What explains happiness? The relationships between happiness and marrige, religion health, trust, and saving

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Author Note

We thank Dr. Nese for his guidance in this project. All mistakes remain ours.

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Abstract

abstract goes here

Keywords: happiness

Word count: X

What explains happiness? The relationships between happiness and marrige, religion health, trust, and saving

```
## [1] "Rather happy"
## [2] "Very happy"
## [3] "Not very happy"
## [4] "Not at all happy"
## [5] "No answer"
## [6] "Dont know"
## [7] "HT: Missing-Dropped out survey; RU: Inappropriate response{Inappropriate}"
```

```
## Warning: Unknown levels in `f`: HT: Missing-Dropped out survey; RU:
## Inappropriate response{Inappropriate}
```

```
## Warning: Unknown levels in `f`: No answer, Dont know
```

family_savings	feeling_of_happiness	n
Just get by	Not at all happy	813
Just get by	Not very happy	4650
Just get by	Rather happy	18661
Just get by	Very happy	10545
Save money	Not at all happy	203
Save money	Not very happy	1449
Save money	Rather happy	11060
Save money	Very happy	9177
Spent savings and borrowed money	Not at all happy	400
Spent savings and borrowed money	Not very happy	1577
Spent savings and borrowed money	Rather happy	3867
Spent savings and borrowed money	Very happy	2489
Spent some savings and borrowed money	Not at all happy	207
Spent some savings and borrowed money	Not very happy	1471
Spent some savings and borrowed money	Rather happy	5853
Spent some savings and borrowed money	Very happy	3800

