

Relatório 6

Matching

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1 Matching between samples

There were notable discrepancies in age between our original samples of TD and TEA participants (Table 1). Additionally, there was a significant gender(?) imbalance, with 47% of females in the TD group, and only 6% in amongst TEA participants.

To address this issue, we employed a matching algorithm suggested by Ho, Imai, King & Stuart (2011), which minimized the Euclidean distance based on participants' sex and age. Following the matching process, our final sample consisted of 15 participants from each diagnostic group (refer to Table X for descriptive statistics).

tea	meanAge	sdAge	N
TD	2.87	1.04	358
TEA	3.06	0.79	15

Table 1: Non matched

tea	meanAge	sdAge	N
TD	3.05	0.78	15
TEA	3.06	0.79	15

Table 2: Matched

2 ANOVA

Same analysis as report 5, but with matched samples. Main effects and interaction were the same between matched and unmatched samples.

2.1 Alternancias

Table 3: Alternancias						
	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
condition	1	2.30	2.30	8.71	0.0035	**
tea	1	1.68	1.68	6.37	0.0123	*
variable	3	25.16	8.39	31.80	0.00	***
condition:tea	1	0.01	0.01	0.02	0.8809	
condition:variable	3	4.89	1.63	6.17	0.0005	***
tea:variable	3	0.43	0.14	0.54	0.6544	
condition:tea:variable	3	0.30	0.10	0.38	0.7711	
Residuals	224	59.09	0.26			

Figure 1: Visualizing TEA effect on alternancias. Mean number of alternancias per tea and trial.

