likert package

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MCW

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Overview
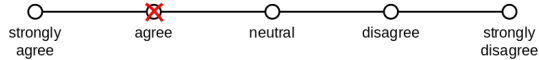
1. **Introduction**

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Introduction

- A Likert scale is a psychometric scale commonly involved in research that employs questionnaires.

- It is the most widely used approach to scaling responses in survey research, such that the term (or more fully the Likert-type scale) is often used interchangeably with rating scale, although there are other types of rating scales.

- The format of a typical five-level Likert item, for example, could be: Strongly disagree; Disagree; Neither agree nor disagree; Agree; Strongly agree.
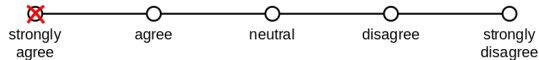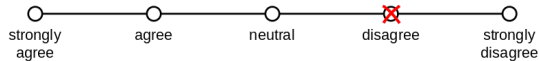
Introduction

Website User Survey

1. The website has a user friendly interface.

| strongly agree | agree | neutral | disagree | strongly disagree |

2. The website is easy to navigate.

| strongly agree | agree | neutral | disagree | strongly disagree |

3. The website's pages generally have good images.

| strongly agree | agree | neutral | disagree | strongly disagree |

Code

	How Often Respondents Use Mouth Wash	How Often Respondents Brush Their Teeth	How Often Respondents Use Floss	age
25	Never	Rarely	Never	Teen
26	Never	Rarely	Never	Teen
27	Rarely	Rarely	Never	Teen
28	Rarely	Rarely	Never	Teen
29	Rarely	Rarely	Never	Teen
30	Rarely	Rarely	Never	Teen
31	Rarely	Rarely	Never	Teen
32	Rarely	Rarely	Never	Adult
33	Rarely	Rarely	Never	Child
34	Rarely	Rarely	Never	Child
35	Rarely	Rarely	Never	Child
36	Rarely	Rarely	Never	Child
37	Sometimes	Rarely	Rarely	Child
38	Sometimes	Rarely	Rarely	Child
39	Sometimes	Rarely	Rarely	Child

Code

- ```r
  library(likert)
  ```

- ```r
  plot(likert(dh),legend.position="right")
  ```
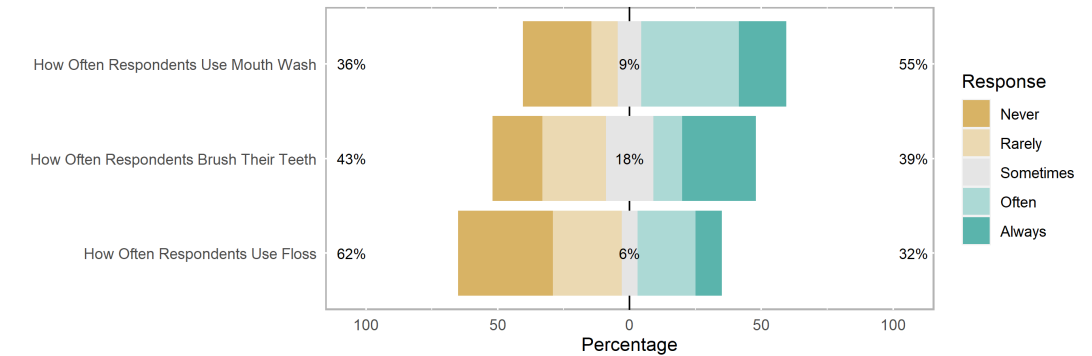
Code

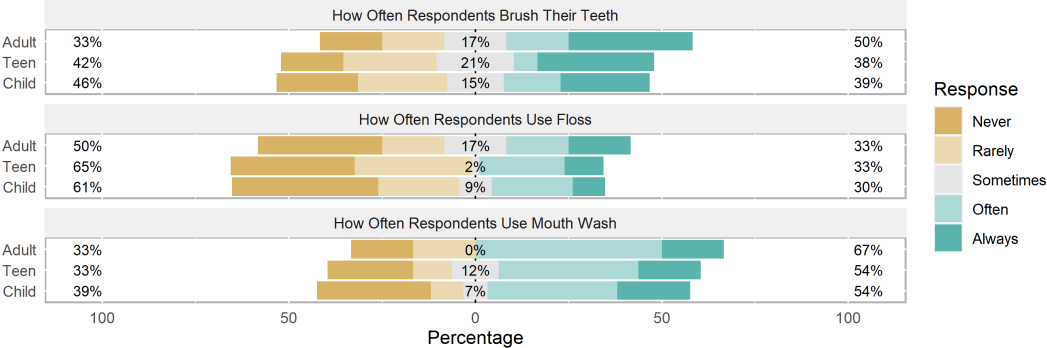## Code

- ```r
  plot(likert(dental_hyg[,c(1:3)], grouping = dental_hyg[,4] ), legend.position="right")
  ```

Code

Code

- For the barplot which wasn't grouped, you can use argument "group.order" to change The ordering of the categorical variables.

