (23%) say 'Maybe, I am considering this', whilst only one in twenty (5%) say 'Yes, I will definitely take this'. One in eight (12%) say 'This isn't an option at my school / college', but one in five (20%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

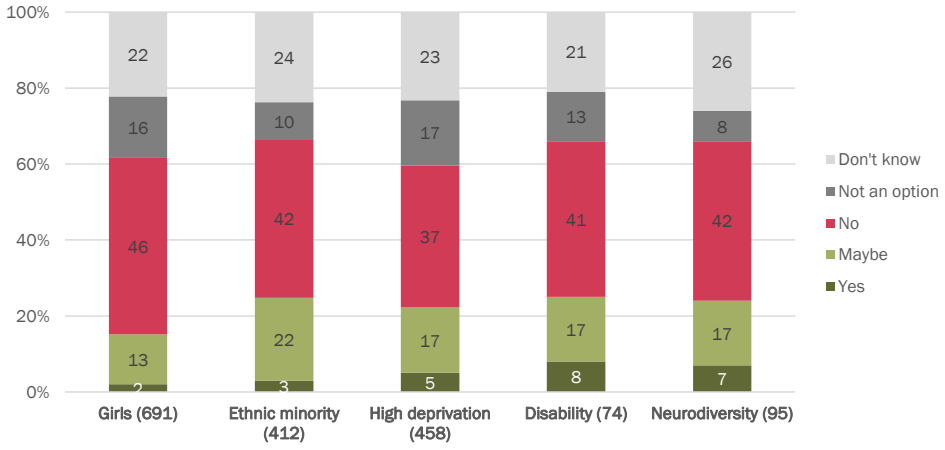
More than two in five young people with a neurodiverse condition (45%) say 'No, I will not take this' when asked about iMedia / Creative iMedia (Cambridge Nationals). One in five (19%) say 'Maybe, I

am considering this', whilst 6% say 'Yes, I will definitely take this'. 8% say 'This isn't an option at my school / college', but one in five (22%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a neurodiverse condition and others for this question.

Figure 19. **Do you think you will study Computing (e.g. Computer Science / Computing Science / Digital Technologies) at GCSE / NATIONALS or equivalent? (Q9b c)**
c) IT (Cambridge Nationals)

Base: 933 participants aged 11-13



Overall

- Between one in three and just under half (37% to 46%) across the sub-groups say 'No, I will not take this' when asked about IT (Cambridge Nationals).
- Between 2% and 8% across the sub-groups say 'Yes, I will definitely take this', with up to one in five (13% to 22%) saying 'Maybe, I am considering this' for this subject.
- Up to one in six (8% to 17%) say 'This isn't an option at my school / college', and one in five or more (21% to 26%) say 'Don't know / Not sure what this is'.

By age

- This question was only asked of those aged 11-13.

Girls

Almost half of girls (46%) say 'No, I will not take this' when asked about IT (Cambridge Nationals). One in eight (13%) say 'Maybe, I am considering this' but only 2% say 'Yes, I will definitely take this'. For one in six (16%) 'This isn't an option at my school / college', and one in five (22%) say 'Don't know / Not sure what this is'.

Girls are more likely than others to say 'This isn't an option at my school / college' (16% vs. 8% of others.

Ethnic minority

Two in five of those from ethnic minority backgrounds (42%) say 'No, I will not take this' when asked about IT (Cambridge Nationals). One in five (22%) say 'Maybe, I am considering this', whilst only 3% say 'Yes, I will definitely take this'. One in ten (10%) say 'This isn't an option at my school / college', but one in four (24%) say 'Don't know / Not sure what this is'.

Young people from ethnic minority backgrounds are more likely than others to say 'Maybe, I am considering this' (22% vs. 14%).

High deprivation

More than one in three of those living in highly deprived areas (37%) say 'No, I will not take this' when asked about IT (Cambridge Nationals). One in six (17%) say 'Maybe, I am considering this', whilst one in twenty (5%) say 'Yes, I will definitely take this'. One in six (17%) say 'This isn't an option at my school / college', but one in four (23%) say 'Don't know / Not sure what this is'.

Those living in highly deprived areas are more likely than other young people to say 'Yes, I will definitely take this' (5% vs. 2%), less likely to say 'No, I will not take this' (37% vs. 50% of others), but more likely to say 'This isn't an option at my school / college' (17% vs. 8%).

Disability

Two in five young people with a disability (41%) say 'No, I will not take this' when asked about IT (Cambridge Nationals). One in six (17%) say 'Maybe, I am considering this', whilst nearly one in ten (8%) say 'Yes, I will definitely take this'. One in eight (13%) say 'This isn't an option at my school / college', but one in five (21%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a disability and others for this question.

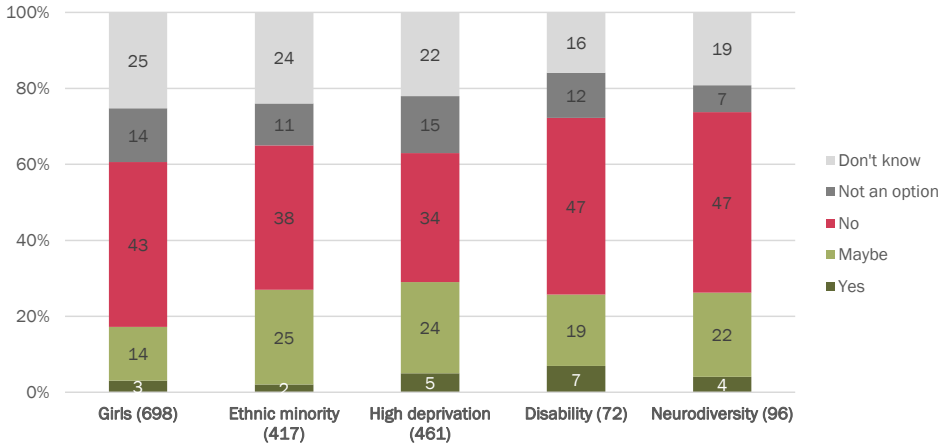
Neurodiversity

Two in five young people with a neurodiverse condition (42%) say 'No, I will not take this' when asked about IT (Cambridge Nationals). One in six (17%) say 'Maybe, I am considering this', whilst 7% say 'Yes, I will definitely take this'. 8% say 'This isn't an option at my school / college', but one in four (26%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a neurodiverse condition and others for this question.

Figure 20. **Do you think you will study Computing (e.g. Computer Science / Computing Science / Digital Technologies) at GCSE / NATIONALS or equivalent? (Q9b d)**
d) Digital Information Technology (BTEC)

Base: 940 participants aged 11-13



Overall

- Between two in five and just under half (34% to 47%) across the sub-groups say 'No, I will not take this' when asked about Digital Information Technology (BTEC).
- Between 2% and 7% say 'Yes, I will definitely take this', and up to one in four (14% to 25%) say 'Maybe, I am considering this' for this subject.
- Up to one in seven (7% to 15%) say 'This isn't an option at my school / college', and one in five two one in four say 'Don't know / Not sure what this is' (16% to 25%).

By age

- This question was only asked of those aged 11-13.

Girls

More than two in five girls (43%) say 'No, I will not take this' when asked about Digital Information Technology (BTEC). One in seven (14%) say 'Maybe, I am considering this' but only 3% say 'Yes, I will definitely take this'. For one in seven (14%) 'This isn't an option at my school / college', and one in four (25%) say 'Don't know / Not sure what this is'.

Girls are half as likely as others to say 'Maybe, I am considering this' (14% vs. 27% of others.

Ethnic minority

Just under two in five of those from ethnic minority backgrounds (38%) say 'No, I will not take this' when asked about Digital Information Technology (BTEC). One in four (25%) say 'Maybe, I am considering this', whilst only 2% say 'Yes, I will definitely take this'. One in nine (11%) say 'This isn't an option at my school / college', but one in four (24%) say 'Don't know / Not sure what this is'.

Young people from ethnic minority backgrounds are more likely than others to say 'Maybe, I am considering this' (25% vs. 18%).

High deprivation

One in three of those living in highly deprived areas (34%) say 'No, I will not take this' when asked about Digital Information Technology (BTEC). One in four (24%) say 'Maybe, I am considering this', whilst one in twenty (5%) say 'Yes, I will definitely take this'. One in seven (15%) say 'This isn't an option at my school / college', but one in five (22%) say 'Don't know / Not sure what this is'.

Those living in highly deprived areas are more likely than other young people to say 'Maybe, I am considering this' (24% vs. 15%), and less likely to say 'No, I will not take this' (34% vs. 47% of others).

Disability

Almost half of young people with a disability (47%) say 'No, I will not take this' when asked about Digital Information Technology (BTEC). One in five (19%) say 'Maybe, I am considering this', whilst 7% say 'Yes, I will definitely take this'. One in eight (12%) say 'This isn't an option at my school / college', but one in six (16%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a disability and others for this question.

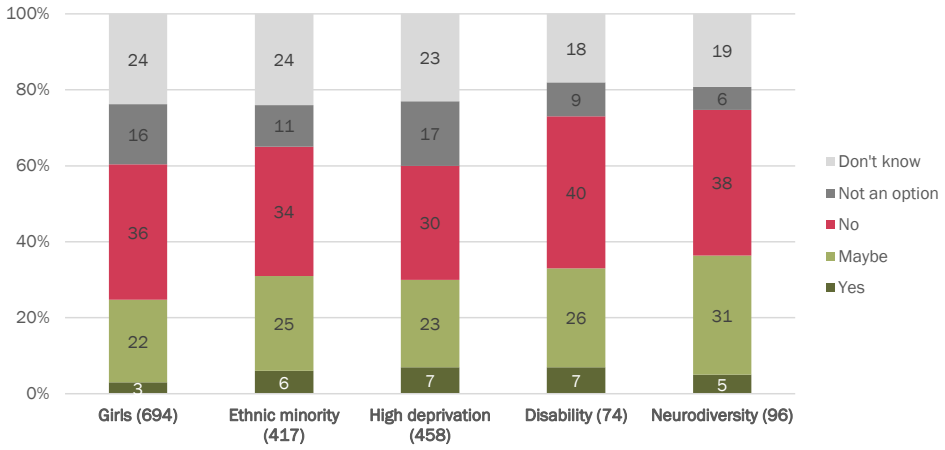
Neurodiversity

Almost half of young people with a neurodiverse condition (47%) say 'No, I will not take this' when asked about Digital Information Technology (BTEC). One in five (22%) say 'Maybe, I am considering this', whilst only 4% say 'Yes, I will definitely take this'. 7% say 'This isn't an option at my school / college', but one in five (19%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a neurodiverse condition and others for this question.

Figure 21. **Do you think you will study Computing (e.g. Computer Science / Computing Science / Digital Technologies) at GCSE / NATIONALS or equivalent? (Q9b e)**
e) Creative Media Production (BTEC)

Base: 938 participants aged 11-13



Overall

- Between one in three and two in five (30% to 40%) across the sub-groups say 'No, I will not take this' when asked about Creative Media Production (BTEC).
- Between 3% and 7% say 'Yes, I will definitely take this', whilst up to three in ten (22% to 31%) say 'Maybe, I am considering this' for this subject.

- Up to one in seven (6% to 17%) say ‘This isn’t an option at my school / college’, and one in five two one in four say ‘Don’t know / Not sure what this is’ (18% to 24%).

By age

- This question was only asked of those aged 11-13.

Girls

One in three girls (36%) say ‘No, I will not take this’ when asked about Creative Media Production (BTEC). One in five (22%) say ‘Maybe, I am considering this’ but only 3% say ‘Yes, I will definitely take this’. For one in six (16%) ‘This isn’t an option at my school / college’, and one in four (24%) say ‘Don’t know / Not sure what this is’.

Girls are much less likely than others to say ‘Yes, I will definitely take this’ (3% vs. 9%), more likely to say ‘This isn’t an option at my school / college’ (16% vs. 9% of others.

Ethnic minority

One in three of those from ethnic minority backgrounds (34%) say ‘No, I will not take this’ when asked about Creative Media Production (BTEC). One in four (25%) say ‘Maybe, I am considering this’, whilst 6% say ‘Yes, I will definitely take this’. One in nine (11%) say ‘This isn’t an option at my school / college’, but one in four (24%) say ‘Don’t know / Not sure what this is’.

There are no significant differences between those from ethnic minority backgrounds and others for this question.

High deprivation

Three in ten of those living in highly deprived areas (30%) say ‘No, I will not take this’ when asked about Creative Media Production (BTEC). One in four (23%) say ‘Maybe, I am considering this’, whilst 7% say ‘Yes, I will definitely take this’. One in six (17%) say ‘This isn’t an option at my school / college’, but one in four (23%) say ‘Don’t know / Not sure what this is’.

Those living in highly deprived areas are more likely than other young people to say ‘Yes, I will definitely take this’ (7% vs. 3%), less likely to say ‘No, I will not take this’ (30% vs. 40% of others), but more likely to say ‘This isn’t an option at my school / college’ (17% vs. 8%).

Disability

Two in five young people with a disability (40%) say 'No, I will not take this' when asked about Creative Media Production (BTEC). One in four (26%) say 'Maybe, I am considering this', whilst 7% say 'Yes, I will definitely take this'. One in ten (9%) say 'This isn't an option at my school / college', but one in five (18%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a disability and others for this question.

Neurodiversity

Two in five young people with a neurodiverse condition (38%) say 'No, I will not take this' when asked about Creative Media Production (BTEC), but three in ten (31%) say 'Maybe, I am considering this', and one in twenty (5%) say 'Yes, I will definitely take this'. 6% say 'This isn't an option at my school / college', but one in five (19%) say 'Don't know / Not sure what this is'.

There are no significant differences between young people with a neurodiverse condition and others for this question.

Views on studying computing

Figure 22. Why have you chosen to study computing? / Why are you considering / why did you consider studying computing? (Q10)

Base: 1,576 participants aged 11-19 studying / considering / considered studying computing

Girls	Ethnic minority	High deprivation	Disability	Neurodiversity
n=1,069	n=725	n=599	n=312	n=461
Important for a range of jobs 31%	**Important for a range of jobs** 36%	**Important for a range of jobs** 36%	**Enjoy(ed) computing** 32%	**Enjoy(ed) computing** 33%
Enjoy(ed) computing 28%	**Help to get a well paid job** 32%	**Enjoy(ed) computing** 34%	**I'm naturally good at computing** 29%	**Important for a range of jobs** 32%
Help to get a well paid job 25%	**Enjoy(ed) computing** 32%	**Help to get a well paid job** 26%	**Important for a range of jobs** 24%	**I'm naturally good at computing** 22%
Family encouraged me to study 15%	**I'm naturally good at computing** 20%	**I'm naturally good at computing** 21%	**Help to get a well paid job** 21%	**Help to get a well paid job** 19%
I'm naturally good at computing 13%	**Family encouraged me to study** 16%	**Family encouraged me to study** 15%	**Friends do / did computing** 19%	**Like(d) computing teacher** 17%
Teacher(s) encouraged 12%	**Help onto preferred course** 15%	**Need for chosen career** 13%	**Teacher(s) encouraged** 18%	**Need for chosen career** 14%
Help onto preferred course 11%	**Need for chosen career** 14%	**Like(d) computing teacher** 14%	**Need for chosen career** 16%	**Family encouraged me to study** 13%

Like(d) computing teacher 11%	**Teacher(s) encouraged** 13%	**Help onto preferred course** 10%	**Like(d) computing teacher** 16%	**Friends do / did computing** 13%
Need for chosen career 10%	**Friends do / did computing** 12%	**Friends do / did computing** 12%	**Help onto preferred course** 15%	**Teacher(s) encouraged** 13%
Friends do / did computing 9%	**Like(d) computing teacher** 10%	**Teacher(s) encouraged** 11%	**Family encouraged me to study** 14%	**Help onto preferred course** 8%
Only subject fit schedule 4%	**Only subject fit schedule** 4%	**Only subject fit schedule** 6%	**Only subject fit schedule** 7%	**Only subject fit schedule** 6%
***None of these** 13%*	***None of these** 8%*	***None of these** 7%*	***None of these** 7%*	***None of these 7%***
***Other** 3%*	***Other** 2%*	***Other** 2%*	***Other** 1%*	***Other** 1%*
***Don't know** 8%*	***Don't know** 7%*	***Don't know** 8%*	***Don't know** 8%*	***Don't know** 6%*

Overall'

- 'Computing is / will be important for a range of jobs now / in the future' is at the top of the list for three of five sub-groups (31% to 36%), and in the top three for the other two sub-groups (24% and 32%).
- 'I enjoy(ed) computing' is top choice for two sub-groups (32% and 33%), and in the top three of the other three sub-groups (28% to 34%).
- 'Computing would help me to get a well-paid job' (25% to 32%) and 'I am naturally good at computing' (22% and 29%) make up the rest of the top threes.
- 'It's the only subject that fit into my schedule / timetable when picking subjects' is bottom choice for all sub-groups (4% to 7%), with 'My friends do / did computing' (9% to 12%) bottom three for three sub-groups, 'My teacher(s) encouraged me to study computing' (11% and 13%) and 'Computing would help me to get into my preferred university or onto my preferred course' (8% and 15%) bottom three for two. 'I need computing to get into my chosen career' (10%), 'I like(d) my computing teacher' (10%) and 'My family encourage me to study computing' (14%) finish off the bottom threes.

By age

- Children aged 11-13 are least likely to say 'My friends do / did computing' (5% vs, 12% of 14-16s and 16% of 17-19s). They are also most likely to say they 'Don't know' (12% vs. 7% of 14-16s and 4% of 17-19s).
- Those aged 14-16 are more likely to say 'Computing is / will be important for a range of jobs now / in the future' (46% vs. 29% of 11-13s and 23% of 17-19s).
- Those aged 17-19 are the least likely to say 'I enjoy(ed) computing' (29% vs. 36% of 14-16s and 38% of 11-13s). They are most likely to say 'My teacher(s) encouraged me to study computing' (15% vs. 9% and 10% respectively).

Girls

Girls are most likely to mention 'Computing is / will be important for a range of jobs now / in the future' (31%), 'I enjoy(ed) computing' (28%) or 'Computing would help me to get a well-paid job' (25%).

Girls are more likely than other young people to choose 'None of these' (13% vs. 5%) and give another reason, such as 'It was compulsory', 'I was told to' or 'As a backup'. They are much less likely than others to say 'I enjoy(ed) computing' (28% vs. 39%), 'I am naturally good at computing' (13% vs. 26%), 'I need computing to get into my chosen career' (10% vs. 16%), or 'My friends do / did computing' (9% vs. 15%).

Ethnic minority

Young people from ethnic minority backgrounds are most likely to mention 'Computing is / will be important for a range of jobs now / in the future' (36%), 'Computing would help me to get a well-paid job' (32%) or 'I enjoy(ed) computing' (32%).

