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Reproducibility and Robustness Replicability of Gsottbauer et al. (2022)*

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Abstract

The relationship between social status and ethical behavior is a widely debated topic in research. In their study, Gsottbauer et al. (2022b) investigate whether higher socio-economic status is linked to lower ethical behavior, using data from two large survey experiments involving over 11,000 participants. In this replication project, we test the computational reproducibility and robustness to the replication of their study, using the provided data and code from the replication package (Gsottbauer et al., 2022a). Nearly all the figures and tables were reproducible — in the process of reproducing the results, some minor rounding or transcription errors were discovered. In testing the robustness replicability, we find consistent results for our extensions. The effort for the replication was manageable, even though the authors treat categorical variables as numeric, or use manually-coded interaction variables (i.e. in regression models).

In summary, we applaud the transparency of Gsottbauer et al. (2022b) in facilitating replications, and make some general recommendations for further improvements for data-analysis studies.

Keywords: Replication, Experiment, information provision, inequality, field experiment

JEL:

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1. Introduction

This paper serves as a replication of Gsottbauer, Elisabeth, Muller, D., Muller, S., Trautmann, S. T., and Zudenkova, G. Social class and (UN)ethical behaviour: causal and correlational evidence. *The Economic Journal*, 2392–2411. 2022b

2. Details of the Original Study

2.1. Motivation

Is there a correlation between socio-economic status and ethical behavior? This idea has been widely publicized by research, which suggests that individuals of higher socio-economic status may be less ethical than those of lower status. However, this paper presents evidence to contradict this claim. The study is based on data from two large survey experiments with more than 11,000 participants. It uses priming techniques as an intervention to invoke perceptions of higher or lower socio-economic status within subjects, and then measures ethical behavior in a game. In addition, a smaller survey (n=807) focusing on participants' beliefs is used to determine the extent to which people's self-image affects ethical behavior. By analyzing both demographic data and the results of the priming/belief experiments, the study concludes that higher social status does not necessarily correspond to lower ethical behavior.

2.2. Procedures

2.2.1. Tasks and Methods

Allocation. Within each income bracket (and within those who did not report income), participants were randomly allocated to one of two priming conditions (rich or poor).

'Priming' task. This task had the form of a questionnaire regarding the lives of 'the poor' or 'the rich', and was concluded by the participants' self assessment of their social position illustrated by 10 rungs of a social ladder representing society (from 1 indicating the lowest to 10 indicating the highest status), as a manipulation check.

Measurement of unethical behavior. The study used a game where participants memorize a letter and then the computer randomly draws one. Participants reveal their memorized letter after seeing the computer's letter, and pay-offs are given if the revealed letter matches the computer letter. If not, pay-offs decrease for each step away from the computer letter. Since the participants' selections of which letter to memorize cannot be

verified, there is an opportunity to 'cheat' — be untruthful for the sake of a larger pay-off. The expected pay-offs are €10. Thus, population-level average pay-offs above that are indicative of cheating, but be untraceable to actions at an individual level.

2.2.2. Survey 1

The study makes use of the German Internet Panel (GIP), which is an online survey conducted bimonthly (every 2 months) with a representative probability sample of the German population (Blom et al., 2015). The study used data from Wave 39 (Blom et al., 2020), which took place in January 2019 and had 4,932 participants, of which 4,785 finished the experiment. This data was combined with information from earlier waves to update socio-demographic information. The study involved incentivized choices, with participants receiving payment for their decisions. Personal net income was recorded in 15 different brackets, and the sample was split at a net monthly income of €2,000 to define the real-rich and real-poor groups.

Results Survey 1. The study's priming manipulation was successful, as participants who were primed to feel rich reported a higher subjective social status compared to those primed to feel poor. This finding held true for both high and low-income groups. The study also found that subjective status increases monotonically with actual income. Therefore, the priming manipulation succeeded in changing participants' subjective assessment of their social status, regardless of their actual social status.

