GSS Education and Environment*

Attitude-behaviour gap in environmental protection by degree obtained

Jueun Kang

5 April 2023

This paper discusses the relationship between the level of education obtained and the attitude-behaviour gap towards environmental protection. We do this by comparing the respondents' willingness to pay money for environmental protection to whether they actually donate money towards the environment, by varying levels of degrees obtained. We find that respondents with highschool as their highest obtained degree have the highest attitude-behaviour gap; they claim that they would pay money for environmental protection, but have not donated in the past five years towards environmental protection. These findings matter as we are able to get insight into which group of respondents require more support in translating their positive attitudes towards environmental protection into action.

1 Introduction

As the condition of the natural environment continues to decline, concerns around the environment, including climate change, loss of biodiversity, and pollution, have grown (Tollefson 2022). With increased public attention, environmental and social development initiatives have emphasised environmental change as a social justice issue, rather than merely a physical one; people with a lower social, economic, and political advantage face the negative consequences of these environmental problems (University, n.d.). In order to address these issues, the need for collective action and effort has been highlighted, however, there is often a discrepancy between people's attitudes and their behaviours (Agency, n.d.). This phenomenon comes from social psychology, called the "attitude-behaviour gap", better defined as: the mismatch between how someone feels about a certain behaviour in comparison to their actual behaviour (Hyun Jung Park 2020).

Education has been recognised as a crucial tool in promoting social change, through providing knowledge and awareness on positive social impacts - "education therefore comes prior

*Code and data are available at: https://github.com/jueunkang12/environment_education

to social change" (Pandey 2020). Particularly among younger age groups, education helps eradicate ignorance, instilling principles which will not only benefit individuals but social at large (Pandey 2020). While the importance of education in fostering change is largely studied and recognised, there remains a gap in exploring the relationship between one's degree and their tendency to exhibit environmentally responsible behaviour (Agency, n.d.). Specifically, there is a lack of research surrounding the attitude-behaviour gap in relation to environmental action among individuals with different education levels obtained.

This paper finds that the majority of respondents have obtained a high school degree as their highest level of education. In addition, the majority of respondents state that they are fairly willing to donate towards environmental protection in the GSS interview. However, when we analysed the potential of the attitude-behaviour phenomenon, by comparing respondents' willingness to donate to respondents' actual donation behaviour in the last five years, we find that the highest mismatch is of respondents with a highschool education as their highest obtained degree. This study is important as it provides implications for the implementation of environmental education initiatives. By identifying the education levels associated with the largest attitude-behaviour gap in terms of environmental action, our findings can help in modifying educational interventions to specific educational levels.

The remainder of this paper has four sections. In section 2, we explain the data source and methodology used for data collection, data cleaning, variables used, potential biases and ethical issues. In section 3, we present a logistic regression model, estimating the relationship between a respondent's willingness to donate money, their education, and whether they actually donate money. In section 4, the final model is interpreted along with all findings regarding respondents' willingness and respondents' behaviour, in relation to their education. Finally, a discussion is carried out, providing the implications of this paper's findings, as well as the weaknesses and future steps of this investigation.

This paper uses R (R Core Team 2020) for data cleaning and analysis, R packages *tidyverse* (Wickham et al. 2019), *tidyr* (Wickham, Vaughan, and Girlich 2023), *janitor* (Firke 2023), *here* (Müller 2020), *dplyr* (Wickham et al. 2023), *labelled* (Larmarange 2022), and *ggplot2* (Wickham 2016), to create the figures, and *haven* (Wickham, Miller, and Smith 2022) to read the dta files.

2 Data

Our data is of penguins.

2.1 Data Source and Methodology

Talk about data source and methodology.

2.1.1 Strengths and Weaknesses of GSS

Talk about strengths and weaknesses of GSS.

2.1.2 Potential Ethical and Bias Issues

Talk about potential ethical and bias issues.

2.1.3 Attributes

Attributes go here.