Young people from ethnic minority backgrounds are more likely than other young people to choose 'Computing is / will be important for a range of jobs now / in the future' (36% vs. 31%), 'Computing would help me to get a well-paid job' (32% vs. 21%), or 'Computing would help me to get into my preferred university or onto my preferred course' (15% vs. 8%).

High deprivation

Young people living in areas of high deprivation are most likely to mention 'Computing is / will be important for a range of jobs now / in the future' (36%), 'I enjoy(ed) computing' (34%), or 'Computing would help me to get a well-paid job' (26%).

There are no significant differences between young people living in areas of high deprivation and others for this question.

Disability

Young people with a disability are most likely to mention 'I enjoy(ed) computing' (32%), 'I am naturally good at computing' (29%) or 'Computing is / will be important for a range of jobs now / in the future' (24%).

Young people with a disability are much more likely than other young people to choose 'I am naturally good at computing' (29% vs. 18%), that 'My friends do / did computing' (19% vs. 11%), or 'My teacher(s) encouraged me to study computing' (18% vs. 10%).

Neurodiversity

Young people with a neurodiverse condition are most likely to mention 'I enjoy(ed) computing' (33%), 'Computing is / will be important for a range of jobs now / in the future' (32%) or 'I am naturally good at computing' (22%).

Young people with a neurodiverse condition are more likely than other young people to choose 'I like(d) my computing teacher' (17% vs. 10%), less likely to say 'Computing would help me to get a well-paid job' (19% vs. 27%).

Figure 23. Why have you chosen not to study computing? / Are any / did any of the following concerns discourage you from studying computing? (Q11)

Base: 1,302 participants aged 11-19 considered but not studying computing, or not considered computing

Girls	Ethnic minority	High deprivation	Disability	Neurodiversity
n=1,023	n=585	n=487	n=196	n=264
Dislike(d) computing 39%	**Not good at computing** 29%	**Not good at computing** 26%	**Not good at computing** 42%	**Not good at computing** 39%
Not good at computing 34%	**Other subjects for career** 26%	**Other subjects for career** 21%	**Other subjects for career** 39%	**Better grades in other subjects** 32%
Other subjects for career 33%	**Other subjects for course** 26%	**Dislike(d) computing** 21%	**Better grades in other subjects** 37%	**Dislike(d) computing** 30%
Better grades in other subjects 29%	**Better grades in other subjects** 25%	**Better grades in other subjects** 21%	**Dislike(d) computing** 36%	**Other subjects for career** 29%
Computing jobs are boring 28%	**Dislike(d) computing** 24%	**Too much to learn / remember** 20%	**Other subjects for course** 23%	**Not good enough at maths** 22%
Other subjects for course 27%	**Too much to learn / remember** 22%	**Other subjects for course** 20%	**Too much to learn / remember** 20%	**Other subjects for course** 21%
Not good enough at maths 20%	**Computing jobs are boring** 19%	**Computing jobs are boring** 15%	**Computing jobs are boring** 17%	**Computing jobs are boring** 18%
Too much to learn / remember 19%	**Earn more doing something else** 15%	**Earn more doing something else** 15%	**Find computing repetitive** 16%	**Find computing repetitive** 18%
Find computing repetitive 17%	**Find computing repetitive** 13%	**Not good enough at maths** 15%	**Not good enough at maths** 16%	**Too much to learn / remember** 15%
Earn more doing something else 11%	**Not good enough at maths** 13%	**Find computing repetitive** 12%	**Earn more doing something else** 12%	**Earn more doing something else** 11%
Wouldn't teach anything useful 10%	**Wouldn't teach anything useful** 8%	**Wouldn't teach anything useful** 5%	**Wouldn't teach anything useful** 10%	**Wouldn't teach anything useful** 10%
Friends don't do computing 6%	**Friends don't do computing** 5%	**Friends don't do computing** 3%	**Friends don't do computing** 8%	**Didn't fit schedule** 5%

Didn't fit schedule 4%	**Didn't fit schedule** 4%	**Didn't fit schedule** 4%	**Didn't fit schedule** 5%	**Friends don't do computing** 4%
Teacher discouraged me 2%	**Teacher discouraged me** 2%	**Teacher discouraged me** 2%	**Teacher discouraged me** 2%	**Teacher discouraged me** 2%
Family discouraged me 2%	**Family discouraged me** 1%	**Family discouraged me** 1%	**Family discouraged me** 1%	**Family discouraged me** 1%
***None of these** 4%*	***None of these** 5%*	***None of these** 8%*	***None of these** 4%*	***None of these** 5%*
***Other** 2%*	***Other** 2%*	***Other** 3%*	***Other** 3%*	***Other** 8%*
***Don't know** 4%*	***Don't know** 4%*	***Don't know** 7%*	***Don't know** 7%*	***Don't know** 9%*

Overall'

- 'I am not good at computing' is at the top of the list for four of five sub-groups (26% to 42%), second place for the other sub-group (34%).
- 'I dislike(d) computing' is top for one sub-group (39%), and in the top three of two more (21% and 30%).
- 'Other subjects are more important to help me get into my chosen career' is in the top three of four sub-groups (21% to 39%).
- 'I could / can get better grades in other subjects' (32% and 37%) and 'Other subjects are more important to help me get into my preferred university or onto my preferred course' (26%) make up the rest of the top threes.
- 'My family discouraged me from studying computing' is bottom choice for all sub-groups (1% to 2%), with 'My teacher(s) discouraged me from studying computing' (2%) second from bottom of all sub-groups. 'It did not fit into my schedule / timetable when picking subjects' (4% to 5%) is in the bottom three of four sub-groups, and 'My friends don't do / didn't do computing' (4%) makes up the remaining spot.

By age

- Children aged 11-13 are most likely to say they 'Don't know' (9% vs. 3% of older children).
- Those aged 14-16 are more likely to say 'I dislike(d) computing' than others (35% vs. 26% of 11-13s and 24% of 17-19s).
- Those aged 17-19 are least likely to say 'Other subjects are more important to help me get into my chosen career' (21% vs. 30% of 14-16s and 29% of 11-13s), 'I can earn more money doing something else' (7% vs. 14% and 16% respectively), or 'Computing wouldn't teach me anything useful' (4% vs. 12% and 10% respectively).

Girls

Girls are most likely to mention 'I dislike(d) computing' (39%), 'I am not good at computing' (34%) or 'Other subjects are more important to help me get into my chosen career' (33%).

Girls are three times more likely than other young people to choose 'I dislike(d) computing' (39% vs. 13%), and more likely to mention 'I am not good at computing' (34% vs. 23%), 'Other subjects are more important to help me get into my chosen career' (33% vs. 21%), 'I could / can get better grades in other subjects' (29% vs. 21%), 'Computing jobs are boring' (28% vs. 12%), 'Other subjects are more important to help me get into my preferred university or onto my preferred course' (27% vs. 17%), or 'I am not good enough at maths' (20% vs. 12%). They are less likely to say 'None of these' (3% vs. 9%) or they 'Don't know' (4% vs. 7%).

Ethnic minority

Young people from ethnic minority backgrounds are most likely to mention 'I am not good at computing' (29%), 'Other subjects are more important to help me get into my chosen career' (26%) or 'Other subjects are more important to help me get into my preferred university or onto my preferred course' (26%).

Young people from ethnic minority backgrounds are more likely than other young people to say 'Other subjects are more important to help me get into my preferred university or onto my preferred course' (26% vs. 20%) or 'There is too much to learn / remember in computing' (22% vs. **15%)**

High deprivation

Young people living in areas of high deprivation are most likely to mention 'I am not good at computing' (26%), 'Other subjects are more important to help me get into my chosen career' (21%) or 'I dislike(d) computing' (21%).

Young people living in areas of high deprivation are less likely than other young people to say 'Other subjects are more important to help me get into my chosen career' (21% vs. 32%), 'I dislike(d) computing' (21% vs. 31%), 'I could / can get better grades in other subjects' (21% vs. 29%), 'Computing jobs are boring' (15% vs. 24%), 'I find computing very repetitive (12% vs. 17%), or 'Computing wouldn't teach me anything useful' (5% vs. 11%).

Disability

Young people with a disability are most likely to mention 'I am not good at computing' (42%), 'Other subjects are more important to help me get into my chosen career' (39%) or 'I could / can get better grades in other subjects' (37%).

Young people with a disability are more likely than other young people to say 'I am not good at computing' (42% vs. 28%), 'Other subjects are more important to help me get into my chosen career' (39% vs. 26%) or 'I could / can get better grades in other subjects' (37% vs. 23%).

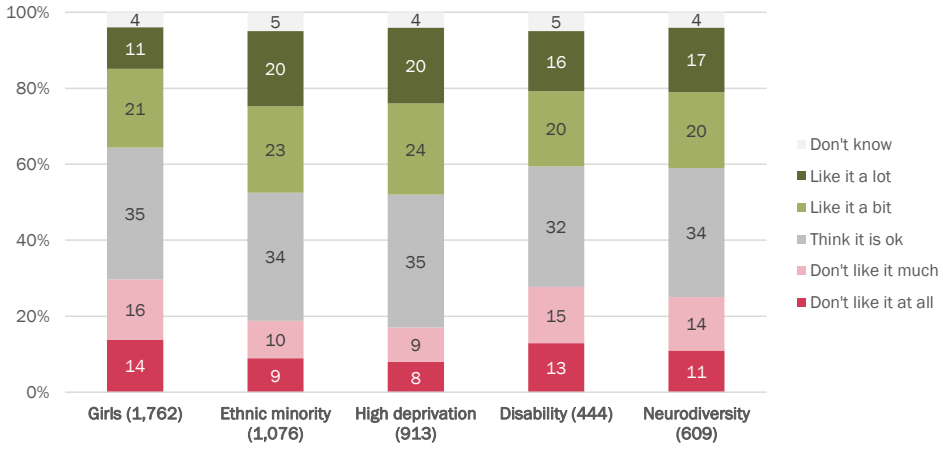
Neurodiversity

Young people with a neurodiverse condition are most likely to mention 'I am not good at computing' (39%), 'I could / can get better grades in other subjects' (32%) or 'I dislike(d) computing' (30%).

Young people with a neurodiverse condition are more likely than other young people to say 'I am not good at computing' (39% vs. 28%), or 'I could / can get better grades in other subjects' (32% vs. 24%).

Figure 24. What do you think about computing? (Q6)

Base: 2,465 participants aged 11-19



Overall

- On the whole, opinion on computing was positive, with a larger proportion across all sub-groups saying 'I like computing a lot' (11% to 20%) or 'I like computing a bit' (20% to 24%) compared to the sum of the negative responses.
- However, a larger proportion across most sub-groups say just 'I think computing is ok' (32% to 35%).

By age

- Those aged 11-13 are the least likely to say 'I like computing a lot' (14% vs. 19% of 14-16s and 21% of 17-19s).
- 17-19 year olds are the most likely to say they like computing overall, saying either 'I like computing a lot' or 'I like computing a bit' (44% vs. 37% of 14-16s and 38% of 11-13s).

Girls

One in three girls just say 'I think computing is ok' (35%). Three in ten say they like computing overall (31%), saying 'I like computing a lot' (11%) or 'I like computing a bit' (21%). A further three in ten girls don't like computing overall, (30%) saying 'I don't like computing at all' (14%) or 'I don't like computing much' (16%).

Girls are much more likely than others to not like computing overall (30% vs. 12% of others), saying 'I don't like computing at all' (14% vs. 6), or 'I don't like computing much' (16% vs. 7%). They are less likely to say they like computing overall (31% vs. 48%), half as likely to say 'I like computing a lot' (11% vs. 25%).

Ethnic minority

More than two in five of those from ethnic minority backgrounds like computing overall (42%), saying 'I like computing a lot' (20%) or 'I like computing a bit' (23%) .One in three just say 'I think computing is ok' (34%). One in five don't like computing overall (19%), saying 'I don't like computing at all' (9%) or 'I don't like computing much' (10%).

Young people from ethnic minority backgrounds are more likely than others to like computing overall (42% vs. 37%). They are less likely to say they don't like it overall (19% vs. 22%).

High deprivation

More than two in five of those living in areas of high deprivation like computing overall (44%), saying 'I like computing a lot' (20%) or 'I like computing a bit' (24%) .One in three just say 'I think computing is ok' (35%). One in six don't like computing overall (17%), saying 'I don't like computing at all' (8%) or 'I don't like computing much' (9%).

Young people living in areas of high deprivation are more likely than others to like computing overall (44% vs. 38%), and less likely to say they don't like it overall (17% vs. 23%), less likely to say 'I don't like computing much' (9% vs. 12%).

Disability

More than one in three young people with a disability like computing overall (36%), saying 'I like computing a lot' (16%) or 'I like computing a bit' (20%) .One in three just say 'I think computing is ok' (32%). Three in ten don't like computing overall (28%), saying 'I don't like computing at all' (13%) or 'I don't like computing much' (15%).

Young people with a disability are more likely than others not to like computing overall (28% vs. 20%).

Neurodiversity

More than one in three young people with a neurodiverse condition like computing overall (36%), saying 'I like computing a lot' (17%) or 'I like computing a bit' (20%) .One in three just say 'I think computing is ok' (34%). One in four don't like computing overall (25%), saying 'I don't like computing at all' (11%) or 'I don't like computing much' (14%).

Young people with a neurodiverse condition are more likely than others not to like computing overall (25% vs. 20%).

Open-text responses

Participants were asked to give reasons for their choices. Many of these fell broadly into three categories: enjoyment, education, and job prospects.

Among those who said they liked computing some simply said they found it interesting and enjoyable. For some this was linked to their love of technology or the problem-solving process. They found computing a fun and creative subject that provided them with an intellectual challenge.

Interest and enjoyment	
"I am very passionate about programming."	*"I find it very entertaining and fun to learn."*
"It's my favourite GCSE choice."	*"I like creating things like digital art or animation."*
"I love working with computers and I've been working with them since a young age."	*"I love coding and making things online like websites and animations."*
"I've always been genuinely interested in computing."	*"It helps build my problem-solving skills."*
"Because I like technology and using it to make slide shows."	*"It allows you to have the freedom of creating something exactly as you want it."*

Many participants valued the educational value of computing, and this furthered their interest and enjoyment. This value might be in terms of the knowledge and skills they acquired which were thought by many to have practical day-to-day use, making their life easier, for example by helping with homework, but also enabling them to access a wider world. They also mentioned that computing was an important life-long skill, or simply enjoyed the intellectual challenge that came from studying computing.

Educational value	
It helps me learn new skills."	*It's a great subject that allows you to build life-long skills."*
"I enjoy learning how to work with computers beyond the very basic stuff."	*"It allows me to access the wider world and different skills."*
"It is a subject that intellectually challenges me."	*"I enjoy taking the subject and coding."*
"It's intriguing, complex but educational and diverse."	*"Computational thinking allows me to use methods such as abstraction."*

The respondents also appreciated the job opportunities provided by computing and some were considering pursuing a career in this field in the future.

Job opportunities and career prospects	
It offers a lot of job opportunities."	*"I find it interesting and am interested in it for a future career choice."*
"Because it helps me to get a better job."	*"It's fun and you can use computing skills for a lot of jobs."*
"I want to go into that field in future."	

Among those who were not interested in computing and most said that they found it 'boring' or repetitive. Sometimes this was related to poor teaching but many simply said they did not find it engaging enough. Many found aspects of it – like coding – too difficult, complicated or confusing with a great deal to learn.

"Its very boring and we basically do the same thing every lesson."

"It's too complicated."

"I find it confusing and difficult

"Too much thinking and it's not creative."

"So many things to memorise."

"It's very analytical and I don't like maths."

Others did not think computing was useful, and some were less inclined to spend a lot of time in front of a screen.

I'm an active person who doesn't really like the thought of computing and sitting in a seat for most of my time."

"I don't like looking into the screen all the time."

"I personally prefer doing paper work rather than everything being electronic."

"I don't think it will help me when I'm older."

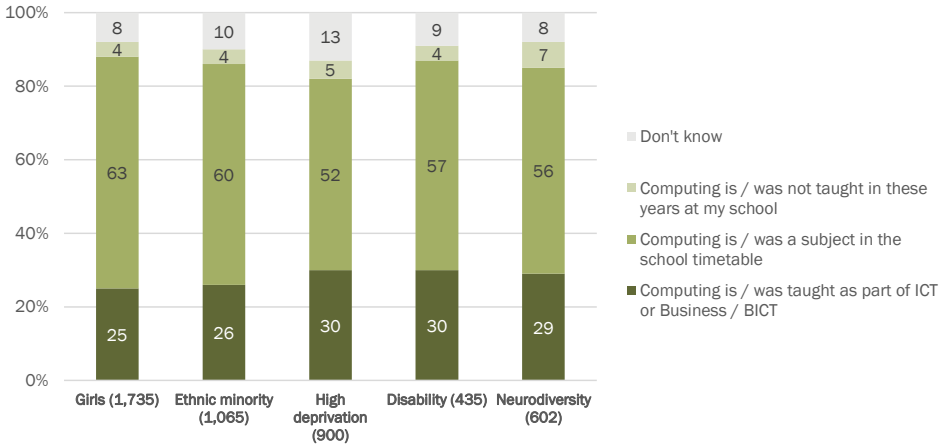
"I don't think its useful."

"I find it a waste of time."

Teaching of computing in school and colleges

Figure 25. How is / was computing taught for you in Years 7-9 / Years 8-10 / S1-2? (Q15)

Base: 2,417 participants aged 11-19



Overall

- For between one-half to two in three across all sub-groups (52% to 63%), 'Computing is / was a subject in the school timetable'.
- Between one in four and three in ten (25% to 30%) say 'Computing is / was taught as part of ICT or Business / BICT'.
- Only a minority of around one in twenty (4% to 7%) say 'Computing is / was not taught in these years at my school'.

By age

- 11-13 year olds are the least likely to say 'Computing is / was taught as part of ICT or Business / BICT' (18% vs. 32% of older children). They are also the most likely to say 'Computing is / was a subject in the school timetable' (65% vs. 53% of 14-16s and 55% of 17-19s). They are least likely to say 'Computing is / was not taught in these years at my school' (2% vs. 6% and 8% respectively), but most likely to say they 'Don't know' (16% vs. 10% and 6% respectively).

Girls

Two in three girls say that 'Computing is / was a subject in the school timetable' (63%), whilst one in four (25%) say 'Computing is / was taught as part of ICT or Business / BICT'. Only 4% say 'Computing is / was not taught in these years at my school' and 8% say they 'Don't know'.

Girls are more likely than others to say that 'Computing is / was a subject in the school timetable' (63% vs. 53% of others), and less likely to say they 'Don't know' (8% vs. 13%).

Ethnic minority

Three in five young people from ethnic minority backgrounds (60%) say that 'Computing is / was a subject in the school timetable', whilst one in four (26%) say 'Computing is / was taught as part of ICT or Business / BICT'. Only 4% say 'Computing is / was not taught in these years at my school' and one in ten (10%) say they 'Don't know'.

