Aggregation Experiment 3 - Results summary

Shir Dekel

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Table 1

Group allocation to the between-subject variable of similarity.

similarity	n
high	133
low	133
Total	266

Participants

Two hundred and sixty-six (127 female) people were recruited from the online recruitment platform Prolific. Participants were compensated at a rate of £5 an hour. The average age was 39.56 ($SD = 8.77$, $min = 25$, $max = 71$). Participants reported an average of 5.64 ($SD = 6.45$, $min = 0$, $max = 40$) years of work in a business setting, and an average of 3.28 ($SD = 4.92$, $min = 0$, $max = 30$) years of business education. The mean completion time was 9.23 ($SD = 7.2$, $min = 1.41$, $max = 65.46$) minutes. Table 1 shows the condition allocation.

Results

Experiment 3 investigated the effect of project similarity on project choice. The data were analysed using either a t-test (when the effect involved comparison of proportion values), or a logistic regression (when the effect involved binary choice).

Project investment

Figures 1 and 2 show the choice and proportion data, respectively. The difference between similarity conditions was not significant, both in the logistic regression $b = 0.01$, 95% CI $[-0.34, 0.36]$, $z = 0.04$, $p = .966$, and in the t-test, d_s = -0.21, 95% CI [-0.45, 0.03], $t(264)$ = -1.69, $p = .093$.

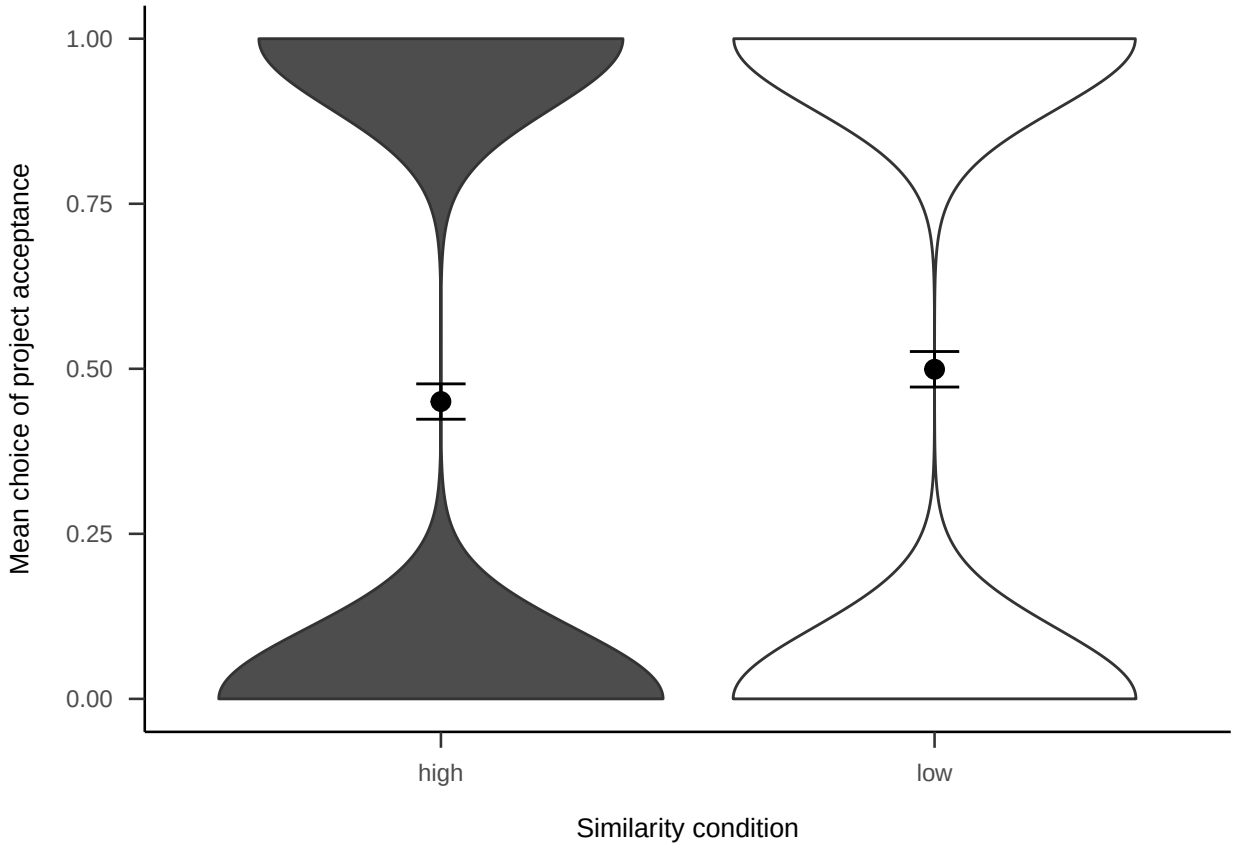

Figure 1

Mean project acceptance for the similarity effect.