The payments received by individuals indicate significant unethical behavior as a group: The expected payment amount, provided individuals report their selected letter honestly, is €10, with a uniform distribution between €0 and €20. However, the fraction of payments above €12 is higher than the expectation, while the fraction of payments below €12 is lower than the expectation. Statistical tests confirm this conclusion, as the data does not fit a uniform distribution and binomial probability tests reject the hypothesis of equal payment frequencies. The distribution of payments also suggests that not all participants cheat to the fullest extent.

Most importantly, when participants are divided into subgroups for their priming condition and actual income level, all groups report significantly larger payments than expected, except for the group of participants who are both primed rich and belong to the richer group.

2.2.3. Survey 2

In May 2021, a second experiment was conducted in partnership with online sample provider 'Cint'. Two changes were made from the first survey: a neutral priming condition

was added, and high-income groups were oversampled. This oversampling was done to obtain a larger sample of households with high socio-economic status while still maintaining balance along age and gender to be representative of the German population. There were 6,243 people who answered the survey, and they were given a flat payment and the chance to get an extra payment added to their accounts if they made certain choices. The sample was split at a net monthly income of €2,000 to define the real-rich and real-poor groups, with a split of 55:45. The allocation in survey 2 was done along the same lines as in survey 1, with the addition of one priming condition (neutral). Respondents were exposed to different statements about weather, a neutral topic, while keeping the survey length similar to the two other groups.

Results Survey 2. Similar to survey 1, there were no significant differences in the tendencies between people of high and low social status. The participants who were primed to feel rich reported a higher subjective social status compared to those primed to feel poor across income groups. This extended to cheating behavior as well. However, conditional on cheating there is increased incidence of full cheating (20 Euros) instead of partial cheating as observed in Survey 1.

2.2.4. Beliefs Survey

People's self-image is important and the lack of a positive relationship between status and cheating may be due to the propensity of people to maintain their self-image in the presence of cheating. It may also be because of an evolution of beliefs because of other participants' and the society's perception of their actions. To test this hypothesis, the authors conduct an additional online survey on an independent sample of 807 individuals. The methodology for gathering background variables remained consistent with previous surveys. However, the priming task and mind game were replaced with a description of the mind game, followed by inquiries regarding participants' beliefs about the behavior of others and their moral stance on cheating in the game. Participants did not receive any incentives for sharing their beliefs, but were given a standardized compensation for taking part in the survey.

Results Beliefs Survey. The study found that cheating in the mind game is considered unethical but not to a prohibitive degree. There were no differences in moral assessment between the rich and the poor. However, high-income participants were more likely to believe that others cheat and also believed that people cheat to a larger degree than low-income participants. The evidence suggests that cheating in the mind game was not too

extreme from an ethical perspective, and differences in moral judgement between the rich and the poor did not lead to an increased inclination to behave unethically by the rich.

3. Reproducibility

In reproducing the summary tables, we observed some minor differences that we believe are attributable to rounding errors. For example, in Gsottbauer et al. (2022b), table 2 presents summary statistics for several variables in the different treatment groups of survey 2. Here, the mean "Religiousness" value for the "Primed-rich" group is reported as 3.9. Yet, in our reproduction (see Table 2), the value is reported as 3.8. When we perform the calculation to more precision, it is revealed as 3.848456. This suggests that an initial calculation rounded to 2 digits beyond the decimal point, 3.85, after which a subsequent rounding to 1 digit beyond the decimal point produced 3.9.

A similar rounding issue arises in Table 9 of the paper.

We also identified some examples of mislabeling. For example, in our reproduction of the original Figure A3.2 (see Figure A6), we produced a nearly identical figure, but with the labels swapped for "primed rich" and "primed poor". To check the labeling, we selected a subset of the data with income of €17,500 (see Table A7). Here, 'q37' and 'q38' are the income questions, whose values of '15' and '3', respectively, correspond to the income level of €17,500. As there are only a few individuals with this income level, the average payoffs can be computed, and match the data points in our reproduction Figure A6.

A larger issue appeared with colums 2 and 4 of the replication of Table 5 and Table 8 in the paper (here Table 3 and Table 5 respectively). This is due to the way the authors do not differentiate between continuous and categorical variables in their regressions. Specifically, they treat categorical variables as continuous variables (see Section 4 for details). However, this changes the coefficients of *all* coefficients in these estimation models. Some of the coefficients even change (in some cases decrease) their level of significance. Nevertheless, the results stay qualitatively the same and the error appears to be unintentional.