There are no significant differences between young people from ethnic minority backgrounds and others when asked this question.

High deprivation

Half of young people living in areas of high deprivation say that 'Computing is / was a subject in the school timetable' (52%), whilst three in ten (30%) say 'Computing is / was taught as part of ICT or Business / BICT'. Only 5% say 'Computing is / was not taught in these years at my school' and one in eight (13%) say they 'Don't know'.

Young people living in areas of high deprivation are less likely than others to say 'Computing is / was a subject in the school timetable' (52% vs. 62% of others), more likely to say 'Computing is / was taught as part of ICT or Business / BICT' (30% vs. 24%, and more likely to say they 'Don't know' (13% vs. 8%).

Disability

Almost three in five young people with a disability (57%) say that 'Computing is / was a subject in the school timetable', whilst three in ten (30%) say 'Computing is / was taught as part of ICT or Business / BICT'. Only 4% say 'Computing is / was not taught in these years at my school' and around one in ten (9%) say they 'Don't know'.

There are no significant differences between young people with a disability and others when asked this question.

Neurodiversity

More than half of young people with a neurodiverse condition (56%) say that 'Computing is / was a subject in the school timetable', whilst three in ten (29%) say 'Computing is / was taught as part of ICT or Business / BICT'. Only 7% say 'Computing is / was not taught in these years at my school' and 8% say they 'Don't know'.

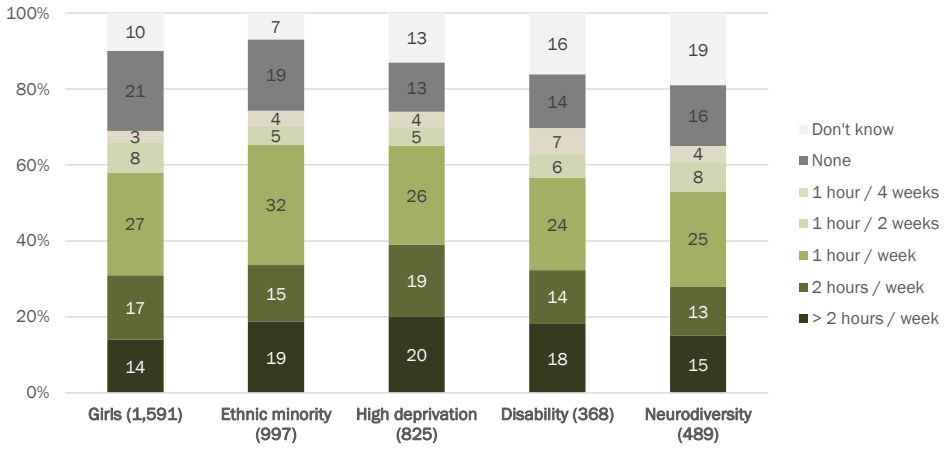
There are no significant differences between young people with a neurodiverse condition and others when asked this question.

Time spent

Figure 26. Approximately how many hours of computing do you do at school / college / University? This could be as part of a computing qualification (e.g. GCSE / NATIONALS/ A levels / Highers) or it

could be for timetabled computing / digital skills lessons if you're not currently studying for a qualification. (Q16)

Base: 2,199 participants aged 11-19 in education



Overall

- The amount of hours of computing amongst those in education varies by sub-group, but a majority of around half to two in three (52% and 66%) are doing at least an hour per week
- Between one in seven and one in five (14% to 20%) are doing more than 2 hours of computing a week.
- Around one in five are not doing any (13% to 21%), and a significant minority are not sure how much they are doing (7% to 19%).

By age

- 11-13 year olds are by far the most likely to say they are doing '1 hour every week' (55% vs. just 8% of 14-16s and 18% of 17-19s). They are by far least likely to say they are doing 'More than 2 hours per week' (3% vs. 29% and 22% respectively), or to say they are doing 'None' (6% vs. 31% and 18% respectively).
- 14-16s are the most likely to be doing 'More than 2 hours per week' (29% vs. 3% of 11-13s and 22% of 17-19s), but also most likely to be doing 'None' (31% vs. 6% and 18% respectively).
- 17-19s are the most likely to only be doing '1 hour every 4 weeks' (7% vs. 3% of 14-16s and 2% of 11-13s).

Girls

One in seven girls (14%) do 'More than 2 hours per week', with 17% doing '2 hours every week'. They are most likely to be doing '1 hour every week' with one in four (27%) saying this. Fewer say they do '1 hour every 2 weeks' (8%) or '1 hour every 4 weeks' (3%). One in five (21%) say they do 'None' but one in ten (10%) say they 'Don't know'.

Girls are more likely than other young people to say they do 'None' (21% vs. 15% of others), and less likely to be doing 'More than 2 hours per week' (14% vs. 21%). They are more likely to be doing '1 hour every 2 weeks' (8% vs. 5%).

Ethnic minority

One in five young people from ethnic minority backgrounds (19%) do 'More than 2 hours per week', with one in seven (15%) doing '2 hours every week'. They are most likely to be doing '1 hour every week' with one in three (32%) saying this. Fewer say they do '1 hour every 2 weeks' (5%) or '1 hour every 4 weeks' (4%). One in five (19%) say they do 'None', with 7% saying they 'Don't know'.

Young people from ethnic minority backgrounds are more likely than other young people to say they do the average of '1 hour every week' (32% vs. 25%). They are also less likely to say they 'Don't know' (7% vs. 14%).

High deprivation

One in five young people living in areas of high deprivation (20%) do 'More than 2 hours per week', with a further one in five (19%) doing '2 hours every week'. One in four (26%) do '1 hour every week', while fewer say they do '1 hour every 2 weeks' (5%) or '1 hour every 4 weeks' (4%). One in eight (13%) say they do 'None', with a further one in eight (13%) saying they 'Don't know'.

Young people living in areas of high deprivation are more likely than other young people to say they do the highest amount of 'More than 2 hours per week' (20% vs. 17%), or the next level down of '2 hours every week' (19% vs. 12%). They are much less likely to say they do 'None' (13% vs. 23%), however, they are more likely to say they 'Don't know' (13% vs. 9%).

Disability

Just under one in five young people with a disability (18%) do 'More than 2 hours per week', with one in seven (14%) doing '2 hours every week'. One in four (24%) do '1 hour every week', while fewer say they do '1 hour every 2 weeks' (6%) or '1 hour every 4 weeks' (7%). One in seven (14%) say they do 'None', with one in six (16%) saying they 'Don't know'.

Young people with a disability are more likely than other young people to say they do only '1 hour every 4 weeks' (7% vs. 3%).

Neurodiversity

Around one in seven young people with a neurodiverse condition (15%) do 'More than 2 hours per week', with one in eight (13%) doing '2 hours every week'. One in four (25%) do '1 hour every week', while fewer say they do '1 hour every 2 weeks' (8%) or '1 hour every 4 weeks' (4%). One in six (16%) say they do 'None', with one in five (19%) saying they 'Don't know'.

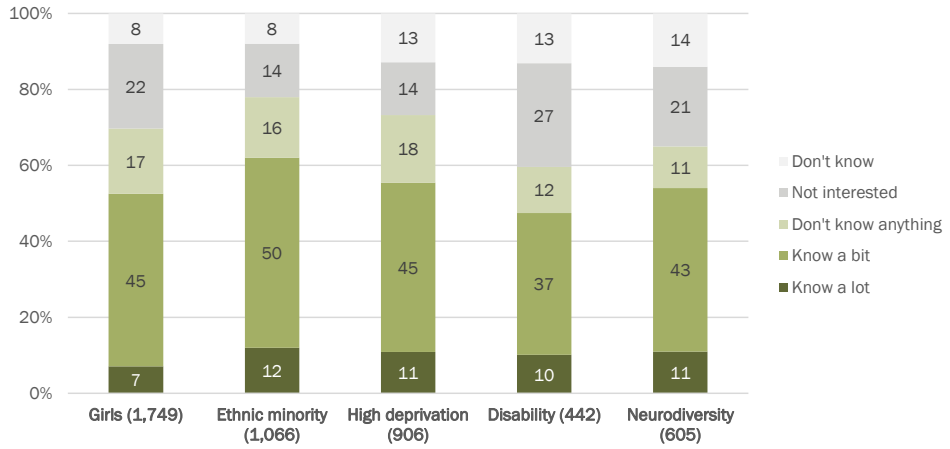
Young people with a neurodiverse condition are twice more likely than other young people to say they 'Don't know' (19% vs. 10%).

CAREERS IN COMPUTING

Knowledge and understanding

Figure 27. How much do you know about careers in computing? (Q12)

Base: 2,435 participants aged 11-19



Overall

- Around one in ten across all sub-groups (7% to 12%) say 'I know a lot about careers in computing'.
- Between one in three and one in two (37% to 50%) say 'I know a bit about careers in computing', varying across the sub-groups.
- From 11% to 18% across the sub-groups say 'I don't know anything about careers in computing but I would be interested to find out more'.
- From one in seven to one in four (14% to 27%) say 'I am not interested in finding out about careers in computing'.
- Between 8% and 14% say they 'Don't know'.

By age

- Young people aged 11-13 are more likely than older children to say they 'Don't know' at this question (13% vs. 9% of 14-16s and 8% of 17-19 year olds).
- 14-16 year olds are less likely than others to say 'I don't know anything about careers in computing but I would be interested to find out more' (11% vs. 17% of 11-13s and 15% of 17-19s).
- Those aged 17-19 are more likely than their younger counterparts to say 'I know a lot about careers in computing' (16% vs. 9% of 14-16s and just 6% of 11-13s).

Girls

More than half of girls (52%) claim to know at least a bit about computing careers, with 7% saying 'I know a lot about careers in computing' and 45% saying 'I know a bit about careers in computing'. Fewer than one in five (17%) say 'I don't know anything about careers in computing but I would be interested to find out more', but one in five (22%) say 'I am not interested in finding out about careers in computing', and 8% 'Don't know'.

Girls are more likely than other young people to say 'I am not interested in finding out about careers in computing' (22% vs. 14%), but also more likely to say 'I don't know anything about careers in computing but I would be interested to find out more' (17% vs. 12%). They are half as likely to claim 'I know a lot about careers in computing' (7% vs. 13%), and almost half as likely to say they 'Don't know' (8% vs. 13%).

Ethnic minority

Three in five young people from ethnic minority backgrounds say they know something about careers in computing (62%), including one in eight (12%) who say 'I know a lot about careers in computing' and half (50%) saying 'I know a bit about careers in computing'. Around one in six (16%) say 'I don't know anything about careers in computing but I would be interested to find out more', whilst one in seven (14%) say 'I am not interested in finding out about careers in computing', and 8% 'Don't know'.

Those from ethnic minority backgrounds are more likely others to say 'I know a bit about careers in computing' (50% vs 45%), and less likely to say 'I am not interested in finding out about careers in computing' (14% vs. 20%) or that they 'Don't know' (8% vs. 12%).

High deprivation

More than half of young people living in areas of high deprivation say they know at least something about careers in computing (56%), with one in nine (11%) saying 'I know a lot about careers in computing' and fewer than half (45%) saying 'I know a bit about careers in computing'. Close to one in five (18%) say 'I don't know anything about careers in computing but I would be interested to find out more', whilst one in seven (14%) say 'I am not interested in finding out about careers in computing', and one in eight (13%) 'Don't know'.

Those from highly deprived areas are more likely than others to say 'I don't know anything about careers in computing but I would be interested to find out more' (18% vs. 11%), but also more likely top say they 'Don't know' (13% vs. 9%). They are less likely than others to say 'I am not interested in finding out about careers in computing' (14% vs. 21%).

Disability

Fewer than half of young people with a disability people say they know at least a bit about careers in computing (47%), with one in ten (10%) saying 'I know a lot about careers in computing' and only just over one in three (37%) saying 'I know a bit about careers in computing'. One in eight (12%) say 'I don't know anything about careers in computing but I would be interested to find out more', but more than twice this proportion (27%) say 'I am not interested in finding out about careers in computing', and one in eight (13%) say they 'Don't know'.

Young people with a disability are much more likely than others to say 'I am not interested in finding out about careers in computing' (27% vs. 17%), and less likely to say 'I know a bit about careers in computing' (37% vs 48%).

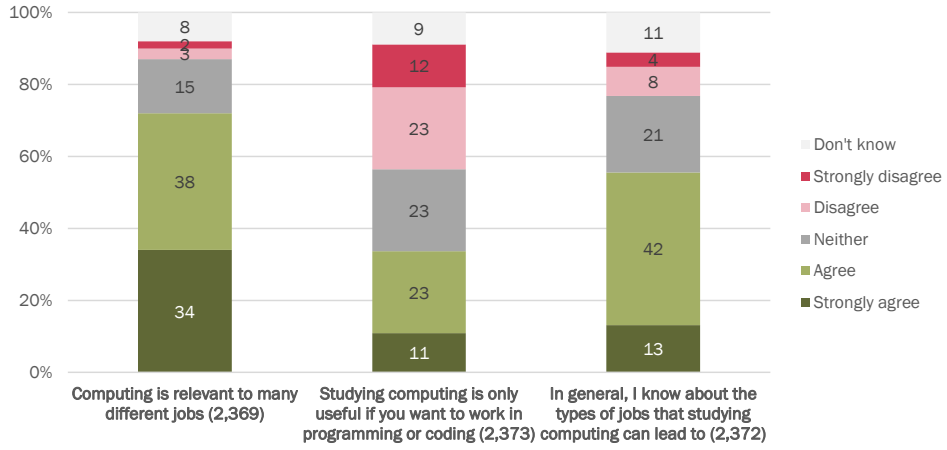
Neurodiversity

Just over half of young people with a neurodiverse condition say they know something about careers in computing (54%), with one in nine (11%) saying 'I know a lot about careers in computing' and only just over two in five (43%) saying 'I know a bit about careers in computing'. One in nine (11%) say 'I don't know anything about careers in computing but I would be interested to find out more', but twice this proportion (21%) say 'I am not interested in finding out about careers in computing', and one in seven (14%) say they 'Don't know'.

There are no significant differences between those young people with a neurodiverse condition, and other young people, when asked this question.

Figure 28. How much do you agree or disagree with these statements? (Q13a/d/e)

Base: 2,369 to 2,373 participants aged 11-19



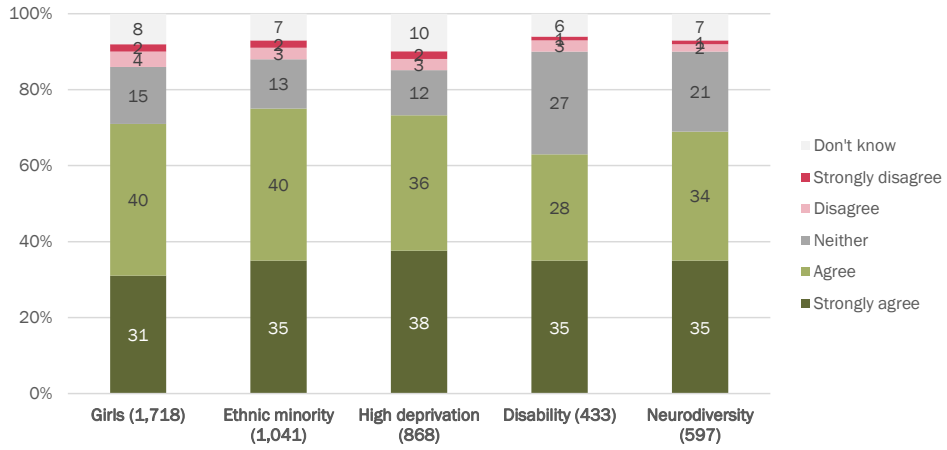
Above and below we summarise the three statements 'Computing is relevant to many different jobs', 'Studying computing is only useful if you want to work in programming or coding', and 'In general, I know about the types of jobs that studying computing can lead to'. A more in-depth breakdown of these statements is on the following pages.

Overall

- Looking at the data at a total level:
  - The majority of children and young people (72%) agree that 'Computing is relevant to many different jobs', with one in three (34%) saying they 'Strongly agree' and two in five (38%) saying they 'Tend to agree'. Only a very small minority of one in twenty (5%) disagree at all, whilst one in seven (15%) 'Neither agree nor disagree'.
  - Opinion is divided on whether 'Studying computing is only useful if you want to work in programming or coding', with one in three (34%) agreeing at all (11%) and a similar proportion (35%) disagreeing at all, and balance of opinion within each of these. One in four (23%) say they 'Neither agree nor disagree'.
  - The majority of children and young people (55%) agree that 'In general, I know about the types of jobs that studying computing can lead to', with one in eight (13%) saying they 'Strongly agree' and two in five (42%) saying they 'Tend to agree'. Only a minority of one in eight (12%) disagree at all (4% 'Strongly disagree'), whilst one in five (21%) 'Neither agree nor disagree'.

Figure 29. **How much do you agree or disagree with these statements? (Q13a)**
a) Computing is relevant to many different jobs

Base: 2,435 participants aged 11-19



Overall

- The majority of children and young people across all sub-groups agree that 'Computing is relevant to many different jobs', with around seven in ten agreeing at all (63% to 75%), one in three saying they 'Strongly agree' (31% to 38%). Only a very small minority disagree at all (3% to 6%).

By age

- 11-13s are less likely than older children to agree at all that 'Computing is relevant to many different jobs' (63% agree vs. 75% of 14-16s and 78% of 17-19s), mainly because more are likely to simply say they 'Don't know' (13% vs. 8% and 3% respectively).

Girls

Seven in ten girls agree that 'Computing is relevant to many different jobs' (72%), including three in ten (31%) that 'Strongly agree'. Only 5% disagree at all, 2% saying they 'Strongly disagree'.

There are no significant differences in opinion between girls and other young people, when asked this question.

Ethnic minority

Three in four of those from ethnic minority backgrounds agree at all that 'Computing is relevant to many different jobs' (75%), including one in three (35%) that say they 'Strongly agree'. Only 6% disagree at all, 2% saying they 'Strongly disagree'.

Young people from ethnic minority backgrounds are more likely to have a positive view on this question, with fewer saying they 'Neither agree nor disagree' (13% vs. 17% of others), and more saying they agree at all (75% vs. 70%).

High deprivation

Three quarters of those living in areas of high deprivation agree that 'Computing is relevant to many different jobs' (73%), including two in five (38%) who 'Strongly agree'. Only one in twenty (5%) disagree at all, 2% saying they 'Strongly disagree'.

Young people living in areas of deprivation are more likely than others to 'Strongly agree' with this statement (38% vs. 32%). Whilst they are less likely to say they 'Neither agree nor disagree' (12% vs. 18%), they are twice more likely to say they 'Don't know' (10% vs. 5%).

Disability

Three in five of those with a disability agree at all that 'Computing is relevant to many different jobs' (63%), including one in three (35%) that say they 'Strongly agree'. Only 4% disagree at all, 1% saying they 'Strongly disagree'.