Further, Figure 3 shows the choice data as a function of the order of the project in the sequence. As Table

2 shows, there were no main effects or interactions.

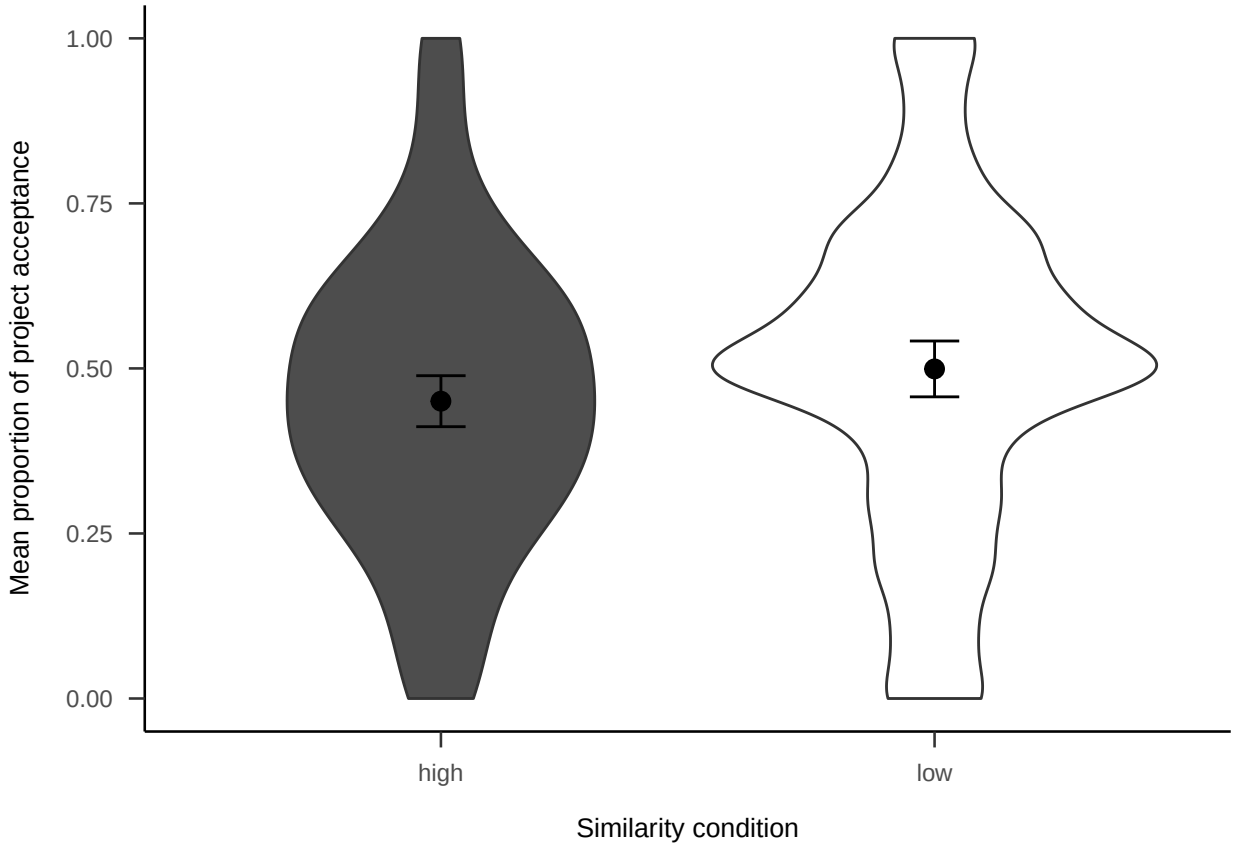

Figure 2

Mean proportion of project acceptance for the similarity effect.

Table 2

Logistic regression table of project acceptance by similarity and trial.

