

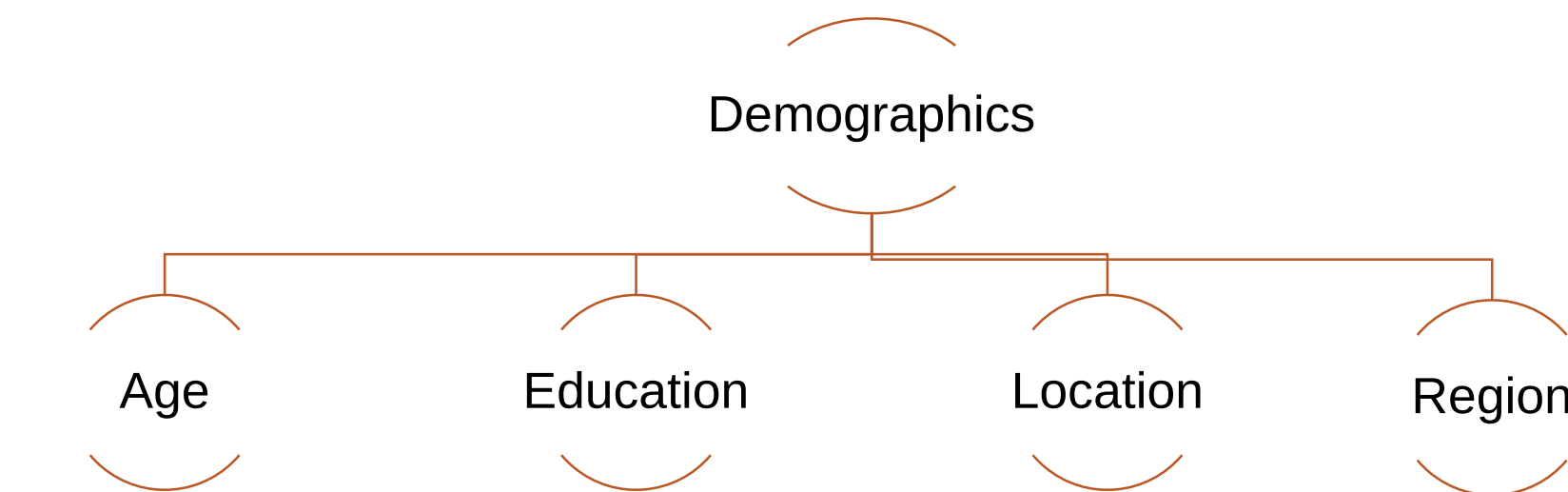
Demographic Implications on the Public Perception of Palm Oil: An Investigative Study

Student Number: 21086907

BSc (Hons) Conservation and Ecology (top up)

INTRODUCTION

Human population growth and the growing demand for natural commodities continue to threaten the existence of flora and fauna globally through deforestation and greenhouse gas emissions. Palm oil is one of the largest natural commodities produced and consumed worldwide with the EU being a major importer of products containing palm oil (Brack *et al.*, 2016). Public perception of this relatively untelevised issue remains uncertain due to the lack of research into the UK consumer perspective (Padfield *et al.*, 2019).



RESEARCH AIM

Attitudes towards certain topics are known to differ between demographic groups (Li *et al.*, 2009), therefore, the aim of the project is to determine whether demographics influence public perception of palm oil and provide recommendations for improving targeted awareness campaigns.

METHODOLOGY

1. Ethical approval.
2. Prioritise topics for investigation and create a research framework for structuring the project, shown by *Figure 1*.