Young people with a disability are less likely than others to agree at all with this statement (63% vs. 73%), and twice more likely to say they 'Neither agree not disagree' (27% vs. 14%).

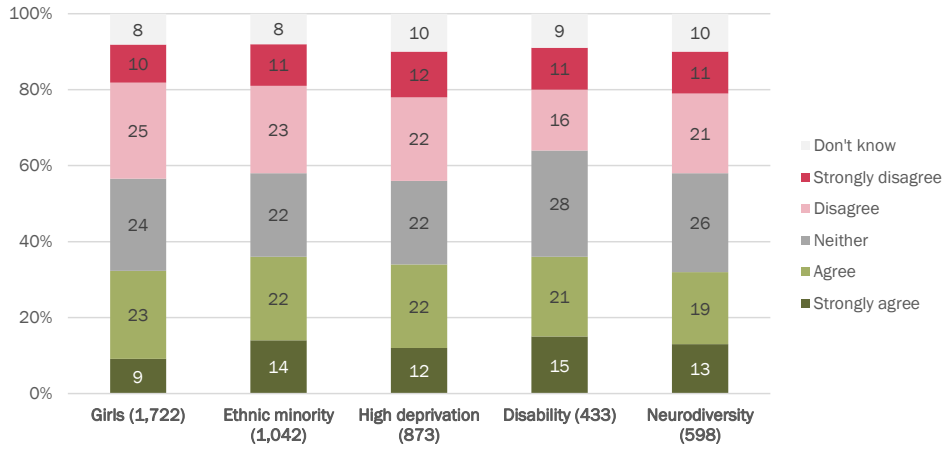
Neurodiversity

Seven in ten young people with neurodiverse conditions agree that 'Computing is relevant to many different jobs' (69%), including one in three (35%) who 'Strongly agree'. Only 3% disagree at all, 1% saying they 'Strongly disagree'.

Young people with neurodiverse conditions are more likely than others to say they 'Neither agree nor disagree' with this statement (21% vs. 14%).

Figure 30. **How much do you agree or disagree with these statements? (Q13d)**
d) Studying computing is only useful if you want to work in programming or coding

Base: 2,373 participants aged 11-19



Overall

- There is no clear consensus on whether 'Studying computing is only useful if you want to work in programming or coding'. Around one in three across all sub-groups agree at all (32% to 36%) but around the same proportion disagree (27% to 35%), and around one in four are not sure either way (22% to 28%).

By age

- 11-13s are less likely than older children to disagree at all that 'Studying computing is only useful if you want to work in programming or coding' (29% disagree vs. 37% of 14-16s and 38% of 17-19s), but they are also more likely to simply say they 'Don't know' (16% vs. 8% and 3% respectively).
- 17-19 year olds are more likely than younger children to agree at all (37% vs. 31% of 14-16s and 32% of 11-13s) – they are also less likely than younger children to say they 'Don't know' (3% vs, 8% of 14-16s and 16% of 11-13s).

Girls

On balance, girls are more likely to disagree that 'Studying computing is only useful if you want to work in programming or coding' (36%), including one in ten (10%) that 'Strongly disagree'. However, almost as many agree at all (32%), including a further one in ten (9%) that 'Strongly agree'. One in four (24%) say they 'Neither agree nor disagree'.

Girls are more likely than other young people to say they 'Tend to disagree' with this statement (25% vs. 20%) but are not significantly more likely to disagree overall.

Ethnic minority

On balance, young people from ethnic minority backgrounds are more likely to agree that 'Studying computing is only useful if you want to work in programming or coding' (36%), including one in seven (14%) that 'Strongly agree'. However, almost as many disagree at all (34%), including one in nine (11) that 'Strongly disagree'. One in five (22%) say they 'Neither agree nor disagree'.

Those from ethnic minority backgrounds are more likely than other young people to say they 'Strongly agree' with this statement (14% vs. 9%) but are not significantly more likely to agree overall.

High deprivation

Opinion is perfectly balanced amongst those living in areas of high deprivation that 'Studying computing is only useful if you want to work in programming or coding', with one in three (34%) agreeing or disagreeing at all. One in eight (12%) either 'Strongly disagree' or 'Strongly disagree'. One in five (22%) say they 'Neither agree nor disagree'.

Those living in areas of high deprivation are more likely than other young people to say they 'Don't know' when confronted with this statement (10% vs. 7%).

Disability

On balance, young people with a disability are more likely to agree that 'Studying computing is only useful if you want to work in programming or coding' (36%), including one in seven (15%) that 'Strongly agree'. More than one in four disagree at all (27%), including one in nine (11) that 'Strongly disagree'. Almost one in three (28%) say they 'Neither agree nor disagree'.

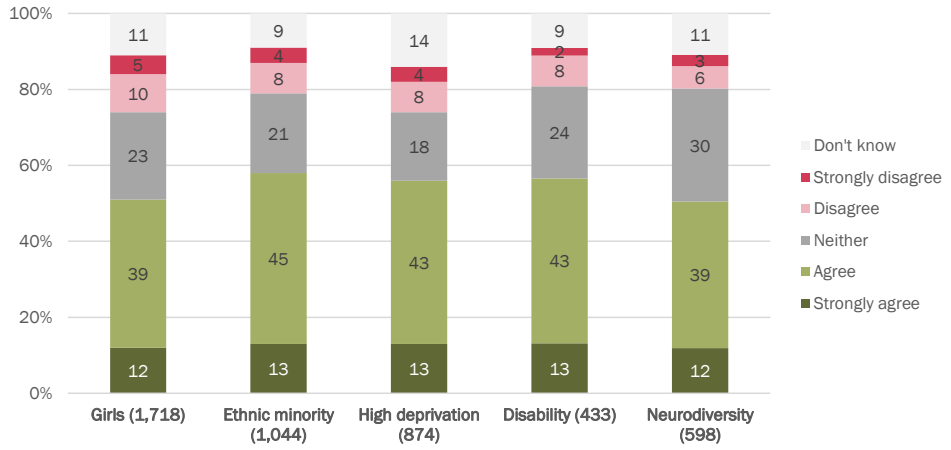
Young people with a disability are less likely than other young people to say they 'Tend to disagree' with this statement (16% vs. 23%), which in turn leads them to be less likely to disagree overall (27% vs. 35%).

Neurodiversity

Opinion is balanced amongst those young people with neurodiverse conditions when asked if 'Studying computing is only useful if you want to work in programming or coding' - one in three (32%) agree or disagree at all, with around one in eight saying they 'Strongly disagree' (13%), one in nine saying they 'Strongly disagree' (11%). One in four (26%) say they 'Neither agree nor disagree'.

There are no significant differences in opinion between those with neurodiverse conditions and other young people, when asked this question.

Figure 31. **How much do you agree or disagree with these statements? (Q13e)**
e) In general, I know about the types of jobs that studying computing can lead to
Base: 2,372 participants aged 11-19



Overall

- The majority of children and young people across all sub-groups agree that 'In general, I know about the types of jobs that studying computing can lead to', with half or more of each sub-group agreeing at all (51% to 58%), one in eight saying they 'Strongly agree' (12% to 13%). A minority of 9% to 15% disagree at all.

By age

- 11-13s are less likely than older children to agree at all that 'In general, I know about the types of jobs that studying computing can lead to' (49% agree vs. 57% of 14-16s and 59% of 17-19s), mainly because they are more likely to simply say they 'Don't know' (19% vs. 11% and 3% respectively).
- 17-19s are more likely than their younger counterparts to disagree with this statement at all (15% vs. 11% of both 14-16s and 11-13s), and are also less likely to say they 'Don't know' (3% vs. 11% of 14-16s and 19% of 11-13s). However they are also more likely to say they 'Strongly agree' (16% vs. 12% and 11% respectively).

Girls

Half of girls agree that 'In general, I know about the types of jobs that studying computing can lead to' (51%), including one in eight (12%) that 'Strongly agree'. 15% disagree at all, with one in twenty (5%) saying they 'Strongly disagree'. One in four (23%) say they 'Neither agree nor disagree'.

Overall, girls are more likely than others to disagree with this statement (15% vs. 10%), and subsequently less likely to agree (51% vs. 59%).

Ethnic minority

Almost three in five of those from ethnic minority backgrounds agree at all that 'In general, I know about the types of jobs that studying computing can lead to' (58%), including one in eight (13%) that say they 'Strongly agree'. One in eight (12%) disagree at all, 4% saying they 'Strongly disagree', whilst one in five (21%) say they 'Neither agree nor disagree'.

Young people from ethnic minority backgrounds are more likely than othgers to agree at all with this statement (58% vs. 53%), and less likely to say they 'Don't know' (9% vs. 12%).

High deprivation

More than half of those living in areas of high deprivation agree that 'In general, I know about the types of jobs that studying computing can lead to' (56%), including one in eight (13%) that say they 'Strongly agree'. One in eight (12%) disagree at all, 4% saying they 'Strongly disagree', whilst around one in five (18%) say they 'Neither agree nor disagree'.

Young people from areas of high deprivation are less likely than others to say they 'Neither agree nor disagree' with this statement (18% vs. 24%), but more likely to say they 'Don't know' (14% vs. 8%).

Disability

More than half of those with a disability agree that 'In general, I know about the types of jobs that studying computing can lead to' (56%), including one in eight (13%) that say they 'Strongly agree'. One in nine (11%) disagree at all, 2% saying they 'Strongly disagree', whilst around one in four (24%) say they 'Neither agree nor disagree'.

There are no significant differences in opinion between those with a disability and other young people, when asked this question.

Neurodiversity

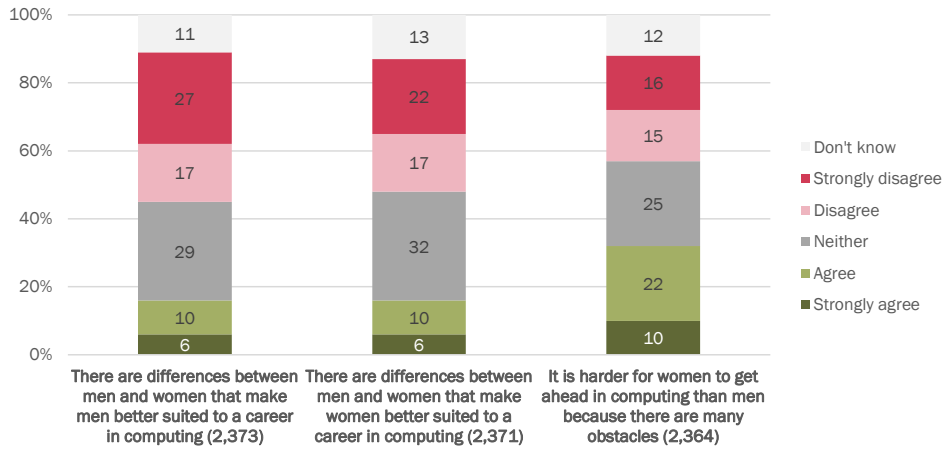
Half of young people with neurodiverse conditions agree that 'In general, I know about the types of jobs that studying computing can lead to' (50%), including one in eight (12%) that 'Strongly agree'. One in ten (9%) disagree at all, with 3% saying they 'Strongly disagree'. Three in ten (30%) say they 'Neither agree nor disagree'.

Neurodiverse young people are more likely than others to say they 'Neither agree nor disagree' with this statement (30% vs. 20%).

Girls in computing

Figure 32. How much do you agree or disagree with these statements? (Q13b/c/f)

Base: 2,364 to 2,373 participants aged 11-19



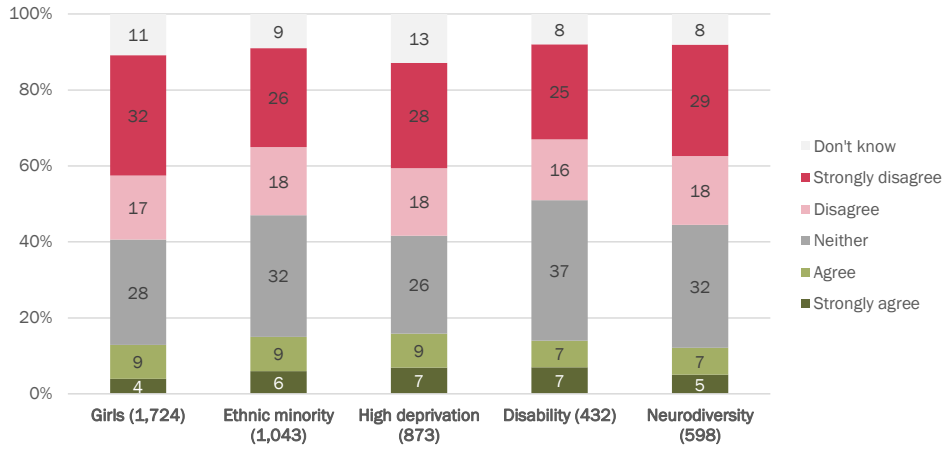
Above and below we summarise the three statements 'There are differences between men and women that make men better suited to a career in computing', 'There are differences between men and women that make women better suited to a career in computing', and 'It is harder for women to get ahead in computing than men because there are many obstacles'. A more in-depth breakdown of these statements is on the following pages.

Overall

- Looking at the data at a total level:
  - More than two in five children and young people (44%) disagree that 'There are differences between men and women that make men better suited to a career in computing', with one in four (27%) saying they 'Strongly disagree' and one in six (17%) saying they 'Tend to disagree'. Only a minority of one in six (16%) agree at all (6% say they 'Strongly agree'), whilst three in ten (29%) 'Neither agree nor disagree'.
  - Two in five children and young people (39%) disagree that 'There are differences between men and women that make women better suited to a career in computing', with one in five (22%) saying they 'Strongly disagree' and one in six (17%) saying they 'Tend to disagree'. Only a minority of one in six (16%) agree at all (6% say they 'Strongly agree'), whilst one in three (32%) 'Neither agree nor disagree'.
  - Opinion is divided on whether 'It is harder for women to get ahead in computing than men because there are many obstacles', with one in three agreeing (32%) or disagreeing (31%) at all. More 'Strongly disagree' (16%) than 'Strongly agree' (10%). One in four (25%) say they 'Neither agree nor disagree'.

Figure 33. **How much do you agree or disagree with these statements? (Q13b)**
b) There are differences between men and women that make men better suited to a career in computing

Base: 2,373 participants aged 11-19



Overall

- Most children and young people across the sub-groups disagree that 'There are differences between men and women that make men better suited to a career in computing', with between four and five in ten saying this (41% to 49%), including one in four or more saying they 'Strongly disagree' (25% to 32%). Around three in ten say they 'Neither agree nor disagree' (26% to 37%), and a small minority of around one in eight agree at all (12% to 16%).

By age

- 11-13s are more likely than older children to say they 'Don't know' whether 'There are differences between men and women that make men better suited to a career in computing' (18% vs. 11% of 14-16s and 5% of 17-19s).
- 14-16 year olds are the most likely to disagree at all with this statement (50% vs. 39% of 11-13s and 43% of 17-19s).
- 17-19 year olds are more likely than younger children to agree with this statement (23% vs. 9% of 14-16s and 14% of 11-13s).

Girls

Half of girls disagree that 'There are differences between men and women that make men better suited to a career in computing' (49%), including one in three (32%) that 'Strongly disagree'. One in eight agree at all (13%), 4% saying they 'Strongly agree'. Almost three in ten (28%) say they' Neither agree nor disagree'.

Girls are more likely than others to disagree at all with this statement (49% vs. 40%), with one in three saying they 'Strongly disagree' (32% vs. 23%). They are also less likely to agree overall (13% vs. 17%), with 4% saying they 'Strongly agree' (vs. 7% of others).

Ethnic minority

More than two in five young people from ethnic minority background disagree that 'There are differences between men and women that make men better suited to a career in computing' (44%), including one in four (26%) that 'Strongly disagree'. One in seven agree at all (15%), 6% saying they 'Strongly agree'. One in three (32%) say they' Neither agree nor disagree'.

Young people from ethnic minority backgrounds are more likely than others to say they 'Neither agree nor disagree' with this statement (32% vs. 27%), but they are less likely to say they simply 'Don't know' (9% vs. 12%).

High deprivation

Almost half of young people living in highly deprived areas disagree that 'There are differences between men and women that make men better suited to a career in computing' (46%), including almost three in ten (28%) that 'Strongly disagree'. One in six agree at all (16%), with 7% saying they 'Strongly agree'. One in four (26%) say they' Neither agree nor disagree'.

Young people living in areas of deprivation are less likely than others to say they 'Neither agree nor disagree' with this statement (26% vs. 32%), but they are more likely to say they simply 'Don't know' (13% vs. 10%).

Disability

Around two in five young people with disabilities disagree that 'There are differences between men and women that make men better suited to a career in computing' (41%), including one in four (25%) that 'Strongly disagree'. One in seven agree at all (14%), 7% saying they 'Strongly agree'. More than one in three (37%) say they' Neither agree nor disagree'.

Young people with disabilities are more likely than others to say they 'Neither agree nor disagree' with this statement (37% vs. 28%).

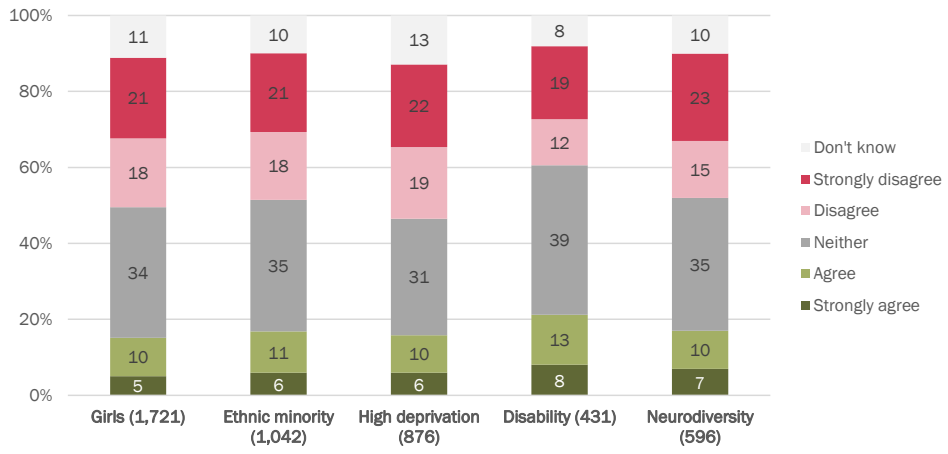
Neurodiversity

Almost half of young people with a neurodiverse condition disagree that 'There are differences between men and women that make men better suited to a career in computing' (46%), including three in ten (29%) that 'Strongly disagree'. One in eight agree at all (13%), with one in twenty (5%) saying they 'Strongly agree'. One in three (32%) say they' Neither agree nor disagree'.

There are no significant differences in opinion between young people with a neurodiverse condition and others when asked this question.

