# Access to and Belief in Mental Health Care Still Low for Many Worldwide\*

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#### Abstract

Mental Health care is a form of human health as important as physical care, however for many around the world, it is deemed as unimportant or unattainable. Previous research has found that seeking healthcare is highly correlated to societal attitudes and personal income, making it unaffordable for many or putting those who want it in silence. We use data from the 2021 Wellcome Trust survey on Mental Health to analyze this by using graphs and table to analyze differences in mental health access for different groups, using R and other packages. We also predict the probability that a person belonging to several groups will seek out professional care. We find that personal wealth of an individual, as well as relative wealth of the country, increase the likelihood of a person getting care. We also find that gender, educational status, and employment status are also heavy indicators. This shows the elitism that still disallows many worldwide to get metal health care, and is a display of how it is still not viewed seriosuly in the eyes of many.

Keywords: mental Health, Global, Education, Wealth Inequality, Education, Science

### 1 Introduction

Professional mental health care includes visiting a therapist, psychiatrist, or psychotherapist. In order to track the popularity of getting this form of care to promote prioritizing mental health, the Welcome Trust holds a survey on mental health by demographic. In this report, we are interested in explaining the relationship between seeking professional mental health care and belonging to a particular demographic group. We are also interested in predicting the probability that someone who belongs to a particular group seeks out care.

We obtained the dataset from the Wellcome Trust. We loaded in, cleaned and analyzed the data using R, dplyr, tidyr, haven, and tidyverse packages. Figures and tables were created with ggplot2, knitr, dplyr, usmap, gridExtra and kableExtra.

#### 2 Data

#### 2.1 Data Source and Collection

The data comes from a worldwide survey performed by the Wellcome Trust, a British non-profit group that deals with health and well being. The survey was conducted in late 2021. The data contains 1000 observations from 100 countries, and the survey asked these respondents several questions on mental state, access to care, and demographic questions. The options for most of the questions were "Yes", "No", or "Not sure". The dataset was last accessed April 2nd, 2022.

#### 2.2 Data Cleaning

We filtered out variables not related to the research question. We changed all "Not sure" responses to "No".

<sup>\*</sup>Code and data are available at: https://github.com/OlaedoOkpareke/FinalPaperRepository

#### 2.3 Data Modification

### 2.4 Data Visualization

## 3 Model

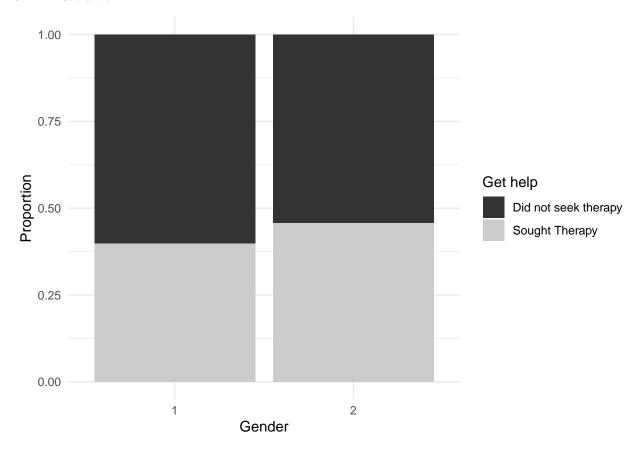
Our final model is

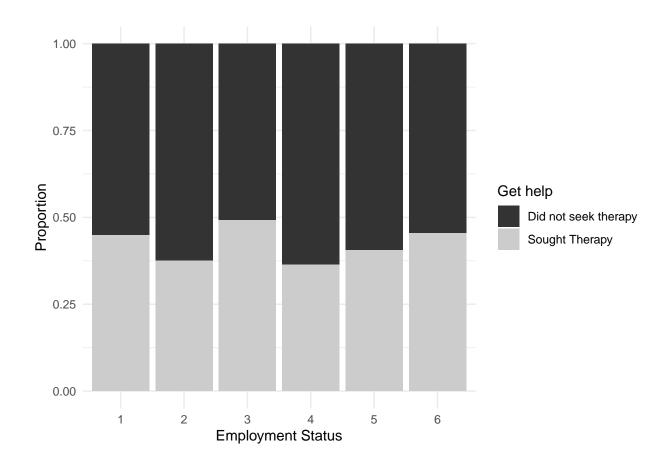
$$log(\frac{\hat{p}}{1-\hat{p}}) = \beta_0 + \beta_1 x_{friends} + \beta_2 x_{science} + \beta_3 x_{age} + \beta_4 x_{employment} + \beta_5 x_{gender} + \beta_6 x_{Education} + \beta_7 x_{Income} + \beta_8 x_{nationwealth} + \beta_8 x_{employment} + \beta_8 x_{employment}$$