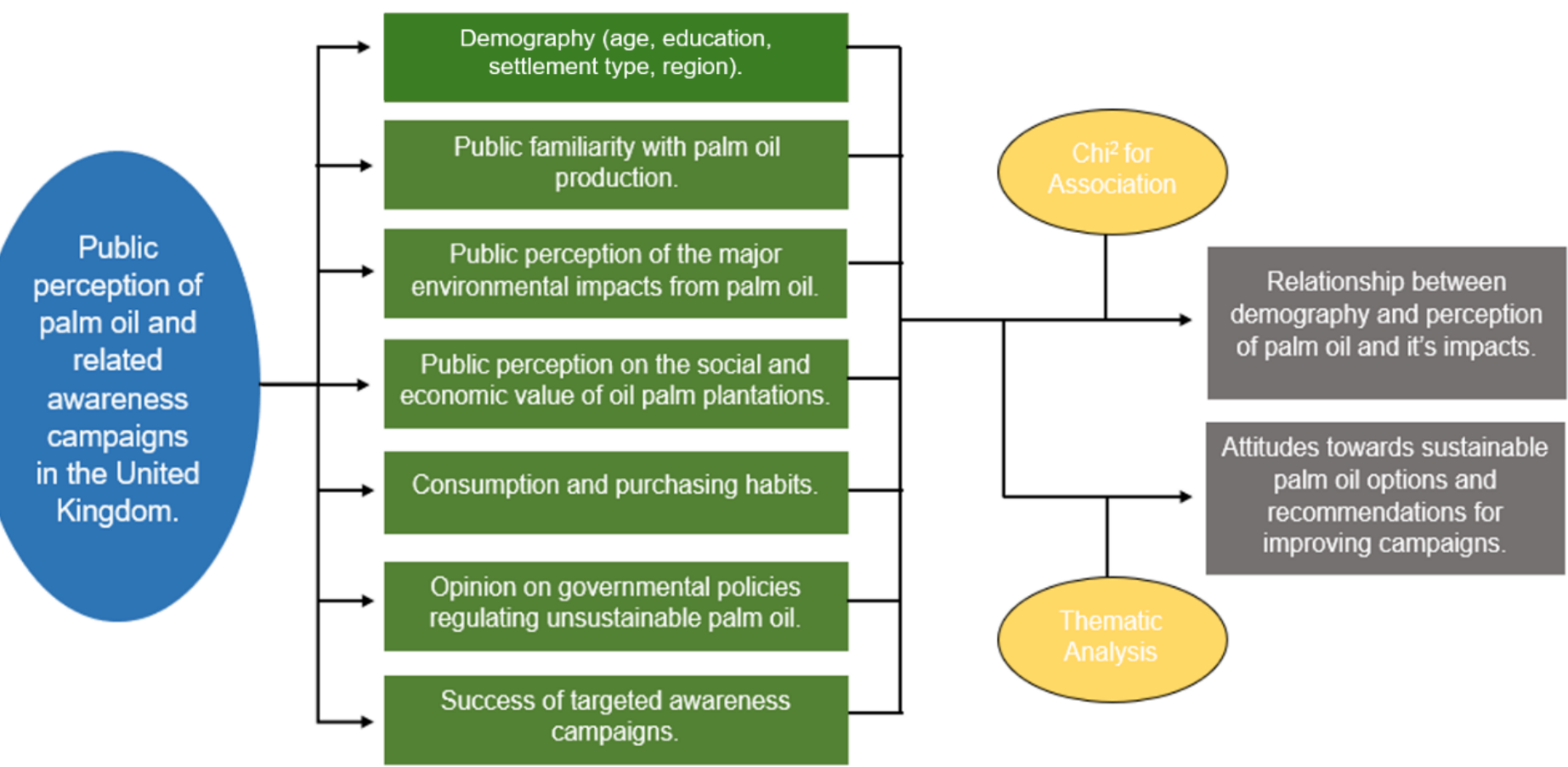


Figure 1: Research framework.

3. Design an online questionnaire on Google Forms using a variety of closed and questions.
4. Distribute survey over a three-month period on multiple social media platforms.
5. Gain at least 100 responses.
6. Perform Chi-Squared for Association to determine significant associations between opinions and demographics and Thematic Analysis to identify themes.

RESULTS

QUANTITATIVE DATA

There was no significant association between scaled knowledge rating and demographic categories (all p values > 0.05) shown by *Figure 2*.