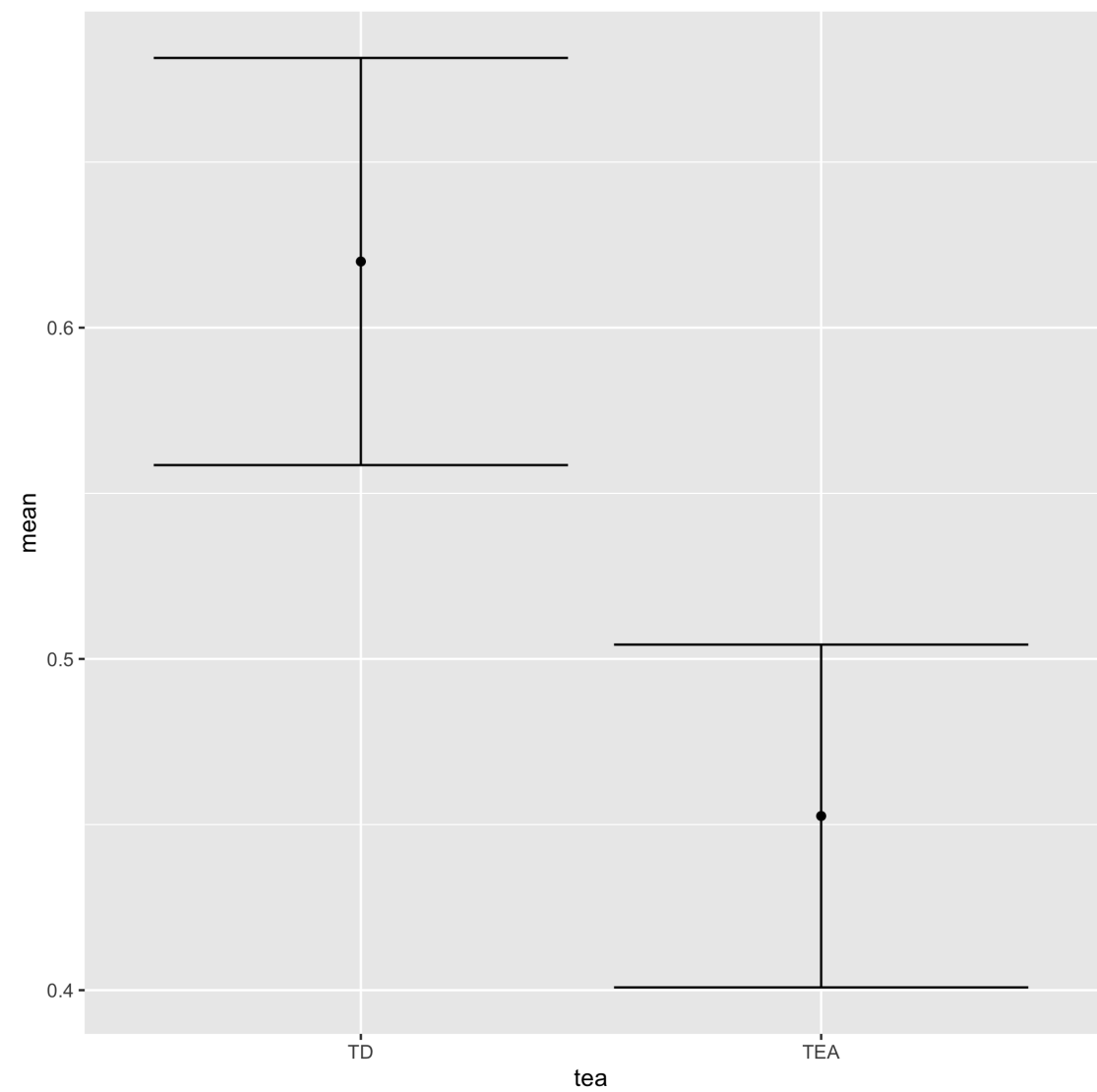


Figure 2: Visualizing effect of variable

