Proportional reasoning across formats

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Introduction

Comparing proportions is sometimes very hard! But, even infants seem to be able to do it a little bit. The purpose of this science project was to better understand how well people compare proportions when the proportions are presented in different formats. The purpose of this class assignment is to take the R-code and plots we've been generating over the last several weeks and put it all together into one poster format.

Research Objectives:

1.Does average performance vary across format type? 2.Does average performance vary across numerator congruency status? 3.Does numerator congruency vary across format type?(ie., is there an interaction)

Participants

A total of 99 adults participated in the study.

Material

Procedure

Data analysis

We used R (Version 4.4.1; R Core Team, 2024) and the R-packages *dplyr* (Version 1.1.4; Wickham, François, Henry, Müller, & Vaughan, 2023), *forcats* (Version 1.0.0; Wickham, 2023a), *ggplot2* (Version 3.5.1; Wickham, 2016), *lubridate* (Version 1.9.3; Grolemund & Wickham, 2011), *papaja* (Version 0.1.3; Aust & Barth, 2024), *purrr* (Version 1.0.2; Wickham & Henry, 2023), *readr* (Version 2.1.5; Wickham, Hester, & Bryan, 2024),

stringr (Version 1.5.1; Wickham, 2023b), *tibble* (Version 3.2.1; Müller & Wickham, 2023), *tidyr* (Version 1.3.1; Wickham, Vaughan, & Girlich, 2024), *tidyverse* (Version 2.0.0; Wickham et al., 2019) and *tinylabels* (Version 0.2.4; Barth, 2023) for all our analyses.

Results

Discussion

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