Figure 34. **How much do you agree or disagree with these statements? (Q13c)**
c) There are differences between men and women that make <u>women</u> better suited to a career in computing

Base: 2,371 participants aged 11-19



Overall

- More children and young people across all sub-groups disagree that 'There are differences between men and women that make women better suited to a career in computing' (31% to 41%), than agree with this statement (15% to 21%), although a significant proportion say they 'Neither agree not disagree' (31% to 39%).

By age

- 14-16s are the age group most likely to disagree that 'There are differences between men and women that make women better suited to a career in computing' at all (45% vs. 36% of 11-13s and 37% of 17-19s).
- 17-19 year olds are much more likely than younger children to agree at all with this statement (24% vs. 11% of 14-16s and 12% of 17-19s). Only one in twenty this age say they 'Don't know' (5% vs. 14% and 19% respectively).

Girls

Two in five girls disagree that 'There are differences between men and women that make women better suited to a career in computing' (39%), including one in five (21%) that 'Strongly disagree'. 15% agree at all, one in twenty (5%) saying they 'Strongly agree'. However, one in three (34%) say they 'Neither agree nor disagree'.

There are no significant differences in opinion between girls and other young people, when asked this question.

Ethnic minority

Two in five young people from ethnic minority backgrounds disagree that 'There are differences between men and women that make women better suited to a career in computing' (39%), including one in five (21%) that 'Strongly disagree'. 17% agree at all, 6% saying they 'Strongly agree'. However, one in three (35%) say they 'Neither agree nor disagree'.

Young people from ethnic minority backgrounds are less likely than others to say they 'Don't know' at this question (10% vs. 14%).

High deprivation

Two in five of those living in areas of high deprivation disagree that 'There are differences between men and women that make women better suited to a career in computing' (40%), including one in five (22%) that 'Strongly disagree'. 16% agree at all, including 6% who say they 'Strongly agree', with three in ten (31%) saying they 'Neither agree nor disagree'.

There are no significant differences in opinion between those living in areas of high deprivation and other young people, when asked this question.

Disability

Three in ten young people with a disability disagree that 'There are differences between men and women that make women better suited to a career in computing' (31%), including one in five (19%) that 'Strongly disagree'. One in five agree at all (21%), 8% saying they 'Strongly agree'. However, two in five (39%) say they 'Neither agree nor disagree'.

Young people with a disability are more likely than others to say they agree at all with this statement (21% vs. 15%), less likely to disagree at all (31% vs 40%), but more likely to say they 'Neither agree nor disagree' (39% vs 32%).

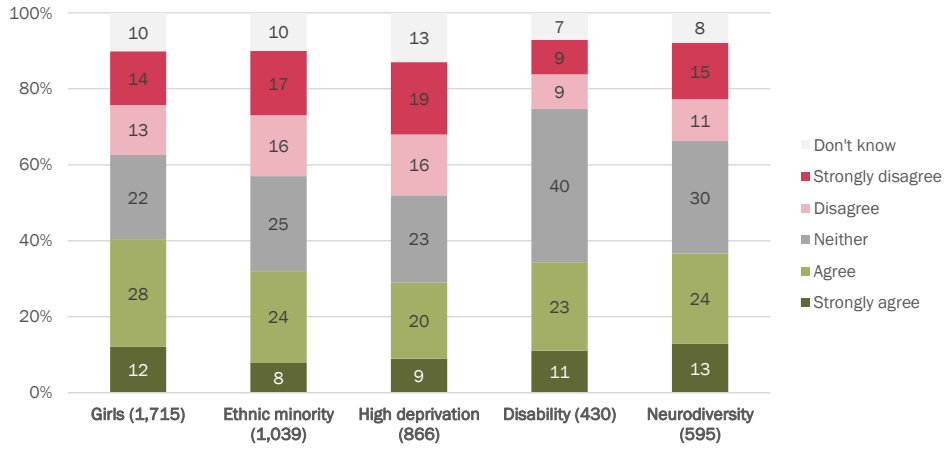
Neurodiversity

Two in five young people with a neurodiverse condition disagree that 'There are differences between men and women that make women better suited to a career in computing' (38%), including one in four (23%) that 'Strongly disagree'. 17% agree at all, including 7% who say they 'Strongly agree', but one in three (35%) say they 'Neither agree nor disagree'.

There are no significant differences in opinion between young people with a neurodiverse conditions and others when asked this question.

Figure 35. **How much do you agree or disagree with these statements? (Q13f)**
f) It is harder for women to get ahead in computing than men because there are many obstacles

Base: 2,364 participants aged 11-19



Overall

- More children and young people agree that 'It is harder for women to get ahead in computing than men because there are many obstacles', with between three and four in ten agreeing at all (29% to 40%), around one in ten saying they 'Strongly agree' (8% to 13%). Around one in five to one in three disagree at all (18% to 33%), with a significant number saying they 'Neither agree nor disagree' (22% to 40%).

By age

- 11-13s are less likely than older children to agree at all that 'It is harder for women to get ahead in computing than men because there are many obstacles' (22% agree vs. 28% of 14-16s and 43% of 17-19s), and they are more are likely to say they 'Don't know' (19% vs. 12% and 5% respectively).
- 17-19 year olds are much more likely than younger children to agree at all with this statement (43% vs. 28% of 14-16s and 22% of 17-19s). Only one in twenty this age say they 'Don't know' (5% vs. 12% and 19% respectively).

Girls

Two in five girls agree that 'It is harder for women to get ahead in computing than men because there are many obstacles' (40%), including one in eight (12%) that 'Strongly agree'. However, nearly three in ten (28%) disagree at all, one in seven (14%) saying they 'Strongly disagree', with a further one in five (22%) saying they 'Neither agree nor disagree'.

Girls opinions are quite different to other young people's when asked if 'It is harder for women to get ahead in computing than men because there are many obstacles', tending to agree where others disagree. Girls are much more likely to agree at all (40% vs. 23%), and within this proportion they are also more likely to 'Strongly agree' (12% vs. 8%). They are less likely to disagree at all (28% vs. 34%), and within this, less likely to 'Strongly disagree' (14% vs. 19%). They are also less likely to say they 'Neither agree nor disagree' (22% vs. 28%), or that they 'Don't know' (10% vs. 14%).

Ethnic minority

Opinion is split on whether 'It is harder for women to get ahead in computing than men because there are many obstacles' among young people from ethnic minority backgrounds. One in three agree at all (32%), including 8% that 'Strongly agree', but equally a further one in three disagree (33%), with 17% saying they 'Strongly disagree'. One in four (25%) say they 'Neither agree nor disagree'.

Young people from ethnic minority backgrounds are less likely than others to say they 'Don't know' when asked this statement (10% vs. 14%).

High deprivation

One in three young people living in areas of high deprivation disagree at all that 'It is harder for women to get ahead in computing than men because there are many obstacles' (35%), including one in five (19%) that 'Strongly disagree'. However, nearly three in ten (29%) agree at all, with one in ten (9%) saying they 'Strongly agree'. Almost one in four (23%) say they 'Neither agree nor disagree'.

Young people living in areas of high deprivation are marginally more likely to disagree with this statement compared with others who are more likely to agree. They are more likely to disagree at all (35% vs. 29%), and within this proportion also more likely to 'Strongly disagree' (19% vs. 15%). They are also less likely to say they 'Neither agree nor disagree' (23% vs. 27%).

Disability

One in three young people with a disability agree that 'It is harder for women to get ahead in computing than men because there are many obstacles' (34%), including one in nine (11%) that 'Strongly agree'. Almost one in five (18%) disagree at all, with one in ten (9%) saying they 'Strongly disagree'. However, the largest proportion say they 'Neither agree nor disagree' (40%).

Young people with a disability are much less likely to disagree at all (18% vs. 33%), and within this less likely to 'Strongly disagree' (9% vs. 17%). They are also much more likely to say they 'Neither agree nor disagree' (40% vs. 23%), but less likely to say they 'Don't know' (7% vs. 13%).

Neurodiversity

One in three young neurodiverse people agree that 'It is harder for women to get ahead in computing than men because there are many obstacles' (36%), including one in eight (13%) that 'Strongly agree'. One in four disagree at all (26%), with one in six (15%) saying they 'Strongly disagree'. However, three in ten say they 'Neither agree nor disagree' (30%).

Young people with a neurodiverse condition are less likely to disagree at all (26% vs. 33%), and less likely to say they 'Don't know' (8% vs. 13%).

Research shows that some groups of young people – particularly girls – are less likely to continue with computing subjects after the age of 14. What do you think might help to

encourage more young people to continue learning about computing and to consider a potential career in this field? (Q18)

Participants were asked the above open-text question about how to encourage girls into computing. The responses fell into several categories as set out below, with selected quotes to illustrate the points.

- Create more awareness of career opportunities in computing, by teaching young people about the range of jobs available, the skills required and the benefits included.

  "Teach them about the variety of jobs computing can lead to".

  "Highlight the benefits of computing for future employment".

  "Make young people more aware of the many jobs that require computing skills".

  "Advertise the different careers and future opportunities that computing can offer."

  "Improve the advertisement of computing careers and their benefits."

  "Use social media and other platforms to promote computing in an engaging way."

  "Communicate the importance of computing in the future job market."

- Make computing more fun, interactive and hands-on to increase engagement. One idea, for example, was to incorporate gaming and coding activities that appeal to young people and ensure the content is varied.

  "Make computing lessons more hands-on and fun".

  "Use interactive and engaging teaching methods".

  "Incorporate gaming and coding activities that appeal to young people."

  "Ensure that the content is varied and interesting to keep students engaged."

  "Run workshops and extra-curricular activities focused on computing."

  "Organize coding clubs and competitions to make computing appealing and fun."

  "Offer hands-on experiences that allow students to explore different aspects of computing."

- Expose young people to computing at a young age and build on that interest as they grow older. For example, one respondent suggested incorporating computing into primary school learning; another idea was to continue offering it through hands-on computing workshops, coding clubs or competitions.

"Introduce computing at a younger age to build interest early on."

"Make computing more available and integrated into primary school learning."

"Offer continuous opportunities to learn about computing through workshops and extracurricular activities."

- Address gender bias in computing to promote inclusivity. This could be done by showcasing successful women in computing as role models for girls, providing mentors as well as increasing the number of female computing teachers.

  "Encourage girls by showcasing successful women in computing."

  "Provide role models and mentors for girls interested in computing".

  "Promote computing as a gender-neutral subject and emphasize inclusivity".

  "Increase the number of female computing teachers to provide relatable role models."

  "Showcase diverse role models in the computing industry".

  "Highlight successful careers of women in computing to inspire young girls".

  "Invite computing professionals to schools to talk about their experiences and careers."

- Raise aspirations more generally by showcasing diverse models in the computing industry. One idea would be to invite various computing professionals to schools to talk about their experiences and careers.

  "Highlight the practical application of computing in the 'real world', for example by explaining the benefits of computing in everyday life, as well as how it is used across various job sectors."

  "Emphasize how computing is integral to many modern careers".

  "Explain the long-term benefits of having computing skills, even in non-technical jobs".

  "Discuss the evolving nature of technology and the growing demand for computing skills."

- Provide a supporting learning environment that generates interest in computing. This could include encouragement from teachers and parents, as well as more accessible lessons that are not overly difficult or intimidating.

  "Provide more support and encouragement from teachers and parents".

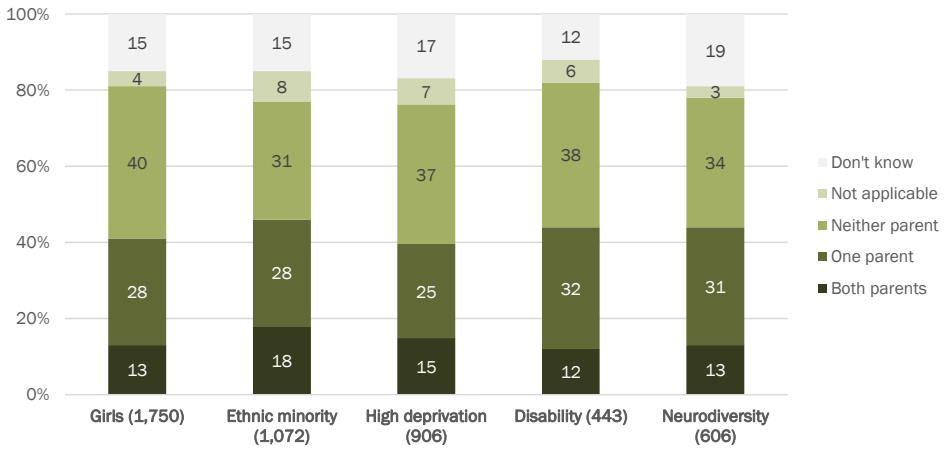
  "Create a supportive environment that nurtures interest in computing".

  "Ensure that computing lessons are not perceived as overly difficult or intimidating."

Engagement in Computing – Extra Curricular

Figure 36. Do you think your parents / carers are interested in computing? (Q17)

Base: 2,433 participants aged 11-19



Overall

- Around two in five or more say that either one or both of their parents / carers are interested in computing (40% to 46%), however, one in three or more actively say that neither of their parents / carers are interested (31% to 40%).
- For a small minority (3% to 8%), this question is not applicable (as they either live alone or without a parent / carer).

By age

- 11-13 year olds are less likely to say 'Yes, both parents / carers interested' (11% vs. 18% of 14-16s and 16% of 17-19s), but they are also twice as likely to say they 'Don't know' (25% vs. 13% and 10% respectively).

Girls

Two in five girls (41%) say that either one (28%) or both of their parents / carers (13%) are interested in computing, but the same proportion (40%) say 'No, neither parent / carer interested'. 15% say they 'Don't know' and 4% feel 'This question is not applicable to me'.

Girls are more likely than other young people to say 'No, neither parent / carer interested' (40% vs. 32%), and half as likely to say 'This question is not applicable to me' (4% vs. 8%).

Ethnic minority

Almost half of young people from ethnic minority backgrounds (46%) say that either one (28%) or both of their parents / carers (18%) are interested in computing (40%). Three in ten say 'No, neither parent / carer interested' (31%). 15% say they 'Don't know' and 8% feel 'This question is not applicable to me'.

Young people from ethnic minority backgrounds are more likely than other young people to say 'Yes, both parents / carers interested' (18% vs. 13%), less likely to say 'No, neither parent / carer interested' (31% vs. 40%), but twice as likely to say 'This question is not applicable to me' (8% vs. 4%).

High deprivation

Two in five young people living in areas of high deprivation (40%) say that either one (25%) or both of their parents / carers (15%) are interested in computing, but almost the same proportion (37%) say 'No, neither parent / carer interested'. 17% say they 'Don't know' and 7% feel 'This question is not applicable to me'.

Young people in areas of deprivation are less likely than others to say 'Yes, one parent / carer interested' (25% vs. 30%), and more likely to say 'This question is not applicable to me' (7% vs. 4%).

Disability

More than two in five young people with a disability (44%) say that either one (32%) or both of their parents / carers (12%) are interested in computing, whilst two in five (38%) say 'No, neither parent / carer interested'. 12% say they 'Don't know' and 6% feel 'This question is not applicable to me'.

There are no significant differences between young people with a disability and others when asked this question.

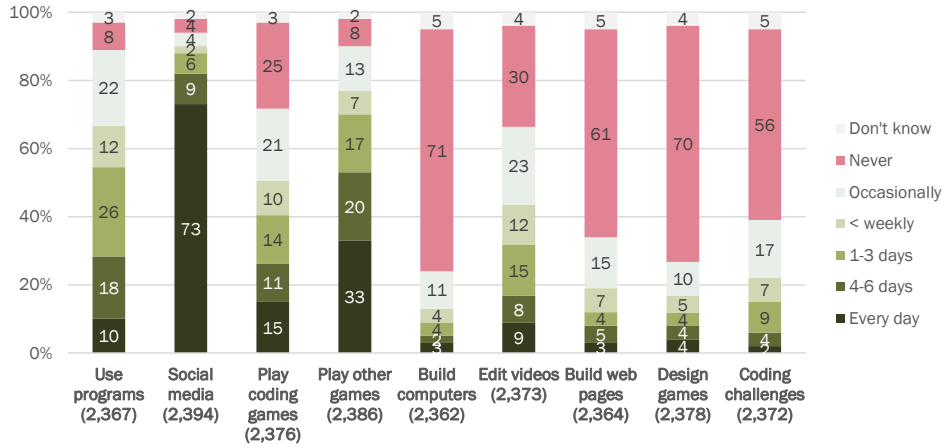
Neurodiversity

More than two in five young people with a neurodiverse condition (44%) say that either one (31%) or both of their parents / carers (13%) are interested in computing, with one in three (34%) saying 'No, neither parent / carer interested'. One in five (19%) say they 'Don't know' and 3% feel 'This question is not applicable to me'.

There are no significant differences between young people with a neurodiverse condition and others when asked this question.

Figure 37. Outside of school or college, how often do you participate in each of these activities? (Q14a to i)

Base: 2,362 to 2,394 participants aged 11-19



Above and below we summarise the statements from this question. A more in-depth breakdown of these statements is on the following pages.

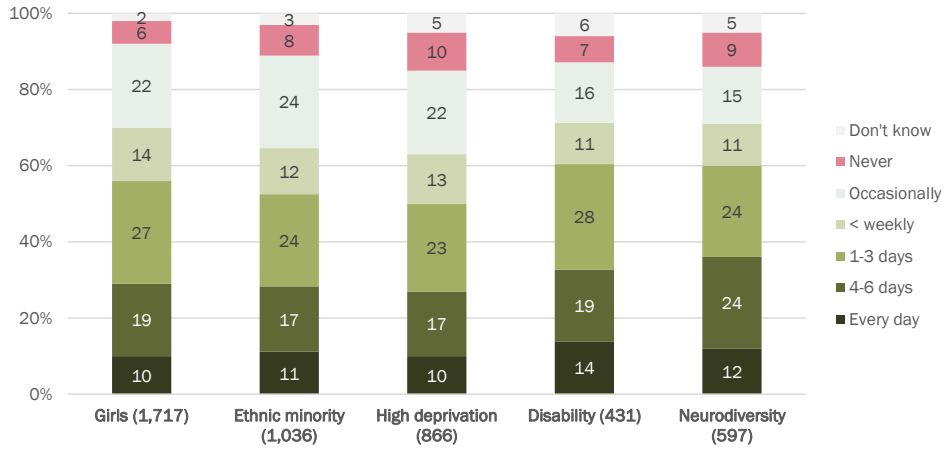
Overall

- Looking at the data at a total level:
  - Nine in ten (88%) ever 'Use programs to do projects (e.g. Word, PowerPoint, Photoshop)', with the most common frequency being '1 to 3 days a week' (26%).
  - More than nine in ten young people (93%) ever 'Use social media (e.g. TikTok, Snapchat, Instagram)', with three in four (73%) using 'Every day'.
  - Seven in ten (71%) 'Play video games that involve an element of coding (e.g. Minecraft on PC)', with only one in four (25%) saying they 'Never' do this. The most common frequency is just 'Occasionally' with one in five (21%) playing this often.
  - Nine in ten (90%) 'Play other games on a computer, console or tablet', with fewer than one in ten (8%) saying they 'Never' do this. One in three (33%) do this 'Every day', one in five (20%) '4 to 6 days per week'.