Figure 1

Happiness levels by family savings: Raw numbers

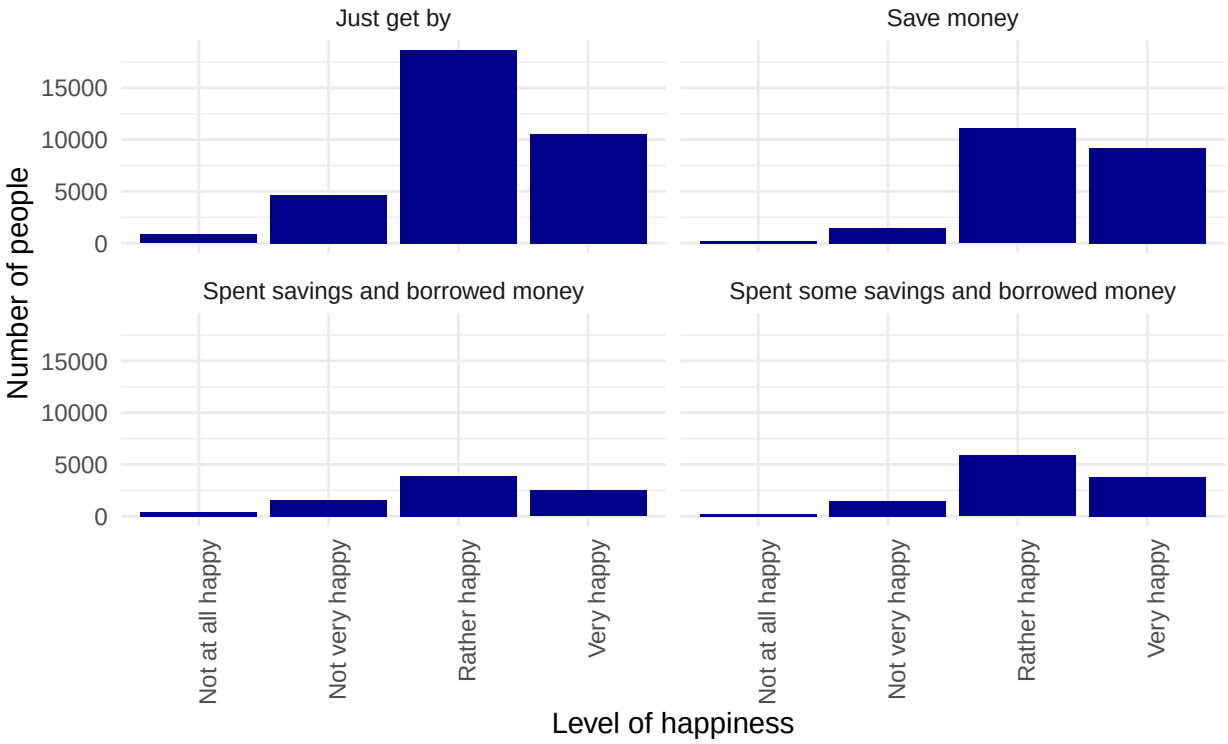

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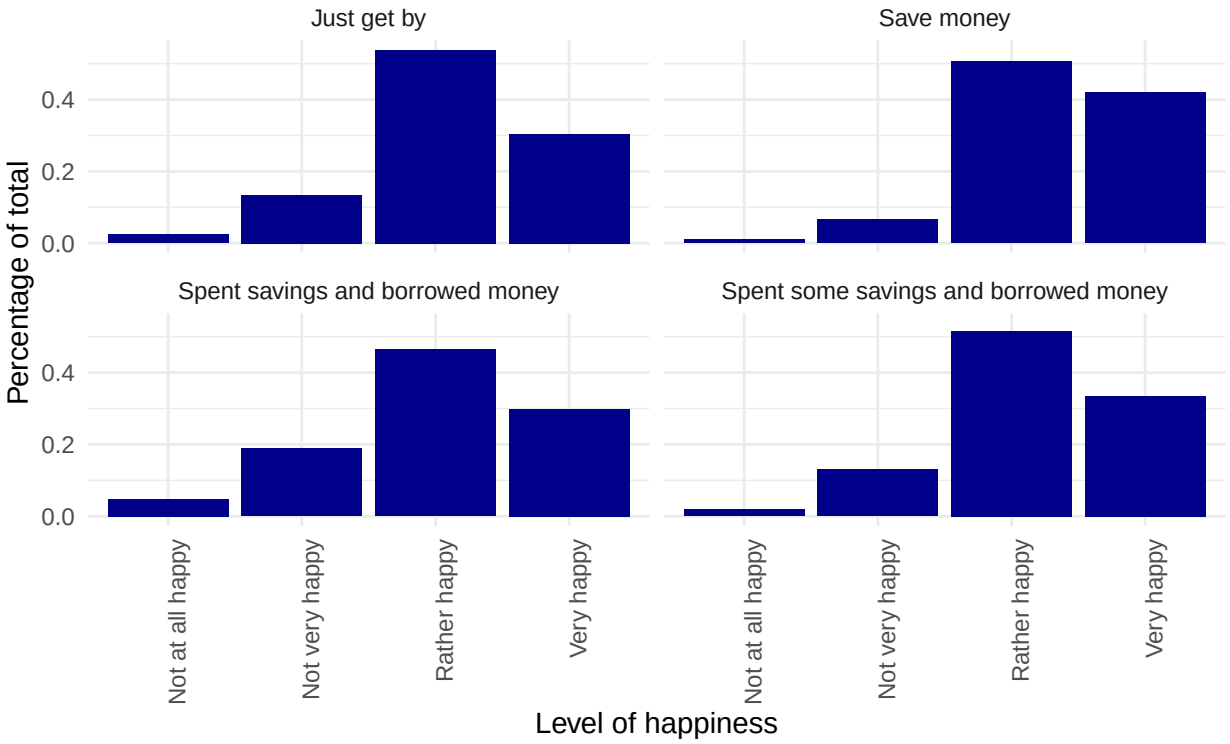
Figure 2