Term	$\hat{\beta}$	95% CI	z	p
Intercept	-0.02	[-0.31, 0.28]	-0.11	.916
Similaritylow	0.05	[-0.37, 0.46]	0.22	.826
Project order	-0.04	[-0.08, 0.00]	-1.83	.067
Similaritylow × Project order	0.03	[-0.03, 0.09]	1.07	.284

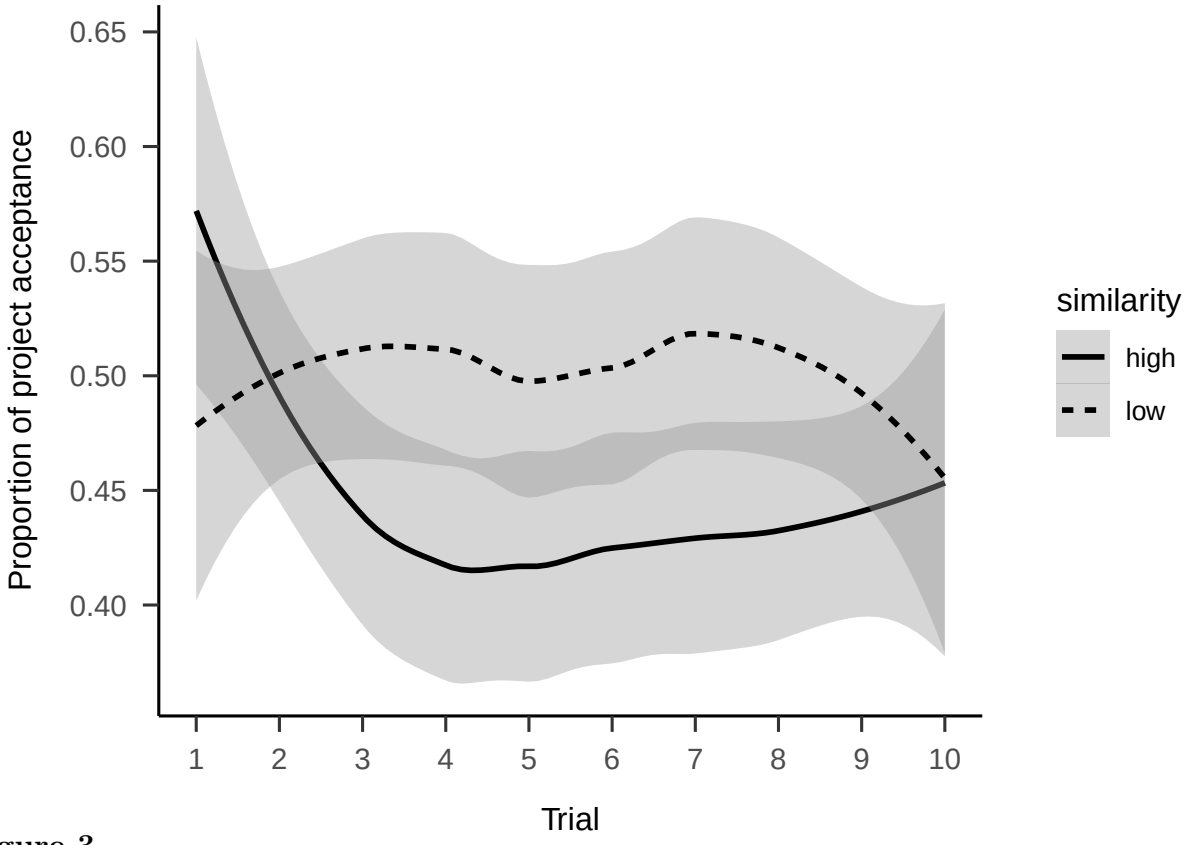

Figure 3

Mean project acceptance by similarity and trial.

Follow-up

Project expectation

We asked participants how many projects they expected to see. As Figure 4 shows, the difference between similarity conditions was not significant, d_s = -0.23, 95% CI [-0.47, 0.01], $t(264)$ = -1.85, p = .065.

Project number

We asked participants how many projects they think they saw. Figure 5 shows that overall people to correctly estimate the number of projects.