- Only one in four (24%) are ever 'Building computers (e.g. using things like micro:bit, Raspberry Pi, Arduino)', with seven in ten (71%) saying they 'Never' do this. One in nine (11%) do this 'Occasionally'.
- Two in three (66%) ever 'Edit your own videos or video content', but three in ten (30%) say they 'Never' do this. One in four (23%) do this 'Occasionally'.
- One in three (34%) ever 'Build or edit web page(s)', but a majority of three in five (61%) 'Never' do this. One in seven (15%) do this 'Occasionally'.
- One in four (27%) ever 'Design your own video games', but seven in ten (70%) say they 'Never' do this. One in ten (10%) do this 'Occasionally'.
- Nearly two in five (38%) ever 'Solve coding challenges', but more than half (56%) 'Never' do this. One in six (17%) say they do this 'Occasionally'.

Figure 38. **Outside of school or college, how often do you participate in each of these activities? (Q14b)**
b) Use programs to do projects (e.g. Word, PowerPoint, Photoshop)

Base: 2,367 participants aged 11-19



Overall

- Around nine in ten young people across the sub-groups ever use programs to do projects (85% to 92%).
- For most sub-groups, the most common frequency of use is '1 to 3 days a week' with around one in four using this often (23% to 28%).
- Around one in ten say that they 'Never' use programs to do projects (6% to 10%).

By age

- Young people aged 11-13 are less likely than their older counterparts to ever use programs to do projects (82% vs. 90% of 14-16s and 93% of 17-19 year olds), and twice as likely to say they 'Never' use programs to do projects (13% vs. 6% of older children).
- Those aged 17-19 are more likely than younger children to use programs to do projects 'Every day' (17% vs. 11% of 14-16s and 3% of 11-13s).

Girls

Nine in ten girls ever use programs to do projects (92%), with more than half (56%) using weekly or more often, with the most common frequency chosen '1 to 3 days a week' (27%). One in five (22%) only use 'Occasionally', with only 6% saying they 'Never' use.

Girls are more likely than other young people to ever use programs to do projects (92% vs. 85%), less likely to say they 'Never' use (6% vs. 10% of others), or that they 'Don't know' (2% vs. 5%).

Ethnic minority

Nine in ten young people from ethnic minority backgrounds ever use programs to do projects (89%), with half (52%) using weekly or more often. One in four (24%) use either '1 to 3 days a week' or just 'Occasionally'. Only 8% say they 'Never' use programs to do projects.

There are no significant differences between those from ethnic minority backgrounds and others when asked this question.

High deprivation

More than four in five young people living in areas of high deprivation ever use programs to do projects (85%), with half (50%) using weekly or more often. Around one in five use either '1 to 3 days a week' (23%) or just 'Occasionally' (22%). One in ten (10%) say they 'Never' use programs to do projects.

Young people living in areas of high deprivation are less likely than others to ever use programs to do projects (85% vs. 91%), more likely to say they 'Never' use (10% vs. 7% of others), or that they 'Don't know' (5% vs. 2%).

Disability

Almost nine in ten young people with a disability ever use programs to do projects (87%), with three in five (60%) using weekly or more often. Almost three in ten use '1 to 3 days a week' (28%), with one in five (19%) using '4 to 6 days a week'. One in six (16%) just use 'Occasionally', and 7% say they 'Never' use programs to do projects.

Young people with a disability are less likely than others to use programs to do projects 'Occasionally' (16% vs. 23%).

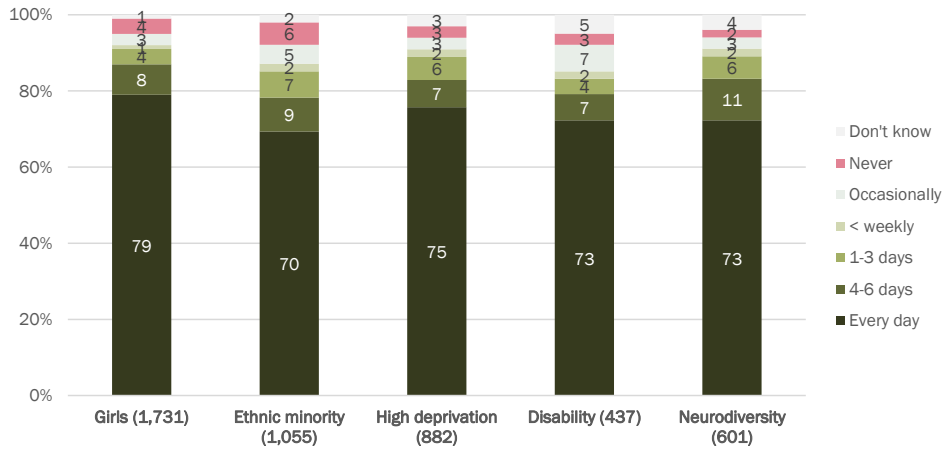
Neurodiversity

More than four in five young people with a neurodiverse condition ever use programs to do projects (86%), with three in five (60%) using weekly or more often. One in four (24%) use either '4 to 6 days a week' or '1 to 3 days a week'. One in seven (15%) just use 'Occasionally', and one in ten (9%) say they 'Never' use programs to do projects.

Young people with a neurodiverse condition are more likely than others to use programs to do projects weekly or more often (60% vs. 52%), especially using '4 to 6 days a week' (24% vs. 16%), and less likely to just use 'Occasionally' (15% vs. 24%).

Figure 39. **Outside of school or college, how often do you participate in each of these activities? (Q14a) a*) Use social media (e.g. TikTok, Snapchat, Instagram)***

Base: 2,394 participants aged 11-19



Overall

- More than nine in ten young people across the sub-groups ever use social media (92% to 95%).
- The vast majority of around three in four across all sub-groups use social media 'Every day' (70% to 79%), with up to one in five using less often than this (16% to 23%).
- Only a minority say that they 'Never' use social media (3% to 6%).

By age

- Young people aged 17-19 are more likely than their younger counterparts to ever use social media (98% vs. 91% of 14-16s and 90% of 11-13 year olds), and more likely to use social media weekly or more often (93% vs. 86% and 84% respectively).

Girls

Almost all girls ever use social media (95%), with a majority of four in five girls using social media 'Every day' (79%). Around one in six (16%) use social media less often than this, with only 4% saying they 'Never' use.

Girls are more likely than other young people to ever use social media (95% vs. 91%), much more likely to be using it weekly or more often (91% vs. 84%), much more likely to be using it 'Every day' (79% vs. 67%), and much less likely to use social media less often (4% use '1 to 3 days a week' vs. 7% of others, 1% use 'Less than once a week' vs. 3% of others).

Ethnic minority

Almost all young people from ethnic minority backgrounds ever use social media (93%), with a majority of seven in ten using social media 'Every day' (70%). Around one in four (23%) use social media less often than this, with only 6% saying they 'Never' use.

Young people from ethnic minority backgrounds are less likely than others to use social media 'Every day' (70% vs. 75%), more like to use '1 to 3 days a week' (7% vs. 5%) or 'Occasionally' (5% vs. 3%).

High deprivation

More than nine in ten young people from areas of high deprivation ever use social media (94%), with three in four using social media 'Every day' (75%). Around one in five (18%) use social media less often than this, with only 3% saying they 'Never' use.

Young people from deprived areas are more likely than others to use social media 'Every day' (75% vs. 71%), and half as likely to say they 'Never' use (3% vs. 6%).

Disability

Just over nine in ten young people with a disability ever use social media (92%), with a majority of three in four using social media 'Every day' (73%). One in five (20%) use social media less often than this, with only 3% saying they 'Never' use.

Young people with a disability are more likely than others to say they 'Don't know' at this question (5% vs. 2%).

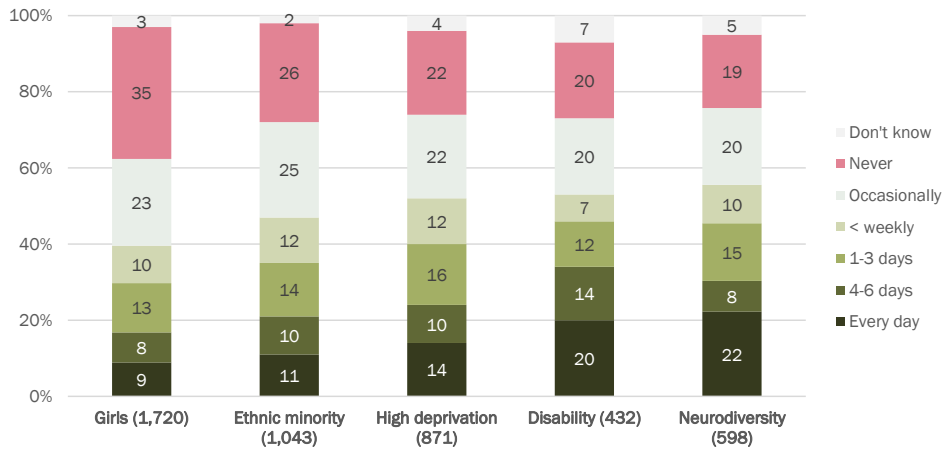
Neurodiversity

Most young people with a neurodiverse condition ever use social media (94%), with a majority of three in four using social media 'Every day' (73%). More than one in five (22%) use social media less often than this, with only 2% saying they 'Never' use.

Young people with a neurodiverse condition are less likely than others to say they 'Never' use social media (2% vs. 5%).

Figure 40. **Outside of school or college, how often do you participate in each of these activities? (Q14h)**
h) Play video games that involve an element of coding (e.g. Minecraft on PC)

Base: 2,376 participants aged 11-19



Overall

- The majority of young people across all sub-groups ever play video games that involve an element of coding (62% to 75%).
- Between one in ten and one in five (9% to 22%) do this 'Every day'.

By age

- There are no significant differences by age among those asked this question.

Girls

Three in five girls ever play video games that involve an element of coding (62%), with three in ten doing this weekly or more often (30%), and one in four (23%) saying they do this 'Occasionally'. One in three (35%) say they 'Never' do this.

Girls are much less likely than other young people to ever play video games that involve an element of coding (62% vs. 79%), and where they do this, less likely to say this is 'Every day' (9% vs. 21%), or '4 to 6 days per week' (8% vs. 13%). They are twice as likely to say they 'Never' do this (35% vs. 16% of others).

Ethnic minority

Seven in ten young people from ethnic minority backgrounds ever play video games that involve an element of coding (72%), with one in three doing this weekly or more often (36%), and one in four (25%) saying they do this 'Occasionally'. A further one in four (26%) say they 'Never' do this.

Young people from ethnic minority backgrounds are less likely than other young people to play video games that involve an element of coding weekly or more often (36% vs. 43%), less likely to say this is 'Every day' (11% vs. 17%), more likely to say it is 'Less than once a week' (12% vs. 9%) or just 'Occasionally' (25% vs. 19%).

High deprivation

Three in four young people living in areas of high deprivation ever play video games that involve an element of coding (74%), with two in five doing this weekly or more often (39%), and one in five (22%) saying they do this 'Occasionally'. A further one in five (22%) say they 'Never' do this.

Young people living in areas of high deprivation are more likely than other young people to play video games that involve an element of coding 'Less than once a week' (12% vs. 8%), but less likely to say they 'Never' do this (22% vs. 27%).

Disability

Three in four young people with a disability ever play video games that involve an element of coding (73%), with almost half doing this weekly or more often (46%), one in five (20%) saying they do this 'Every day' or 'Occasionally'. A further one in five (20%) say they 'Never' do this.

Young people with a disability are more likely than other young people to play video games that involve an element of coding 'Every day' (20% vs. 14%), but more likely to say they 'Don't know' (7% vs. 3%).

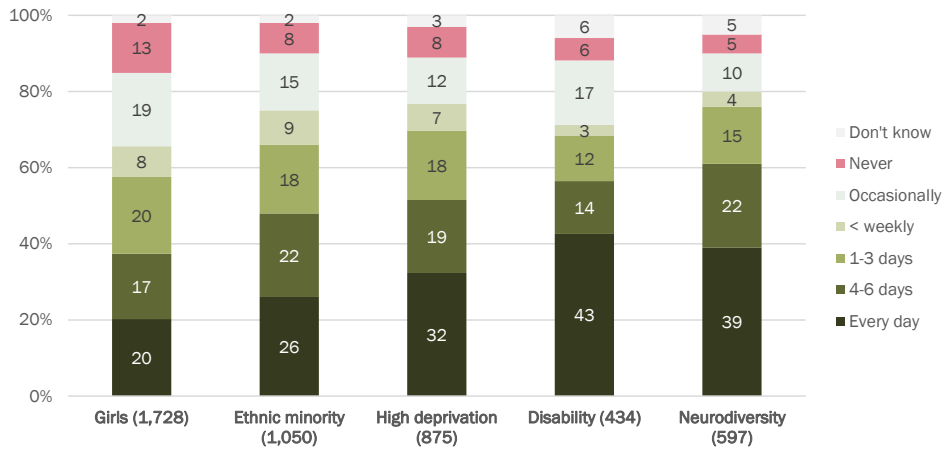
Neurodiversity

Three in four young people with a neurodiverse condition ever play video games that involve an element of coding (75%), with almost half doing this weekly or more often (45%), one in five saying they do this 'Every day' (22%) or 'Occasionally' (20%). A further one in five (19%) say they 'Never' do this.

Young people with a neurodiverse condition are more likely than other young people to play video games that involve an element of coding weekly or more often (45% vs. 37%), 'Every day' (22% vs. 13%), and less likely to say they 'Never' do this (19% vs. 27%).

Figure 41. **Outside of school or college, how often do you participate in each of these activities? (Q14i)**
i) Play other games on a computer, console or tablet

Base: 2,386 participants aged 11-19



Overall

- The majority of young people across all sub-groups play other games on a computer, console or tablet (85% to 90%).
- Up to two in five (20% to 43%) do this 'Every day'.

By age

- Young people aged 11-13 are more likely than their older counterparts to play other games on a computer, console or tablet 'Every day' (41% vs. 28% of 14-16s and 29% of 17-19s). They are also less likely to play '1 to 3 days a week' (12% vs. 20% and 19% respectively).

Girls

More than four in five girls ever play other games on a computer, console or tablet (85%), with three in five doing this weekly or more often (58%), and one in five saying they do this 'Every day' (20%), '1 to 3 days a week' (20%), or 'Occasionally' (19%). One in eight (13%) say they 'Never' do this.

Girls are less likely than other young people to ever play other games on a computer, console or tablet (85% vs. 93%), and where they do this, much less likely to do this weekly or more often (58% vs. 81%), half as likely to say this is 'Every day' (20% vs. 45%), more likely to be '1 to 3 days per week' (20% vs. 15%), 'Less than once a week' (8% vs. 4%) or 'Occasionally' (19% vs. 8). They are four times more likely to say they 'Never' do this (13% vs. 3% of others).

Ethnic minority

Nine in ten of those from ethnic minority backgrounds ever play other games on a computer, console or tablet (90%), with two in three doing this weekly or more often (67%), one in four saying they do this 'Every day' (26%), one in five '4 to 6 days per week' (22%), or '1 to 3 days a week' (18%). 15% say they play 'Occasionally', and only 8% say they 'Never' do this.

Young people from ethnic minority backgrounds are less likely than other young people to play other games on a computer, console or tablet weekly or more often (67% vs. 72%), and where they do this, less likely to do this 'Every day' (26% vs. 37%), but more likely to do it '4 to 6 days per week' (22% vs. 18%), or 'Less than once a week' (9% vs. 5%).

High deprivation

Nine in ten of those living in highly deprived areas ever play other games on a computer, console or tablet (89%), with seven in ten doing this weekly or more often (70%), one in three saying they do this 'Every day' (32%), one in five '4 to 6 days per week' (19%), or '1 to 3 days a week' (18%). One in eight (12)% say they play 'Occasionally', and only 8% say they 'Never' do this.

There are no significant differences between young people from areas of high deprivation and others when asked this question.

Disability

Nine in ten young people with a disability ever play other games on a computer, console or tablet (88%), with two in three doing this weekly or more often (68%), two in five saying they do this 'Every day' (43%), one in seven '4 to 6 days per week' (14%), one in eight '1 to 3 days a week' (12%). 17% say they play 'Occasionally', and only 6% say they 'Never' do this.

Young people with a disability are more likely than other young people to play other games on a computer, console or tablet 'Every day' (43% vs. 31%), less likely to do this '4 to 6 days per week' (14% vs. 20%), '1 to 3 days a week' (12% vs. 18%), or 'Less than once a week' (3% vs. 7%). They are more likely to say they 'Don't know' at this question (6% vs. 2%).

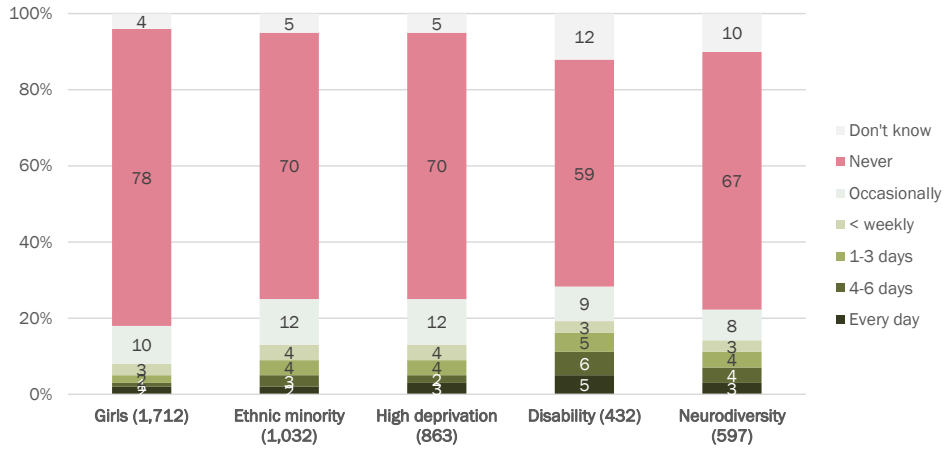
Neurodiversity

Nine in ten young people with a neurodiverse condition ever play other games on a computer, console or tablet (90%), with three in four doing this weekly or more often (76%), two in five saying they do this 'Every day' (39%), one in five '4 to 6 days per week' (22%), 15% saying '1 to 3 days a week'. One in ten (10%) say they play 'Occasionally', and only 5% say they 'Never' do this.

Young people with a neurodiverse condition are more likely than other young people to play other games on a computer, console or tablet weekly or more often (76% vs. 67%), including 'Every day' (39% vs. 31%). They are less likely to do this 'Less than once a week' (4% vs. 7%), or to say they 'Never' do this (5% vs. 9%). They are more likely to say they 'Don't know' at this question (5% vs. 2%).