4. Replication

We evaluate the data as the authors with a multivariate OLS regression and include the same dependent and independent variables in the regression models, as these have been pre-specified by the pre-analysis plan of the authors (survey 1 was pre-regsitered

at aspredicted.org as “The Causal Effect of Social Class on Ethical Behavior (#16459)”, November 14, 2018. Survey 2 was pre-registered at aspredicted.org as “Social Class and Ethical Behavior (#64762)”, April 30, 2021).

The main issue we find in the coding is that the authors do not impute missing values in their variables and take up missing indicators. This leads to a change in the sample in the regressions of Table 5 Columns 2 and 4. Consequently, while the authors report these regressions with 2,933 observations, we conduct them with 3,014.

Due to this change in sample population, we have different estimates for the coefficients in Table 5 Columns 2 and 4 (see Table 3). Qualitatively, the coefficients result in a similar interpretation. However the parameters change for all variables estimated in these models.

In the following case even significance level of an interaction of interest changed:

- The parameter for for the "Primed-rich x Real-poor" interaction changed from 0.749 to 0.649 and the significance of the effect decreased from a 5%-level to a 10%-level, as indicated by the provided p-value of Table 3.

Furthermore, if we intend to reconstruct the table without missing imputation, we receive the same sample as the authors, but still find inconsistencies in the results of Columns 2 and 4 (Columns 1 and 3 replicate perfectly, see Table 4). The significance of some parameters of interest changes slightly in the reproduction of the table without missing imputation too. However, the qualitative interpretation of the coefficients again stays the same. We attribute this difference, not to malintent, but due to the following coding issue.

The authors do not indicate the variables to be indicator variables, while all treatment and control variables in their estimations should be seen as such (with an "i." in front of the variable in Stata). Basically, we argue to take up each category of the control and treatment variables as an own indicator variable, while the authors treat the variables as continuous. However, all variables are measured in categories, even ‘age’ and ‘income’ and especially ‘gender’, ‘east’, and ‘education’, and should in our point of view be treated as categorical variables in the regressions. This issue applies to Tables 5 and 8 in the main paper and Tables A 2.1 and A 2.2 in the appendix. Therefore, our regression model in Stata including control variables (Tables 5 and 8, models 2 and 4 respectively) reads as follows: $payment\ i.treatment\#\#i.real\_rich2\ i.male\ i.age\ i.edu\ i.east, robust$. Yet, we can reproduce the table as presented in the paper, if we do not include the described model specification.

Lastly, the authors create interaction variables by hand (i.e. generating a new indicator variable for each treatment group times the real-rich indicator that is equal to "primed

treatment-group indicator" ∗ the "real-rich indicator") and regress the generated variables on the outcome "payment" in Table 5 and Table 8 of the paper. This changes the baseline category between models 1, 2 and models 3 and 4 of both tables. We would have preferred to take up a fully interacted model (indicated by a "##" in Stata) to avoid this change in baseline category and the manual construction of the interacted variables. While this is more a violation of coding convention than of a danger to the replicability of the study, this made the replication of tables 5 and 8 more difficult than necessary.

Finally, one minor issue — which is not wrong but just an inconsistency — is that the authors report estimates and standard errors for control variables with two decimals, but for variables of interest with three decimals.

4.1. Extension

We proceeded to code different cut-offs for the "Real-rich (dummy)" which is used as an indicator for whether the person is rich in reality and is coded as 1 if the person has an income higher than €2,000. However, the authors only have data in income categories, so the variable is efficiently coded as if persons are in an income category larger than 5. We re-code this value to be larger than €2,500 or larger than €1,500, as these are the values associated with income categories 4 and 6. The results stay the same after the modification of this group. Given the median income per person of around €2,100 in Germany (see IW Data), these different cutoff values seemed reasonable to explore. We were also limited in the scope of further extensions that we could conduct, as the authors evaluate the results of two specific experiments and there is little data to explore. Furthermore, as the authors already included a full set of control variables and a different specification of the regression models did not seem logical. Also, the authors pre-registered their set of control variables, which —as intended— limits the scope of possible model specifications.