Happiness levels by family savings: percentage




```
## # A tibble: 16 x 5
##    family_savings                  feeling_of_happine~     n total percent
##    <fct>                           <fct>               <int> <int>   <dbl>
##  1 Save money                      Not at all happy      203 21889 0.00927
##  2 Spent some savings and borrowed~ Not at all happy     207 11331 0.0183
##  3 Just get by                     Not at all happy      813 34669 0.0235
##  4 Spent savings and borrowed money Not at all happy     400  8333 0.0480
##  5 Save money                      Not very happy       1449 21889 0.0662
##  6 Spent some savings and borrowed~ Not very happy      1471 11331 0.130
##  7 Just get by                     Not very happy       4650 34669 0.134
##  8 Spent savings and borrowed money Not very happy      1577  8333 0.189
##  9 Spent savings and borrowed money Very happy          2489  8333 0.299
## 10 Just get by                     Very happy          10545 34669 0.304
```

```
## 11 Spent some savings and borrowed~ Very happy           3800 11331 0.335
## 12 Save money                       Very happy           9177 21889 0.419
## 13 Spent savings and borrowed money Rather happy         3867  8333 0.464
## 14 Save money                       Rather happy        11060 21889 0.505
## 15 Spent some savings and borrowed~ Rather happy         5853 11331 0.517
## 16 Just get by                      Rather happy        18661 34669 0.538
```

```
## List of 65
##  $ line                      :List of 6
##   ..$ colour       : chr "black"
##   ..$ size         : num 0.5
##   ..$ linetype     : num 1
##   ..$ lineend      : chr "butt"
##   ..$ arrow        : logi FALSE
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_line" "element"
##  $ rect                      :List of 5
##   ..$ fill         : chr "white"
##   ..$ colour       : chr "black"
##   ..$ size         : num 0.5
##   ..$ linetype     : num 1
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_rect" "element"
##  $ text                      :List of 11
##   ..$ family       : chr ""
##   ..$ face         : chr "plain"
##   ..$ colour       : chr "black"
```

```
##   ..$ size         : num 11
##   ..$ hjust        : num 0.5
##   ..$ vjust        : num 0.5
##   ..$ angle        : num 0
##   ..$ lineheight   : num 0.9
##   ..$ margin       : 'margin' num [1:4] 0pt 0pt 0pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : logi FALSE
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.title.x              :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : NULL
##   ..$ vjust        : num 1
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 2.75pt 0pt 0pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.title.x.top          :List of 11
```

```
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : NULL
##   ..$ vjust        : num 0
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 0pt 0pt 2.75pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.title.y              :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : NULL
##   ..$ vjust        : num 1
##   ..$ angle        : num 90
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 0pt 2.75pt 0pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
```

```
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.title.y.right        :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : NULL
##   ..$ vjust        : num 0
##   ..$ angle        : num -90
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 0pt 0pt 0pt 2.75pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.text                 :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : chr "grey30"
##   ..$ size         : 'rel' num 0.8
##   ..$ hjust        : NULL
##   ..$ vjust        : NULL
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : NULL
```

```
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.text.x               :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : num 1
##   ..$ vjust        : num 1
##   ..$ angle        : num 90
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 2.2pt 0pt 0pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi FALSE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.text.x.top           :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : NULL
##   ..$ vjust        : num 0
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
```

```
##   ..$ margin       : 'margin' num [1:4] 0pt 0pt 2.2pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.text.y               :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : num 1
##   ..$ vjust        : NULL
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 0pt 2.2pt 0pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.text.y.right         :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : num 0
```

```
##   ..$ vjust        : NULL
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 0pt 0pt 0pt 2.2pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ axis.ticks               : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ axis.ticks.length        : 'unit' num 2.75pt
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
##  $ axis.ticks.length.x      : NULL
##  $ axis.ticks.length.x.top  : NULL
##  $ axis.ticks.length.x.bottom: NULL
##  $ axis.ticks.length.y      : NULL
##  $ axis.ticks.length.y.left  : NULL
##  $ axis.ticks.length.y.right : NULL
##  $ axis.line                : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ axis.line.x              : NULL
##  $ axis.line.y              : NULL
##  $ legend.background        : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ legend.margin            : 'margin' num [1:4] 5.5pt 5.5pt 5.5pt 5.5pt
```

```
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
##  $ legend.spacing            : 'unit' num 11pt
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
##  $ legend.spacing.x          : NULL
##  $ legend.spacing.y          : NULL
##  $ legend.key                : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ legend.key.size           : 'unit' num 1.2lines
##   ..- attr(*, "valid.unit")= int 3
##   ..- attr(*, "unit")= chr "lines"
##  $ legend.key.height         : NULL
##  $ legend.key.width          : NULL
##  $ legend.text               :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : 'rel' num 0.8
##   ..$ hjust        : NULL
##   ..$ vjust        : NULL
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : NULL
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
```

```
##  $ legend.text.align         : NULL
##  $ legend.title              :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : num 0
##   ..$ vjust        : NULL
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : NULL
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ legend.title.align        : NULL
##  $ legend.position           : chr "right"
##  $ legend.direction          : NULL
##  $ legend.justification      : chr "center"
##  $ legend.box                : NULL
##  $ legend.box.margin         : 'margin' num [1:4] 0cm 0cm 0cm 0cm
##   ..- attr(*, "valid.unit")= int 1
##   ..- attr(*, "unit")= chr "cm"
##  $ legend.box.background     : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ legend.box.spacing        : 'unit' num 11pt
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
```

```
##  $ panel.background          : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ panel.border              : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ panel.spacing             : 'unit' num 5.5pt
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
##  $ panel.spacing.x           : NULL
##  $ panel.spacing.y           : NULL
##  $ panel.grid                :List of 6
##   ..$ colour       : chr "grey92"
##   ..$ size         : NULL
##   ..$ linetype     : NULL
##   ..$ lineend      : NULL
##   ..$ arrow        : logi FALSE
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_line" "element"
##  $ panel.grid.minor          :List of 6
##   ..$ colour       : NULL
##   ..$ size         : 'rel' num 0.5
##   ..$ linetype     : NULL
##   ..$ lineend      : NULL
##   ..$ arrow        : logi FALSE
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_line" "element"
##  $ panel.ontop               : logi FALSE
##  $ plot.background           : list()
```

```
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ plot.title               :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : 'rel' num 1.2
##   ..$ hjust        : num 0
##   ..$ vjust        : num 1
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 0pt 0pt 5.5pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ plot.subtitle            :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : num 0
##   ..$ vjust        : num 1
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 0pt 0pt 5.5pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
```

```
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ plot.caption              :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : 'rel' num 0.8
##   ..$ hjust        : num 1
##   ..$ vjust        : num 1
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 5.5pt 0pt 0pt 0pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ plot.tag                  :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : 'rel' num 1.2
##   ..$ hjust        : num 0.5
##   ..$ vjust        : num 0.5
##   ..$ angle        : NULL
```

