

# Summer preparation for the EPQ

On the following pages, you will find suggested activities to prepare you for the EPQ

**Edexcel EPQ**

Specification: [www.tinyurl.com/EdexcelEPQ](http://www.tinyurl.com/EdexcelEPQ)



*Hinchingsbrooke School*

The EPQ is an opportunity for you to develop your own academic or cultural interests in a self-directed project.

You can choose from **one** of four ways to present your project:

- 5000-6000 word dissertation
- 4000-5000 word practical investigation
- 1500-3000-word essay to accompany a practical performance
- 1500-3000-word essay to accompany an artefact.

You'll be assessed on your ability to:

- **Manage** → Think of a project idea and plan how you'll achieve it.
- **Use resources** → Selecting, organising and utilising relevant information to create your EPQ.
- **Develop and realise** → How well you're able to complete your project using a range of skills and technologies.
- **Review** → How well you evaluate your project and your journey.

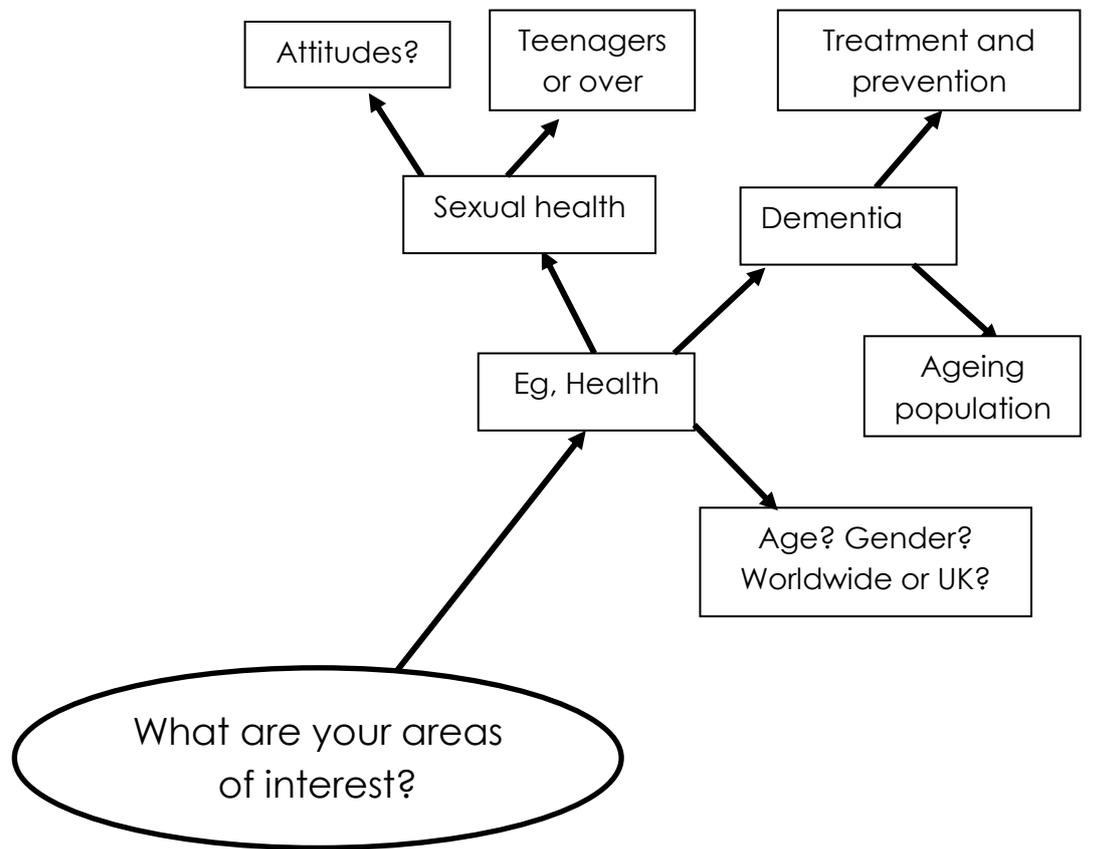
You will **only** have until May/June 2019 to complete your EPQ as well as completing your other 3 or 4 A-Levels.

The **hardest** part about the EPQ is choosing an area that is interesting and that you want to research into extensively. Boredom will lead to procrastination and time-wasting.

On the next page you'll see a spider diagram with an example of how to explore your interests.

Your topic area:

- **Doesn't** have to be related to your A-Levels
- **Doesn't** have to be related to your degree
- Should **avoid** unethical areas (breaking the law, underage participants, sensitive areas)
  - ☹ Are teenagers more likely to break the law? (*sensitive*)
  - ☹ The ageing population: offering euthanasia to pensioners. (*sensitive*)
- Needs to be **specific** and **focused**.
  - ☹ Are serial killers born or made? (*far too big for 6k words!*)
  - 😊 What is the impact of environmental influences on British serial killers?
  - ☹ Does social media affect mental health? (*Yes? Too broad and obvious*)
  - 😊 To what extent does Instagram affect body image in mixed-sex teenagers?



**Why are these interesting areas for you? (You'll need to explain why in your introduction!)**



You will need to read hundreds of articles to write your EPQ. Start to explore your topics of interest to see if there is enough information out there. You can do this through internet searches but also through watching documentaries on Youtube, Vice, BBC iPlayer, Netflix, 4OD...

