Exploring the Potential of Using a Text-Based Game to Inform Simulation Models of Risky

Migration Decisions

Supplementary Materials

Method Supplement S1

Sampling Design

For both the pilot study and the main study, we randomly chose what condition (agency or no-agency) to run first and invited all the migrants to participate. Once our desired sample size took part, we closed that condition and ran the remaining one, excluding migrants who had previously participated. We followed the same procedure for non-migrants. This sampling design deviated from the preregistration.

For the main study, we compared age, gender, education, marital status, and income between the following groups:

- Migrants vs. non-migrants in the agency condition.

- Migrants vs. non-migrants in the no-agency condition.

- Migrants in the agency condition vs. migrants in the no-agency condition.

- Non-migrants in the agency condition vs. non-migrants in the no-agency condition.

None of the comparisons were statistically significant. This analysis was not preregistered.

Pilot Study

The pilot study included 46 females and 46 males. There were 14 participants between the ages of 18–24, 29 between 25–34, 20 between 35–44, 18 between 45–54, nine between 55–64, and two that were 65 or over.

After the pilot study, the following two minor formatting changes were made: First, the background of the pre-screener was changed from dark grey to black to match that of the experiment. Second, in the combined information sheet and consent form, a closed bracket and a full stop were invisible due to their font being black instead of the intended dark grey, so this was corrected.

Main Study

The main study included 280 females, 283 males, and five individuals who identified as other. There were 46 participants between the ages of 18–24, 191 between 25–34, 163 between 35–44, 71 between 45–54, 79 between 55–64, and 18 that were 65 or over.

Procedure

The response options for each demographic question were the following: age (*18–24*, *25–34*, *35–44*, *45–54*, *55–64*, or *65 or over*), gender (*male*, *female*, or *other*), highest level of education (*less than high school*, *high school*, *bachelor's degree*, *master's degree*, or *doctoral degree*), marital status (*married*, *divorced*, *separated*, *widowed*, or *never married*), annual household income (*less than £25,000*, *£25,001–£50,000*, *£50,001–£100,000*, *£100,001–£200,000*, or *more than £200,000*), whether they had ever migrated to a new country before (*yes* or *no*), and, if they replied *yes* to the preceding question, whether they were old enough to remember their migration journey (*yes* or *no*).

Table S1

ANOVA 3 Post Hoc t-Tests

Post hoc *t*-test	M_1	M_2	df	t	p	d	BF_{10}
Post hoc *t*-test 1							
agency - no-agency	.21	.25	555	-2.07	.039	-0.12	0.01
Post hoc *t*-test 2							
female - male	.21	.25	555	-1.99	.047	-0.11	0.05

Notes. ANOVA 1: dependent variable = participants' responses (0 [non-risky] or 1 [risky]); factors = condition (agency or no-agency), migrant status (migrants or non-migrants), and migration decision (first, second, or third). ANOVA 2: the same as ANOVA 1 but with age (18–24, 25–34, 35–44, 45–54, 55–64, or 65 or over) added as a factor. ANOVA 3: the same as ANOVA 1 but with gender (male or female) added as a factor. Post hoc *t*-test 1 tested the pairwise comparisons between each condition (agency or no-agency) from ANOVA 3. Post hoc *t*-test 2 tested the pairwise comparisons between each gender (male or female) from ANOVA 3. All post hoc *t*-tests were based on estimated marginal means. The results from post hoc *t*-tests 1 and 2 may be misleading due to the significant interaction between migrant status, gender, and decision in ANOVA 3.

Figure S1

Three-Way Interaction Effect Between Migrant Status, Gender, and Migration Decision on Risk-

Taking
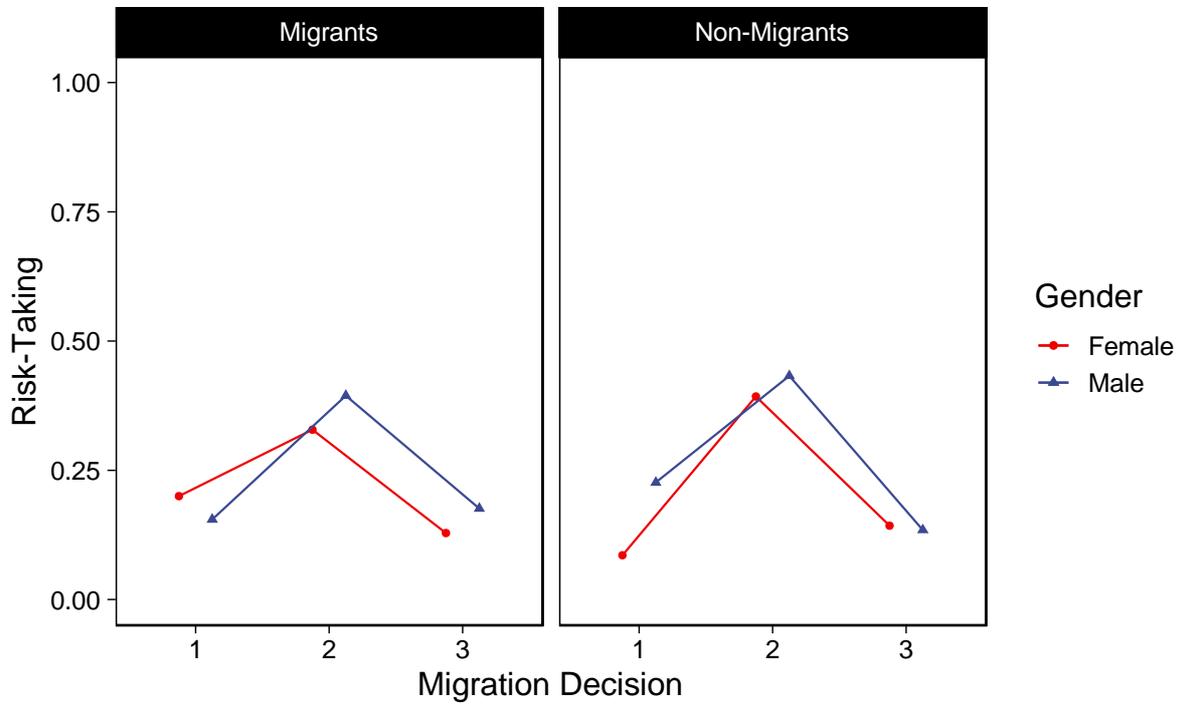
Note. The values on the y-axis represent estimated marginal means.