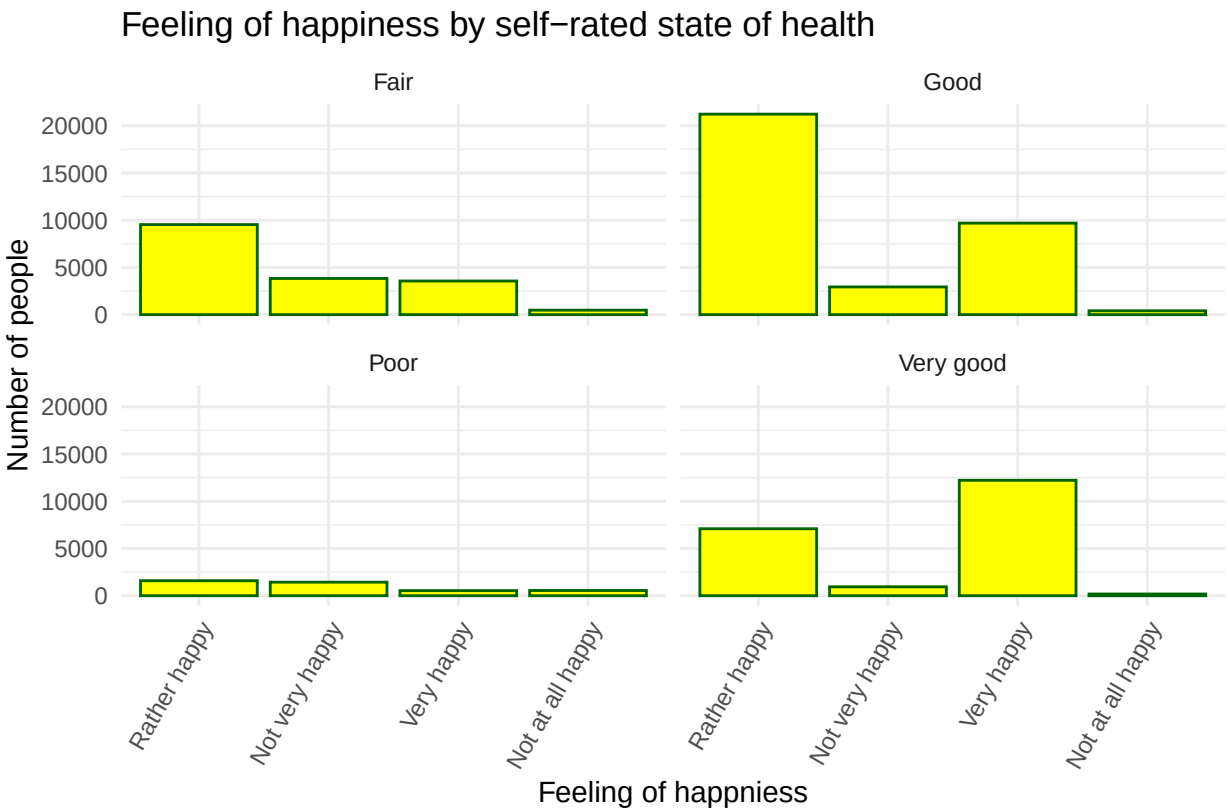
```
##   ..$ lineheight   : NULL
##   ..$ margin       : NULL
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ plot.tag.position         : chr "topleft"
##  $ plot.margin               : 'margin' num [1:4] 5.5pt 5.5pt 5.5pt 5.5pt
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
##  $ strip.background          : list()
##   ..- attr(*, "class")= chr [1:2] "element_blank" "element"
##  $ strip.placement           : chr "inside"
##  $ strip.text                :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : chr "grey10"
##   ..$ size         : 'rel' num 0.8
##   ..$ hjust        : NULL
##   ..$ vjust        : NULL
##   ..$ angle        : NULL
##   ..$ lineheight   : NULL
##   ..$ margin       : 'margin' num [1:4] 4.4pt 4.4pt 4.4pt 4.4pt
##   .. ..- attr(*, "valid.unit")= int 8
##   .. ..- attr(*, "unit")= chr "pt"
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
```

```
##  $ strip.text.x              : NULL
##  $ strip.text.y              :List of 11
##   ..$ family       : NULL
##   ..$ face         : NULL
##   ..$ colour       : NULL
##   ..$ size         : NULL
##   ..$ hjust        : NULL
##   ..$ vjust        : NULL
##   ..$ angle        : num -90
##   ..$ lineheight   : NULL
##   ..$ margin       : NULL
##   ..$ debug        : NULL
##   ..$ inherit.blank: logi TRUE
##   ..- attr(*, "class")= chr [1:2] "element_text" "element"
##  $ strip.switch.pad.grid     : 'unit' num 2.75pt
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
##  $ strip.switch.pad.wrap     : 'unit' num 2.75pt
##   ..- attr(*, "valid.unit")= int 8
##   ..- attr(*, "unit")= chr "pt"
##  - attr(*, "class")= chr [1:2] "theme" "gg"
##  - attr(*, "complete")= logi TRUE
##  - attr(*, "validate")= logi TRUE
```

