

# Are young people making subject choice decisions too early?

An Analysis of the perceived implications of choosing subjects and careers at age 16 in England.

By James Morrow

# The problem



## Too many university applicants 'pick wrong subjects at 16'

By Judith Burns  
Education reporter

28 April 2016 | Education & Family

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### Schoolchildren 'not ready' to choose their GCSE options at 14

A leading neuroscientist says that schoolchildren should not choose their GCSE options at 14 because pupils' brains have not developed properly at that age



Photo courtesy of mirehan.

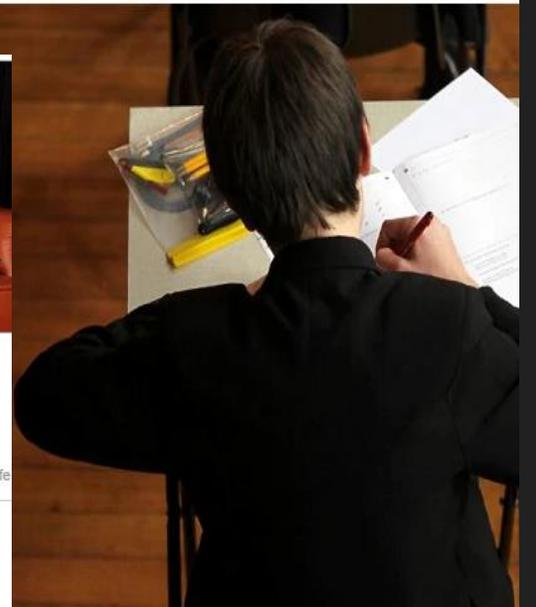
## Is Your Career Path Determined By a High School Kid?

Written by Emilie Topics: Guest Posts, Life

**Editor's Note:** this is a guest post by Dan Johnson.

I was thinking recently about how so many people end up in jobs that they don't like, and I started wondering what it is that leads so many of us down that path towards a life of boredom and broken dreams.

When did we make the decisions that would determine the course of



...yne Blakemore, a professor in cognitive neuroscience at Universi

# Why this is an important issue

- Now in the UK everyone must stay in some form of education or training until age 18. The choices they make at age 16 play a huge role in determining what students can and cannot do and ultimately what career path they will take.
- With the new retirement age rising to 67 by 2028 it is vital students eventually end up in a role that maximises their skills for both their wellbeing and their employer's productivity.

# Background

- Currently in England until the age of 14 all students follow the same national curriculum. At 14 pupils gain a limited freedom by having the choice to drop, continue or start studying new subjects however must remain on a curriculum with core subjects compulsory such as English and Mathematics, during this pupils sit GCSE exams.
- Then at 16 the national curriculum ends and students get to entirely pick what courses they do. Usually this is in the form of several subject specific A-level qualifications but can also be apprenticeships, an English baccalaureate or training in employment.

# Theory

- The research is in the field of youth studies and is of relevance to the theory of individualisation in sociology.
- This is the idea the individual's life is becoming a more self-steered phenomenon being less restricted in collectively by social classes and norms (Beck 2000).
- The research can indicate if whether it is perceived beneficial for young people to given these choices at this fairly young age.