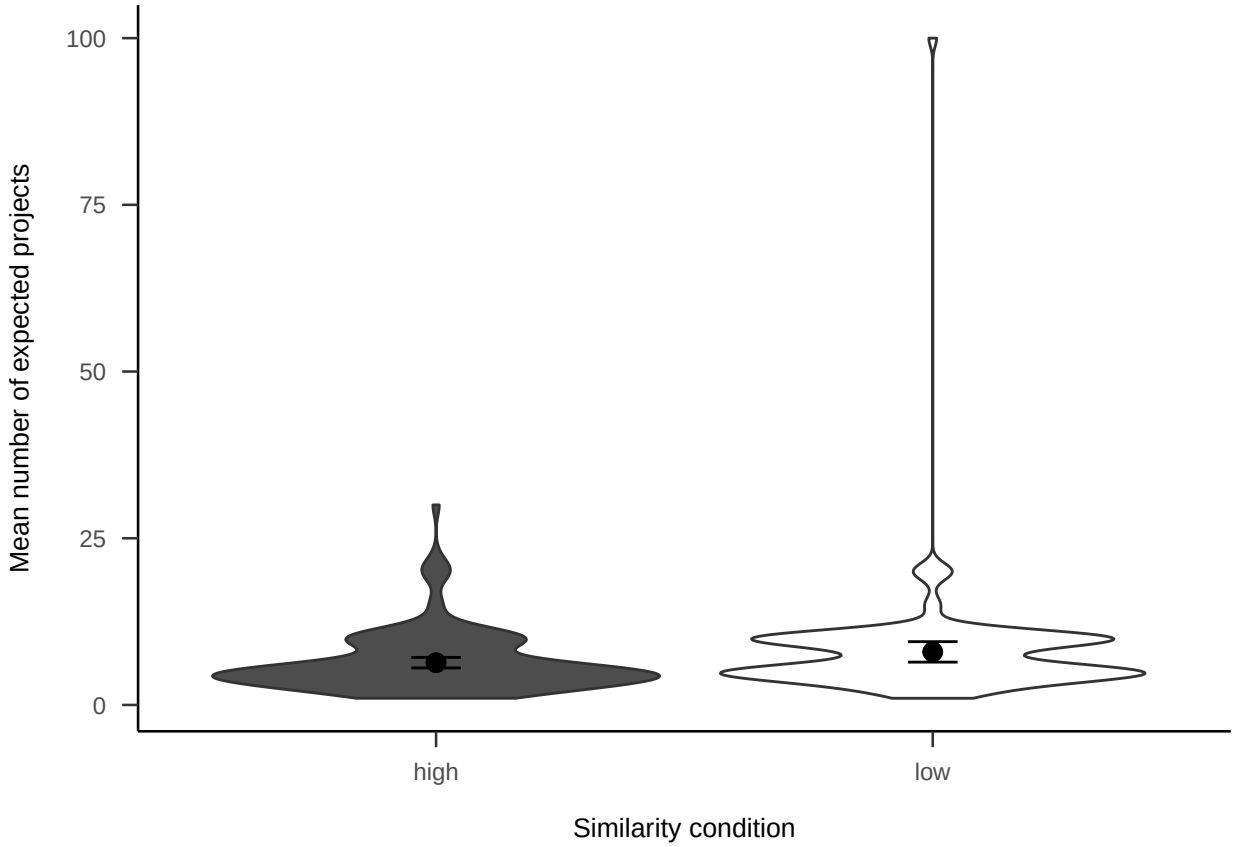

Figure 4

Number of projects participants expected to see, by condition

Portfolio choice - binary

Participants were then asked if they would rather invest in all or none of the projects. As Figure 6 shows, those in the low similarity condition were significantly more likely to want to invest in all of the projects, $b = 0.52$, 95% CI $[0.04, 1.02]$, $z = 2.10$, $p = .036$.

Portfolio choice - number

Subsequently, we asked participants how many projects they would invest in out of the 10 that they saw. As Figure 7 shows, the difference between similarity conditions was not significant, d_s = -0.14, 95% CI [-0.38, 0.10], $t(264)$ = -1.12, $p = .264$.