5. Conclusion

Broadly speaking, we were able to reproduce the results of Gsottbauer et al. (2022b), using the data and code shared in the replication package Gsottbauer et al. (2022a). A few minor issues were discovered during the replication process, which do not substantially alter the interpretation of the results of Gsottbauer et al. (2022b), but which are indicative of common issues in data analyses:

- Rounding Errors - As reported in the Reproducibility section, computing intermediate results rounded to one level of precision, and then rounding to another level of precision in a manuscript or other output can result in errors.
- Transcription Errors - As reported in the Reproducibility section, some figures and tables have swapped labels. This may be the result of switching between software for producing analyses and figures, or assigning labels manually.
- Analysis Issues - As reported in the Replication section, some analyses do not fully impute variables, treat categorical variables as numeric, or use manually-coded interaction variables. These can have an effect on the computed effect sizes, which were fortunately minor in this situation.

Thus, we have the following recommendations:

- Embrace 'Literate Programming' (Knuth, 1984) - Modern computing tools (e.g. Quarto, Rmarkdown, Jupyter Notebook) allow researchers to embed the results of data analysis alongside prose. In addition, there are often templates available to facilitate the exporting of results into formats suitable for journal submission. This reduces or eliminates the possibility for rounding or transcription errors, and also showcases how results are generated from the stated methods and inserted into a research publication. The source code can then be shared as a supplemental document for transparency. For example, some of the figures and tables are produced by an Rmarkdown document (source |output) and exported into image and tex files that are embedded in this report.
- Streamline Data Cleaning - In the process of working with the replication package (Gsottbauer et al., 2022a), we observed that the coding of the raw data was done in both the Rmarkdown and Stata script files, and for both survey datasets. It would be ideal to have a single script to clean the data and to produce cleaned data files with variable names as similar as possible. This will reduce duplication of effort and code, which is a common source of error. Furthermore, sharing the cleaned data file will also reduce the burden for checking or replicating the analysis.
- Include Robustness Checks in Analyses - For analyses that rely on categorization of data, including supplemental analyses that employ different categorizations is an important step in interpreting the robustness or generalizability of an effect. Steegen et al. (2016) describe a "multiverse analysis" approach that could be performed.

Although a thorough multiverse analysis may not be necessary, applying this approach to the main effects of interest would lend strength to any interpretations by researchers.

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URL: *https://doi.org/10.1177/1745691616658637*