# Past Research

- There have been shown to be many factors effecting a student's course choice (both at 14 and 16 years old) unrelated to whether these courses will specifically be a good fit for them (Jin, Muriel et al. 2011). Firstly for example their report states that the huge growth in vocational courses at GCSE level may have been driven by schools performing poorly in the 5 A\* to C measure (this is a common way of judging overall pupil performance in secondary school). These schools then switch to providing more vocational courses in order to perform higher in this measure and therefore rise in league tables. This impacts and limits young people's course choices in a way that's irrelevant to whether it's effective personally for them or not. Those schools that have changed courses most rapidly have made the quickest gains in the rate of pupils achieving 5 A\* to C grades.
- Secondly the report shows pupils are heavily influenced on the way course decisions are presented to them by what is known as framing effects. For example pupils tend to stick with default options when they are given. Finally at age 16 there is a huge array of options- many subjects to pick from. This would seem to be useful as students could have the potential to choose courses fitting closer to their wants but in fact it's suggested that instead of selecting rationally students can be influenced by emotional bias and social norms with gender differences shown to be still existing even when the effect of prior attainment and subject preferences are controlled. The attitude that Science related subjects are more masculine and arts and language subjects are more feminine still exists (Whitehead 1996). This is despite the fact there is a relatively small difference in the results both genders achieve. This is an issue because students are selecting courses for misinformed reasons and they aren't the best fit. This could result in people entering careers that aren't as fulfilling. This is an argument for improving the current system.
- However by school year 11 as students decide their post 16 courses they have been shown to subtly shift in the way they see the role of their teachers (Blenkinsop, McCrone et al. 2006). This shift is in the form of taking a more measured approach than they did at 14 years old by asking for more information on the content of the courses and their potential ability in them. Also at the age of 16 many students have a clear idea of a career path they want to take. This is especially true if it is a STEM subject and specialising at this stage is more beneficial, enabling them to go into more depth in future study. This early specialisation is also looked on more favourably by Universities with often 3 science subjects required at A-level for certain courses. This is an argument for it being advantageous for students to specialise early. A balance needs to be found with giving students enough time to be studying a broad range of courses as to not narrow future options but at the same time allowing students to go into enough depth to prepare them well for a field useful to their future.

# In not as much writing

- Schools deliberating trying to gain higher ranking offering more vocational courses improving 5 a\* to c measure
- Framing effects
- Arguments for: students being able to make measured approach at 16 and how often universities favour students to specialise and already have in depth knowledge EG: for STEM subject courses at prestigious universities often require 2/3 STEM A-levels

# The Method

- I collected data using an online survey administered using google forms. Survey participants were invited to apply from a link shared on the universities social media. Individuals age 18-49 who completed their secondary education in England were invited to take part.
- The questions in the survey were split into 4 simple sections: Participant background, attitudes at the time of subject choice and the last two sections on their attitudes now.

# The sample

| Variable                          |  | <u>n</u> (%) |
|-----------------------------------|--|--------------|
| Gender                            | Male   | 49 (41)      |
|                                   | Female   | 70 (59)      |
| Age                               | 19-24  | 26 (22)      |
|                                   | 25-29  | 54 (45)      |
|                                   | 30+  | 39 (33)      |
| Highest Educational Qualification | Degree or above                                    | 101(85)      |
|                                   | Further education, A level, GCSE                   | 18 (15)      |
| Parental Social Class             | Higher managerial, administrative and professional | 48(40.3)     |
|                                   | Intermediate occupations                           | 29(24.4)     |
|                                   | Routine and manual occupations                     | 41(34.5)     |
|                                   | Missing  | 1 (0.8)      |
| Total                             |  | 119          |

