

Plots - Relationship with Gamble Decisions

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Result plots markdown

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

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

Setup and data prep

RainCloudPlot

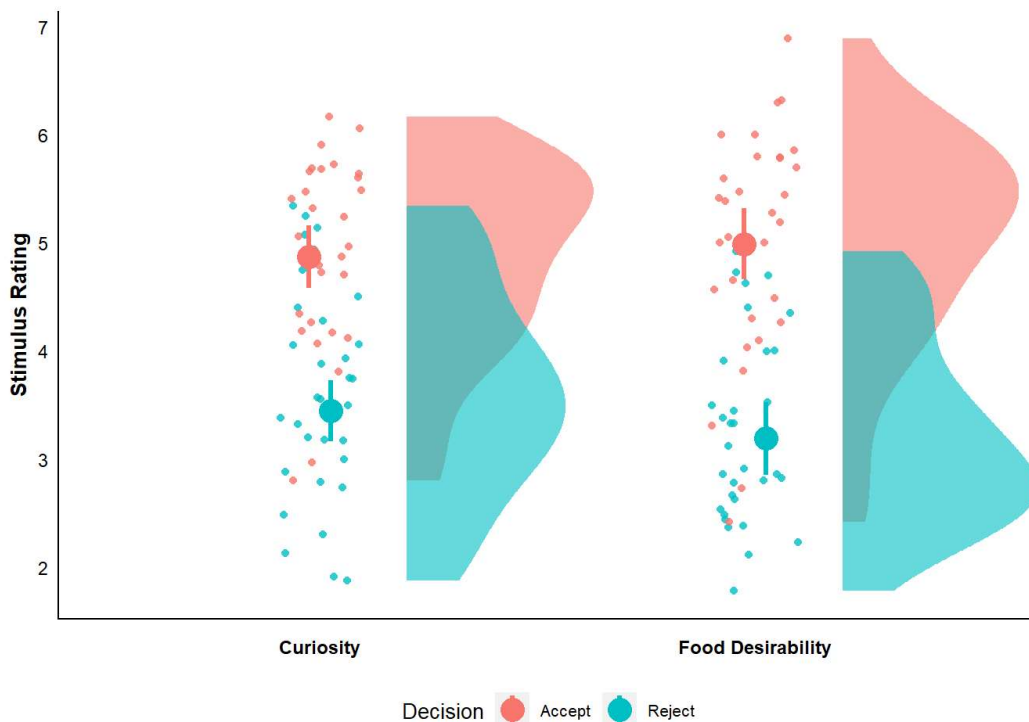
Logistic function (Sigmoid curve)

Preparing a theme

Data wrangling

Plotting

```
raincloudplot <- function(ppt_data, avg_data){  
  #use ggplot and R_rainclouds.script (esp 'geom_flat_violin' function) for plotting  
  ggplot() +  
    geom_flat_violin(data = 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= ppt_data, aes(y = raw_rate, x = category, color = Decision), position = position_jitter(width=.1), size = 1.5, alpha = 0.8, show.legend = FALSE, shape=16) +  
    # add the summary scores (average rating across participants for each condition )  
    geom_pointrange (data=avg_data, aes(y = group_mean_rate, x = category, ymin= ymin, ymax= ymax, color=Decision), shape=16, size=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="Stimulus Rating")  
}  
  
g_rcp <- raincloudplot(agg_ppt_data, avg_data)  
  
g_rcp
```



```
# 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)
```