Evaluations of action and inaction decision-makers in risky decisions resulting in negative outcomes: Inaction agents are preferred to and perceived as more competent and normative than action agents

Supplementary

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# Open Science disclosures

## Procedure and data disclosures

### Data collection

Data collection was completed before analyzing the data.

### Conditions reporting

All collected conditions are reported.

### Data exclusions

Details are reported in the materials section of this document

### Variables reporting

All variables collected for this study are reported and included in the provided data.

# Power-analysis

## Study 1a



## Study 1b



## Study 2



# Tables

Table S1

*Studies 1a/1b: Summary of one-sample t-tests*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | *t* | *df* | *p* | *d* | *95% CI* |
| Study 1a (*n* = 339) |
| Preference | -7.73 | 255 | <.001 | -0.48 | [-0.61, -0.35] |
| Competence | -4.51 | 273 | <.001 | -0.27 | [-0.39, -0.15] |
| Normative | -4.26 | 270 | <.001 | -0.26 | [-0.38, -0.14] |
| Regret | 12.71 | 263 | <.001 | 0.78 | [0.64, 0.92] |
| Study 1b (*n* = 339) |
| Preference | -6.29 | 338 | <.001 | -0.34 | [-0.45, -0.23] |
| Competence | -4.00 | 338 | <.001 | -0.22 | [-0.33, -0.11] |
| Normative | -5.16 | 338 | <.001 | -0.28 | [-0.39, -0.17] |
| Regret | 14.01 | 338 | <.001 | 0.76 | [0.64, 0.88] |

*Note.* *t* = one sample t-test against *M* = 0, *df* = degree of freedom, all *ps* <.001, *d* = Cohen’s *d*,
*95% CI* = 95% confidence interval around Cohen’s *d*.

Table S2

*Study 2: Summary of one-sample t-tests*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | *t* | *df* | *p* | *d* | *95% CI* |
| Preference | -3.91 | 455 | <.001 | -0.18 | [-0.28, -0.09] |
| Competence | -4.33 | 453 | <.001 | -0.20 | [-0.30, -0.11] |
| Descriptive norms | 1.21 | 455 | .23 | 0.06 | [-0.04, 0.15] |
| Injunctive norms | 6.13 | 455 | <.001 | 0.29 | [0.19, 0.38] |
| Regret | 16.71 | 456 | <.001 | 0.78 | [0.68, 0.89] |
| Joy | 4.45 | 454 | <.001 | 0.21 | [0.12, 0.30] |

*Note.* *t* = one sample t-test against *M* = 0, *df* = degree of freedom, all *ps* <.001, *d* = Cohen’s *d*,
*95% CI* = 95% confidence interval around Cohen’s *d*.

Table S3

*Study 2: Correlations table*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | Preference | Competence | Descriptive norms | Injunctive norms | Regret | Joy |
|  | *r* | *p* | *r* | *p* | *r* | *p* | *r* | *p* | *r* | *p* | *r* | *p* |
| Preference |  |  | .44 [.35, .50] | <.001 | .03 [-.07, .14] | .49 | -.34 [-.42, -.26]  | <.001  | -.27 [-.35, -.18] | <.001 | .07 [-.03, .17] | .12 |
| Competence |  |  |  |  | .15 [.06, .25] | .001 | -.28 [-.37, -.20] | <.001  | -.19 [-.28, -.09] | <.001 | .01 [-.09, .12] | .63 |
| Descriptive norms |  |  |  |  |  |  | -.25 [-.33, -.16] | < .001 | -.11 [-.21, -.01] | 0.02 | .06 [-.05, .16] | .28 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Injunctive norms |  |  |  |  |  |  |  |  | .24 [.16, .33] | <.001 | -.15 [-.24, -.05] | .004 |
| Regret |  |  |  |  |  |  |  |  |  |  | .00 [-.10, .11] | .97 |
| Joy |  |  |  |  |  |  |  |  |  |  |  |  |

*Note.* N = 460. *r* = Pearson’s correlation. All measures were between -5 (Paul, Inaction) and +5 (George, Action). Values in brackets represent 95% interval confidence for Pearson’s *r.*

