WSP closed question analysis

Lizzie Jones[1]

10/05/2021

WSP - Analysis, stats and visualisations for closed questions

This rMarkdown explores and analyses the closed

About rMarkdowns

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com (http://rmarkdown.rstudio.com). To generate the document of all content, click the **Knit** button.

This rMarkdown document will be periodically updated and uploaded to the OneDrive folder and pushed to the WSP GitHub code repository. The primary format of this document is HTML, but this can be easily changed by changing the output (e.g. PDF, GitHub) using the 'output' section at the top of the document. The possible output formats are listed here: https://rmarkdown.rstudio.com/lesson-9.html (https://rmarkdown.rstudio.com/lesson-9.html).

Question sample size per survey

Creating a table to calculate and display the sample sizes per column, per survey type.

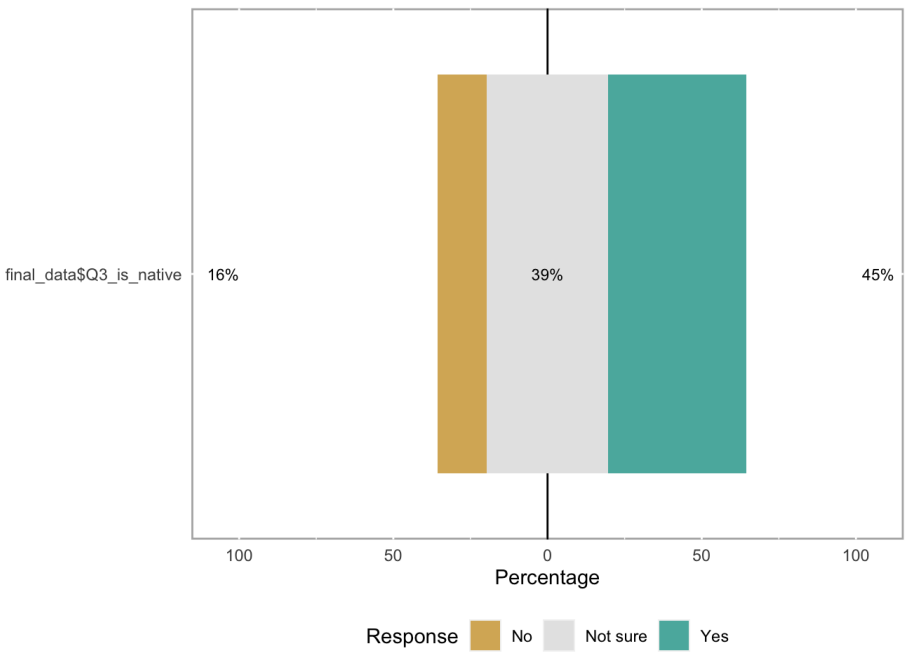
```
### Calculate sample size per column/question and create a table
# str(final_data)

# All numeric columns
# vars <- names(final_data)[11:222]
# final_data %>%
#   dplyr::group_by(SurveyType) %>%
#   dplyr::summarise_at(vars, ~sum(!is.na(.)))
#
# # Just the score columns
# final_data %>%
#   dplyr::group_by(SurveyType) %>%
#   dplyr::summarise_at(vars(ends_with("score")), ~sum(!is.na(.)))
```

Sectioned analysis (in order found in questionnaire)