2.2 Exploration

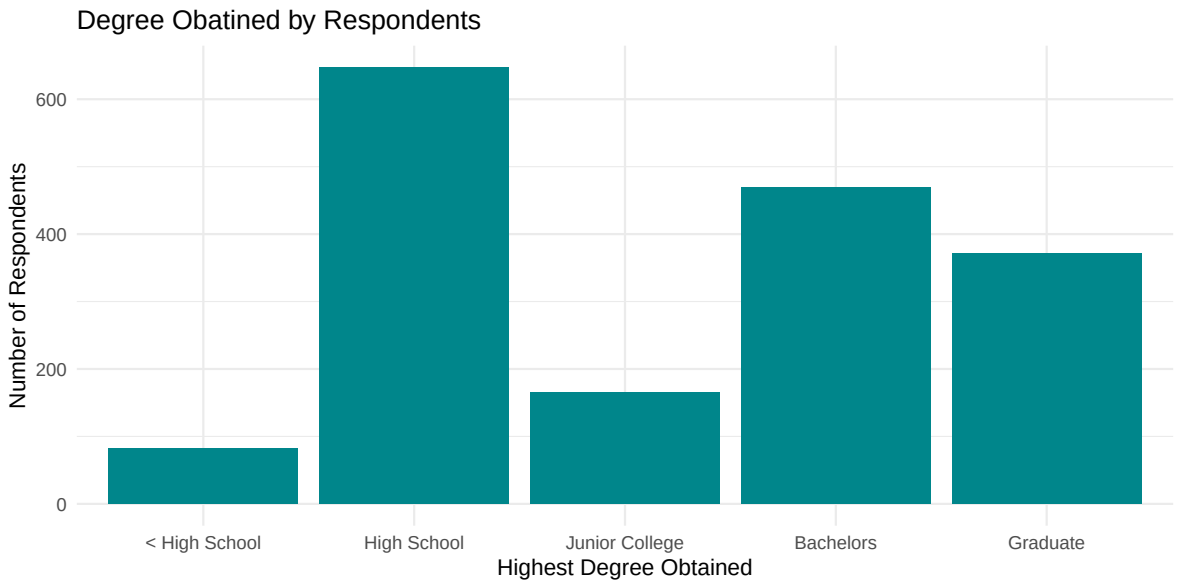

Figure 1: Highest Degree of Education Obtained by Respondents

Figure 1 talk more about it.