6. Figures

Figure 1: Histogram of Individual Payments

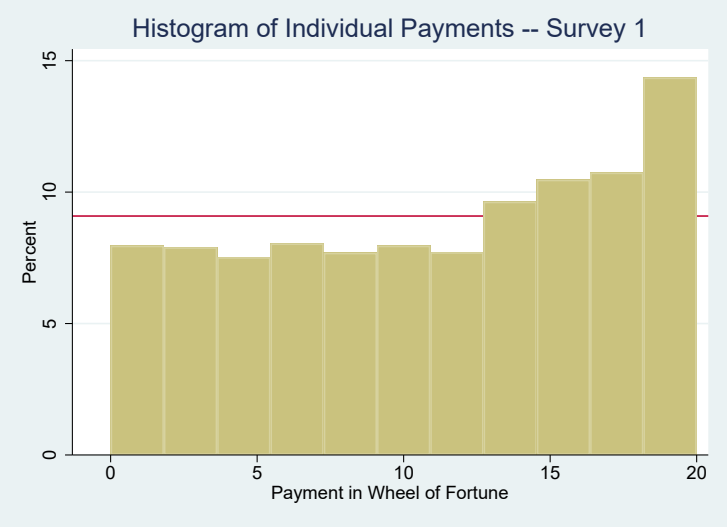


Figure 2: Figure 3

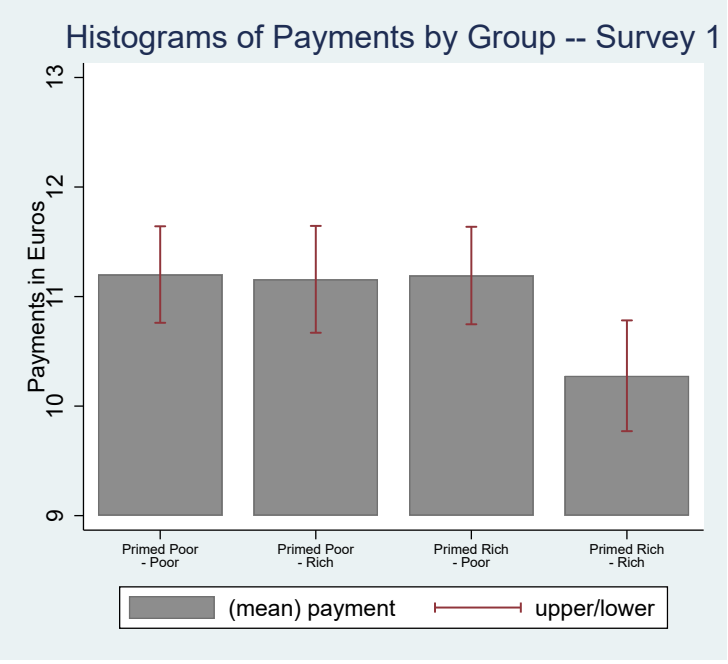


Figure 3: Figure 4

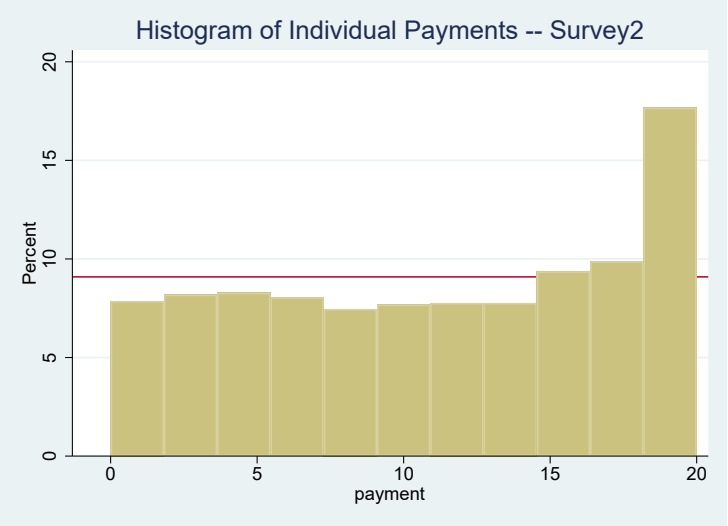
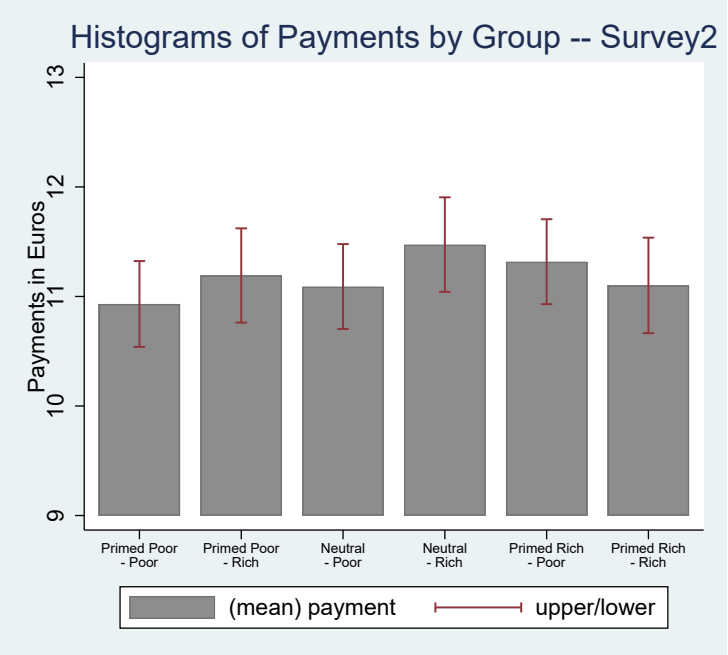