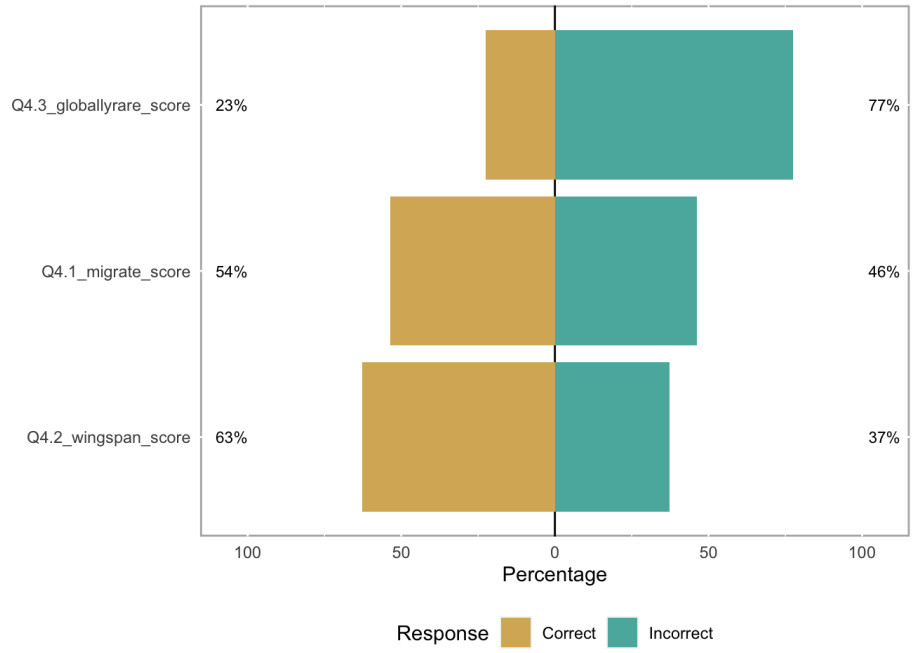
Respondent knowledge

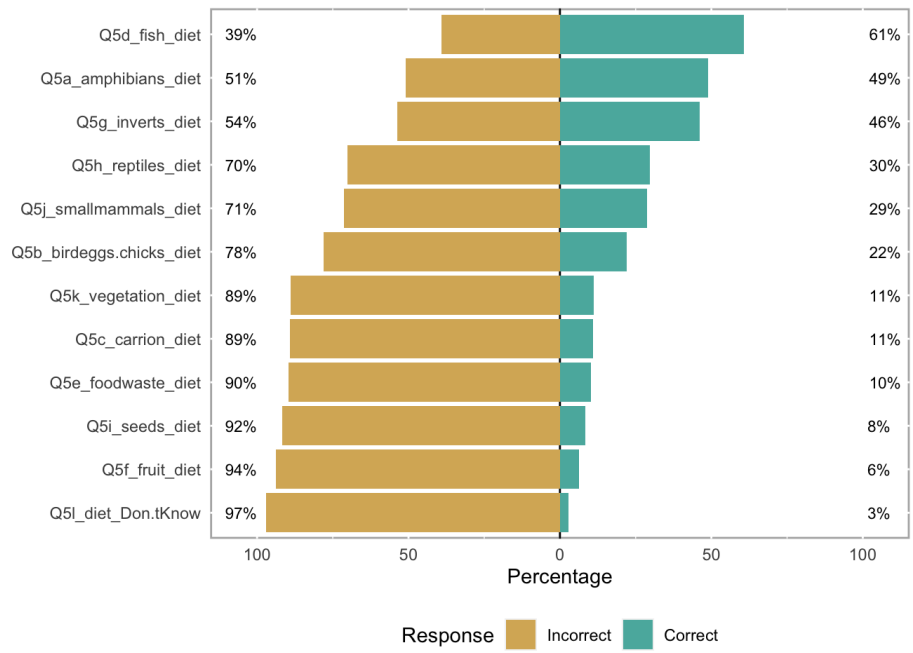
Respondent knowledge questions have yes/no/notsure or incorrect/correct answer formats, lending themselves to Likert sytle plots. Below I have created some initial plots (both samples together at the moment but will seperate according to sample next week). I have made the following plots uisng the Likert package.

Some useful Likert plotting guides and packages: * https://cran.r-project.org/web/packages/sjPlot/vignettes/plot_likert_scales.html (https://cran.r-project.org/web/packages/sjPlot/vignettes/plot_likert_scales.html) * https://towardsdatascience.com/how-to-plot-likert-scales-with-a-weighted-survey-in-a-dplyr-friendly-way-68df600881a (https://towardsdatascience.com/how-to-plot-likert-scales-with-a-weighted-survey-in-a-dplyr-friendly-way-68df600881a) * https://www.r-graph-gallery.com/202-barplot-for-likert-type-items.html (https://www.r-graph-gallery.com/202-barplot-for-likert-type-items.html)

