Decision Bound Model Handout

Below is a contingency table showing the number of participants in each learning condition that were best fit by each type of decision bound model tested. The models were random responder (RR), Frequency-Based (RB_F), Angle-Based (RB_A), Conjunctive (CJ), and Information-Integration (II). The Information-Integration strategy was optimal for this categorization task.

	RR	RB_F	RB_A	CJ	II	Total
No Pause	1	5	6	1	22	35
Pause	0	8	1	1	29	39
Category-Level JOL	0	8	0	1	37	46
Total	1	21	7	3	88	120

A Chi-Square test of independence was conducted with learning condition and best-fitting decision-bound model as the grouping variables, $\chi_8^2 = 14.8, p = .063$. There is a marginally significant relationship between learning condition and best-fitting decision-bound model at test, with Category-Level JOL learners being less likely to endorse rule-based categorization strategies. See the below figure.