Table S4

*Study 2: Experimental design*

|  |  |  |
| --- | --- | --- |
| **IV: No prior (control / replication)** Paul and George are two financial advisors. In the past, Paul invested his client's money in stocks in Company A and George invested his client's money in Company B. | **IV: Negative prior outcomes**Paul and George are two financial advisors. In the past, Paul invested his client's money in stocks in Company A, and these investments usually *lost money* for the clients. George invested his client's money in Company B, and these investments usually *lost money* for the clients. | **IV: Positive prior**Paul and George are two financial advisors. In the past, Paul invested his client's money in stocks in Company A, and these investments were usually *profitable* for the clients. George invested his client's money in Company B, and these investments were usually *profitable* for the clients. |
| **Manipulation check**"To what extent do you expect Paul and George to change their investment behavior in the future? (-5 = *definitely not changed their behavior*, 5 = *definitely changed their behavior*)." |
| **Scenario**Paul has continued to invest his client’s money in stocks in company A. During the past year he considered switching to stock in company B, but he decided against it. He now finds out that his client would have been better off by £1.2 million if he had switched to the stock of company B. George has not continued to invest his client’s money in stocks in company B. During the past year he switched to stock in company A. He now finds out that his client would have been better off by £1.2 million if he had kept his stock in Company B. |
| **Dependent variables**Orders presentation were randomized. Scale: -5 = *Definitely Paul who decided not to switch*; 5 *Definitely George who decided to switch*.PreferenceWhich advisor – Paul or George – would you prefer to hire in the future? CompetenceWhich advisor – Paul or George – is more competent? Descriptive normsWhose behavior – Paul’s or George’s – is more common among financial advisors? Injunctive normsWhose behavior – Paul’s or George’s – will be more criticized among financial advisors?RegretWhich advisor – Paul or George – regrets their decision more?JoyWhich advisor – Paul or George - would have been likely to experience more joy if things had gone well? |

# Figures

Figure S1

*Study 1a: Distribution plots*



Figure S2

*Study 1b: descriptives*

**

Figure S3

*Study 2 descriptives*

**

Figure S4

*Study 1a: Correlations*

**

Figure S5

*Study 1a: Correlations*

**

Figure S6

*Study 1b: Correlations*

**

Figure S7

*Study 1b: Correlations*

**

Figure S8

*Study 2: Correlations*

**

Figure S9

*Study 2: Correlations*

**

# One-way ANOVA Study 2

The ANOVA revealed a difference between the three priors for preference, a difference between control + positive priors vs. negative prior for competence and injunctive norms, and no differences for descriptive norms, regret and joy.

## One-Way ANOVA

| *One-Way ANOVA (Fisher's)* |
| --- |
|  |  |  |  |  |  |  |  |  |  |
|  | **F** | **df1** | **df2** | **p** |
| Preference |  | 24.245 |  | 2 |  | 450 |  | < .001 |  |
| Competence |  | 17.608 |  | 2 |  | 448 |  | < .001 |  |
| Descriptive norms |  | 0.476 |  | 2 |  | 450 |  | 0.621 |  |
| Injunctive norms |  | 17.547 |  | 2 |  | 450 |  | < .001 |  |
| Regret |  | 1.799 |  | 2 |  | 451 |  | 0.167 |  |
| Joy |  | 2.115 |  | 2 |  | 449 |  | 0.122 |  |
|  |

##  Post Hoc Tests

| Tukey Post-Hoc Test – preference |
| --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **1** | **2** | **3** |
| 1 |  | Mean difference |  | — |  | 0.762 | \*\* | -0.957 | \*\*\* |
|   |  | t-value |  | — |  | 3.04 |  | -3.74 |  |
|   |  | df |  | — |  | 450 |  | 450 |  |
|   |  | p-value |  | — |  | 0.007 |  | < .001 |  |
| 2 |  | Mean difference |  |   |  | — |  | -1.719 | \*\*\* |
|   |  | t-value |  |   |  | — |  | -6.96 |  |
|   |  | df |  |   |  | — |  | 450 |  |
|   |  | p-value |  |   |  | — |  | < .001 |  |
| 3 |  | Mean difference |  |   |  |   |  | — |  |
|   |  | t-value |  |   |  |   |  | — |  |
|   |  | df |  |   |  |   |  | — |  |
|   |  | p-value |  |   |  |   |  | — |  |
| Note. \* p < .05, \*\* p < .01, \*\*\* p < .001 |
|  |

| Tukey Post-Hoc Test – competence |
| --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **1** | **2** | **3** |
| 1 |  | Mean difference |  | — |  | 0.309 |  | -0.888 | \*\*\* |
|   |  | t-value |  | — |  | 1.46 |  | -4.12 |  |
|   |  | df |  | — |  | 448 |  | 448 |  |
|   |  | p-value |  | — |  | 0.309 |  | < .001 |  |
| 2 |  | Mean difference |  |   |  | — |  | -1.197 | \*\*\* |
|   |  | t-value |  |   |  | — |  | -5.76 |  |
|   |  | df |  |   |  | — |  | 448 |  |
|   |  | p-value |  |   |  | — |  | < .001 |  |
| 3 |  | Mean difference |  |   |  |   |  | — |  |
|   |  | t-value |  |   |  |   |  | — |  |
|   |  | df |  |   |  |   |  | — |  |
|   |  | p-value |  |   |  |   |  | — |  |
| Note. \* p < .05, \*\* p < .01, \*\*\* p < .001 |
|  |