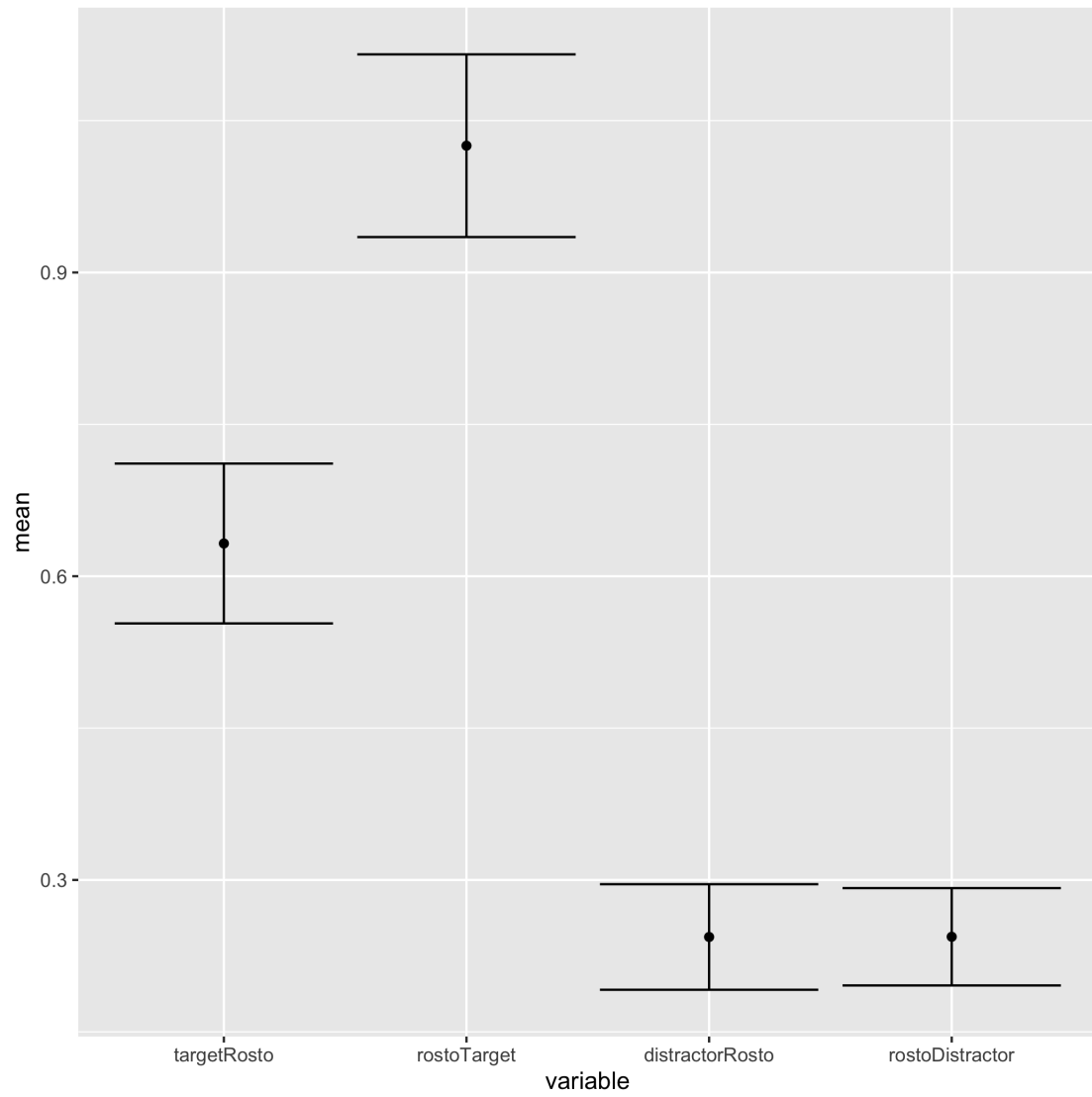


Figure 3: Visualizing effect of condition