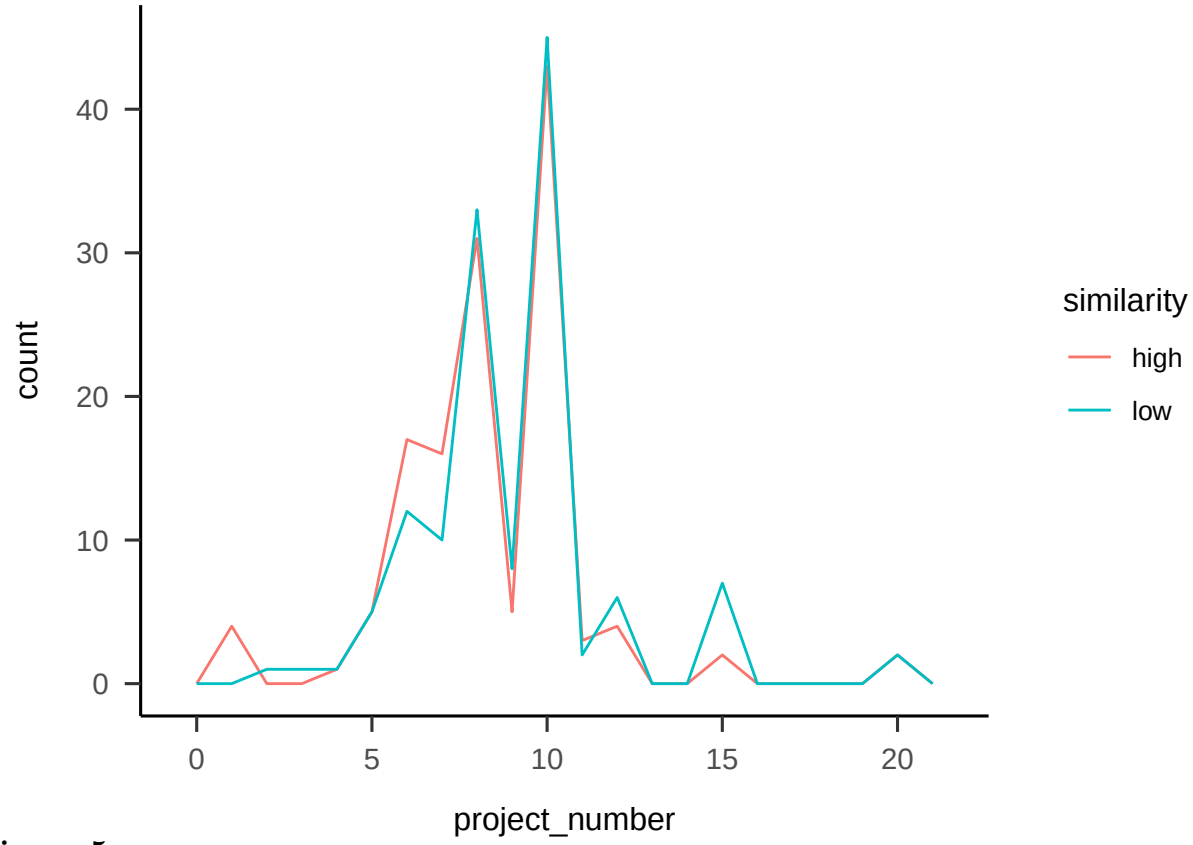

Figure 5

Number of projects participants reported seeing, by condition

Gambles

Figures 8 and 9 show the overall people seemed to prefer gambles with higher probabilities of gain, sometimes regardless of expected value or value of the gain.