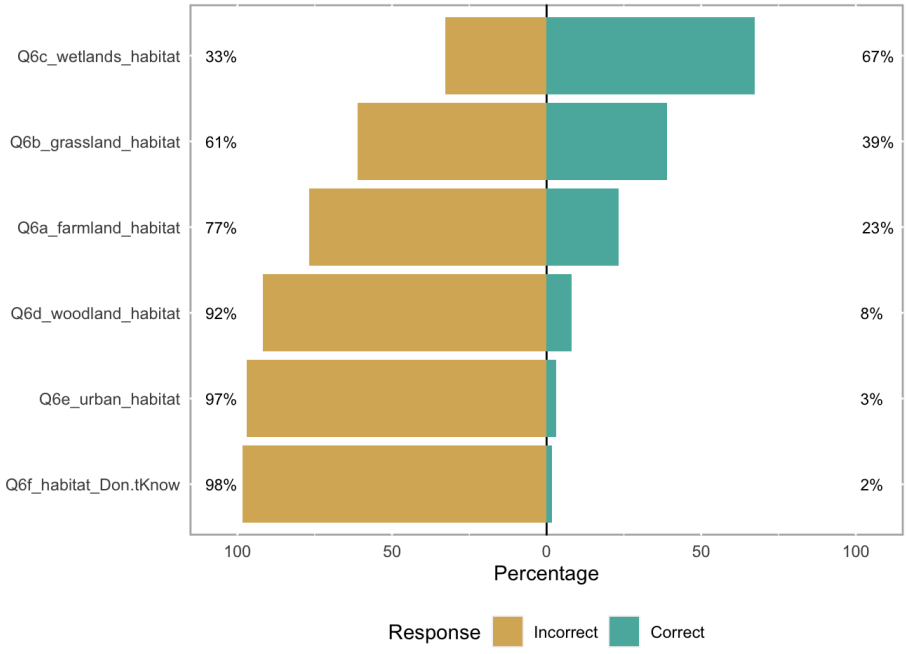


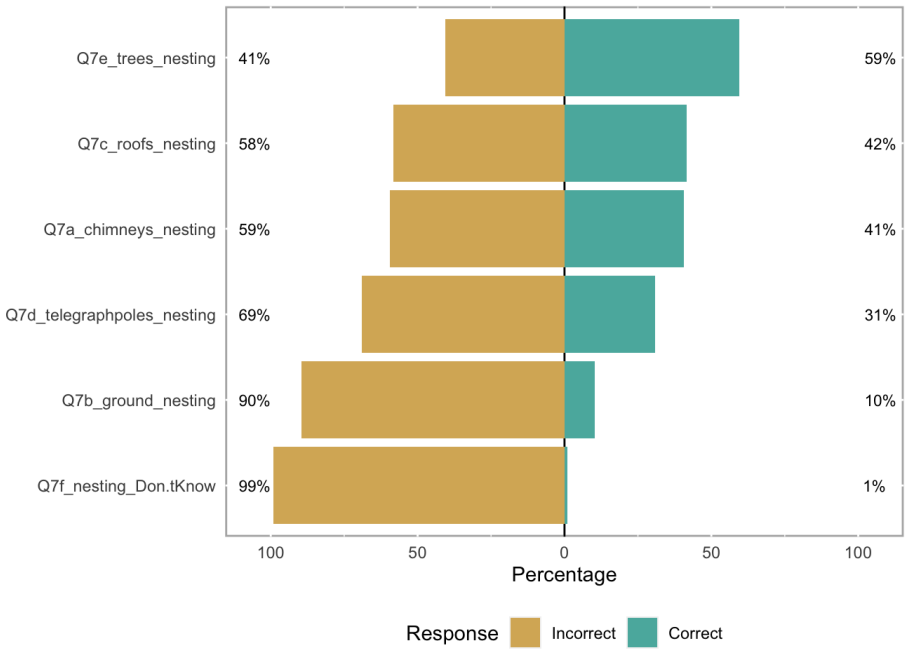
```
## Warning: `funs()` was deprecated in dplyr 0.8.0.
## Please use a list of either functions or lambdas:
##
##   # Simple named list:
##   list(mean = mean, median = median)
##
##   # Auto named with `tibble::lst()`:
##   tibble::lst(mean, median)
##
##   # Using lambdas
##   list(~ mean(., trim = .2), ~ median(., na.rm = TRUE))
```






```
## [1] 0 0 1 0 1 0
```





Exploring score questions

The respondent scores are explored and compared between samples using…

---

1. University of Brighton, l.jones4@brighton.ac.uk (mailto:l.jones4@brighton.ac.uk)↩