- ✓ Has your topic of interest been researched before? (search on *Google Scholar*)
- ✓ Are there any challenging arguments or debates (for/against or agree/disagree)?
- ✓ How reliable are the sources? (random person? Newspaper? Academic source? Government?)

**IMPORTANT!** → If you find *any* articles or links that might be useful, save them somewhere safe. You will need them for referencing in the future.

**Make notes on content you've watched or read, arguments you've found or useful information.**

# Adult brains structured differently depending on status in society, study suggests

Monday 14 May 2018 (The Independent)



Adult [brains](#) may be so sensitive to their owners' social and economic situation that they could be actively reshaped and their function changed.

Previous work has demonstrated that children's brains can be altered if they are raised in environments that lack adequate education, nutrition and access to health care. However, less is known about the impact these markers of lower

socioeconomic status can have on the brains of adults.

"We know that socioeconomic status influences the structure of the brain in childhood and older age, but there's been a gap in the research," said Dr Gagan Wig, a neuroscientist at the University of Texas at Dallas. "We wanted to see if there were relationships between socioeconomic status and the brain across a wider range of adulthood."

In a study published in the journal *Proceedings of the National Academy of Sciences of the United States of America*, Dr Wig and his colleagues applied brain imaging technology to around 300 subjects between the ages of 20 and 90.

Their socioeconomic status was measured using a combination of education and the "prestige" of each individual's job. The researchers' results suggested a potential link between socioeconomic status and changes to brain structure and function.

In middle-aged adults they noted those with higher overall "status" had brain networks that were more efficiently organised and their cortical grey matter was thicker.

The thinner cortex seen in those from lower socioeconomic backgrounds, on the other hand, could be cause for concern as this feature is known to be associated with cognitive impairment later in life, including memory loss and dementia.

"These data provide a snapshot in time for each participant," said the study's lead author Dr Micaela Chan. "Following individuals through their lifespan would provide more information about brain changes and their relationship to life events and status." Dr Wig added: "What we have found in middle-aged adults is a correlation between socioeconomic status and brain function and anatomy. What makes these results more striking is that the individuals we studied were predominantly above the poverty line. This provides evidence that socioeconomic status-brain relationships are not limited to individuals at the extreme ends of socioeconomic status, but are present across a broader socioeconomic status range."

Professor Derek Hill, a medical imaging specialist at University College London who was not involved in the study, told *The Independent* the impact of socioeconomic status on brain function and structure is "a fascinating area of research".

However, he noted the study by Dr Wig and his colleagues had its limitations. "The results suggest possible relationships between socioeconomic status and brain function, but must be considered very preliminary," said Prof Hill.

"The study is too small to provide strong evidence of a link and more research would help clarify whether the findings are real, or random." Dr Rebecca Dewey, a research fellow in neuroimaging at the University of Nottingham noted that the measures used such as socioeconomic index are so strongly tied with education attainment that making conclusions about broader socioeconomic status is "not very helpful".

While he noted that much is still not understood about the links suggested by this study, Dr Wig said these results suggest this area is worth further investigation. "Because differences in socioeconomic status can be associated with differences in many factors, including those related to diet and health behaviours, access to health care, and levels of stress, it's not yet clear which of these, if any, is the source of the observed relationships," he added. "The bottom line is, socioeconomic status might matter for brain health, even in middle age, and we will need to investigate the relationship further."

You will score highly in your EPQ if you are **critical** and can **analyse** information that you find. To do this, you need to always remind yourself that *“Nothing published/broadcast is ever perfect. There are always problems, limitations or flaws”*

Use the article above to answer the questions below.

**The Independent is a newspaper which tends to display left-wing ideologies. Why is this a problem?**

**Newspapers are designed to make profit and sell information. How could this impact the article content?**

**How do you define socioeconomic status? Is this subjective to each person and/or country?**

**Who decides which jobs are considered ‘prestigious’? – is this problematic?**

**Is a sample of 300 participants large enough to represent a whole country? Are American participants able to represent Germany, India or Japan?**

The screenshot shows the Future Learn website interface. At the top left is the 'Future Learn' logo. The navigation menu includes 'Categories', 'Courses', 'Programs', and 'Degrees'. A search icon and a 'Sign in' button are in the top right. The main content area features the text 'ONLINE COURSE' followed by the title 'Developing Your Research Project'. Below the title is a description: 'Undertaking an Extended Project Qualification, IB extended essay or any other scholarly research? This guides you step-by-step.' To the right is the University of Southampton logo and a 'Join course' button. At the bottom, a grey bar contains navigation links: 'Overview', 'Topics', 'Start dates', 'Requirements', 'Educators', and 'Try it'.

If you want to really get ahead you can enrol onto this **FREE online 8 hour** course.

[www.futurelearn.com/courses/research-project](http://www.futurelearn.com/courses/research-project)

It's specific for EPQ and provided by the University of Southampton. It covers:

- Academic research: principles and definition
- Drafting and developing research proposals
- Gathering information from literature and from findings
- Research methods: choosing an appropriate methodology
- Academic reading and note taking
- Referencing, plagiarism, and academic integrity
- Academic writing: organising sources, structuring essays
- Academic writing: summarising a research project into an abstract
- Academic presentations: preparation and delivery