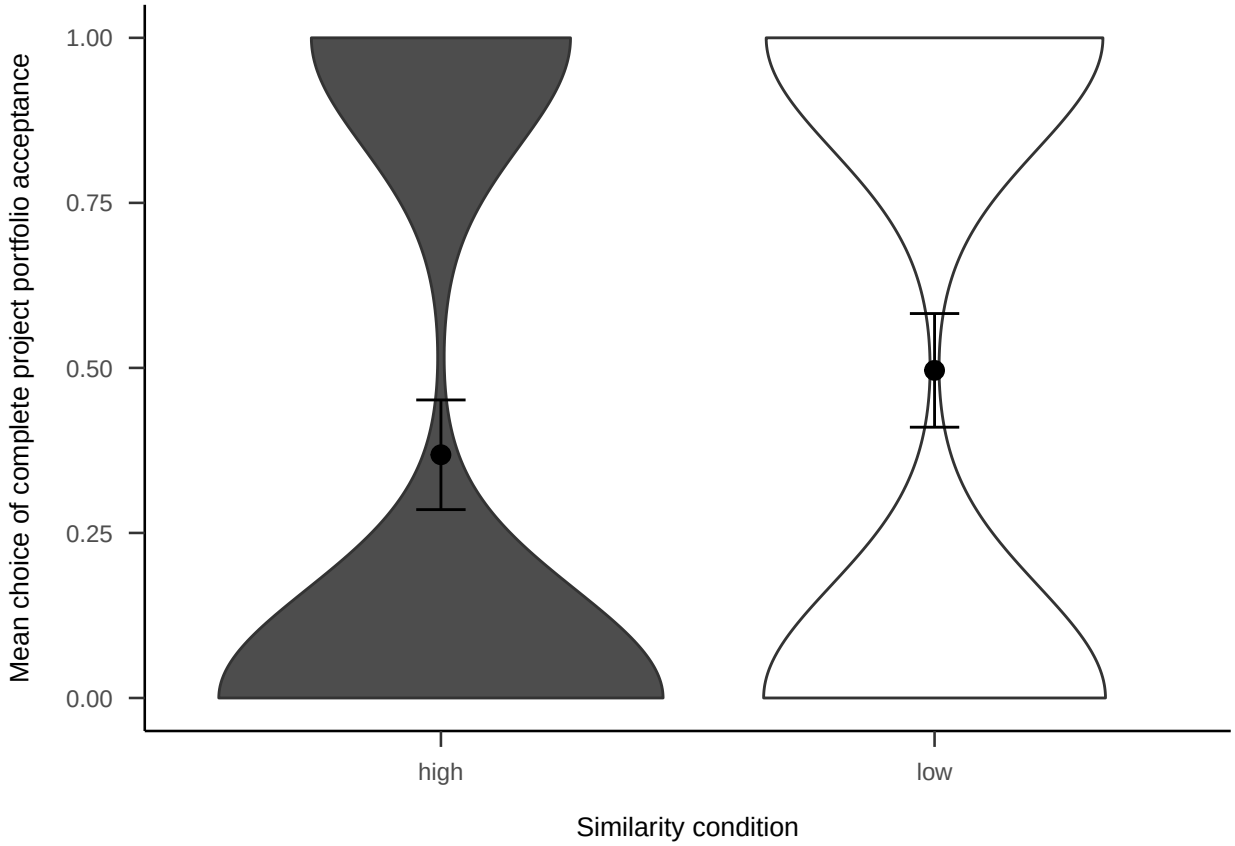

Figure 6

Mean choice of investing in all 10 projects for the similarity effect.