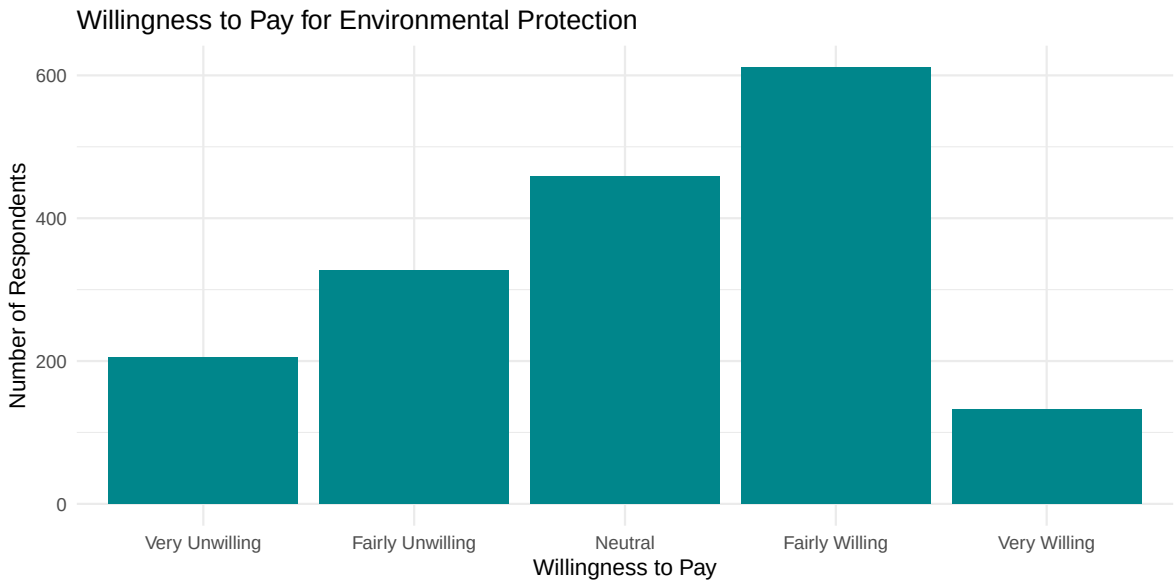

Figure 2: Respondents' willingness to pay to protect the environment

Figure 2 talks about.

3 Model

4 Results

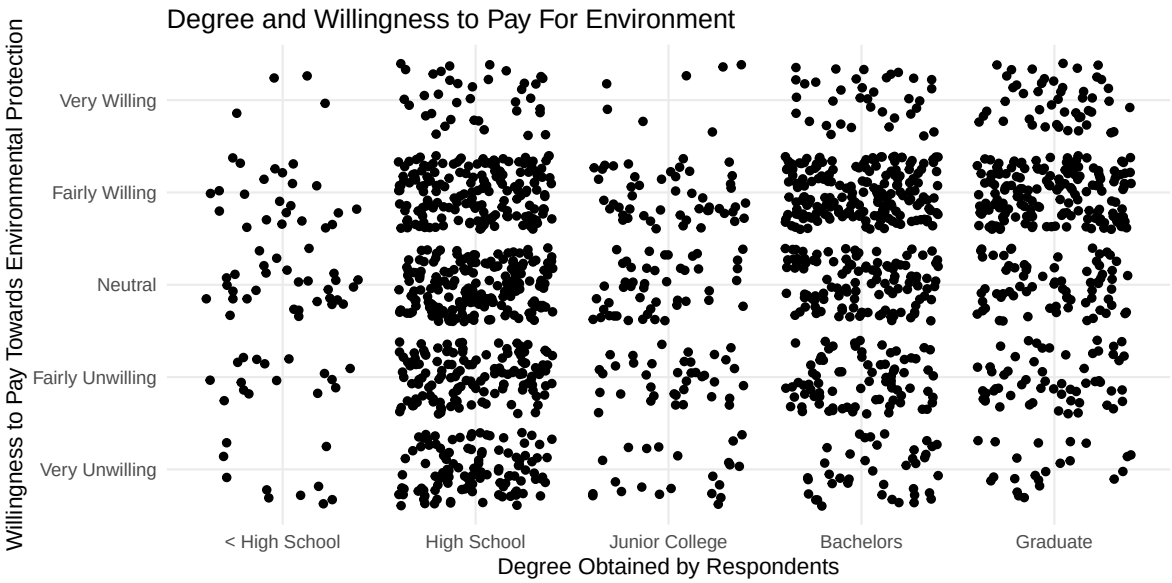

Figure 3: Respondents' degree and willingness to pay to protect the environment

Figure 3 talks about.