Figure 42. **Outside of school or college, how often do you participate in each of these activities? (Q14g)**
g) Building computers (e.g. using things like micro:bit, Raspberry Pi, Arduino)

Base: 2,362 participants aged 11-19



Overall

- The majority of young people across all sub-groups never build their own computers (59% to 78%).
- From one in five to three in ten (18% to 29%) ever build their own computers.

By age

- Those aged 14-16 who will have taken their options / be doing their exams are the least likely to ever build their own computers (15% vs. 23% of 11-13s and 34% of 17-19s), most likely to say they 'Never' do this (80% vs. 69% and 64% respectively).
- Young people aged 17-19 are more likely than their younger counterparts to ever build their own computers (34% vs. 15% of 14-16s and 23% of 11-13 year olds), and more likely to say they do this weekly or more often (16% vs. 6% of younger children). They are least likely to say they 'Never' do this (64% vs. 80% of 14-16s and 69% of 11-13s).

Girls

Only one in five girls ever build their own computers (18%), with one in ten (10%) saying they do this 'Occasionally', but the vast majority of four in five (78%) say they 'Never' do this.

Girls are much less likely than other young people to ever build their own computers (18% vs. 30%), and where they do this, less likely to say this is 'Every day' (2% vs. 4%), '4 to 6 days per week' (1% vs. 4%), or '1 to 3 days a week' (2% vs. 6%). They are much more likely to say they 'Never' do this (78% vs. 64% of others).

Ethnic minority

One in four young people from ethnic minority backgrounds ever build their own computers (26%), with one in eight (12%) saying they do this 'Occasionally'. However, the vast majority of seven in ten (70%) say they 'Never' do this.

There are no significant differences between young people from ethnic minority backgrounds and others when asked this question.

High deprivation

One in four young people from areas of high deprivation ever build their own computers (25%), with one in eight (12%) saying they do this 'Occasionally'. However, the vast majority of seven in ten (70%) say they 'Never' do this.

There are no significant differences between young people from areas of high deprivation and others when asked this question.

Disability

Three in ten young people with a disability ever build their own computers (29%), with almost one in ten (9%) saying they do this 'Occasionally', but the vast majority of three in five (59%) say they 'Never' do this.

Young people with a disability are more likely than other young people to build their own computers weekly or more often (17% vs. 8%), more likely to do this '4 to 6 days per week' (6% vs. 2%). They are much less likely to say they 'Never' do this (59% vs. 73% of others), but also more likely to say they 'Don't know' (12% vs. 5%).

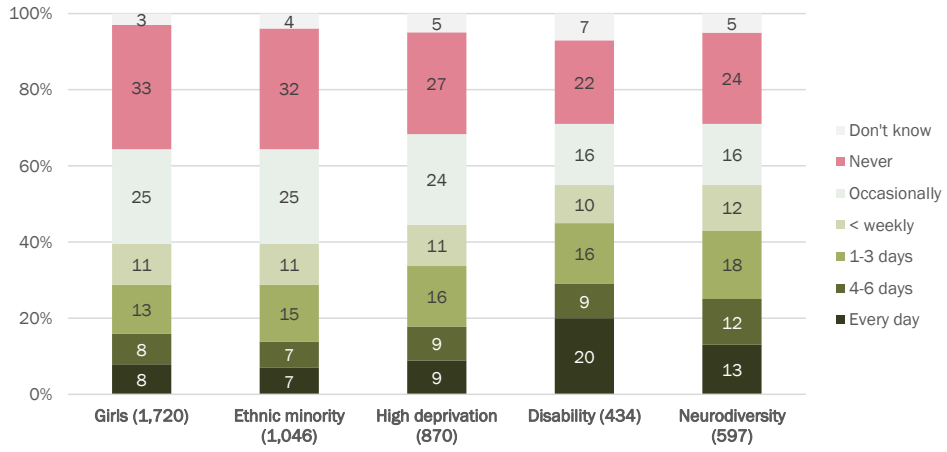
Neurodiversity

One in four young people with a neurodiverse condition ever build their own computers (23%), with 8% saying they do this 'Occasionally', but the majority of two in three (67%) say they 'Never' do this.

Young people with a neurodiverse condition are more likely than other young people to build their own computers weekly or more often (12% vs. 7%), more likely to do this '4 to 6 days per week' (4% vs. 2%), but more likely to say they 'Don't know' (10% vs. 5%).

Figure 43. **Outside of school or college, how often do you participate in each of these activities? (Q14c)**
c) Edit your own videos or video content

Base: 2,373 participants aged 11-19



Overall

- Between two in three and seven in ten young people ever edit their own videos (64% to 71%).
- For most sub-groups, the most common frequency of doing this is just 'Occasionally' (16% to 25%).
- Between one in four and one in three say they 'Never' edit their own videos (22% to 33%).

By age

- Young people aged 17-19 are more likely than their younger counterparts to ever edit their own videos (76% vs. 62% of 14-16s and 60% of 11-13 year olds), and more likely to say they do this weekly or more often (38% vs. 27% and 29% respectively). They are less likely to say they 'Never' do this (22% vs. 35% and 34% respectively).

Girls

Two in three girls ever edit their own videos (64%), with three in ten (29%) doing this weekly or more often. One in four only do this 'Occasionally' (25%), and one in three (33%) say they 'Never' do this.

Girls are less likely than other young people to ever edit their own videos (64% vs. 68%), and more likely to say they 'Never' do this (33% vs. 27% of others).

Ethnic minority

Two in three young people from ethnic minority backgrounds ever edit their own videos (65%), with three in ten (29%) doing this weekly or more often. One in four only do this 'Occasionally' (25%), and one in three (32%) say they 'Never' do this.

Young people from ethnic minority backgrounds are less likely than others to edit their own videos 'Every day' (7% vs. 10%), or weekly or more often (29% vs. 34%).

High deprivation

Almost seven in ten young people living in areas of high deprivation ever edit their own videos (68%), with one in three (33%) doing this weekly or more often. One in four only do this 'Occasionally' (24%), and more than one in four (27%) say they 'Never' do this.

Young people living in areas of high deprivation are less likely than others to say they 'Never' edit their own videos (27% vs. 33%), more likely to say they 'Don't know' at this question (5% vs. 3% of others).

Disability

Seven in ten young people with a disability ever edit their own videos (71%), with almost half (45%) doing this weekly or more often. One in five (20%) say they do this 'Every day', but one in five (22%) say they 'Never' do this.

Young people with a disability are much more likely than others to say they edit their own videos 'Every day' (20% vs. 7%), less likely to say they do this 'Occasionally' (16% vs. 24%), 'Never' (22% vs. 31%), but more likely to say they 'Don't know' at this question (7% vs. 4% of others).

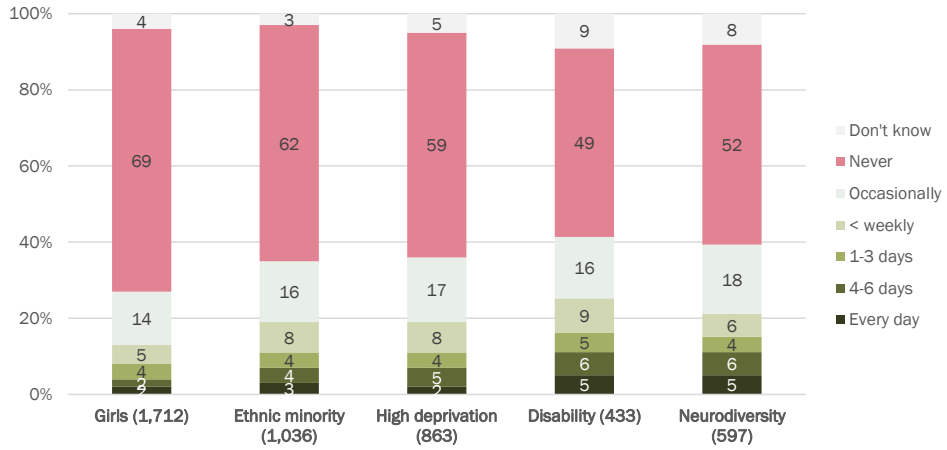
Neurodiversity

Seven in ten young people with a neurodiverse condition ever edit their own videos (71%), with more than two in five (43%) doing this weekly or more often. Around one in five (18%) say they do this '1 to 3 days a week', with one in four (24%) saying they 'Never' do this.

Young people with a neurodiverse condition are much more likely than others to say they edit their own videos 'Every day' (13% vs. 8%) or '4 to 6 times a week' (12% vs. 7%). They are less likely to say they do this 'Occasionally' (16% vs. 25%), or they 'Never' do this (24% vs. 31%).

Figure 44. **Outside of school or college, how often do you participate in each of these activities? (Q14d)**
d) Build or edit web page(s)

Base: 2,364 participants aged 11-19



Overall

- Most young people across all sub-groups never build or edit web page(s) (49% to 69%).
- Between one in four and two in five ever do this (27% to 42%).

By age

- Young people aged 17-19 are much more likely than their younger counterparts to ever build or edit web page(s) (47% vs. 25% of 14-16s and 28% of 11-13 year olds), and more likely to say they do this weekly or more often (22% vs. 6% and 8% respectively). They are less likely to say they 'Never' do this (50% vs. 71% and 64% respectively).

Girls

Only one in four girls ever build or edit web page(s) (27%), with one in seven (14%) doing this 'Occasionally'. However, the vast majority of seven in ten (69%) say they 'Never' do this.

Girls are much less likely than other young people to ever build or edit web page(s) (27% vs. 40%), and where they do this, less likely to say this is 'Every day' (2% vs. 4%) or '4 to 6 days per week' (2% vs. 7%). They are much more likely to say they 'Never' do this (69% vs. 55% of others).

Ethnic minority

One in three young people from ethnic minority backgrounds ever build or edit web page(s) (35%), with one in six (16%) doing this 'Occasionally'. However, a vast majority of three in five (62%) say they 'Never' do this.

Young people from ethnic minority backgrounds are less likely than others to say they 'Don't know' at this question (3% vs. 6%).

High deprivation

More than one in three young people from areas of high deprivation ever build or edit web page(s) (36%), with one in six (17%) doing this 'Occasionally'. However, the vast majority of three in five (59%) say they 'Never' do this.

Young people from areas of high deprivation are more likely than others to say they ever build or edit web page(s) (36% vs. 31%), more likely to say they do this 'Occasionally' (17% vs. 13%), and less likely to say they 'Never' do this (59% vs. 64%).

Disability

Two in five young people with a disability ever build or edit web page(s) (42%), with one in six (16%) doing this 'Occasionally'. Half (49%) say they 'Never' do this.

Young people with a disability are more likely than others to say they ever build or edit web page(s) (42% vs. 32%), more likely to say they do this weekly or more often (17% vs. 10%), less likely to say they 'Never' do this (49% vs. 63%), but more likely to say they don't know at this question (9% vs. 4%).

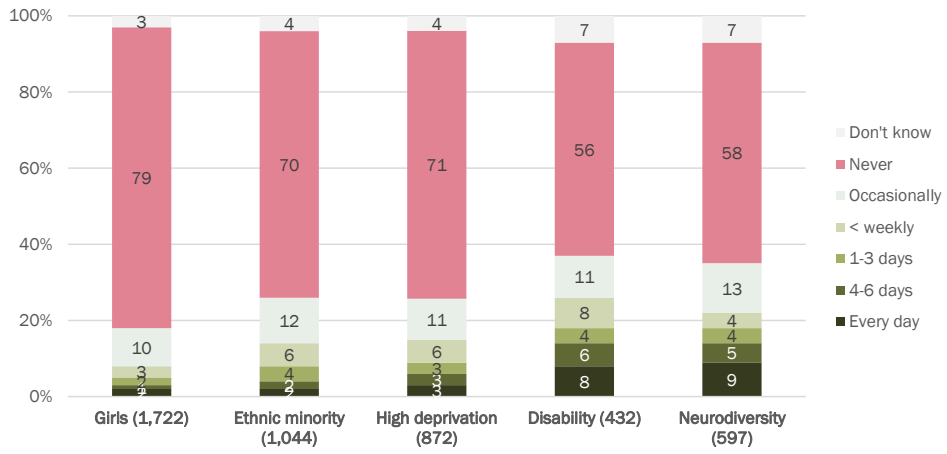
Neurodiversity

Two in five young people with a neurodiverse condition ever build or edit web page(s) (40%), with one in five (18%) doing this 'Occasionally'. Half (52%) say they 'Never' do this.

Young people with a neurodiverse condition are more likely than others to say they ever build or edit web page(s) (40% vs. 31%), more likely to say they do this weekly or more often (15% vs. 10%), more likely to do this 'Every day' (5% vs. 2%), or '4 to 6 times per week' (6% vs. 3%), less likely to say they 'Never' do this (52% vs. 64%), but more likely to say they don't know at this question (8% vs. 4%).

Figure 45. **Outside of school or college, how often do you participate in each of these activities? (Q14f)**
f) Design your own video games

Base: 2,378 participants aged 11-19



Overall

- The majority of young people across all sub-groups never design their own video games (56% to 79%)
- Between one and two in five (18% to 38%) ever design their own video games.

By age

- Those aged 14-16 who will have taken their options / be doing their exams are the least likely to ever design their own video games (17% vs. 27% of 11-13s and 36% of 17-19s), most likely to say they 'Never' do this (79% vs. 68% and 62% respectively).
- Young people aged 17-19 are more likely than their younger counterparts to ever design their own video games (36% vs. 17% of 14-16s and 27% of 11-13 year olds), and more likely to say they do this weekly or more often (17% vs. 8% and 10% respectively). They are least likely to say they 'Never' do this (62% vs. 79% and 68% respectively).

Girls

Only one in five girls ever design their own video games (18%), with one in ten (10%) saying they do this 'Occasionally', but the vast majority of four in five (79%) say they 'Never' do this.

Girls are half as likely as other young people to ever design their own video games (18% vs. 36%), and where they do this, less likely to say this is 'Every day' (2% vs. 6%), '4 to 6 days per week' (1% vs. 6%), '1 to 3 days a week' (2% vs. 7%), or 'Less than once a week' (3% vs. 7%). They are much more likely to say they 'Never' do this (79% vs. 60% of others).

Ethnic minority

One in four young people from ethnic minority backgrounds ever design their own video games (26%), with one in eight (12%) saying they do this 'Occasionally'. However, the vast majority of seven in ten (70%) say they 'Never' do this.

Those from ethnic minority backgrounds are less likely than other young people to design their own video games 'Every day' (2% vs. 5%), or '4 to 6 days per week' (2% vs. 5%).

High deprivation

One in four young people living in areas of high deprivation ever design their own video games (26%), with one in nine (11%) saying they do this 'Occasionally'. The vast majority of seven in ten (71%) say they 'Never' do this.

Those from areas of high deprivation are less likely than other young people to design their own video games '1 to 3 days a week' (3% vs. 5%), more likely to say they do this 'Less than once a week' (6% vs. 4%).

Disability

Two in five young people with a disability ever design their own video games (38%), with one in nine (11%) saying they do this 'Occasionally'. More than half (56%) say they 'Never' do this.

Young people with disabilities are much more likely than other young people to ever design their own video games (38% vs. 25%), more likely to do this 'Every day' (8% vs. 3%), or '4 to 6 days per week' (6% vs. 3%), and less likely to say they 'Never' do this (56% vs. 72%).

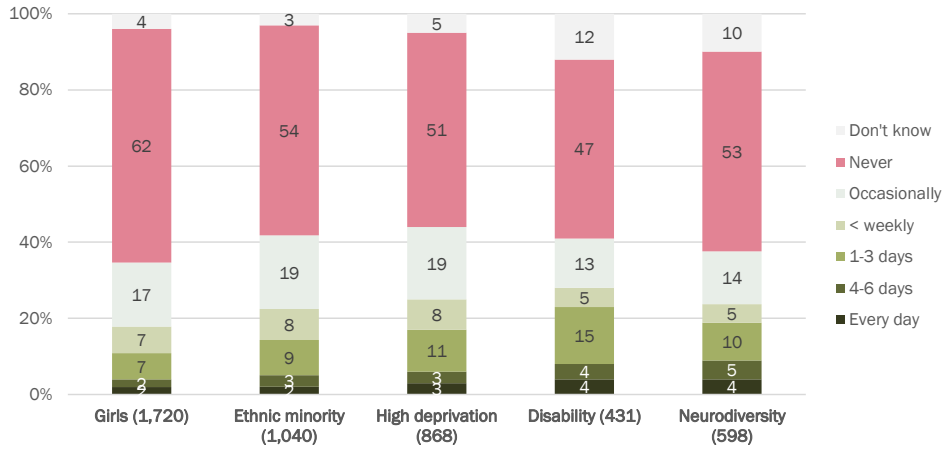
Neurodiversity

One in three young people with a neurodiverse condition ever design their own video games (35%), with one in eight (13%) saying they do this 'Occasionally'. Two in five (58%) say they 'Never' do this.

Young people with a neurodiverse condition are more likely than other young people to ever design their own video games (35% vs. 24%), more likely to do this 'Every day' (9% vs. 3%), and less likely to say they 'Never' do this (58% vs. 73%).

Figure 46. **Outside of school or college, how often do you participate in each of these activities? (Q14e)** ***e) Solve coding challenges***

Base: 2,372 participants aged 11-19



Overall

- Most young people across all sub-groups never solve coding challenges (47% to 62%).
- Between one in three and two in five (34% to 44%) ever solve coding challenges.

By age

- Those aged 14-16 who will have taken their options / be doing their exams are the least likely to ever solve coding challenges (27% vs. 40% of 11-13s and 49% of 17-19s), most likely to say they 'Never' do this (67% vs. 53% and 49% respectively).

- Young people aged 17-19 are much more likely than their younger counterparts to ever solve coding challenges (49% vs. 27% of 14-16s and 40% of 11-13 year olds), and more likely to say they do this weekly or more often (24% vs. 8% and 12% respectively).

Girls

One in three girls ever solve coding challenges (34%), with one in six (17%) doing this 'Occasionally'. However, a vast majority of three in five (62%) say they 'Never' do this.

Girls are much less likely than other young people to ever solve coding challenges (34% vs. 42%), and where they do this, less likely to say this is '4 to 6 days per week' (2% vs. 6%), or '1 to 3 days a week' (7% vs. 11%). They are much more likely to say they 'Never' do this (62% vs. 51% of others).

Ethnic minority

More than two in five young people from ethnic minority backgrounds ever solve coding challenges (43%), with one in five (19%) doing this 'Occasionally'. However, more than half (54%) say they 'Never' do this.

Those from ethnic minority backgrounds are more likely than other young people to ever solve coding challenges (43% vs. 36%), however, where they do this, they are more likely to say this is 'Less than once a week' (8% vs. 6%), or just 'Occasionally' (19% vs. 15%).

High deprivation

Over two in five young people living in areas of high deprivation ever solve coding challenges (44%), with one in five (19%) doing this 'Occasionally'. However, around half (51%) say they 'Never' do this.