# The sample

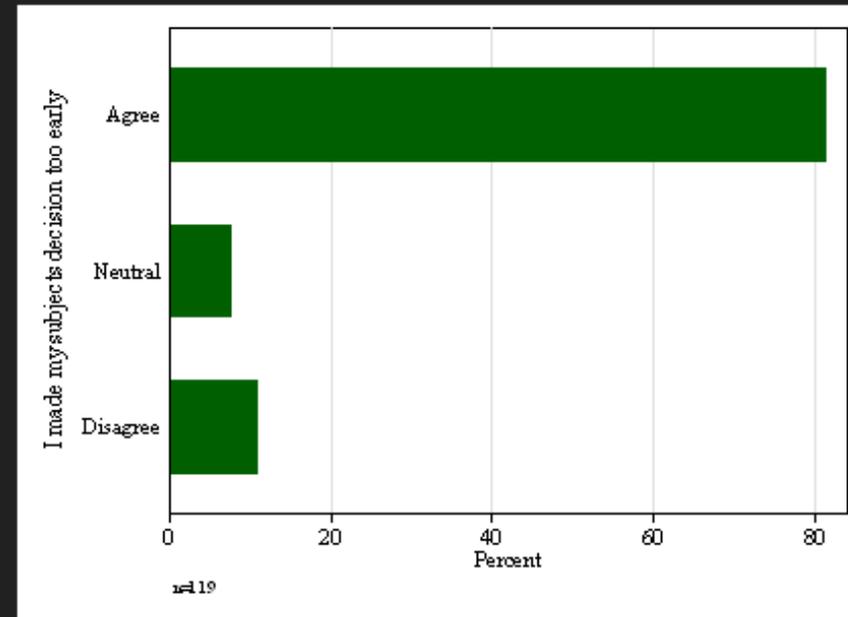
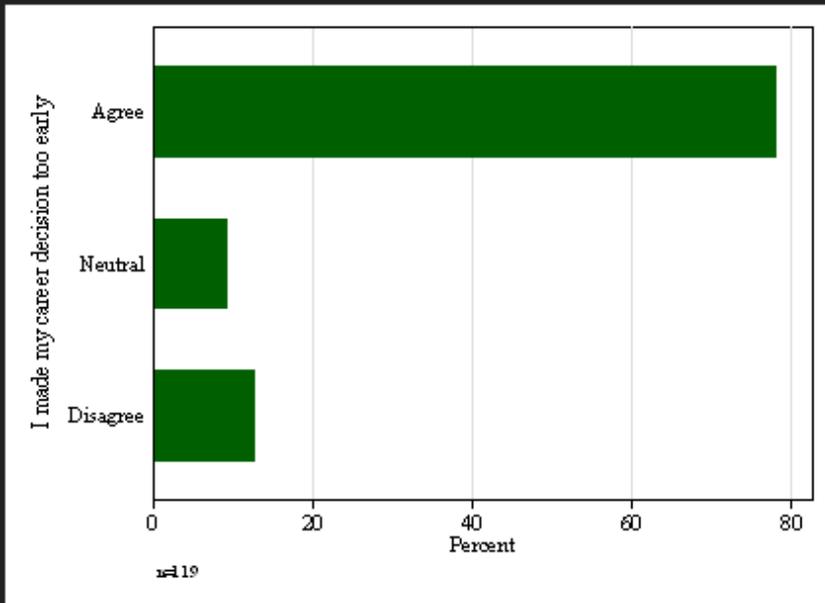
- I used an online survey which was available for anyone to complete, if they choose to. I did not use a sampling frame which listed all eligible respondents in the population of interest. The sample is therefore a convenience sample.
- The fact the survey was shared on a University the department's social media to encourage participation may have resulted in sample bias with more highly educated participants than is representative of the population.
- Secondly Web surveys have limitations like socioeconomic biases in computer access and literacy
- Finally a gender and age bias can occur from a imbalance in the followers of the used social media, and also in the willingness of different groups of the population to take part in online surveys. The achieved sample size was 119.

# How Responses were coded

- I asked participants what their mothers and fathers jobs were when they were 14. From this, I used the Office for National Statistics NSSEC coding tool that gave a score estimating participant's social class from what respondents answered.
- Used dominance method to get final score for each participant

