Transfer and learning in basic choice tasks

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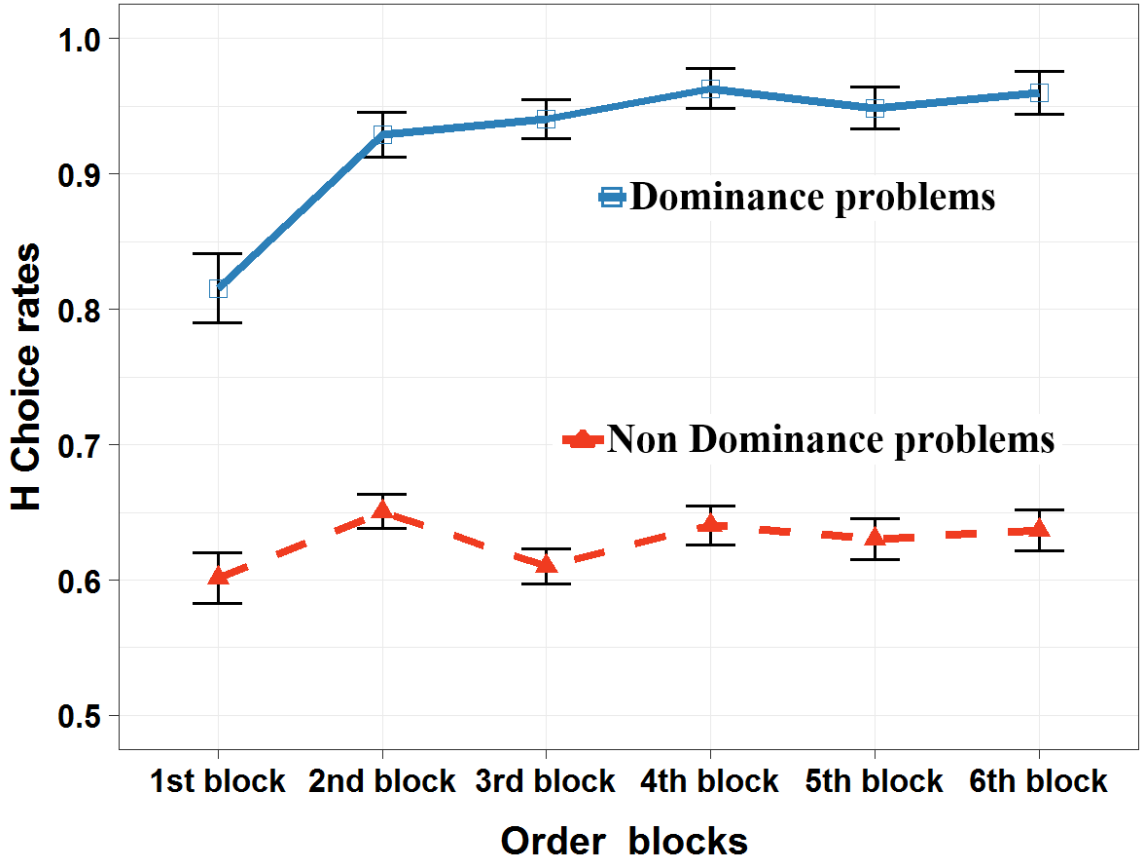
The role of transfer

- Previous research on decisions from experience focused mainly on learning within tasks. For example in the 2015 Choice Prediction Competition (CPC15) each subjects faced 30 tasks, for 25 trials, and the analysis focused on learning within the 25 trials with each tasks.
- The current study focuses on learning between tasks; i.e., the effect of experience drawn from previous tasks

Reanalysis of the Choice Prediction Competition 2015

- The re-analysis shows *positive transfer*: choice rates of the dominant option went from **81%** when facing Dominance problems early, to **96%** when the same problems were faced late.



First 5 trials, no feedback

3 hypotheses were suggested

1. Experience with other tasks helps to discover an optimal strategy.

2. Experience increases the tendency to use an effective shortcut such as an "equal weighting" rule.

3. The effort to discover dominance is affected by previous reinforcement.

Study 2

- 20 choice problems：19 with no dominant alternative, one target problem with a dominant option.

Two conditions：Dom-1st and Dom-last.

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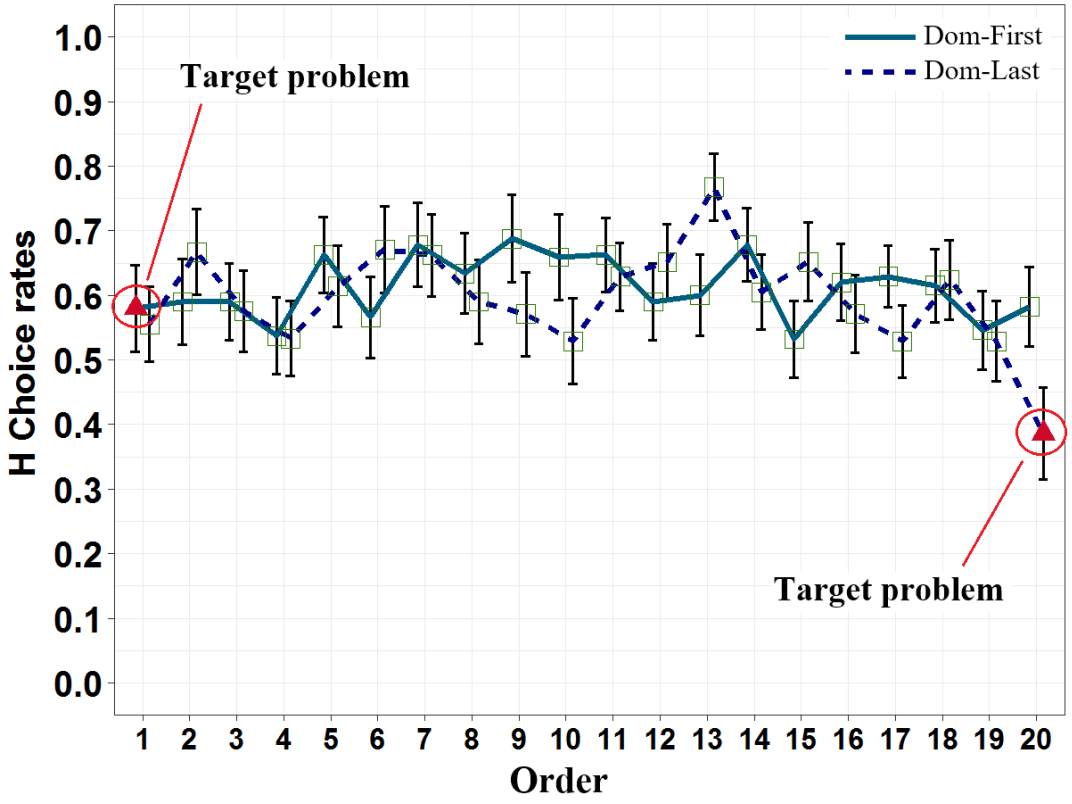

Target Problem

Target problem (adapted from Birnbaum, 2008):

A:	B:
0.9 prob **EV** to win 26	0.85 prob **EW** o win 26
0.05 probability to win 1	0.05 probability to win 20
0.05 probability to win -1	0.1 probability to win -1

One example of “filler” Problems

One example of a filler problem:

A:	B:
0.1 probability to win 16	0.25 p **EW + EV** 25
0. 5 probability to win 11	0.3 probability to win 16
0.4 probability to lose -1	0.45 probability to win -8

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