

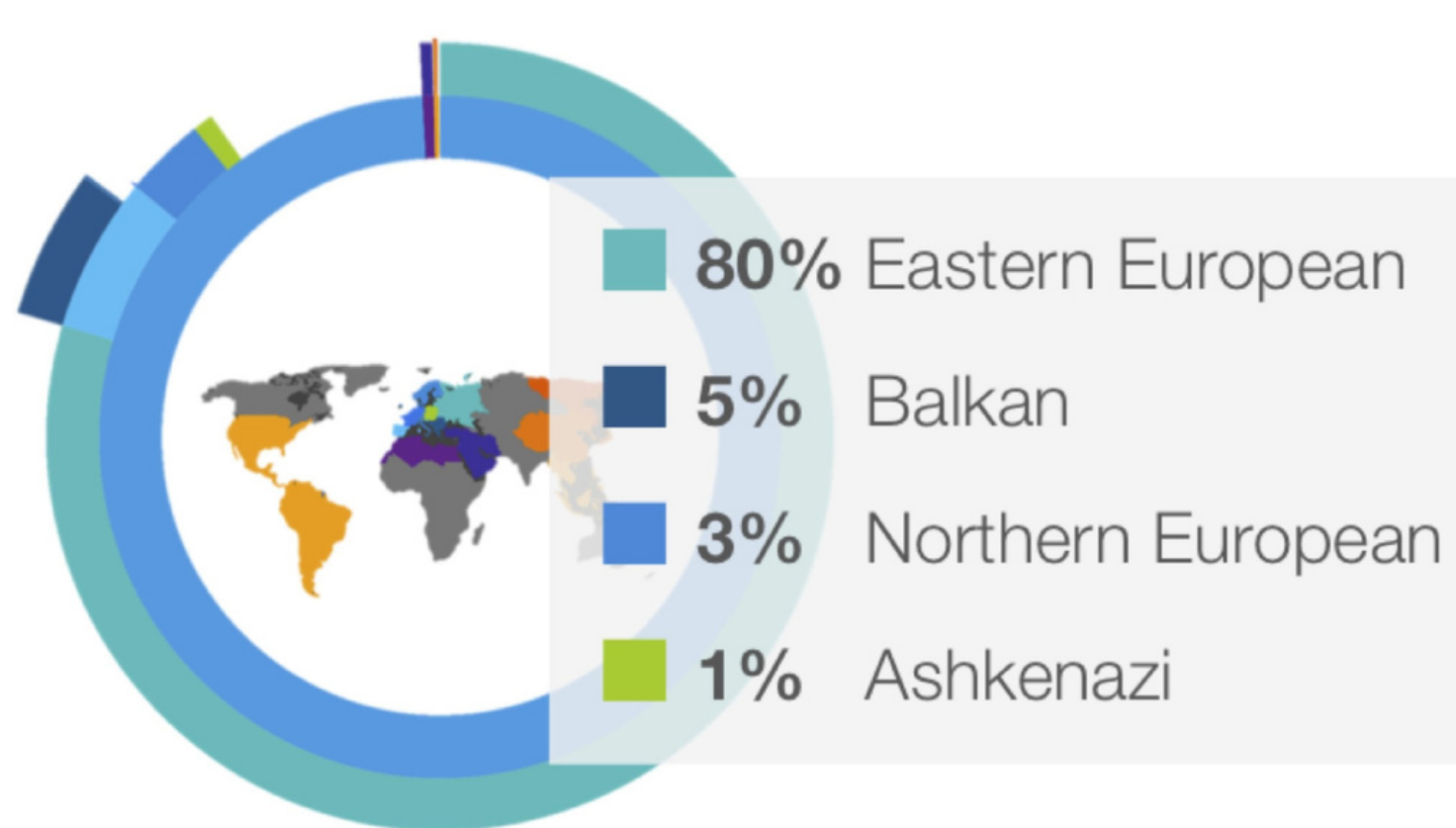
Assessing UK Undergraduate Students' Understanding of Genetic Ancestry Claims in the Media

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Introduction and Methodology

- Genetic ancestry is a field that never fails to catch public attention
- Many for-profit companies, such as direct-to-consumer testing companies, the news and media often exploit this, sometimes in exchange for scientific accuracy and validity
- Readers often lack the background, time, and resources to filter out inaccurate claims
- Little research has been conducted on understanding of genetic ancestry
- I identified common misconceptions from past media claims and formulated open-ended questions based on this
- I then analysed the responses, noting key trends and themes



Example of 23AndMe ancestry report and logos of popular DTC ancestry companies



Misconception	Question (adapted)
Genetic ancestry testing can tell me about my true ethnic and racial identity	Do you think genetic ancestry testing companies are able to accurately assess whether someone has Viking DNA? One million British men may be directly descended from the Roman legions which came, saw, and conquered England and Wales almost two thousand years ago, a DNA study suggests. Could you explain what is meant by this headline?
Based on genealogical records, I am related to this historical figure!	...That DNA could determine if I am one of the world's 17 million people that a recent study suggests are descended from the infamous Khan and his tribe... Imagine you are explaining this headline to someone. What would you say to them?
Neanderthals and humans are weakly genetically related	Watch this video: https://youtu.be/-soaBmX-6mo . Do you agree or disagree with what was said in the video?
People across the world are only weakly genetically related	Humanity's most recent common ancestor and so-called genetic isopoint illustrate the surprising connections among our family trees. How genetically similar do you believe you are to another person on the other side of the world?
All humans descended from two individuals 100,000 to 200,000 years ago	All humans may be descended from just TWO people and a catastrophic event almost wiped out ALL species 100,000 years ago, study suggests Could you explain what is meant by this headline?



Examples of media claims used



Results and conclusion

- 75 students responded to the survey, and 29 completed it in full. The age range was 18 to 23 and respondents came from a range of degree courses
- While most respondents had some basic understanding of genetic ancestry, this was not always sufficient to fully grasp the media claims presented
- There is much more nuance to the issue than just whether respondents conform to the hypothesised misconceptions.
- The 5 misconceptions represent only a small sample of potential topics to investigate within genetic ancestry.

Acknowledgements

This research project would not have been possible without support from the Laidlaw Foundation, my supervisor Dr. Mark Dyble, and my personal tutor Dr. Richard Milne for assisting me in the application process. I would also like to thank Mr. Chris Cullen, Mrs. Daniela Bultoc and Dr. Richard Adairs for coordinating the UCL scholar cohort.

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