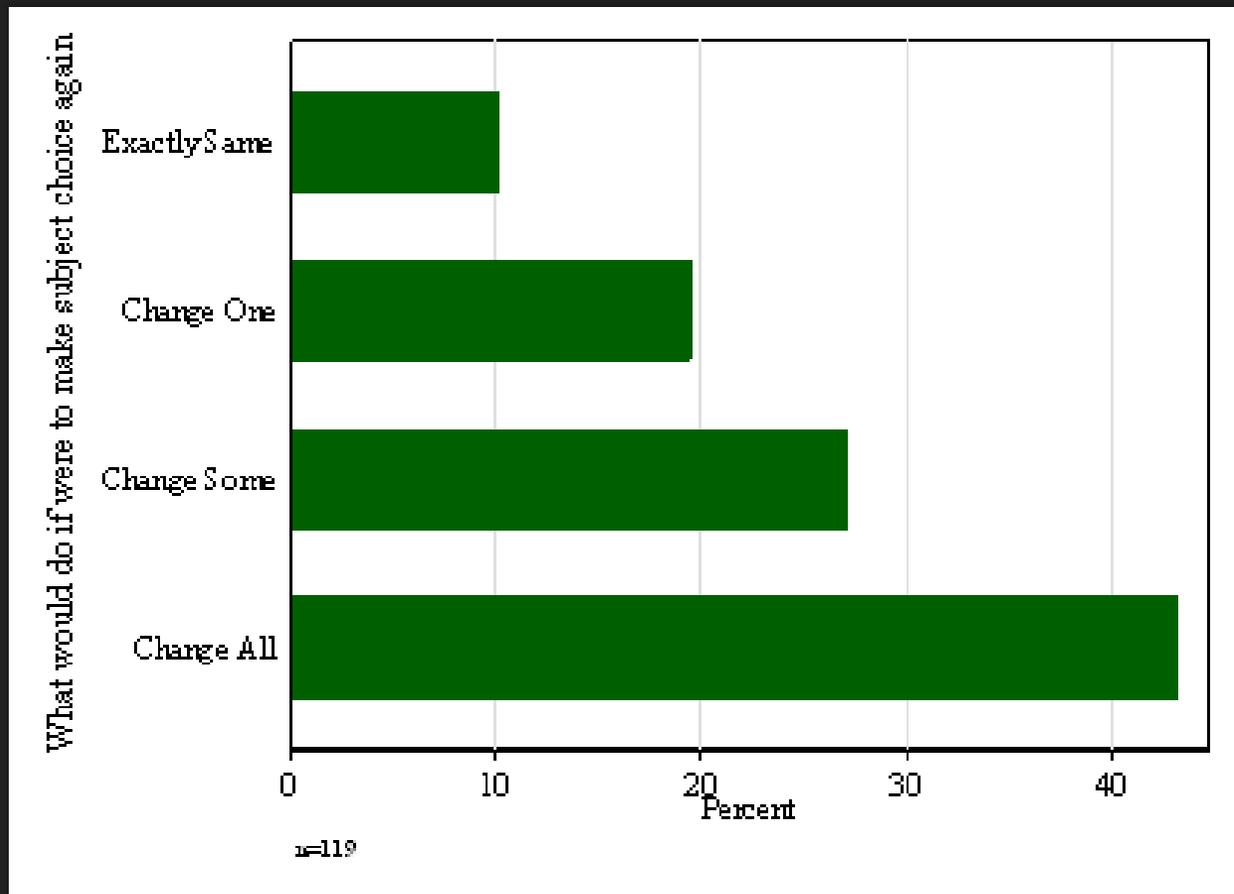
# My Results

The large majority of people (more than 80%) believe they made their career decision too early. The majority of respondents also believe they made their subjects choices too early.



There is also seems to be quite a strong correlation between people thinking they've taken their career and subject decision too early ( $r=0.613$ )