- dh.reverse = reverse.levels(dh)
  plot(likert(dh.reverse), group.order=names(dh), legend.position="right") +
  scale_fill_manual(values = brewer.pal(n=5,"RdYlBu"), breaks = c("Never",
  "Rarely", "Sometimes", "Often", "Always")) +
  guides(fill = guide_legend(title="Responses", reverse = TRUE))

Code

- For the barplot which was grouped, You can order groups by ordering the columns in dataframe.
- There is a bug in the likert package that changes the variable ordering from column ordering to alphabetical if any of the percent arguments are set to TRUE . These arguments are:
  plot.percent.low
  plot.percent.high
  plot.percent.neutral
- This bug has been documented here. Unfortunately, all three of these parameters are set to TRUE by default so you must set them all to false each time you want to make a grouped plot with a custom ordering of the groups.

Code

- dental_hyg.reorder = dental_hyg[,c(3,2,1,4)]
- plot(likert(dental_hyg.reorder[,c(1:3)], grouping = dental_hyg.reorder[,4]), plot.percent.low = FALSE
  , plot.percent.high = FALSE, plot.percent.neutral = FALSE,
  legend.position="right") +
  scale_fill_manual(values = brewer.pal(n=5,"RdYlBu"), breaks = c("Never",
  "Rarely", "Sometimes", "Often", "Always")) +
  guides(fill = guide_legend(title="Responses", reverse = TRUE))
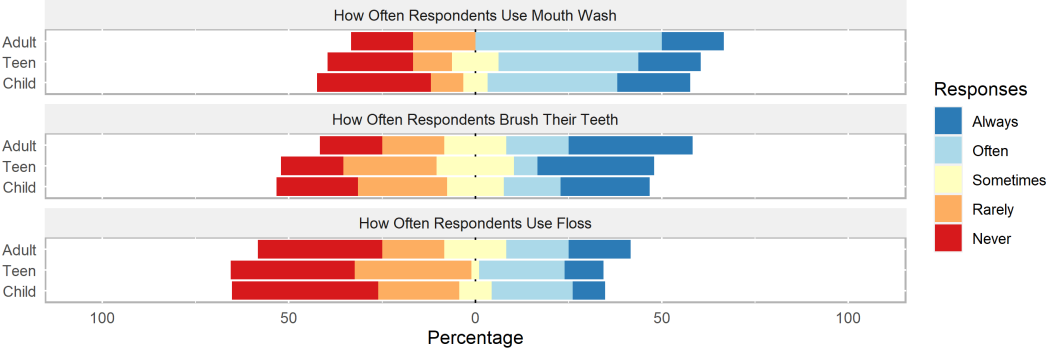
Code

Code
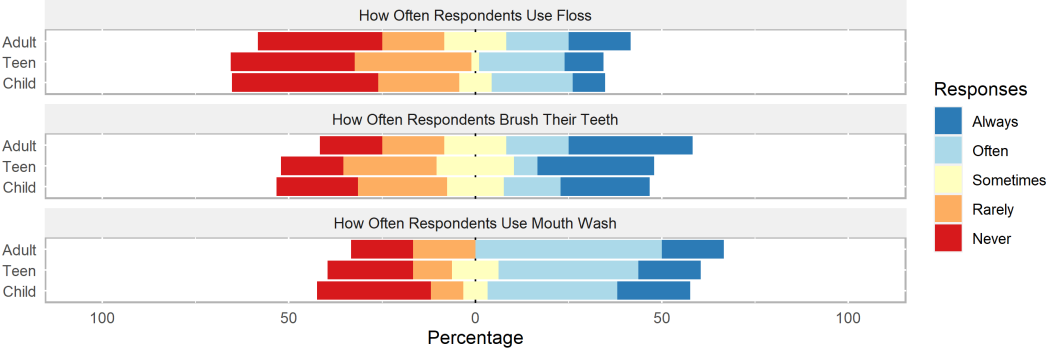
References

📄 Jake Chanenson
On Likert Scales In R (PDF Version)
https://jakec007.github.io/assets/files/2021-06-23-R-likert.pdf

The End