

# Shifting\_tray\_Markdown

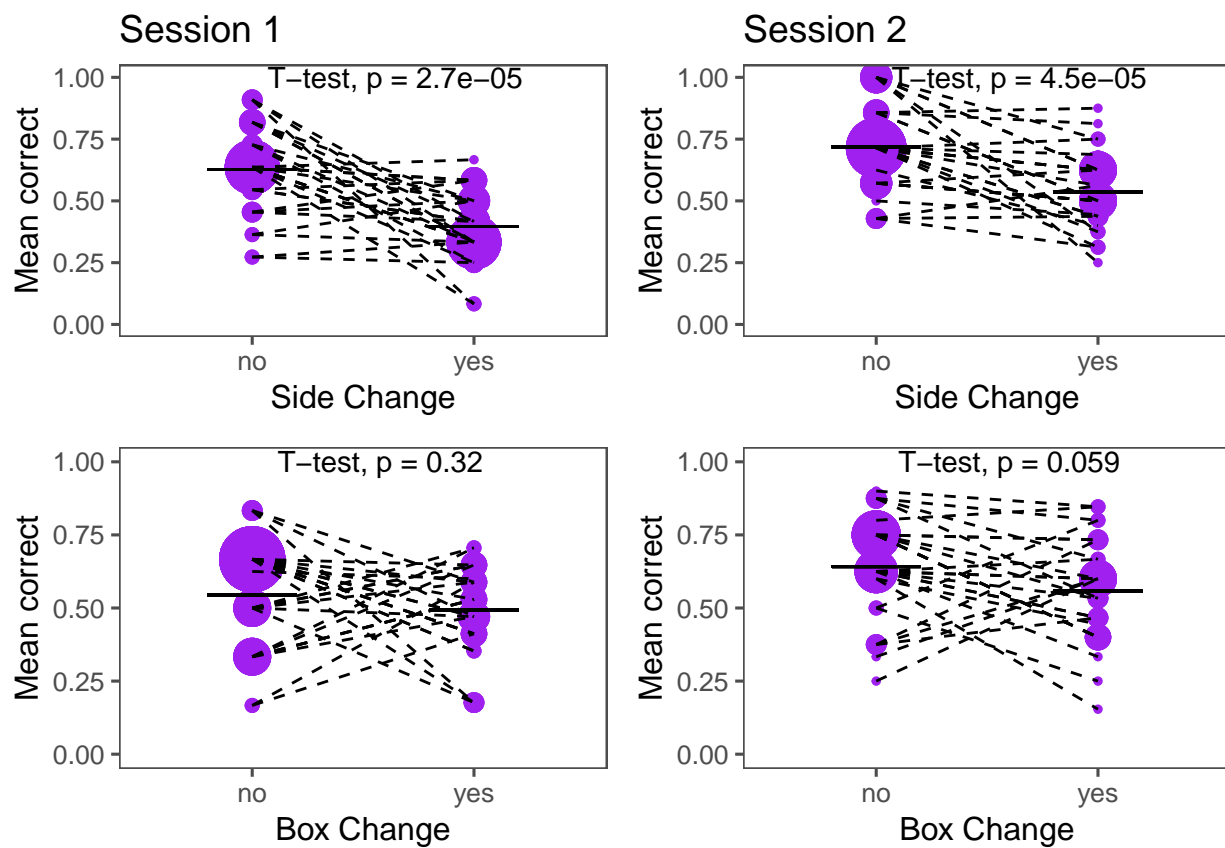
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*November 18, 2018*