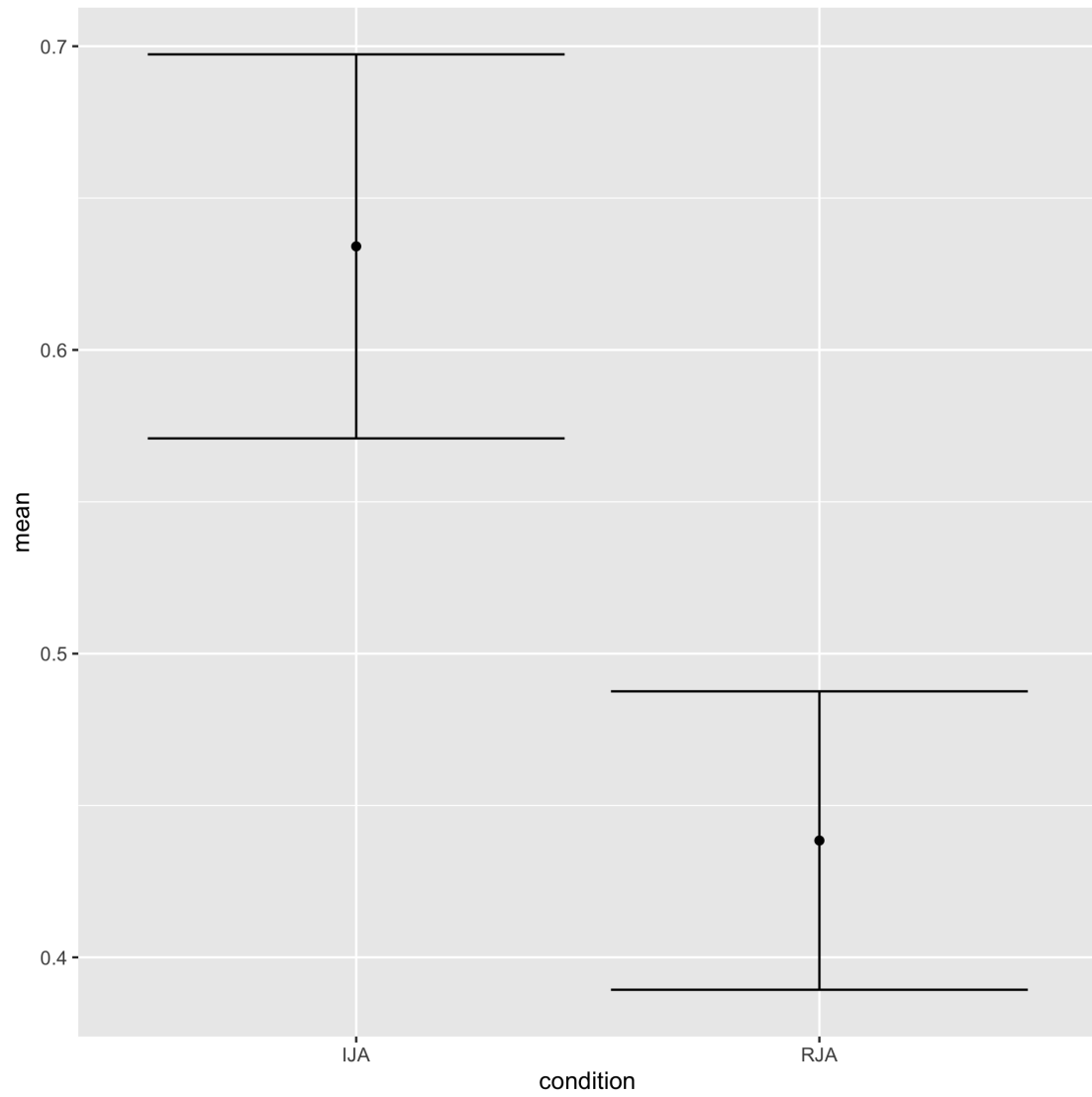


Figure 4: Visualizing interaction of condition and variable