| Tukey Post-Hoc Test – descriptive norms |
| --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **1** | **2** | **3** |
| 1 |  | Mean difference |  | — |  | 0.270 |  | 0.2185 |  |
|   |  | t-value |  | — |  | 0.931 |  | 0.737 |  |
|   |  | df |  | — |  | 450 |  | 450 |  |
|   |  | p-value |  | — |  | 0.621 |  | 0.741 |  |
| 2 |  | Mean difference |  |   |  | — |  | -0.0516 |  |
|   |  | t-value |  |   |  | — |  | -0.181 |  |
|   |  | df |  |   |  | — |  | 450 |  |
|   |  | p-value |  |   |  | — |  | 0.982 |  |
| 3 |  | Mean difference |  |   |  |   |  | — |  |
|   |  | t-value |  |   |  |   |  | — |  |
|   |  | df |  |   |  |   |  | — |  |
|   |  | p-value |  |   |  |   |  | — |  |
| Note. \* p < .05, \*\* p < .01, \*\*\* p < .001 |
|  |

| Tukey Post-Hoc Test – Injunctive |
| --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **1** | **2** | **3** |
| 1 |  | Mean difference |  | — |  | -0.718 |  | 1.17 | \*\* |
|   |  | t-value |  | — |  | -2.21 |  | 3.52 |  |
|   |  | df |  | — |  | 450 |  | 450 |  |
|   |  | p-value |  | — |  | 0.071 |  | 0.001 |  |
| 2 |  | Mean difference |  |   |  | — |  | 1.89 | \*\*\* |
|   |  | t-value |  |   |  | — |  | 5.89 |  |
|   |  | df |  |   |  | — |  | 450 |  |
|   |  | p-value |  |   |  | — |  | < .001 |  |
| 3 |  | Mean difference |  |   |  |   |  | — |  |
|   |  | t-value |  |   |  |   |  | — |  |
|   |  | df |  |   |  |   |  | — |  |
|   |  | p-value |  |   |  |   |  | — |  |
| Note. \* p < .05, \*\* p < .01, \*\*\* p < .001 |
|  |

| Tukey Post-Hoc Test – regret |
| --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **1** | **2** | **3** |
| 1 |  | Mean difference |  | — |  | -0.279 |  | 0.276 |  |
|   |  | t-value |  | — |  | -0.940 |  | 0.913 |  |
|   |  | df |  | — |  | 451 |  | 451 |  |
|   |  | p-value |  | — |  | 0.615 |  | 0.632 |  |
| 2 |  | Mean difference |  |   |  | — |  | 0.555 |  |
|   |  | t-value |  |   |  | — |  | 1.896 |  |
|   |  | df |  |   |  | — |  | 451 |  |
|   |  | p-value |  |   |  | — |  | 0.141 |  |
| 3 |  | Mean difference |  |   |  |   |  | — |  |
|   |  | t-value |  |   |  |   |  | — |  |
|   |  | df |  |   |  |   |  | — |  |
|   |  | p-value |  |   |  |   |  | — |  |
| Note. \* p < .05, \*\* p < .01, \*\*\* p < .001 |
|  |

| Tukey Post-Hoc Test – joy |
| --- |
|  |  |  |  |  |  |  |  |  |  |
|  |  | **1** | **2** | **3** |
| 1 |  | Mean difference |  | — |  | -0.0101 |  | -0.651 |  |
|   |  | t-value |  | — |  | -0.0280 |  | -1.76 |  |
|   |  | df |  | — |  | 449 |  | 449 |  |
|   |  | p-value |  | — |  | 1.000 |  | 0.183 |  |
| 2 |  | Mean difference |  |   |  | — |  | -0.641 |  |
|   |  | t-value |  |   |  | — |  | -1.80 |  |
|   |  | df |  |   |  | — |  | 449 |  |
|   |  | p-value |  |   |  | — |  | 0.170 |  |
| 3 |  | Mean difference |  |   |  |   |  | — |  |
|   |  | t-value |  |   |  |   |  | — |  |
|   |  | df |  |   |  |   |  | — |  |
|   |  | p-value |  |   |  |   |  | — |  |
| Note. \* p < .05, \*\* p < .01, \*\*\* p < .001 |
|  |

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