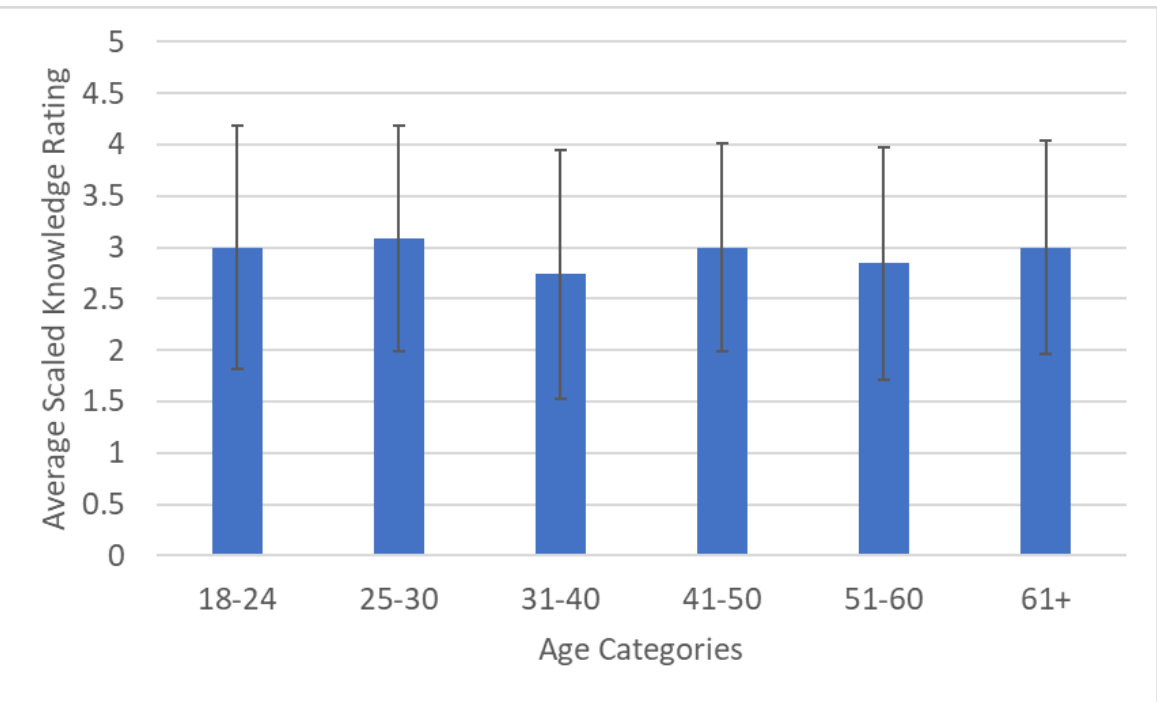


Figure 2: Average participant knowledge rating. 1 = very low, 2 = low, 3 = average, 4 = high and, 5 = very high.

