

Navigating Factors Affecting Job Satisfaction Among Working Americans

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Introduction

Data

Based at the University of Chicago since 1972, the General Social Survey (GSS) is a project with the objective of monitoring and analyzing the intricacies of American society (1). The GSS Data Explorer makes it so that data retrieved from the project is a publicly available resource, accessible to various types of people, such as educators, policymakers, or researchers through the National Opinion Research Center (NORC).

The dataset used for this paper was retrieved from The General Social Survey (GSS) Data Explorer website (citation). We retrieved survey data relating to work and job in the years of 1989, 1998, 2006, and 2016.

Source Data

All the survey data used was in relation to job and work in the Work Orientation Module; the specific variable names extracted from the dataset being `intjob`, `hlpoths`, and `hlp soc`, as shown in Table 1.

Table 1: yup

Variable	NewName	Description	Example
<code>intjob</code>	<code>interesting_work</code>	Importance of interesting work in a job	Very Important
<code>hlpoths</code>	<code>helping_others</code>	Importance of helping others in a job	Neither
<code>hlp soc</code>	<code>social_usefulness</code>	Importance of social usefulness in a job	Not Important

Data Cleaning

The open source statistical programming language R was used to clean and analyze the data, along with producing the graphs. The main packages that supported this process included `tidyverse`, `ggplot2`, `knitr`, `kableExtra`, here...

The cleaning process involved filtering the specific data variables used for our analysis from the downloaded GSS dataset, and renaming any variables with meaningful names. For example, rather than “`intjob`” being the column name for “importance of interesting work in a job”, we renamed it to `INSERT NAME HERE`. Further, the numerical values representing the participants’ responses (1-5) were changed to the representative words/phrases (not important, very important, etc.).

Importance of a Job that Helps Others

Figure 1 displays the proportion of respondents to the prompt “A job that allows someone to help other people?”. From the first year of data collection in 1989 to 2006, “Important” was the most selected response. In 2016, “Very Important” surpassed “Important” by 1%. In general, you can see an increase in “Very Important” respondents across the years while there is little change in the proportion of “Not Important” and “Not Important At All” responses.

```
# A tibble: 20 x 4
# Groups:   year [4]
   year helping_others    n percentage
  <dbl>      <dbl> <int>      <dbl>
1  1989          1   348       25.0
2  1989          2   708       50.9
3  1989          3   278       20.0
4  1989          4    54        3.88
5  1989          5     3        0.216
6  1998          1   342       29.7
7  1998          2   591       51.3
8  1998          3   181       15.7
9  1998          4    34        2.95
10 1998          5     5        0.434
11 2006          1   653       43.3
12 2006          2   713       47.2
13 2006          3   111        7.36
14 2006          4    26        1.72
15 2006          5     6        0.398
16 2016          1   617       42.1
17 2016          2   617       42.1
18 2016          3   195       13.3
19 2016          4    34        2.32
20 2016          5     4        0.273
```

Importance of a Job that is Interesting

Figure 2 shows the proportion of responses for the prompt “An interesting job?”. In 1989, “Important” responses was most chosen at around 50%. The following survey, in 1998, showed an increase in “Very Important” responses, where it had a similar proportion to “Important” responses 1989 and “Important” decreased to a proportion similar to “Very Important”.