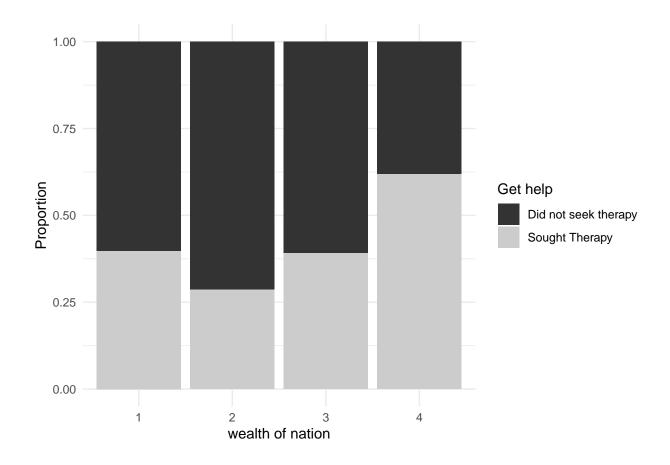
We chose these variables after a set of model comparisons which decided on this as the best model.

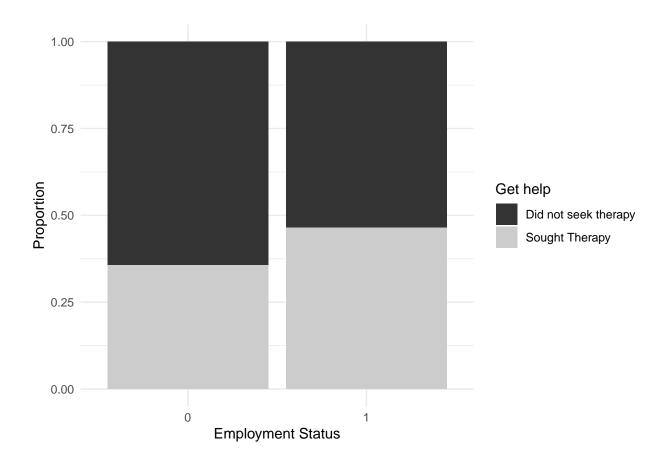
Friends is a binary variable indicating if someone sought mental help from a friend Science is a binary variable indicating if someone believes the science behind mental health industry Age is a continuous variable stating the age of the person. Employment is a categorical variable indicating a persons employment status Gender is a binary variable indicating the gender of a person Education is a categorical variable indicating the educational status of a person at the time of taking the survey Income is how good a person thinks their income is (not how their income actually is) Nationwealth is a categorical variable indicating the relative wealth of a respondent's nation.

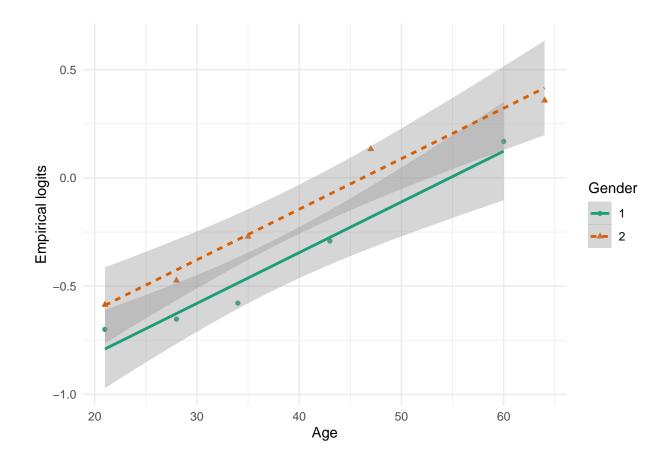
#### 3.1 Results











## 4 Discussion

- 4.1 Bias and Ethical Concerns
- 4.2 Data Collection Concerns
- 4.3 Gender and Mental Health Access
- 4.4 Income and Mental Health Access
- 4.5 Education and mental health access

Tackling both science and education variables

- 4.6 Nation Differences
- 4.7 Views of Mental Health in Society
- 5 Weaknesses and Next Steps
- 6 References

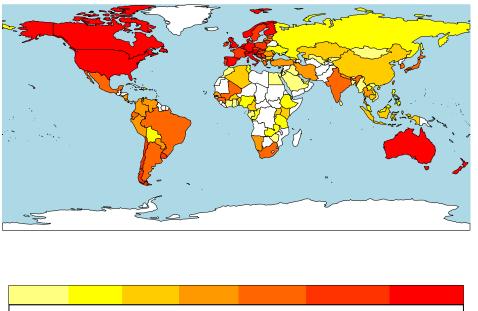




Figure 1: Percentage of Those who sought help in Each Country