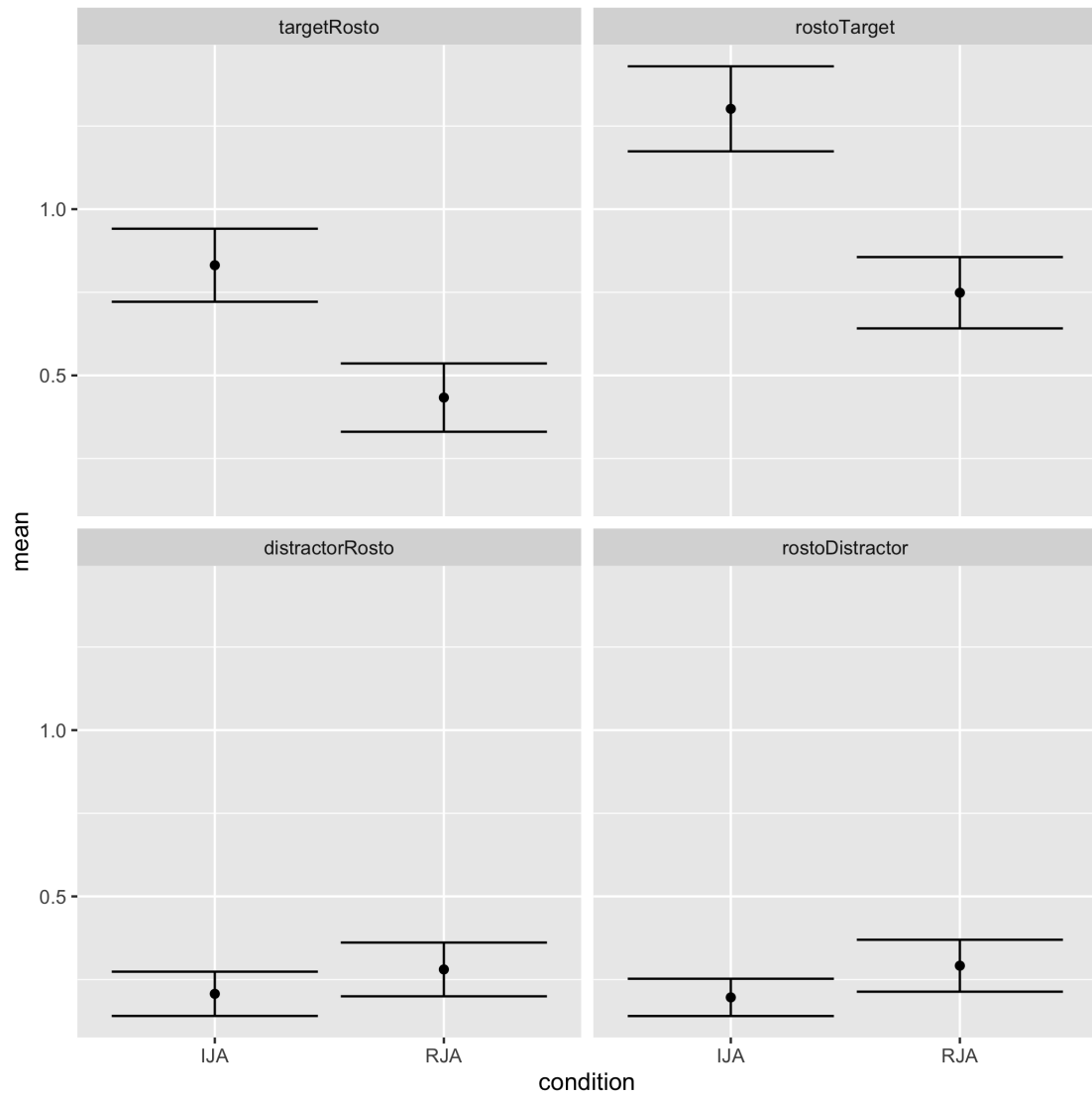
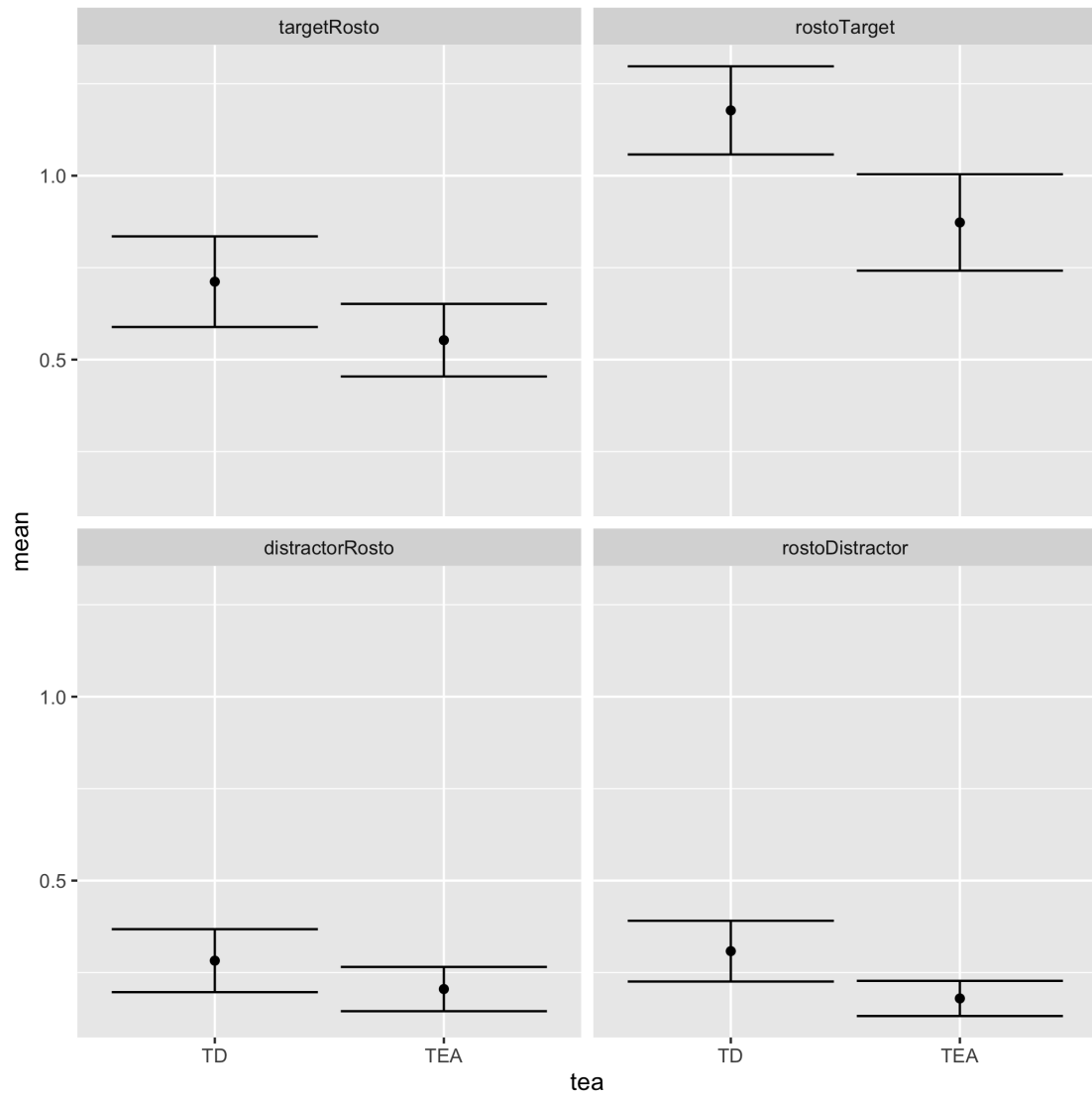