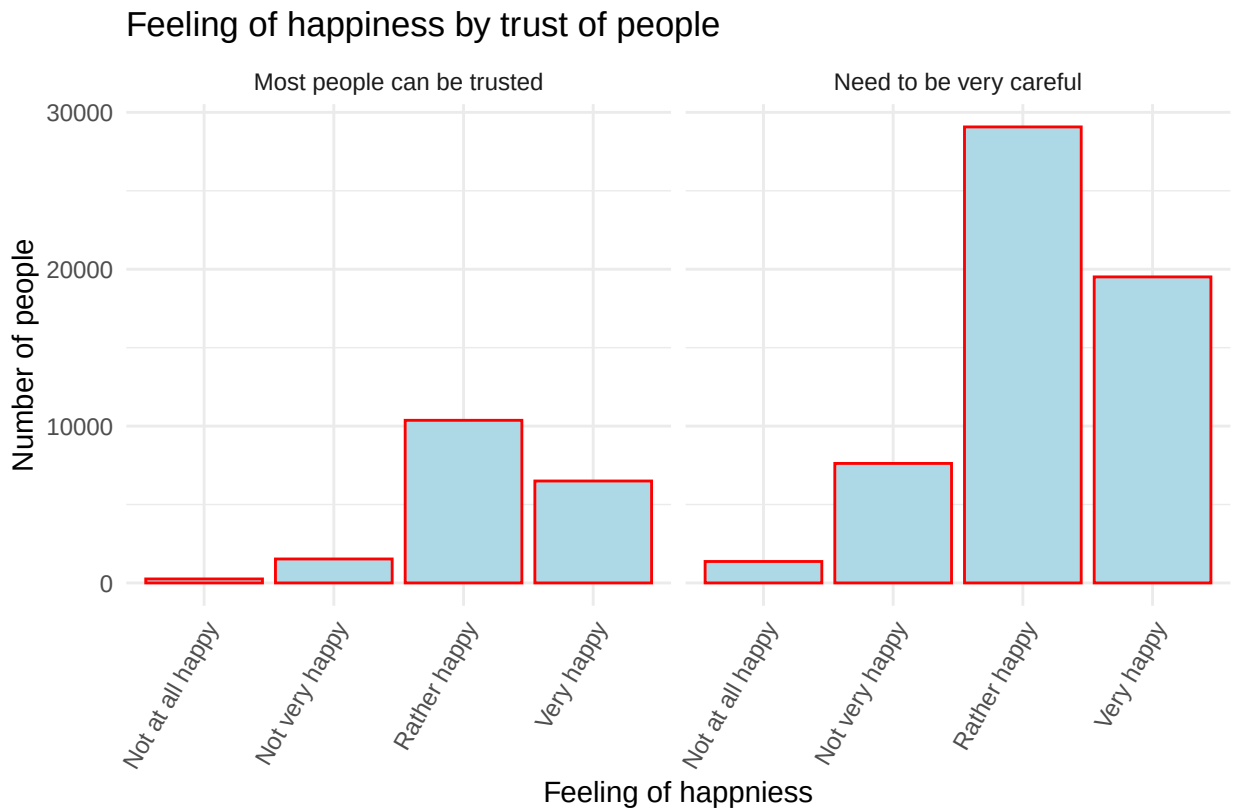
As Figure 3 shows, although patterns of happiness levels are similar overall (e.g. most people report being “Rather Happy”, fewest people report being “Not happy at all”), there are some differences of happiness level distributions between groups. A greater percentage of those with the lowest level of family savings (those who spent savings and borrowed