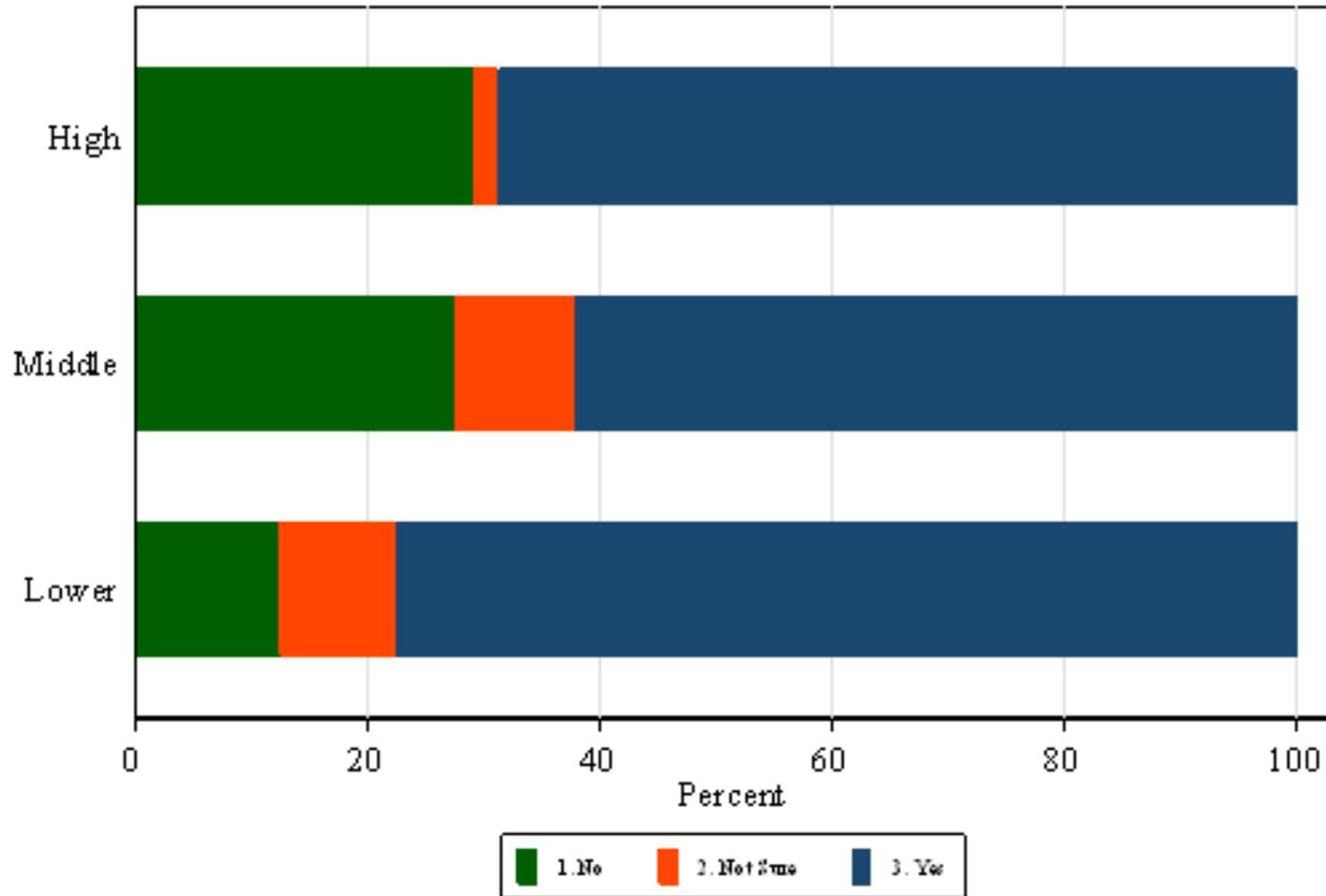
# My Results



This is supported by only a small fraction (10%) saying they would pick the same A-levels if they were to choose again now and nearly half saying that they would completely change what courses they took.

# My Results

If you were to make your subject choices again, would you pick subjects that would allow you to get a different job? BY Parental Social Class.



n=119

- If they were to pick courses again, the respondents making up the lower class are more likely than the middle and higher classes to pick differently to get a more fulfilling, higher paying and different job.
- This indicates there could be a class inequality in the success of course decisions made at 16 with students in higher socio-economic positions being able to make more informed decisions.

# Discussion

- My results show that population believe young people are making course decisions too early in England. This supports the claim made in many newspapers like those that were discussed in the introduction.
- They agree with the claim that many students regret their A level choices (Which? Press Office 2016)
- My results also show there are class inequalities in attitudes to course decisions. The lower class category has a higher fraction of people who think they made their course decisions too early and would pick the most differently now to improve their pay and job fulfilment.
- Finally because there is a strong correlation between participants who think they made their subjects decision too early and career decision too early, this suggests there is perceived connection in course decisions success and career success supporting its importance.

# Discussion

There are limitations of my work:

- The sample was both not large enough consisting of only 119 respondents and unrepresentative of the population of England with a much higher proportion of university graduates answering than there is in England as a whole.
- This is because a convenience sample was used so there was no control on respondents.
- More complex analysis could also add develop the interpretation of my results.

# Conclusion

- If these results can be relied upon or supported by other more extensive studies this would mean there is desire for students to make final subject decisions later on.
- This could result in a core syllabus carrying on until students get to 18 or allowing pupils to study a wider range of subjects.
- These future more extensive studies could be in the form of a larger stratified survey better representing the population confirming the attitudes expressed from this report far more reliably.
- These results would benefit policy makers by supporting reform of later secondary education in a way so young people do not have to specialise so early.
- This would allow young people more time to find an area of work or higher education that they can be successful in.
- Finally, if the pattern emerging in that younger people from lower class backgrounds perceive themselves to make less successful subject choices then this could also highlight an area for reform. Government could encourage schools to provide more information to all pupils especially ones with a lower social class in their course decisions at 16.