

Plots - Relationship with Gamble Decisions

Johnny Lau

24/03/2020

Result plots markdown

The RainCloudPlot function used here was created by Allen et al (2019).

DOI: 10.12688/wellcomeopenres.15191.1

It can be downloaded here (<https://github.com/RainCloudPlots/RainCloudPlots> (<https://github.com/RainCloudPlots/RainCloudPlots>))

Setup and data prep

RainCloudPlot

Logistic function (Sigmoid curve)

Preparing a theme

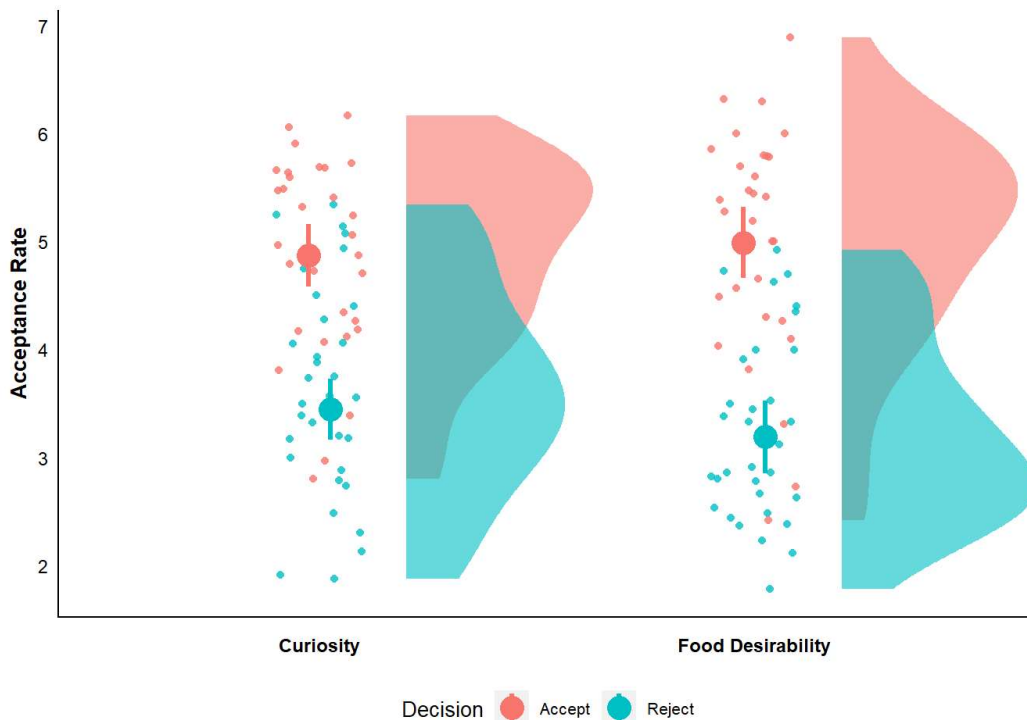
Data wrangling

Plotting

```
#use ggplot and R_rainclouds.script (esp 'geom_flat_violin' function) for plotting
g_cloudplot <- ggplot() +
  geom_flat_violin(data = agg_ppt_data, aes(y = raw_rate, x = category, fill=Decision), position = position_nudge(x = .2,
y = 0), alpha = .6, colour=FALSE, show.legend = FALSE) +
  # add data-points (average ppt rating of each participant)
  geom_point(data=agg_ppt_data, aes(y = raw_rate, x = category, color = Decision), position = position_jitter(width=.1),s
ize = 1.5, alpha = 0.8, show.legend = FALSE, shape=16) +
  # add the summary scores (average rating across participants for each condition )
  geom_pointrange (data=rst, aes(y = group_mean_rate, x = category, ymin= ymin, ymax= ymax, color=Decision), shape=16, si
ze=1.2, position = position_dodge(width=0.1)) +

  # adjust other plot features
  raincloud_theme +
  scale_x_discrete(labels=c("Curiosity","Food Desirability")) +
  ylim(0,7) +
  labs(fill = "Decision") +
  scale_y_continuous(name="Acceptance Rate")

g_cloudplot
```



```
# Try the following line to save the plot as an image
#ggsave("RCP_initialbeh.jpeg", width = 140, height = 180, units = "mm", dpi=300, limitsize=FALSE)
```