Figure 4: Figure 5



7. Tables

Table 1: Summary Statistics for Survey 1

	primed rich			primed poor		
variable	obs	mean	sd	obs.	mean.	sd.
income	1509	2075.3	1406.0	1505	2050.0	1381.5
male	2253	51.7	50.0	2254	50.8	50.0
age	2252	* 50.6	15.6	2255	49.7	15.6
edu	2268	2	1.4	2270	2.0	1.4
married	2393	* 52.8	49.9	2392	50.3	50.0
student	2393	4.4	20.6	2392	4.7	21.1
religiousness	2243	4.4	3.0	2263	4.4	3.0
east	2392	19.4	39.5	2391	19.2	39.4
leftright	1994	5.3	2.0	2014	5.2	1.9

Stars (‘*‘, ‘* *‘, ‘* * *‘) indicate significance (between the rich and poor conditions) at the (0.1, 0.05, 0.01) levels, respectively.

Table 2: Summary Statistics for Survey 2

	primed rich			primed poor			control		
variable	obs	mean	sd	obs.	mean.	sd.	obs..	mean..	sd..
income	2072	2270.9	2310.2	2098	2227	2057.6	2073	2203.9	1973.9
male	2072	† † 50.3	50.0	2098	* 47.2	49.9	2073	50.0	50.0
age	2072	47.3	15.7	2098	47.1	15.5	2073	47.1	15.8
edu	2072	* * † † 4.6	1.2	2098	4.7	1.1	2073	4.7	1.1
married	2072	† 47	49.9	2098	49.6	50.0	2073	49.2	50.0
student	2072	4.2	20.0	2098	3.9	19.3	2073	4.2	20.2
religiousness	2072	3.8	2.9	2098	4	2.9	2073	3.9	2.9
east	2072	12	32.5	2098	* * 13.6	34.3	2073	11.5	31.9
leftright	2072	* * 5.5	1.9	2098	5.4	1.9	2073	5.4	1.8

Stars (‘*‘, ‘* *‘, ‘* * *‘) indicate significance (between the rich and control OR between the poor and control conditions) at the (0.1, 0.05, 0.01) levels, respectively. Daggers (‘†‘, ‘† †‘, ‘† † †‘) indicate significance (between the rich and poor conditions) at the (0.1, 0.05, 0.01) levels, respectively.

Table 3: Table 5 with Missing Imputation

	(1)	(2)	(3)	(4)
Primed-rich=1	-0.396*	-0.376		
	(0.238)	(0.238)		
Real-rich (dummy)=1	-0.479**	-0.178		
	(0.240)	(0.278)		
Primed-poor			0.881**	0.890**
			(0.358)	(0.359)
Real-poor			0.915***	0.649*
			(0.343)	(0.374)
Primed-poor × Real-poor			-0.872*	-0.924*
			(0.479)	(0.480)
Controls	No	Yes	No	Yes
Primed-rich x Real-poor			0.915	0.649
Primed-rich x Real-poor p-Value			0.008	0.083
Primed-poor x Real-poor			0.924	0.615
Primed-poor x Real-poor p-Value			0.007	0.097
Primed-poor x Real-rich			0.881	0.890
Primed-poor x Real-rich p-Value			0.014	0.013
N	3014	3014	3014	3014

Table 4: Table 5 without Missing Imputation

	(1)	(2)	(3)	(4)
Primed-rich=1	-0.396*	-0.376		
	(0.238)	(0.238)		
Real-rich (dummy)=1	-0.479**	-0.178		
	(0.240)	(0.278)		
Primed-poor			0.881**	0.890**
			(0.358)	(0.359)
Real-poor			0.915***	0.649*
			(0.343)	(0.374)
Primed-poor × Real-poor			-0.872*	-0.924*
			(0.479)	(0.480)
Controls	No	Yes	No	Yes
Primed-rich x Real-poor			0.915	0.649
Primed-rich x Real-poor p-Value			0.008	0.083
Primed-poor x Real-poor			0.924	0.615
Primed-poor x Real-poor p-Value			0.007	0.097
Primed-poor x Real-rich			0.881	0.890
Primed-poor x Real-rich p-Value			0.014	0.013
N	3014	3014	3014	3014

