Plots - Relationship with Gamble Decisions

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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)

Data preparation & GLMM | Data Wrangling | Plotting

```
# plot the modelled curves (separately for curiosity condition and food condition)
sigplot<- ggplot(data=df_plot, aes(x=x_var)) +
  geom_line(aes(y=y_cmean, color='curiosity'), size=1, linetype="solid")  +
    geom_line(aes(y=y_fmean, color='food'), size=1, linetype="solid") +
  scale_color_manual(name="Category", values= c(food = "red", curiosity = "blue"))

# add and adjust graph elements
axis.title.bold <- element_text(face="bold", size="12", color="black")
axis.text.bold <- element_text(face="bold", size="12", color="black")

sigplot <- sigplot + scale_x_continuous(name="Probability of Shock (%)", breaks=c(-4,-2,0,2,4), labels=c("-4"="16.7%", "-2"=
"33.3%", "0"="50%", "2"="66.7%", "4"="83.3%")) +
  scale_y_continuous(name="Acceptance Rate", breaks=c(0, 0.5, 1)) +
  ggtitle("Effect of Prospective Shock Probability on 'Accept' Decision") +
  theme_classic() +
  theme(axis.title=axis.title.bold, axis.text =axis.text.bold) #plot.title = title.align,


# also plot the raw data-points (from each participant at each probabilty level) on the graph
sigplot <- sigplot + geom_point(data = efg, mapping = aes(x = ShockProb, y = avg_ppt_choice), shape=1, position=position_jit
ter(h=0.03,w=0.18), color="blue") +
  geom_point(data = abc, mapping = aes(x = ShockProb, y = avg_ppt_choice), shape=1, position=position_jitter(h=0.03,w=0.18),
color="red")



sigplot
```