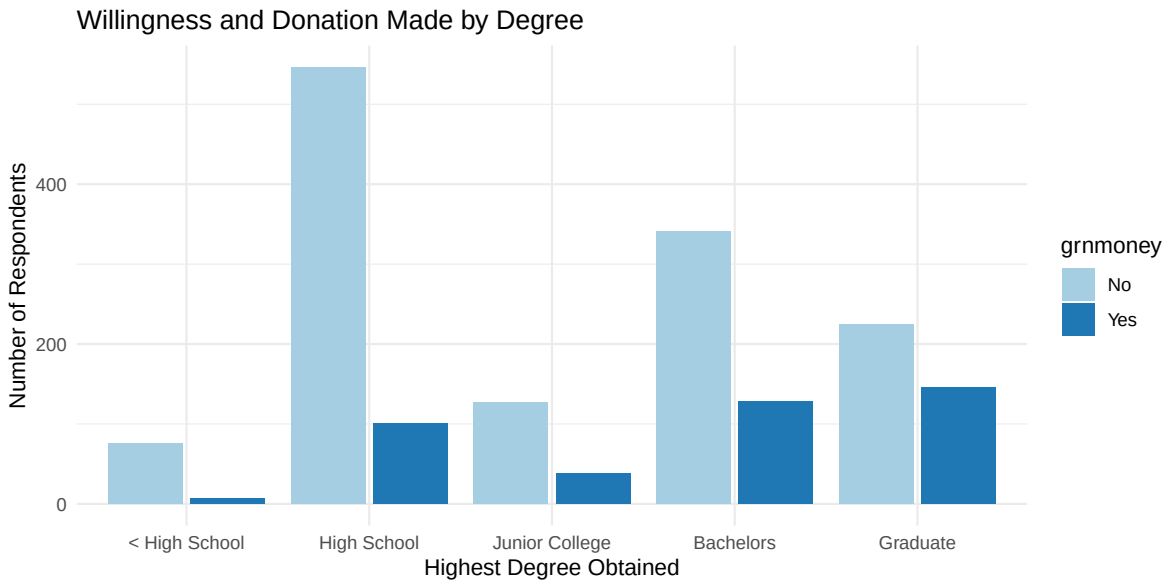

Figure 4: Respondents' degree and donation made for environmental protection

Figure 4 talks about.

5 Discussion

My discussion here.

5.1 First discussion point

If my paper were 10 pages, then should be be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

5.2 Second discussion point

5.3 Third discussion point

5.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional details

References

Agency, Irrational. n.d. *How the Hidden Consumer Narrative Explains the Say/Do Gap*. https://blog.irrationalagency.com/how-the-hidden-consumer-narrative-explains-the-say-do-gap.

Firke, Sam. 2023. *Janitor: Simple Tools for Examining and Cleaning Dirty Data*.

Hyun Jung Park, Li Min Lin. 2020. *Exploring Attitude–Behavior Gap in Sustainable Consumption: Comparison of Recycled and Upcycled Fashion Products*. https://www.sciencedirect.com/science/article/pii/S0148296318304004.

Larmarange, Joseph. 2022. *Labelled: Manipulating Labelled Data*. https://CRAN.R-project.org/package=labelled.

Müller, Kirill. 2020. *Here: A Simpler Way to Find Your Files*. https://CRAN.R-project.org/package=here.

Pandey, Pranay. 2020. *Education and Social Change: An Interrelationship*. https://adamasuniversity.ac.in/education-and-social-change-an-interrelationship/#:~:text=Education%20as%20a%20State%20of,comes%20prior%20to%20social%20change.

R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Tollefson, Jeff. 2022. *Climate Change Is Hitting the Planet Faster Than Scientists Originally Thought*. https://www.nature.com/articles/d41586-022-00585-7.

University, Washington. n.d. *Environment & Social Development*. https://csd.wustl.edu/areas-of-work/environment-social-development/#:~:text=Global%20environmental%20changes%E2%80%94such%20as,%2C%20health%2C%20and%20sometimes%20survival.

Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York. https://ggplot2.tidyverse.org.

Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. "Welcome to the tidyverse." *Journal of Open Source Software* 4 (43): 1686. https://doi.org/10.21105/joss.01686.

Wickham, Hadley, Romain François, Lionel Henry, Kirill Müller, and Davis Vaughan. 2023. *Dplyr: A Grammar of Data Manipulation*.

Wickham, Hadley, Evan Miller, and Danny Smith. 2022. *Haven: Import and Export 'SPSS', 'Stata' and 'SAS' Files*.

Wickham, Hadley, Davis Vaughan, and Maximilian Girlich. 2023. *Tidyr: Tidy Messy Data*.