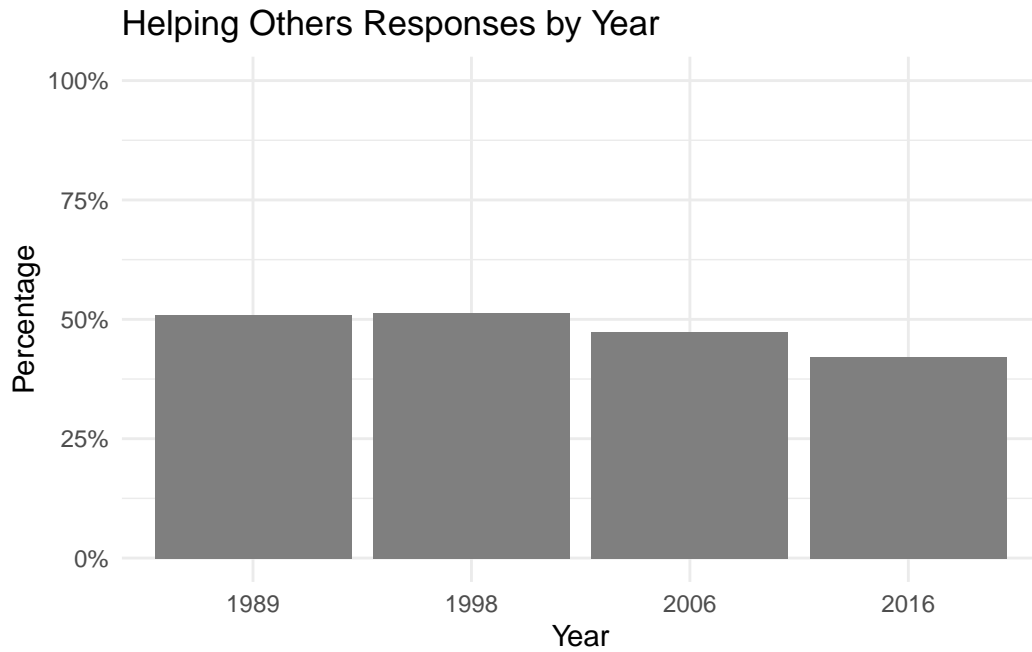


Figure 1: Q1 - “A job that allows someone to help other people?”

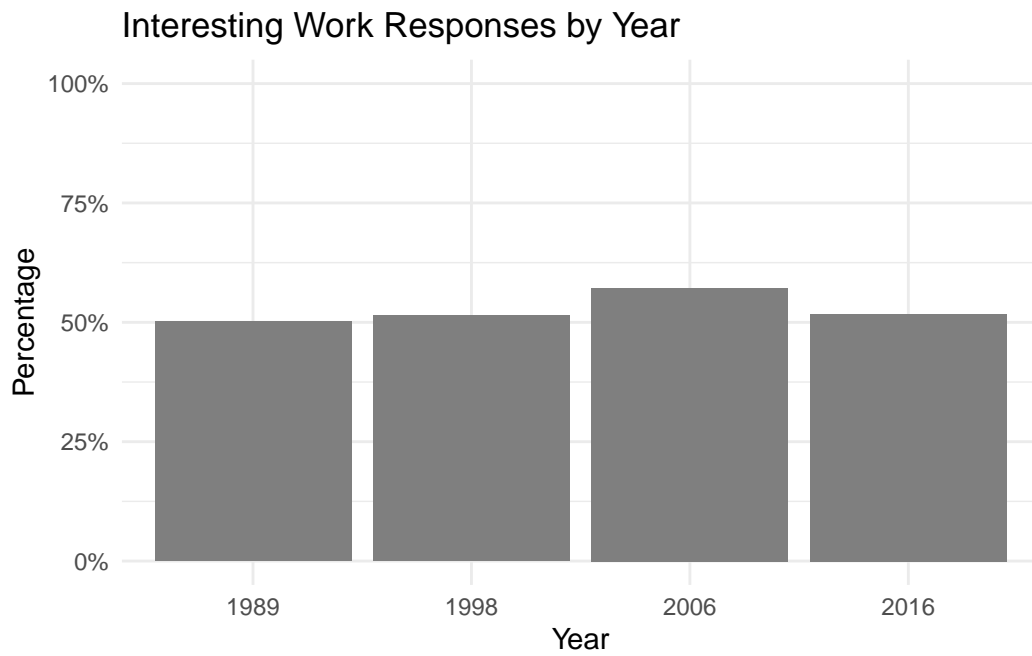


Figure 2: Q2 - “An interesting job?”

Importance of a Job that is Useful to Society

Figure 3 displays the proportion of responses for the prompt “A job that is useful to society?”. There is a large increase in the proportion of “Very Important” responses from 1989 to 2016. In contrast, there is a gradual decline for both “Important” and “Neither”. There is little change in “Not Important” and “Not Important At All”.