Those young people living in areas of high deprivation are more likely than other young people to ever solve coding challenges (44% vs. 34%), more likely to do this '1 to 3 days a week' (11% vs. 7%), 'Less than once a week' (8% vs. 6%) or just 'Occasionally' (19% vs. 15%). They are less likely to say they 'Never' do this (51% vs. 61%).

Disability

Two in five young people with a disability ever solve coding challenges (41%), with one in seven (15%) doing this '1 to 3 days a week'. Just fewer than half (47%) say they 'Never' do this.

Young people with disabilities are more likely than other young people to solve coding challenges weekly or more often (23% vs. 14%), twice as likely to do this '1 to 3 days a week' (15% vs. 8%), and less likely to say they 'Never' do this (47% vs. 58%).

Neurodiversity

Just over one in three young people with a neurodiverse condition ever solve coding challenges (37%), with one in seven (14%) doing this 'Occasionally'. More than half (53%) say they 'Never' do this.

Young people with neurodiverse conditions are more likely than other young people to solve coding challenges weekly or more often (18% vs. 13%), but also more likely to say they 'Don't know' at this question (10% vs. 5%).

APPENDIX – ANNOTATED QUESTIONNAIRE

P1. Which of the following best describes your gender?

1) *Boy / Man*
2) *Girl / Woman*
3) *I prefer to describe myself in another way*
4) *Prefer not to say*

This was a single code question that was asked of the full sample with age appropriate text shown for 11-16s and 17-19s. Codes were shown in the order above (not randomised).

P2. How old are you?

1) *11*
2) *12*
3) *13*
4) *14*
5) *15*
6) *16*
7) *17*
8) *18*
9) *19*

Single code question that was asked of the full sample. Codes were shown in the order above (not randomised)

P3. Where do you live?

1) *England - North East*
2) *England - North West*
3) *England - Yorkshire and the Humber*
4) *England - East Midlands*
5) *England - West Midlands*
6) *England - East Anglia*
7) *England – South East*
8) *England - South West*
9) *England – Greater London*
10) *Scotland*
11) *Wales*
12) *Northern Ireland*

Single code question that was asked of the full sample. Codes were shown in the order above (not randomised).

P4. To help us classify which region you live in, please enter your full postcode.

Any personal identifiable information you provide will be anonymously analysed in conjunction with your survey responses. We will not pass on these details. The survey results will be processed in adherence to Market Research Society's Code of Conduct and Data Protection Act 1998.

This was an open response question asked of those aged 17-19 recruited via the online panel.

P5. Please select which of the following statements is most applicable to you.

1) *I am in part time education (up to 11 hours per week)*
2) *I am in full time education (12+ hours per week)*
3) *I am not currently in education*
4) *I'm not sure / I'd rather not say*

Figure 2 - This was a single code question that was asked of those aged 17-19 recruited via the online panel, but we have added in responses from those aged 11-16 recruited via the schools panel (all in full time education) to the report. Codes were shown in the order above (not randomised).

P6. Where are you currently studying?

1) *At a school with a sixth form*
2) *At an FE or sixth form College*
3) *At university or HE college*
4) *Other (please tell us where)*

Figure 3 - This was a single code question that was asked of those aged 17-19 recruited via the online panel, if they answered that they were in education at question P5. Codes were shown in the order above (not randomised). We have included results for those aged 11-16 recruited via the schools panel in the report. Code 4 allowed for open responses to be entered (1% overall used this option).

P7. What school year are you in?

1) *7 / 8 / P7*
2) *8 / 9 / S1*
3) *9 / 10 / S2*
4) *10 / 11 / S3*
5) *11 / 12 / S4*
6) *12 / 13 / S5*
7) *13 / 14 / S6*

This was a single code question that was asked of all of those recruited via schools and those recruited via the online panel aged up to 16 or aged 17/18 in education at question P5. Codes were shown in the order above (not randomised). Region appropriate codes were shown for England and Wales / Northern Ireland / Scotland.

P8. What is the name of your school?

This was an open response question asked of all of those recruited via schools and those recruited via the online panel aged up to 16.

P9. Which of these broad groups best describes your ethnic background?

1) *White*
2) *Asian / Asian British*
3) *Black / African / Caribbean / Black British*
4) *Mixed*
5) *Other*
6) *Prefer not to say*
7) *Don't know*

This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

P9a. You describe your ethnic background as 'White'. Which of the following best describes you?

1) *English / Welsh / Scottish / Northern Irish / British*
2) *Irish*
3) *Gypsy or Irish Traveller*
4) *Any other White background*
5) *Don't know*

This was a single code question that was asked of the full sample choosing code 1 at P9, codes were shown in the order above (not randomised).

P9b. You describe your ethnic background as 'Asian / Asian British'. Which of the following best describes you?

1) *Bangladeshi*
2) *Indian*
3) *Pakistani*
4) *Chinese*
5) *Any other Asian background*
6) *Don't know*

This was a single code question that was asked of the full sample choosing code 2 at P9, codes were shown in the order above (not randomised).

P9c. You describe your ethnic background as 'Black / African /Caribbean / Black British'. Which of the following best describes you?

1) *African*
2) *Caribbean*
3) *Any other Black background*
4) *Don't know*

This was a single code question that was asked of the full sample choosing code 3 at P9, codes were shown in the order above (not randomised).

P9d. You describe your ethnic background as 'Mixed'. Which of the following best describes you?

1) *White and Asian*

2) *White and Black African*
3) *White and Black Caribbean*
4) *Any other Mixed background*
5) *Don't know*

This was a single code question that was asked of the full sample choosing code 4 at P9, codes were shown in the order above (not randomised).

P9e. You describe your ethnic background as 'Other'. How would you describe your ethnic background?

This was an open response question that was asked of the full sample choosing code 5 at P9.

P10. Thinking about when you had / have lunch at school or college, did / do you have Free School Meals?

1) *Yes*
2) *No*
3) *Don't know*
4) *Prefer not to say*

This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

P11. Do you consider yourself to have a disability?

1) *Yes*
2) *No*
3) *Don't know*

This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

P12. Do you have a neurodiverse condition, such as Dyscalculia, Attention-deficit Hyperactivity Disorder (ADHD), Autism or Asperger's – or another developmental disorder, long term health condition or additional need?

1) *Yes, I have been diagnosed with one (or more) of these conditions*
2) *I am awaiting diagnosis for a one (or more) of these conditions*
3) *I think I might have one (or more) of these conditions, but it is not something that has ever been diagnosed*
4) *No, I don't have one of these conditions*
5) *Don't know*
6) *Prefer not to say*

This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

Q1. Please pick up to five words or phrases that describe you best.

1) *Creative*
2) *Smart*
3) *Determined*
4) *Organised*
5) *Good at solving problems*
6) *Up for a challenge*
7) *Team player*
8) *Easy to talk to*
9) *Competitive*
10) *Logical*
11) *Unusual*
12) *Ordinary*
13) *None of these*
14) *Don't know*

Figure 1 - This was a multiple code question that was asked of the full sample, and limited to five choices only. Codes 1 to 12 were randomised when shown to young people, and codes 13 and 14 were exclusive and cancelled any previously selected codes.

Q2. Which of these statements best describes you?

1) *I have no idea what job or career I want in the future*
2) *I have some ideas of what types of job or career I want in the future (e.g. I want a job that lets me work with my hands, involves working with animals)*
3) *I have a particular area of work in mind for the future (e.g. I want to work in a school, college or university; or I want to work for a charity)*
4) *I know exactly what job I want in the future (e.g. I want to be a doctor, a dancer, a builder).*
5) *Don't know*

Figure 6 - This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

Q3. Below is a list of things that you might consider when choosing a job / career. Which, if any, of these are important to you? Please choose up to five responses.

1) *Earn a lot of money*
2) *Do something I love*
3) *Doing something that makes a difference to people's lives*
4) *Working close to home / short commute*
5) *Opportunities to travel overseas*
6) *Opportunities to help other people*
7) *Opportunities to progress quickly*
8) *Working in a friendly team*
9) *Working for a well-known / respected employer*
10) *Opportunities to learn new skills*
11) *Opportunities to use the skills I already have*
12) *Opportunity to live somewhere new*
13) *Having plenty of free time outside work to see family, friends or to do my hobbies*
14) *A job where I'd be doing something different every day, week or year*
15) *Offering job-security (so I feel confident that I'll always have a job)*
16) *Have an impressive job title*
17) *Be seen as having a "good job" by my family and friends*
18) *Doing something where I am "in charge"*

19) *Lets me follow in my parents' footsteps*
20) *Other (please type in below)*
21) *Don't know*

Figure 7 - This was a multiple code question that was asked of the full sample, and limited to five choices only. Codes 1 to 19 were randomised when shown to young people. Code 20 allowed for open responses to be entered (only 1% overall used this option). Code 21 was exclusive and cancelled any previously selected codes.

Q4. Which of these statements best describes you?

1) *I have agreed what {GCSE / NATIONALS} subjects I am taking with my school*
2) *I know what {GCSE / NATIONALS} subjects I want to take but I haven't agreed them with my school yet*
3) *I don't know what {GCSE / NATIONALS} subjects I want to take*
4) *I haven't thought about this yet*

Figure 4 - This was a single code question that was asked of those in school years 7 to 9 or equivalent. Codes were shown in the order above (not randomised). GCSE was shown to those in England, Wales and Northern Ireland, whilst NATIONALS was shown to those in Scotland.

Q5. Who, if anyone helped / will help you decide what subjects you chose / will choose for {GCSE / NATIONALS}?

1) *Parent(s) or carer(s)*
2) *Other family members*
3) *Friends*
4) *Teachers*
5) *Someone else (please type in below)*
6) *Don't know*
7) *No-one*

Figure 5 - This was a multiple code question that was asked of the full sample, codes were shown in the order above (not randomised). Code 5 allowed for open responses to be entered (only 1% overall used this option). Codes 6 and 7 were exclusive and cancelled any previously selected codes.

Some of the next questions refer to 'computing'. When we say computing we mean either:
1) a subject that's taught in schools/colleges or
2) the skills that students might use, like programming, data handling, or solving problems. (This could be inside or outside school/colleges.)

When we say Computer Science we mean the qualification that some young people take at GCSE / NATIONALS or A LEVEL / HIGHERS

Please click 'Next' below to continue

Q6. What do you think about computing?

1) *I don't like computing at all*
2) *I don't like computing much*
3) *I think computing is OK*
4) *I like computing a bit*
5) *I like computing a lot*
6) *Don't know*

Figure 24 - This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

Q7. Why do you say you (ANSWER FROM Q6)?

This was an open response question asked of those choosing codes 1 to 5 from Q6.

Q8. Does / Did your school or college offer any of the following qualifications? For this question, we only need to know if these courses are available, we don't need to know if you are studying them.

1) *GCSE Computer Science*
2) *GCSE Digital Technologies (media and/or programming)*
3) *A Level Computer Science*
4) *National 4/5 Computing Science*
5) *Scottish Higher Computing Science*
6) *No*
7) *Don't know*

Figure 8 - This was a multiple code question that was asked of the full sample, codes were shown in the order above (not randomised). Codes 6 and 7 were exclusive and cancelled any previously selected codes. GCSE / A-Levels was shown to those in England, Wales and Northern Ireland, whilst Nationals / Highers was shown to those in Scotland.

Q9a. Have you studied, are you studying, or would you like to study any of the following subjects?

Yes studied / studying / No, but I have thought about it / No, didn't consider it at all / No, not an option at my school / college / Don't know what this is

1) *SHOW IF NOT SCOTLAND Computing e.g. Computer Science / Computing Science / Digital Technologies (GCSE)*
2) *SHOW IF SCOTLAND Computing e.g. Computer Science / Computing Science / Digital Technologies (Nationals)*
3) *iMedia / Creative iMedia (Cambridge Nationals)*
4) *IT (Cambridge Nationals)*
5) *Digital Information Technology (BTEC)*
6) *Creative Media Production (BTEC)*
7) *SHOW IF 16+ Digital Production, Design and Development (T Level)*
8) *SHOW IF 16+ Another T Level in Digital or Engineering*
9) *SHOW IF 16+ AND ENGLAND / WALES Computer Science (AS/A Level)*
10) *SHOW IF 16+ AND SCOTLAND Computer Science / Computing (Highers)*

11) SHOW IF 16+ AND NORTHERN IRELAND Digital Technology (AS/A Level)
12) Other – please type in below

Figures 9-16 - This was a grid of single code question statements asked of those in school year 10 + or equivalent, or those post-FE education. The order that the statements were shown to young people in was in the order above (not randomised). Regional and age appropriate options were shown.

Q9b. Do you think you will study Computing (e.g. Computer Science / Computing Science / Digital Technologies) at GCSE / NATIONALS or equivalent?

Yes, I will definitely take this / Maybe, I am considering this / No, I will not take this / This isn't an option at my school / college / Don't know / Not sure what this is

1) Computing e.g. Computer Science / Computing Science / Digital Technologies
2) iMedia / Creative iMedia (Cambridge Nationals)
3) IT (Cambridge Nationals)
4) Digital Information Technology (BTEC)
5) Creative Media Production (BTEC)

Figures 17-21 - This was a grid of single code question statements asked of those in school years 7 to 9 or equivalent. The order that the statements were shown to young people in was in the order above (not randomised). Regionally appropriate text for GCSE / Nationals was shown.

Q10. Why have you chosen to study computing? / Why are you considering / why did you consider studying computing?

1) I enjoy(ed) computing
2) I am naturally good at computing
3) I like(d) my computing teacher
4) My friends do / did computing
5) I need computing to get into my chosen career
6) Computing would help me to get into my preferred university or onto my preferred course
7) Computing would help me to get a well-paid job
8) My family encourage me to study computing
9) My teacher(s) encouraged me to study computing
10) It's the only subject that fit into my schedule / timetable when picking subjects
11) Computing is / will be important for a range of jobs now / in the future
12) There is / was another reason (please type in below)
13) None of these
14) Don't know

Figure 22 - This was a multiple code question that was asked of those who were taking or had considered any of the computing options at Q9a or Q9b. Codes 1 to 11 were randomised when shown to young people. Code 12 allowed for open responses to be entered (only 2% overall used this option). and codes 13 and 14 were exclusive and cancelled any previously selected codes..

Q11. Why have you chosen not to study computing? / Are any / did any of the following concerns discourage you from studying computing?

1) I dislike(d) computing
2) I am not good at computing
3) I am not good enough at maths
4) I find computing very repetitive
5) There is too much to learn / remember in computing
6) My friends don't do / didn't do computing
7) Other subjects are more important to help me get into my chosen career
8) Other subjects are more important to help me get into my preferred university or onto my preferred course
9) Computing jobs are boring
10) Computing wouldn't teach me anything useful
11) My family discouraged me from studying computing
12) My teacher(s) discouraged me from studying computing
13) It did not fit into my schedule / timetable when picking subjects
14) I could / can get better grades in other subjects
15) I can earn more money doing something else
16) There is / was another reason (please type in below)
17) None of these
18) Don't know

Figure 23 - This was a multiple code question that was asked of those who had not considered computing, or had considered but were not taking computing options at Q9a or Q9b. Codes 1 to 15 were randomised when shown to young people. Code 16 allowed for open responses to be entered (4% overall used this option). and codes 17 and 18 were exclusive and cancelled any previously selected codes..

Q12. How much do you know about careers in computing?

1) I know a lot about careers in computing
2) I know a bit about careers in computing
3) I don't know anything about careers in computing but I would be interested to find out more
4) I am not interested in finding out about careers in computing
5) Don't know

Figure 27 - This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

Q13. How much do you agree or disagree with these statements?

Strongly agree / Tend to agree / Neither agree nor disagree / Tend to disagree / Strongly disagree / Don't know
1) Computing is relevant to many different jobs
2) There are differences between men and women that make men better suited to a career in computing
3) There are differences between men and women that make women better suited to a career in computing

4) *Studying computing is only useful if you want to work in programming or coding*
5) *In general, I know about the types of jobs that studying computing can lead to*
6) *It is harder for women to get ahead in computing than men because there are many obstacles*

Figures 28-35 - This was a grid of single code question statements asked of the full sample. The order that the statements were shown to young people in was randomized.

Q14. Outside of school or college, how often do you participate in each of these activities?

Every day / 4 to 6 days per week / 1 to 3 days a week / Less than once a week / Occasionally / Never / Don't know

1) *Use social media (e.g. TikTok, Snapchat, Instagram)*
2) *Use programs to do projects (e.g. Word, PowerPoint, Photoshop)*
3) *Edit your own videos or video content*
4) *Build or edit web page(s)*
5) *Solve coding challenges*
6) *Design your own video games*
7) *Building computers (e.g. using things like micro:bit, Raspberry Pi, Arduino)*
8) *Play video games that involve an element of coding (e.g. Minecraft on PC)*
9) *Play other games on a computer, console or tablet*

Figures 37-46 - This was a grid of single code question statements asked of the full sample. The order that the statements were shown to young people was not randomised.

Q15. How is / was computing taught for you in Years 7-9 / Years 8-10 / S1-2?

1) *Computing is / was taught as part of ICT or Business / BICT*
2) *Computing is / was a subject in the school timetable*
3) *Computing is / was not taught in these years at my school*
4) *Don't know*

Figure 25 - This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised). Appropriate tense (is / was) was shown depending on their school year, and appropriate school years were shown depending on their nation (England and Wales / Northern Ireland / Scotland).

Q16. Approximately how many hours of computing do you do at school / college / University? This could be as part of a computing qualification (e.g. GCSE / NATIONALS/ A levels / Highers) or it could be for timetabled computing / digital skills lessons if you're not currently studying for a qualification.

1) *1 hour every 4 weeks*
2) *1 hour every 2 weeks*
3) *1 hour every week*
4) *2 hours every week*
5) *More than 2 hours per week*
6) *None*
7) *Don't know*

Figure 26 - This was a single code question that was asked of all of those saying they were in education (all 11-16 sample via schools plus 17-19s answering codes 1 and 2 at question P5), codes were shown in the order above (not randomised). Appropriate setting (schools / college / university) was shown depending on their age, and appropriate qualifications were shown depending on their nation (England and Wales / Northern Ireland / Scotland).

Q17. Do you think your parents / carers are interested in computing?

1) Yes, one parent / carer interested
2) Yes, both parents / carers interested
3) No, neither parent / carer interested
4) This question is not applicable to me
5) Don't know

Figure 36 - This was a single code question that was asked of the full sample, codes were shown in the order above (not randomised).

Q18. Research shows that some groups of young people – particularly girls – are less likely to continue with computing subjects after the age of 14. What do you think might help to encourage more young people to continue learning about computing and to consider a potential career in this field?

This was an open response question asked of the full sample.

CONCLUSIONS AND RECOMMENDATIONS

APPENDIX 1:

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T 0117 230 9933 **www.chrysalisresearch.co.uk**