money) reported being “Not at all happy” or “Not very happy”. On the other hand, the greatest percentage of people reporting being “Rather happy” were those who reported just getting by, and the greatest percentage of people reporting the highest level of happiness were those in the strongest financial position - those who saved money.

(NOTE: I’d like to use inline code here to reference exact percentages. How do put one cell value into inline code??)



Survey of more than 85,000 respondents across the world. Source: WVS 2012



most_people_trusted	feeling_of_happiness	n
Most people can be trusted	Not at all happy	255
Most people can be trusted	Not very happy	1528
Most people can be trusted	Rather happy	10369
Most people can be trusted	Very happy	6499
Need to be very careful	Not at all happy	1368
Need to be very careful	Not very happy	7619
Need to be very careful	Rather happy	29072
Need to be very careful	Very happy	19512

Happiness and trust

Out of totla 76222 people, only slightly more than 24.47 percent say they can trust most of the people around them, while 75.53 is caucious about the society.

Introduction

Study of happiness and its causal factors has been flourished in recent years. This project explores the relationship between happiness and some candidate variables, namely marital status, religious affiliation, level of income, status of heath, and level of trust. We use individual level survey of more than 85,000 respondents across 60 countries and societies around the world in World Value Survey Dataset 2012.

Scholars have studied the relationship between happines and political system (Inglehart, 2009)...

Johnson (2012) finds that "trust as measured by the World Values Survey is positively correlated with experimentally measured trust".

Gandelman and Hernández-Murillo (2013) reviews relationship of self-rate health status and perceived life quality.

Methods

We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in the study.

Data analysis

We used R (Version 3.5.1; R Core Team, 2018) and the R-packages *dplyr* (Version 0.8.3; Wickham, François, Henry, & Müller, 2019), *forcats* (Version 0.4.0; Wickham, 2019a), *ggplot2* (Version 3.2.1; Wickham, 2016), *here* (Version 0.1; Müller, 2017), *janitor* (Version 1.2.0; Firke, 2019), *kableExtra* (Version 1.1.0; Zhu, 2019), *knitr* (Version 1.25; Xie, 2015), *papaja* (Version 0.1.0.9842; Aust & Barth, 2018), *purrr* (Version 0.3.3; Henry & Wickham, 2019), *readr* (Version 1.3.1; Wickham, Hester, & Francois, 2018), *rio* (Version 0.5.16; C.-h. Chan, Chan, Leeper, & Becker, 2018), *stringr* (Version 1.4.0; Wickham,

2019b), *tibble* (Version 2.1.3; Müller & Wickham, 2019), *tidyr* (Version 1.0.0; Wickham & Henry, 2019), and *tidyverse* (Version 1.2.1; Wickham, 2017) for all our analyses.

Results

Discussion

References

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Final Paper

The final project must:

(a) be a reproducible and dynamic APA manuscript produced with R Markdown, via the {papaja} package and include references to the extant literature;
(b) be housed on GitHub, with contributions from all authors obvious;
(c) demonstrate moving data from its raw "messy" format to a tidy data format through the R Markdown file, but not in the final document;

(d) include at least two exploratory data visualizations, and

(e) include at least summary statistics of the data in tables, although fitted models of any sort are an added bonus (not literally, there are not extra points for fitting a model).