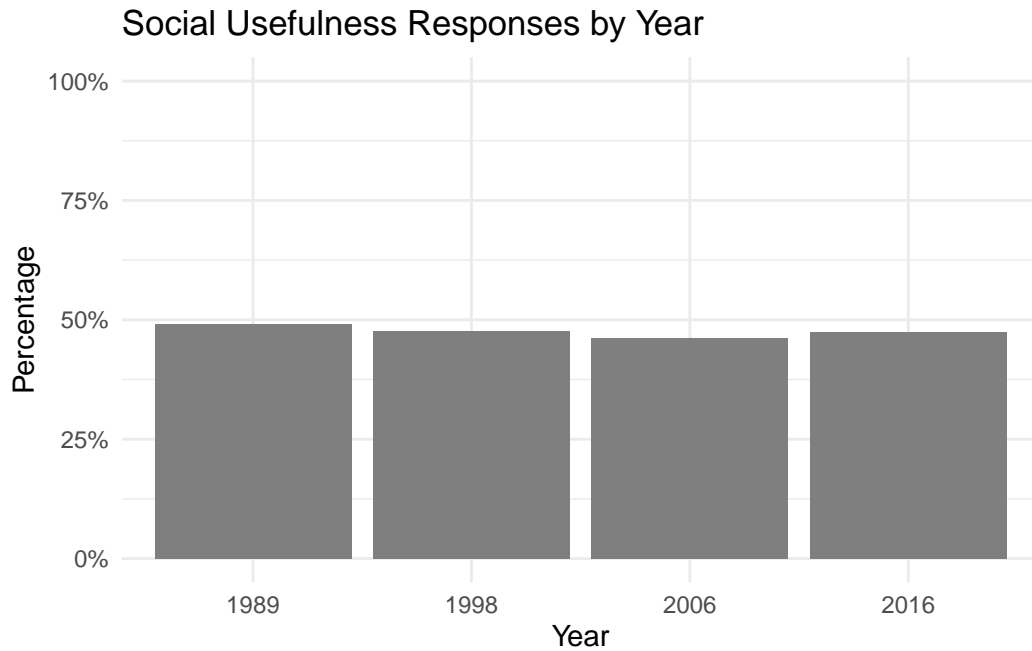


Figure 3: Q3 - “A job that is useful to society?”

Results

Respondent Demographics

1989

Figure 4 shows...

1998

In Figure 5, the __ is shown.

Sex	Percentage
female	56.51
male	43.49

Figure 4: ?(caption)

Sex	Percentage
female	58.8
male	41.2

Figure 5: ?(caption)

2006

Figure 6 shows

Sex	Percentage
female	53.48
male	46.52

Figure 6: ?(caption)

2016

Figure 7 shows

Figure 8 summarizes the average of responses per year for each variable.

Average change

In ?@fig-avgchange, the average changer for “very important” and “important” responses to how important is a job in which you help others.

```
cleaned_GSS_data
```

```
# A tibble: 5,520 x 6
```

```

  year   age sex   helping_others interesting_work social_usefulness
  <dbl> <dbl> <chr>         <dbl>             <dbl>             <dbl>
1  1989    26 male             1                 1                 1
2  1989    38 male             4                 2                 3
3  1989    27 female          2                 2                 2
4  1989    19 female          3                 1                 3
5  1989    40 male             3                 2                 1
6  1989    55 female          4                 2                 2
7  1989    22 female          3                 2                 1
8  1989    65 male             3                 1                 3
9  1989    38 female          3                 3                 3
```

Sex	Percentage
female	52.22
male	47.78

Figure 7: ?(caption)

Table 2: Average of Responses by Year

Year	Helping Others	Interesting Work	Social Usefulness
1989	2.034	1.649	1.986
1998	1.932	1.550	1.939
2006	1.687	1.501	1.669
2016	1.767	1.577	1.675

Figure 8: ?(caption)

?@fig-allresponse-helpingothers demonstrates the changing proportion of responses to how important is it for a job to help others.

```
#|label: fig-allresponse-helpingothers
#|echo: false
#|message: false
#|tbl-cap: Proportion of Responses to Importance of Job that Helps Other

# Prepare data
helping_others_data <- cleaned_GSS_data[c('year',
                                           'helping_others')]

helping_others_data <- helping_others_data |>
  mutate(
    helping_others = recode(helping_others,
                           '1' = 'Very Important',
                           '2' = 'Important',
                           '3' = 'Neither',
                           '4' = 'Not Important',
                           '5' = 'Not Important At All'),
  )

helping_others_data <-
```

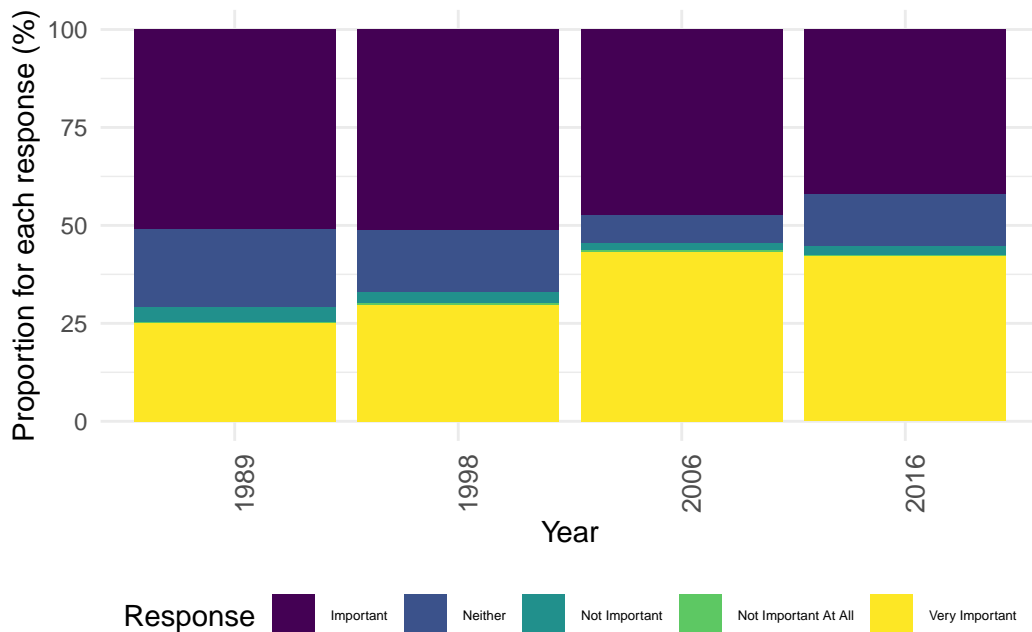
```

helping_others_data |>
mutate(
  year = (as.character(year)),
)

helping_others_percentages <-
  helping_others_data |>
  count(year, helping_others) |>
  group_by(year) |>
  mutate(percentage = n / sum(n) * 100)

# Graph data
helping_others_percentages |>
  ggplot(mapping = aes(x = year, y = percentage, fill = helping_others)) +
  geom_col() +
  theme_minimal() +
  theme(axis.text.x = element_text(angle=90, size = 10)) +
  labs(x = "Year", y = "Proportion for each response (%)", fill = "Response") +
  theme(legend.position = "bottom") +
  theme(legend.text = element_text(size = 5)) +
  scale_fill_viridis_d(option = "viridis")