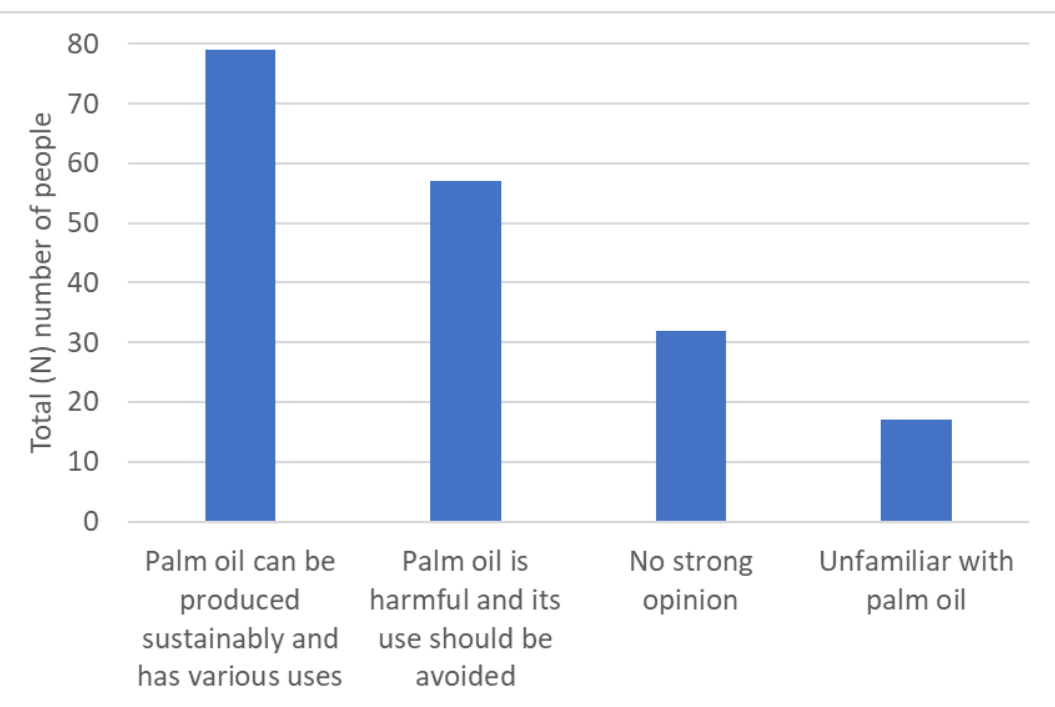


Figure 3: Public familiarity with the sustainable production of palm oil.

There was a significant association between education and public familiarity with the sustainable production of palm oil ($p=0.0022$), with no significant associations found between age, location and region (all $p > 0.05$) and familiarity.

Education was the only demographic where a significant association was found with how often people check for palm oil content ($p=0.000612$), with no relation between age, location and region (all $p > 0.05$).

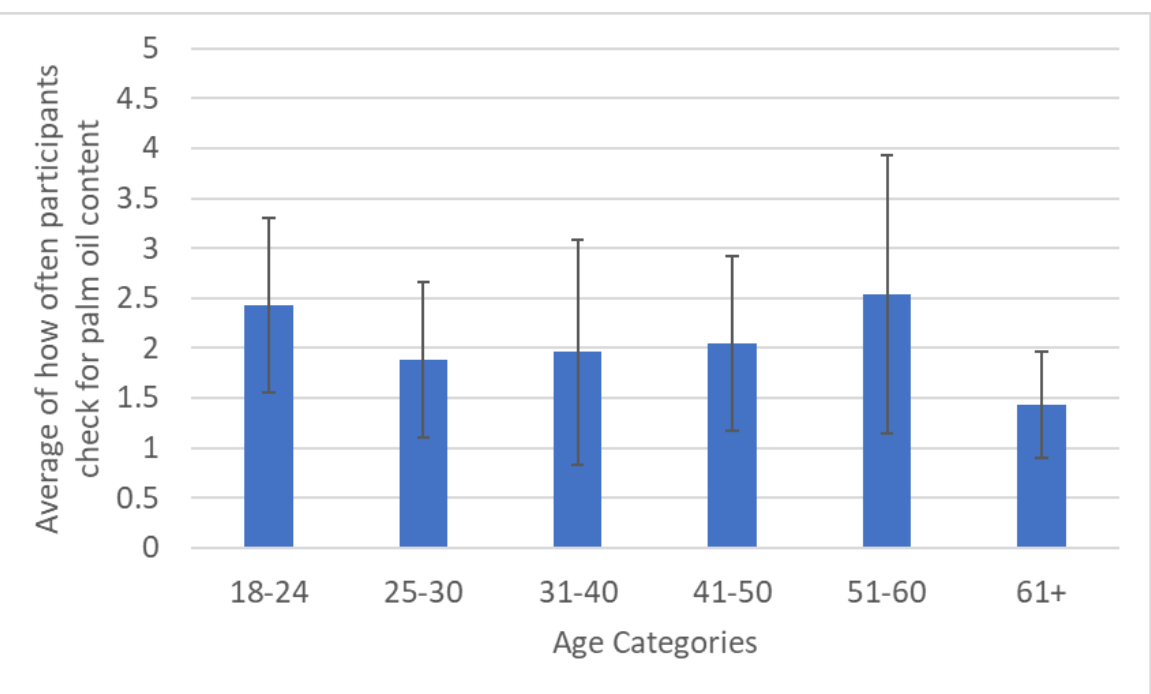


Figure 4: How often the public check for palm oil content on a scale of 1-5. 1=Never, 2=Rarely, 3=Occasionally, 4=Often, 5=Always.

