Proportion Sheet Dataset

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```
knitr::opts_chunk$set(echo = FALSE, include = FALSE)
# install.packages("readr")
# install.packages("knitr")
# install.packages("kableExtra")
library(readr)
library(janitor)
```

```
##
## Attaching package: 'janitor'

## The following objects are masked from 'package:stats':
##
##     chisq.test, fisher.test
```

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.1 --

## v ggplot2 3.3.5     v dplyr   1.0.8
## v tibble  3.1.6     v stringr 1.4.0
## v tidyr   1.2.0     v forcats 0.5.1
## v purrr   0.3.4

## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(tidyr)
library(dplyr)
library(knitr)
library(kableExtra)
```

```
##
## Attaching package: 'kableExtra'

## The following object is masked from 'package:dplyr':
##
##     group_rows
```

```
#install.packages('plyr', repos = "http://cran.us.r-project.org")
```

#Data

Data Cleaning

The data cleaning was processed on an opensource platform called 'R'(R Core Team 2020). The dataset was pulled from the **Australian Bureau of Statistics** as a downloadable xlxs file with over 377 observations and 10 variables that has already been cleaned and tallied, separated by gender outcomes. The focus of this dataset was to provide insight on relationships between characteristics. Due to the nature of the dataset being a results summary that is meant for public consumption, we understand that it can be viewed and analyzed to serve many purposes. For the purpose of having a meaningful analysis,we controlled the dataset down to main variables which are the health conditions and gender of participants. We decided to have a focal point that we can concentrate on, rather than interpreting the dataset as whole. This allows us to substantiate the findings and postulate recommendations based from our own analysis. The data has been cleaned using the package 'Janitor' (Firke 2021) and filtered to create a Tibble using packages 'Dplyr' (Wickham et al. 2021), 'TidyR' (Wickham and Girlich 2022), 'Tidyverse' (Wickham et al. 2019) and 'Readr' (**ReadR?**). The tibble was generated to focus on data for the *Cared for a person with either a disability, long term health condition or old age in last 4 weeks* entry with a focus on outcomes from **Males** and **Females**.(Statistics 2021) The dataset was reduced to only include reports for **Mental Health Disabilities, Long-Term Health Disabilities and Long-Term Disabilities**.

##Data Source The dataset was generated by the **Australian Bureau of Statistics** called *General Social Survey: Summary Results Australia 2020* (Statistics 2021) It is an annual survey that aims to provide information on "social characteristics, wellbeing and social experiences of people in Australia." The results summary was released on June 29, 2021, referencing the period 2020 as the year the data was collected.(Statistics 2021) The **Australian Bureau of Statistics** indicated that the survey was conducted over a 4 month period from 15th June to 5th September 2020 during the COVID-19 pandemic. As per **Australian Bureau of Statistics** "There was no face-to-face interviewing conducted in 2020 due to COVID-19 restrictions. Because of this changed methodology and the impact of COVID-19 restrictions on the Australian population, care should be exercised when making comparisons with 2019.The survey was previously ran in 2019. Prior to that, the survey was conducted once every four years from 2002 to 2014." (Statistics 2021) However we did not compare data from 2019 on this report and focused on an aspect we thought to be an occurrence that may have come about during the pandemic. The dataset was pulled from the **Australian Bureau of Statistics** database where it was downloaded locally as an xlxs file and converted to a csv file. It was then processed in 'R' (R Core Team 2020) and visualized as graphs and table with a controlled dataset using packages 'Ggplot2' (Wickham 2016) and 'KableExtra' (Zhu 2021).

###Methodology The *General Social Survey: Summary Results Australia 2020* data includes all Australian residents aged 15 and over. There were approximately 5,300 Australian households where data was collected from and were completed online or via telephone interview. (Statistics 2021) The key benefit of this survey is to provide information on the multi-dimensional nature of relative advantage and disadvantage across the population.

Discussion

Secondary Research

McGillvey and Dodevska posits Australia to be a country that values volunteering as one of its core cultural feature Keith McVilly (2017). This translates to the dataset presented by the Australian Bureau of Statistics' summary results of the General Social Survey of 2020. Statistics (2021) Focusing on the specific results regarding volunteering, it's remarkable that the proportion of volunteers between those who suffer from

conditions of *Mental Health Disabilities, Long-Term Health Disabilities and Long-Term Disabilities* to those who don't are more than half. Statistics (2021) According to Australian Institute of Health and Wellness Australian Government and Welfare (2021), volunteering serves as an indicator of wellbeing and social cohesion of people. Through volunteering, people can become more outwardly focused, which may strengthen social interactions or even reduce anxiety. Australian Government and Welfare (2021) As shown in the table **Figure 3**, we see that there are less male and female volunteers who are not suffering from any conditions such as *Mental Health Disabilities, Long-Term Health Disabilities and Long-Term Disabilities*. Interestingly the data shows that there are slightly more male volunteers than females. This can suggest that this information may be informally setup such as unpaid work or support for a family member by a male family member. It may also suggest that women are already bearing domestic obligations that hinders them from extending assistance, adding more to their responsibilities. A proposition noted by Musick and Wilson on their paper where over a 10 year period, on six occasions that women were asked if they volunteered, half had answered never volunteered. As seen in Figure 3, volunteering was highest from those that identified as suffering from Mental Health Issues. It's always been said that volunteering helps alleviate anxiety and depression. It has been noted in several studies that the association between volunteering and it's positive effects on individuals have indicated that this is a consequence of self-validation. The opportunity to dedicate themselves in an activity that requires them to look beyond their own welfare allow people to feel unique, which can possibly impede depression. Neal Krause and Baker (1992) According to the paper by Marc A. Musick (2003) where they propose that volunteering experience could decrease or even prevent depression based from findings by (**LumandLight2005?**) that looked into the effects of volunteering on the physical and mental health of older people. In this study (AHEAD-Asset and Health Dynamics Among the Oldest Old Study) they have noted that data acquired from 1993 to 2000 determined the relationship between physical and mental health in persons over 70 years old, who had over 100 hours of volunteer experience in 1993. However, this study is subjective as the results showed that volunteering experience could affect self-reported conditions and not the ones that are medically diagnosed. Similarly, McVilly and Dodevska mentions in their article that volunteering impacts are difficult to measure due to inconsistent definitions and survey methodologies. Keith McVilly (2017) It is important to note that studies and surveys such as the *Australian General Social Survey* influences policies and funding of projects like the Agency (2022) (National Disability Scheme). This could mean that the narrative of the positive effects of volunteering is perpetuated to feed into the system of volunteers to get more funding and may exploit or not support the needs of the volunteers especially of those that are suffering from conditions noted in the dataset. Understanding the social and psychological complexities of volunteering and how data can be easily adapted to fit different narratives is vital in translating these information. Research methodologies may be skewed to fit this narrative that furthers the portrayal of volunteers to report experiencing less stress and anxiety as what the *Department of Health of Australia* Department of Health (2022) account on their volunteering page. Information viewable through this link. This may not represent the struggles or have a blind spot on challenges of volunteers who suffer from either mental or physiological disabilities. We believe that volunteering has it's positive effects both socially and psychologically. It helps build communities up, especially of those with disabilities and may show positive changes on mood on both sides. We hope to support the needs of these specific volunteers through amendments on the survey released by the Australian Government.

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Appendix

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