Yousif and Keil 2019

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Table 1: Files downloaded for Yousif et al. (2019)

File name	MD5 Hash
Additive Area - Raw Data and Info.xlsx	353d11a97c09ccfd4f3e740bb5650af6

1 Introduction

This documents contains the reanalysis of the following papers:

Yousif, S. R., & Keil, F. C. (2019). The Additive-Area Heuristic: An Efficient but Illusory Means of Visual Area Approximation. *Psychological Science, 30*(4), 495–503.

The analysis code is available at https://github.com/ljcolling/odp-yousif. This document is automatically built. To manually build this document, clone the git repository and run `make all`.

1.1 Data download

A total of 1 files were downloaded from https://osf.io/a54dg. The downloaded files the MD5 hashes are shown in Table 1.

1.2 Preliminary data checking

For the preliminary data checking we checked whether the number of reported participants matched the number of participants in the data files. The number of reported participants before and after inclusions are listed in Table 2. The data files provided on Yousif and Keil's OSF page contains multiple columns that could correspond to the participant ID. This includes the columns labelled `id` and `id2`. The number of unique participant IDs listed in the `id` and `id2` columns for each of the five experiments are listed in Table 3. None of the data files contained the correct number of participants suggesting that an error was introduced when participant codes were partially redacted (for privacy reasons). Because the mismatch between the reported number of participants and the number of participants in the data file the re-analysis could not proceed.

Table 2: Number of participants reported in each experiment from Yousif and Keil (2019)

Experiment	Total	After exclusions
1	100	97
2	100	97
3	100	99
4	100	98
5	100	100

Table 3: Number of participants contained in the data file for each experiment from Yousif and Keil (2019)

Experiment	id	id2
1	96	95
2	101	97
3	102	100
4	106	101
5	101	97

`R` information

We performed our analysis on R version 4.0.0 (2020-04-24) with all packages installed from a timestamped version of MRAN (date: 2020-06-06). The following R packages were used: R Core Team (2020), Wickham, François, et al. (2020), Wickham (2020), Wickham, Chang, et al. (2020), Müller (2017), Henry and Wickham (2020), Wickham et al. (2018), Wickham and Bryan (2019), Hester et al. (2020), Wickham (2019a), Müller and Wickham (2020), Wickham and Henry (2020), Wickham (2019b), Wickham (2016), Wickham et al. (2019).

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