```




```

#|label: fig-allresponse-helpingothers
#|echo: false
#|message: false
#|tbl-cap: Proportion of Responses to Importance of Job that Helps Other

# Prepare data
helping_others_data <- cleaned_GSS_data[c('year',
                                           'helping_others')]

helping_others_data <- helping_others_data |>
  mutate(
    helping_others = recode(helping_others,
                           '1' = 'Very Important',
                           '2' = 'Important',
                           '3' = 'Neither',
                           '4' = 'Not Important',
                           '5' = 'Not Important At All'),
  )

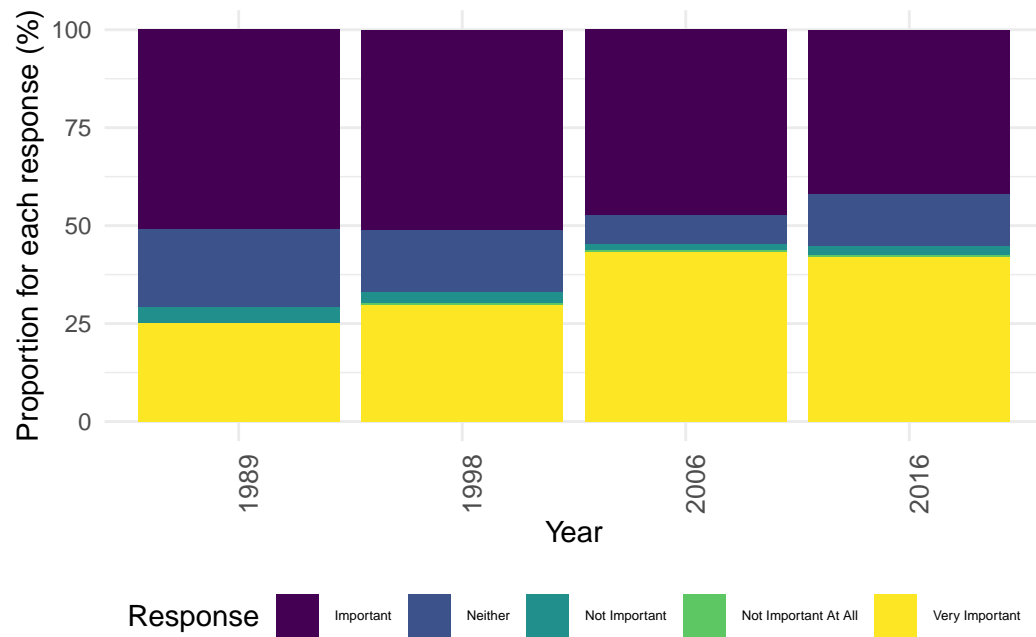
helping_others_data <-
  helping_others_data |>
  mutate(
    year = (as.character(year)),
  )

helping_others_percentages <-
  helping_others_data |>
  count(year, helping_others) |>
  group_by(year) |>
  mutate(percentage = n / sum(n) * 100)

# Graph data
helping_others_percentages |>
  ggplot(mapping = aes(x = year, y = percentage, fill = helping_others)) +
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  theme(axis.text.x = element_text(angle=90, size = 10)) +
  labs(x = "Year", y = "Proportion for each response (%)", fill = "Response") +
  theme(legend.position = "bottom") +
  theme(legend.text = element_text(size = 5)) +

```

```
scale_fill_viridis_d(option = "viridis")
```



Discussion

Gender?

Culture?

Sources