Figure 5: Visualizing interaction between tea and variable



2.2 Proportion fixation

Table 4: Proportion fixation

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
condition	1	0.00	0.00	0.00	1.0000	
tea	1	0.00	0.00	0.00	1.0000	
variable	3	6.37	2.12	67.56	0.0000	***
condition:tea	1	0.00	0.00	0.00	1.0000	
condition:variable	3	1.82	0.61	19.30	0.0000	***
tea:variable	3	0.63	0.21	6.69	0.0002	***
condition:tea:variable	3	0.17	0.06	1.85	0.1387	
Residuals	224	7.04	0.03			

Figure 6: Visualizing variable effect

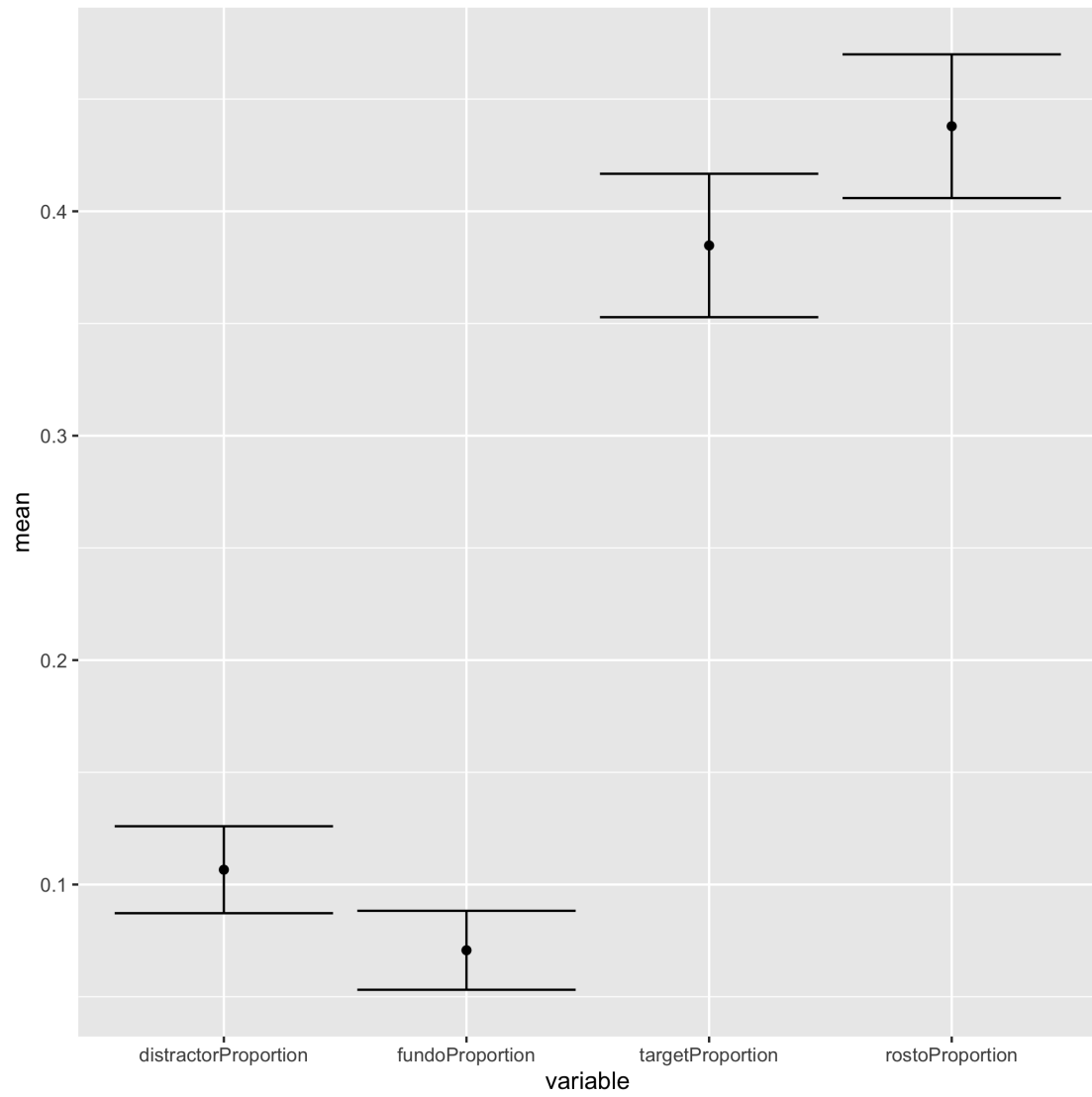


Figure 7: Visualizing interaction condition and variable

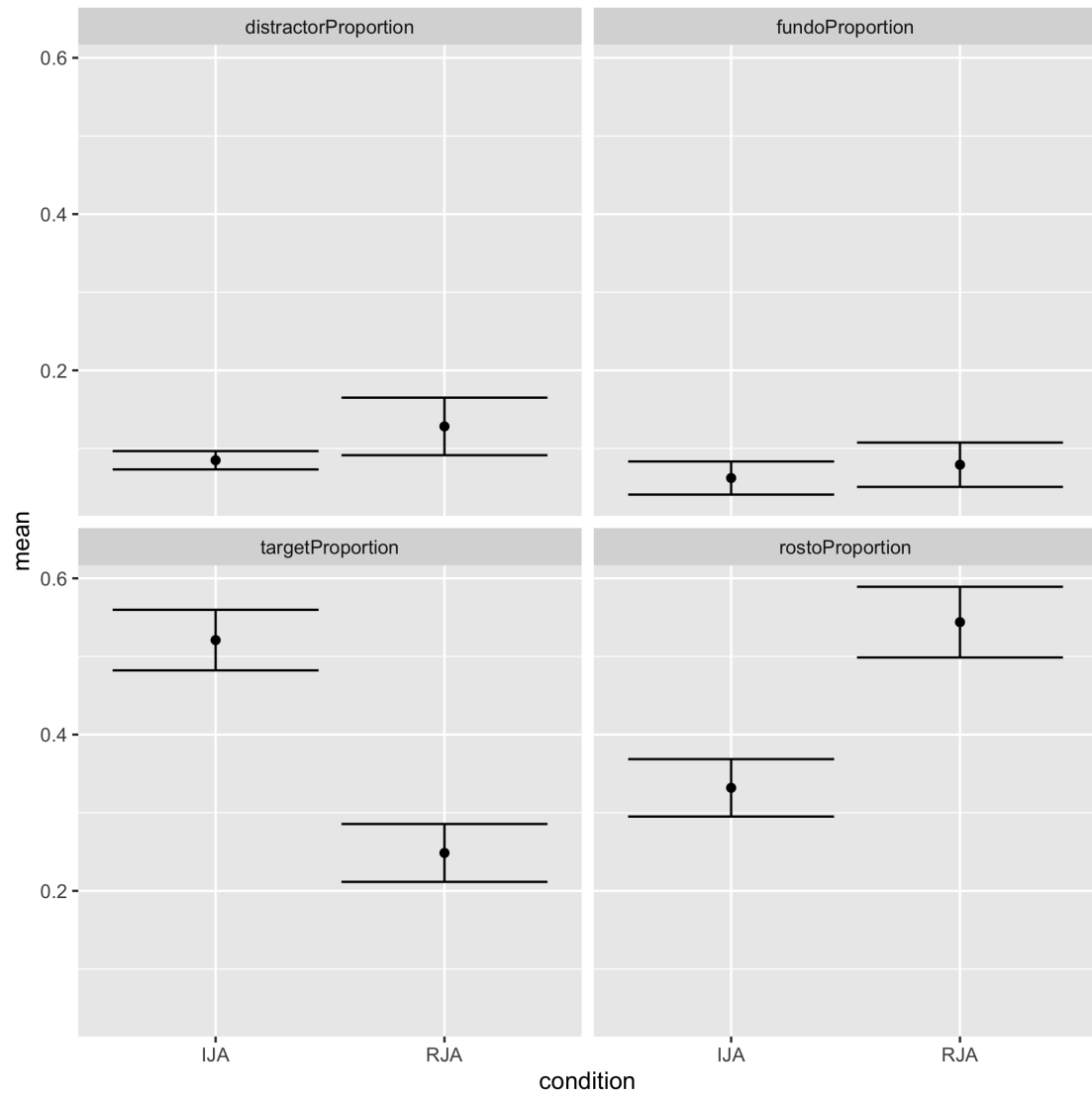
