

PSYC 5090: Topics in Mathematical Psychology

Tarleton State University

Homework 9

The goal of this set of exercises is to investigate the size congruity effect using the EZ diffusion model. The data and functions needed to perform this modeling are available in `lecture9.R`.

1. From the Faulkenberry, Vick, and Bowman (2018) data, choose a participant and load their dataset. Fit an EZ diffusion model to the observed RTs for *congruent* trials. Be sure to write down the parameter estimates.
2. Repeat Exercise 1, but this time fit the *incongruent* trials.
3. What effect (if any) does congruity have on the diffusion model parameters? What cognitive interpretations can we make based on these effects?