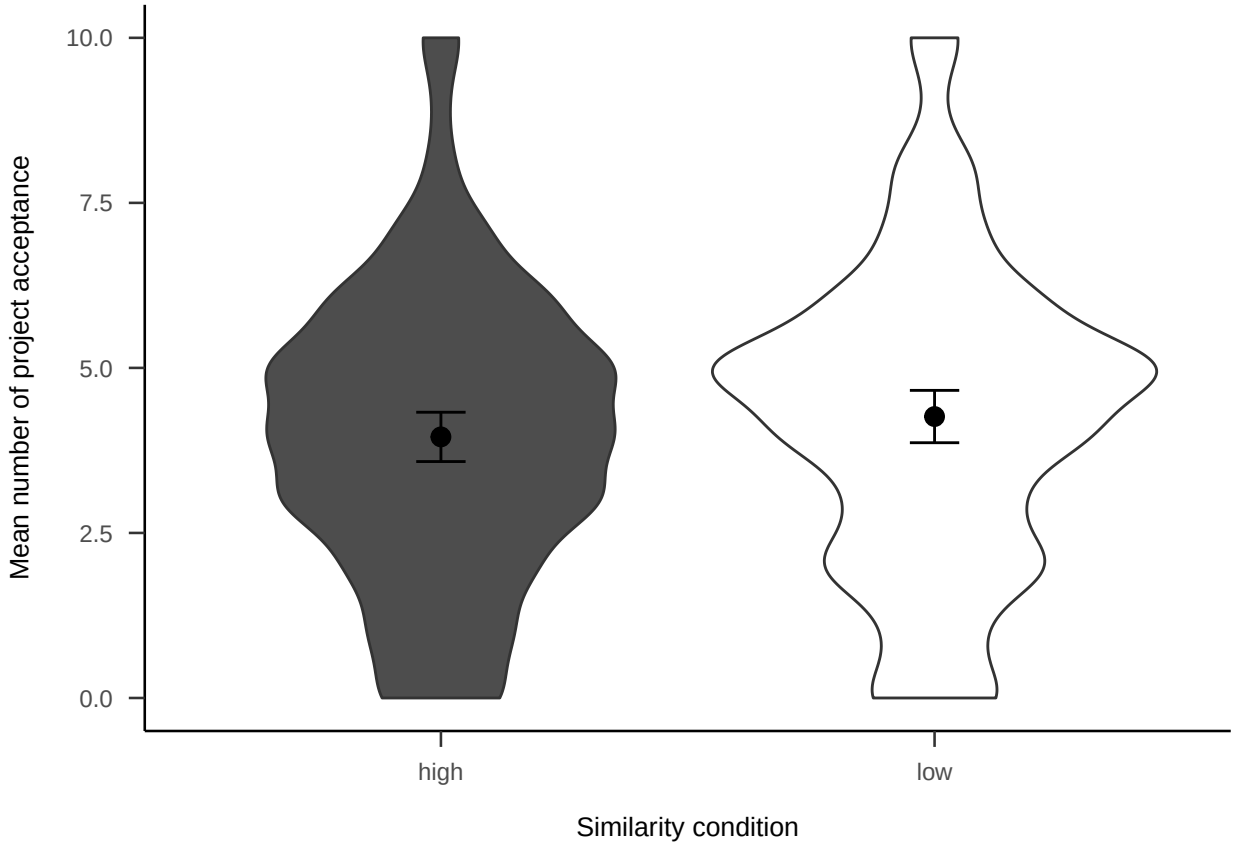

Figure 7

Mean number of projects chosen in the follow-up for the similarity effect.