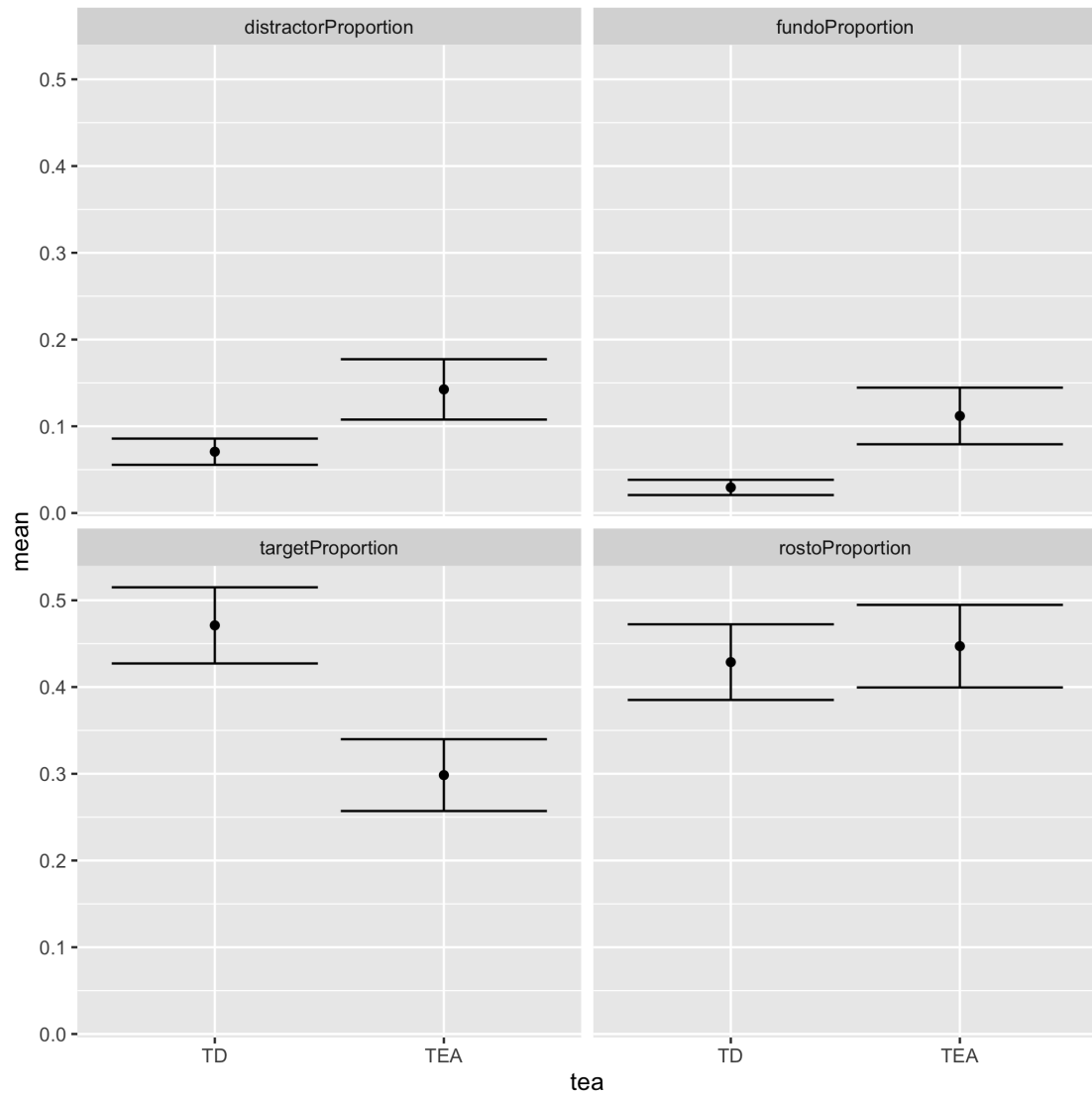


Figure 8: Visualizing interaction tea variable



Ho, D., Imai, K., King, G., & Stuart, E. A. (2011). MatchIt: Nonparametric Preprocessing for Parametric Causal Inference. *Journal of Statistical Software*, 42(8), 1–28. <https://doi.org/10.18637/jss.v042.i08>