Table 5: Table 8

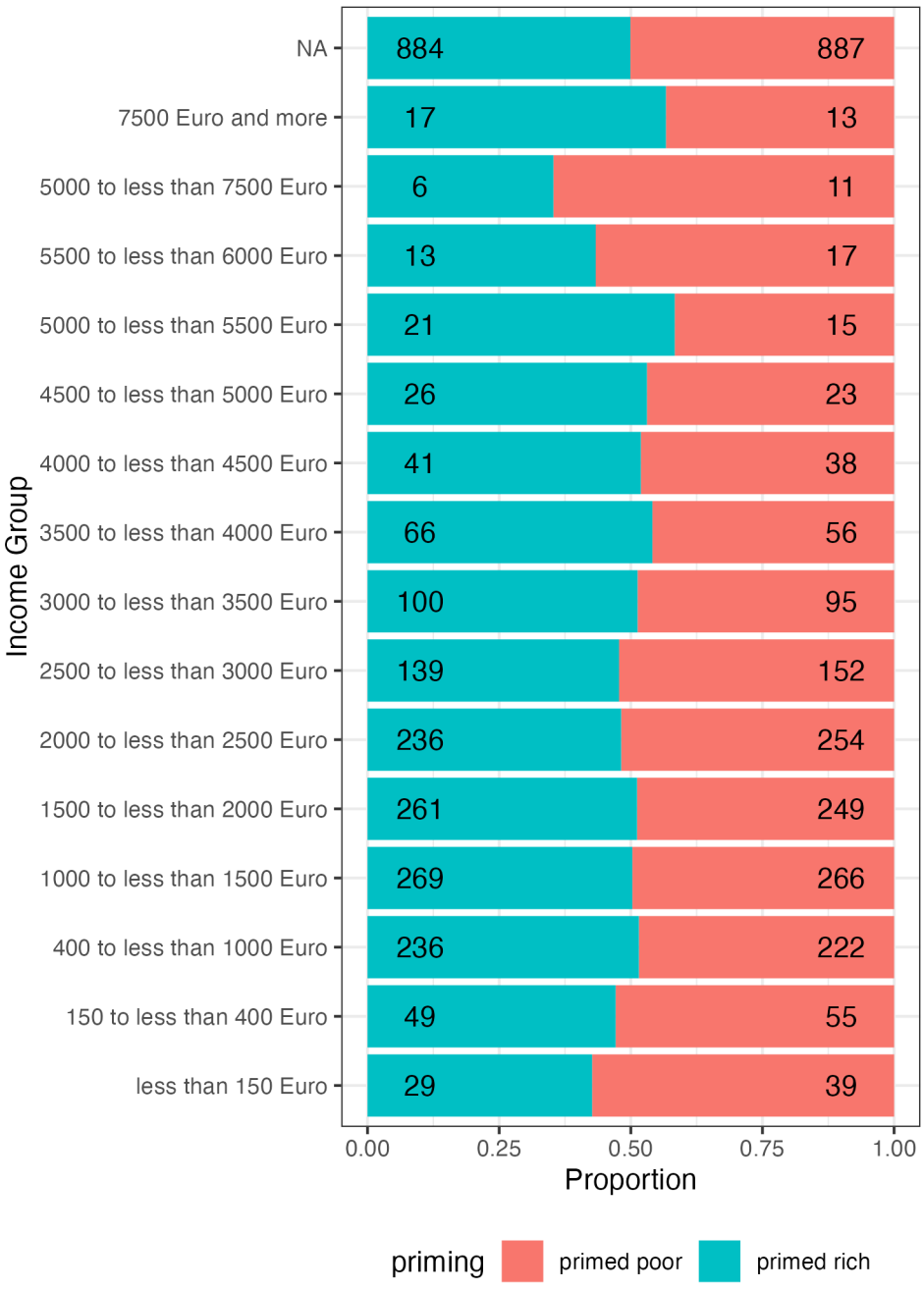
	(1)	(2)	(3)	(4)
Primed-neutral	0.213	0.212		
	(0.208)	(0.208)		
Primed-rich	0.172	0.176		
	(0.209)	(0.209)		
Real-rich	0.143	0.138		
	(0.171)	(0.182)		
Primed-poor			0.091	0.056
			(0.312)	(0.312)
Real-poor			0.217	0.188
			(0.297)	(0.304)
Primed-neutral × Real-poor			-0.600	-0.554
			(0.419)	(0.419)
Primed-poor × Real-poor			-0.477	-0.423
			(0.420)	(0.420)
Controls	No	Yes	No	Yes
Primed-poor x Real-poor			-0.169	-0.178
Primed-poor x Real-poor p-Value			0.571	0.560
Primed-poor x Real-rich			0.091	0.056
Primed-poor x Real-rich p-Value			0.771	0.856
Primed-neutral x Real-poor			-0.010	-0.025
Primed-neutral x Real-poor p-Value			0.972	0.935
Primed-neutral x Real-rich			0.373	0.341
Primed-neutral x Real-rich p-Value			0.233	0.276
Primed-rich x Real-poor			0.217	0.188
Primed-rich x Real-poor p-Value			0.466	0.535
N	6243	6243	6243	6243