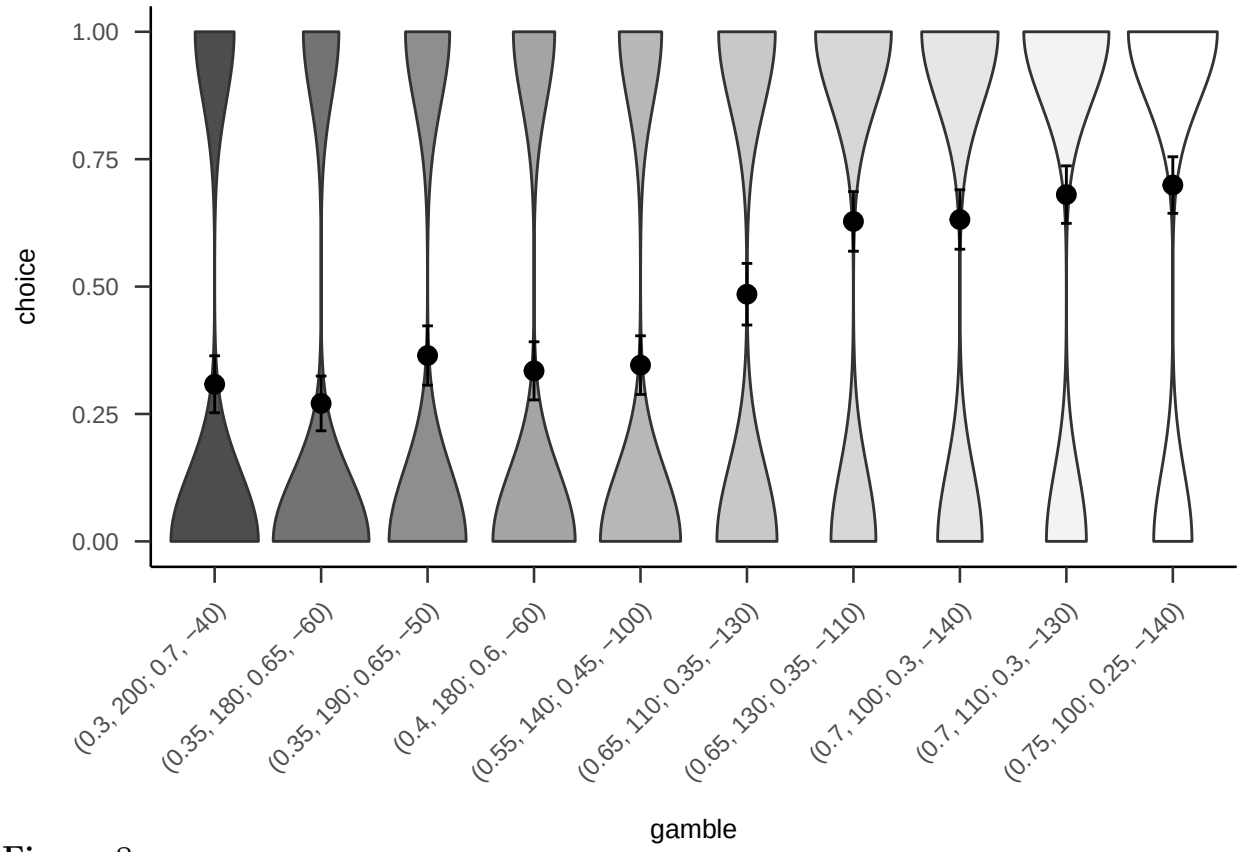

Figure 8

Mean project acceptance for the 10 gambles. The format of the labels indicate: (gain probability, gain value; loss probability, loss value).

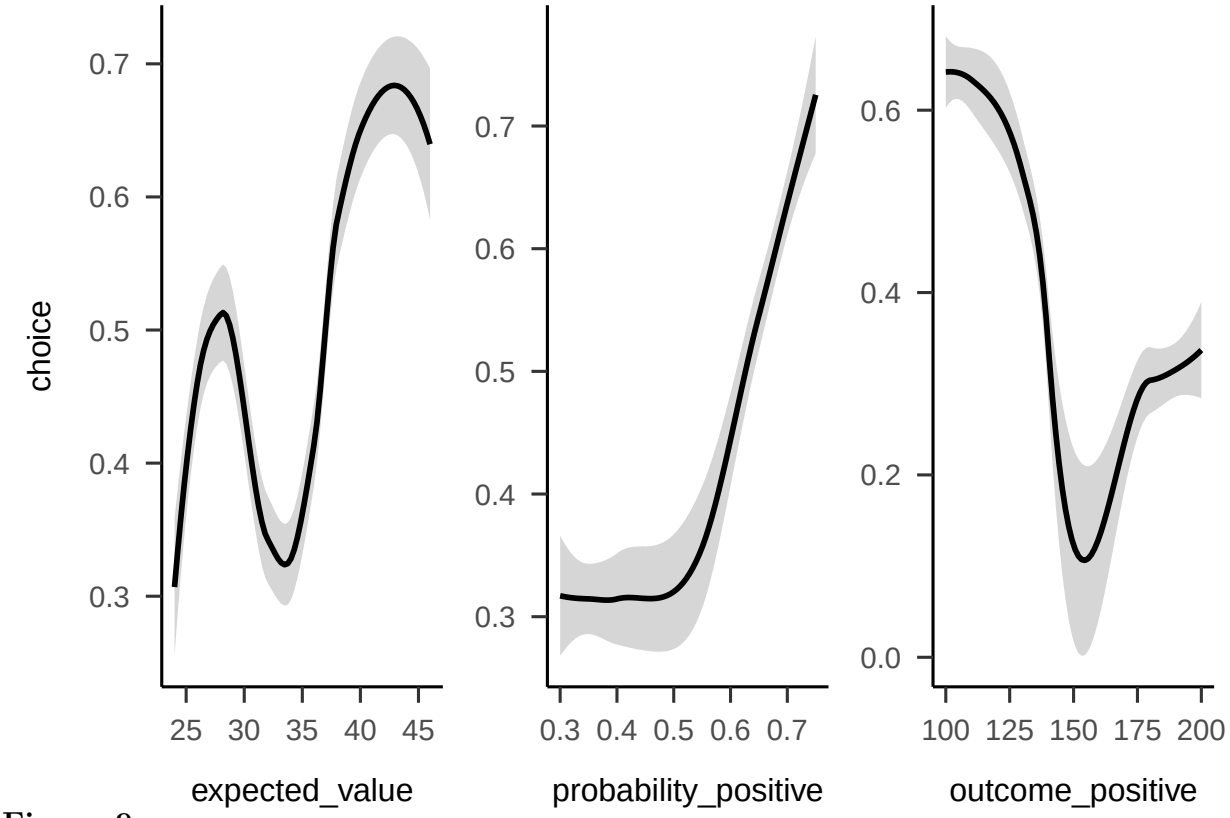

Figure 9

Mean project acceptance for the gambles' expected value, positive probability, and positive outcome.