The points for the final project are broken down as follows:

Writing (abstract, intro, methods, results, discussion, references).

- 30 points(25%) Document is fully reproducible and housed on GitHub
- 25 points (21%) Demonstrate use of inline code
- 5 points (4%) Demonstrate tidying messy data
- 30 points (25%) Two data visualizations
- 20 points(10 points each) (17%) Production of at least one table (of summary statistics or model results)
- 10 points (8%)

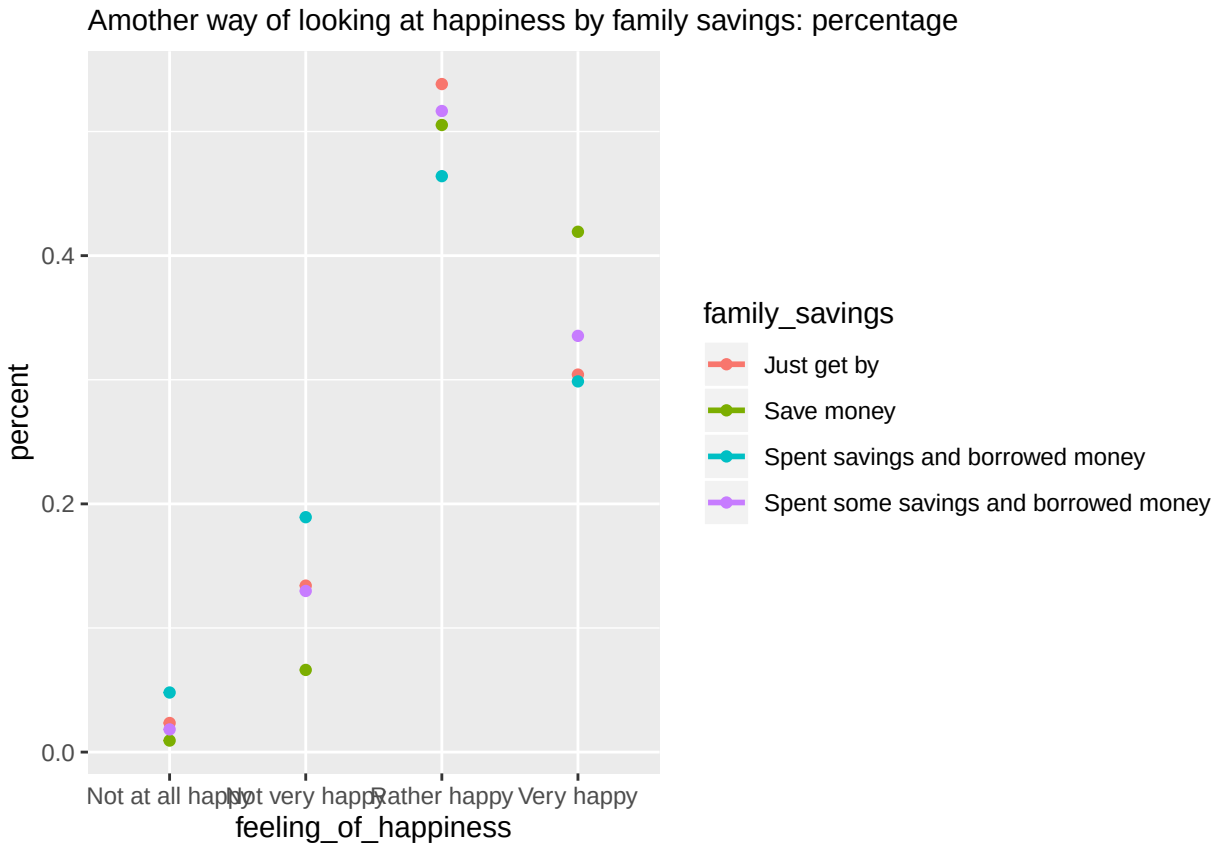
Amother way of looking at happiness by family savings: percentage
percent
0.4
0.2
0.0
Not at all happy
Not very happy
Rather happy
Very happy
feeling_of_happiness
family_savings
Just get by
Save money
Spent savings and borrowed money
Spent some savings and borrowed money

Figure 1