## Summary

## Plotting data

## Plotting trial-to-trial effects



## Paired-sample t-test

```
t.test( plot_ind_S1_side[plot_ind_S1_side$side_change=="no"],$correct_resp, plot_ind_S1_side[plot_ind_S1_side$side_change=="yes"],$correct_resp,
data.name="S1_side")

##
## Paired t-test
##
## data: plot_ind_S1_side[plot_ind_S1_side$side_change == "no", ]$correct_resp and plot_ind_S1_side[plot_ind_S1_side$side_change == "yes", ]$correct_resp
## t = 5.0096, df = 28, p-value = 2.702e-05
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.1361946 0.3246205
## sample estimates:
## mean of the differences
## 0.2304075

t.test( plot_ind_S2_side[plot_ind_S2_side$side_change=="no"],$correct_resp, plot_ind_S2_side[plot_ind_S2_side$side_change=="yes"],$correct_resp,
data.name="S2_side")

##
## Paired t-test
##
## data: plot_ind_S2_side[plot_ind_S2_side$side_change == "no", ]$correct_resp and plot_ind_S2_side[plot_ind_S2_side$side_change == "yes", ]$correct_resp
## t = 4.8209, df = 28, p-value = 4.525e-05
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 0.1052504 0.2607731
## sample estimates:
## mean of the differences
## 0.1830118

t.test( plot_ind_S1_box[plot_ind_S1_box$box_change=="no"],$correct_resp, plot_ind_S1_box[plot_ind_S1_box$box_change=="yes"],$correct_resp,
data.name="S1_box")

##
## Paired t-test
##
## data: plot_ind_S1_box[plot_ind_S1_box$box_change == "no", ]$correct_resp and plot_ind_S1_box[plot_ind_S1_box$box_change == "yes", ]$correct_resp
## t = 1.0098, df = 28, p-value = 0.3212
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.05269177 0.15515966
## sample estimates:
## mean of the differences
## 0.05123394

t.test( plot_ind_S2_box[plot_ind_S2_box$box_change=="no"],$correct_resp, plot_ind_S2_box[plot_ind_S2_box$box_change=="yes"],$correct_resp,
data.name="S2_box")

##
## Paired t-test
##
## data: plot_ind_S2_box[plot_ind_S2_box$box_change == "no", ]$correct_resp and plot_ind_S2_box[plot_ind_S2_box$box_change == "yes", ]$correct_resp
## t = 1.9692, df = 28, p-value = 0.05889
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## -0.003328214 0.168919137
## sample estimates:
## mean of the differences
```

```
## 0.08279546
# compare_means(correct_resp ~ side_change, data = plot_ind_S1_side, paired = TRUE, method="t.test")

plot_individual <- all.data %>%
  group_by(Session, Subject) %>%
  summarize(correct_resp = mean(correct))

mean(plot_individual[plot_individual$Session==1,]$correct_resp, na.rm=TRUE)

## [1] 0.5043103
mean(plot_individual[plot_individual$Session==2,]$correct_resp, na.rm=TRUE)

## [1] 0.595679
t.test( plot_individual[plot_individual$Session==1,]$correct_resp, mu=0.5, alternative = "two.sided")

##
## One Sample t-test
##
## data: plot_individual[plot_individual$Session == 1, ]$correct_resp
## t = 0.25031, df = 28, p-value = 0.8042
## alternative hypothesis: true mean is not equal to 0.5
## 95 percent confidence interval:
## 0.4690368 0.5395839
## sample estimates:
## mean of x
## 0.5043103
t.test( plot_individual[plot_individual$Session==2,]$correct_resp, mu=0.5, alternative = "two.sided")

##
## One Sample t-test
##
## data: plot_individual[plot_individual$Session == 2, ]$correct_resp
## t = 3.8053, df = 26, p-value = 0.0007752
## alternative hypothesis: true mean is not equal to 0.5
## 95 percent confidence interval:
## 0.5439958 0.6473622
## sample estimates:
## mean of x
## 0.595679
```

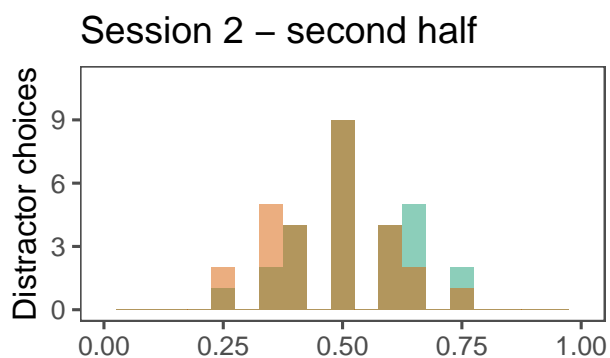
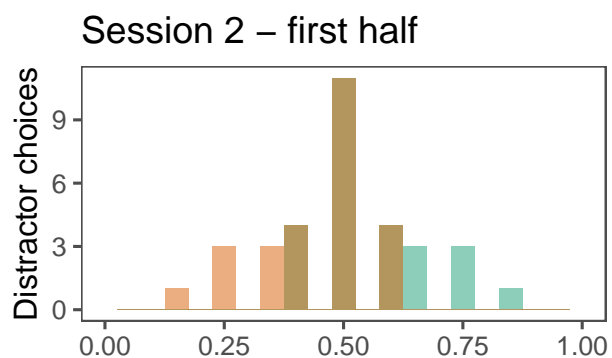
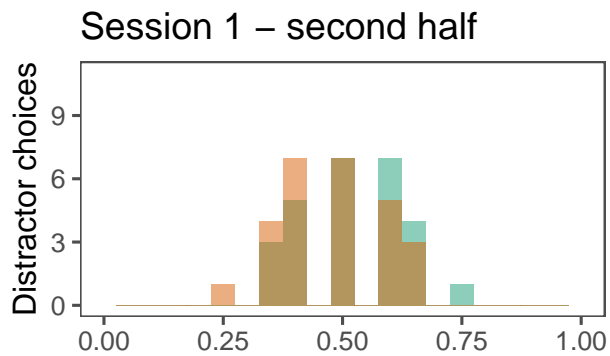
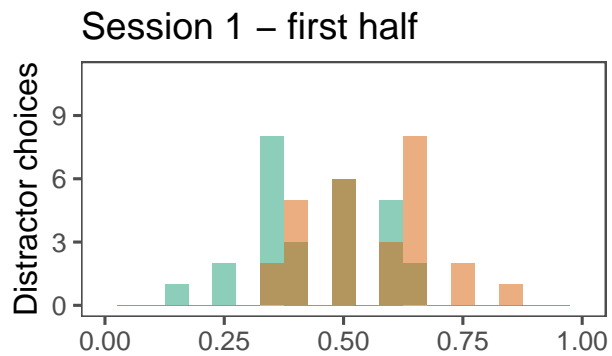
### Plotting box preferences

```
## Warning: Removed 4 rows containing missing values (geom_bar).

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```



chosen\_distractor   green   heart