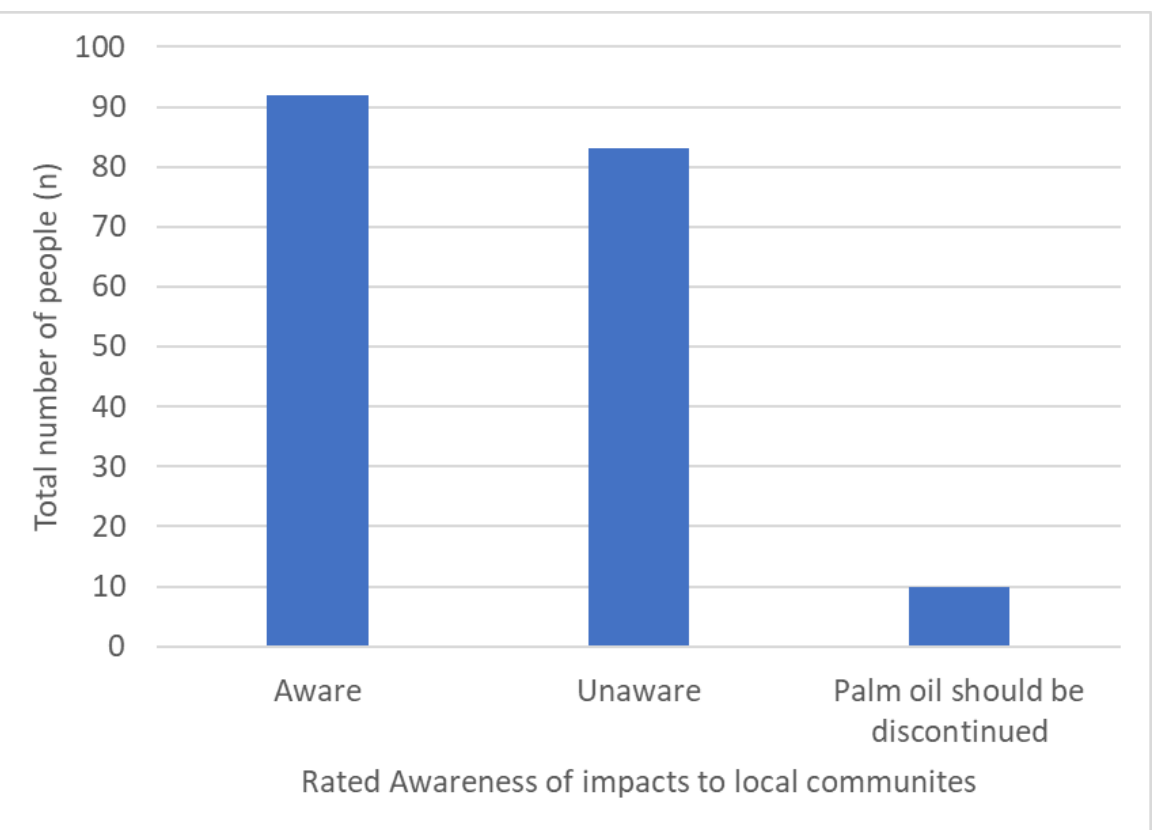


Figure 5: Total number of people who rated themselves aware or unaware of the socio-economic impacts of palm oil.

Significant associations between age ($p=1.10E-06$), education level ($p=4.08E-27$) and location ($p=4.60E-11$) and awareness of socio-economic impacts were made. There was no significant association between region ($p=0.646$) and knowledge on the socio-economic factors.



Figure 6: Word cloud of participants' views on the most effective campaign strategy.

QUALITATIVE DATA AND THEMATIC ANALYSIS

The public rated social media, followed by television advertisements as the most effective campaign strategies against unsustainable palm oil, shown in *Figure 6*. The most frequent theme amongst participant responses, asking for opinions of the biggest environmental impact, was deforestation.

DISCUSSION AND CONCLUSION

Palm oil campaigns should target the public with lower education qualifications as participants with higher education levels exhibited more pro-environmental behaviour and knowledge, specifically checking for palm oil content and awareness of the wider impacts from the palm oil production industry. Focusing on the UK, campaigns should alter their message and deliverance depending on the region they are targeting, as annual household income and education level fluctuate around regions (Jerrim *et al.*, 2018; Banerjee, 2016; Millington, 2023). The public recognised deforestation as the biggest environmental threat from unsustainable practices within the industry.

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