Table 6: Table 9

	Full Sample	Sub Sample	
		Real rich	Real poor
Belief cheating (% of Yes) - Do you think that respondents in this decision situation potentially enter a different letter than the one they had thought of in their head in order to increase their profit from the game? [Y/N]	80.67	84.66 - p = 0.012	77.58
Belief cheating-extent (only if 'Yes' for Belief cheating) - To what extent do you think people are willing to indicate a different letter than the one they came up with in order to increase their profit?[1–7: very low extent–very high extent]	4.83 (1.59)	4.99 (1.55) - p = 0.012	4.69 (1.61)
Belief cheating unethical - Do you think it is morally questionable to lie in this situation, that is, to indicate a different letter than the letter one came up with in order to increase one's profit? [1–7: not unethical–very unethical]	4.56 (1.81)	4.49 (1.75) - p = 0.285	4.61 (1.84)

Appendix A. Appendix Figures

Figure A1: Randomization of Treatments by Income Group (Survey 1)



The labels appear reversed from the original Figure A3.2 of the appendix. Let's check with the raw values for the income == 17,500 group, see Table A7.

Figure A2: Randomization of Treatments by Income Group (Survey 2)

Figure A3: Manipulation Check (y-axis) vs Income, grouped by "Primed-Rich" and "Primed-Poor" (Survey 1)

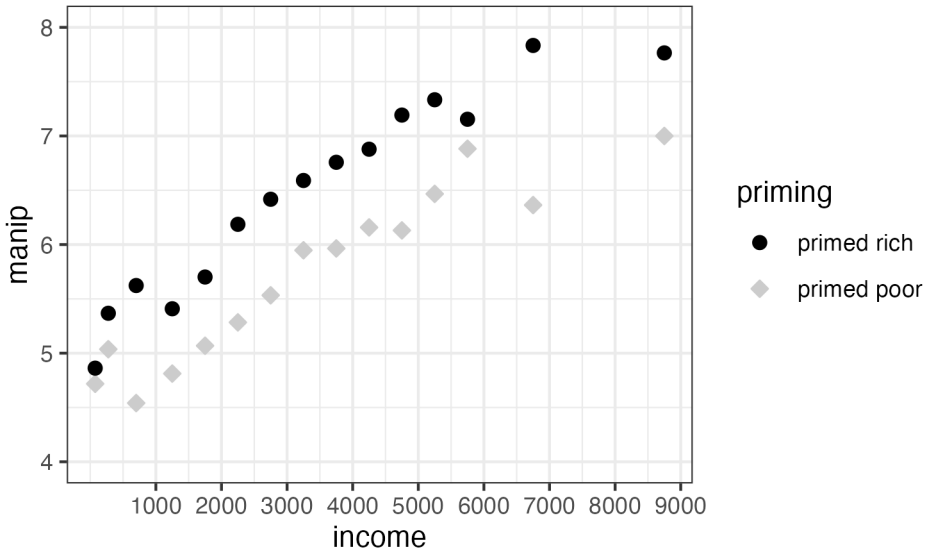


Figure A4: Manipulation Check (y-axis) vs Income, grouped by "Primed-Rich" and "Primed-Poor" (Survey 2)

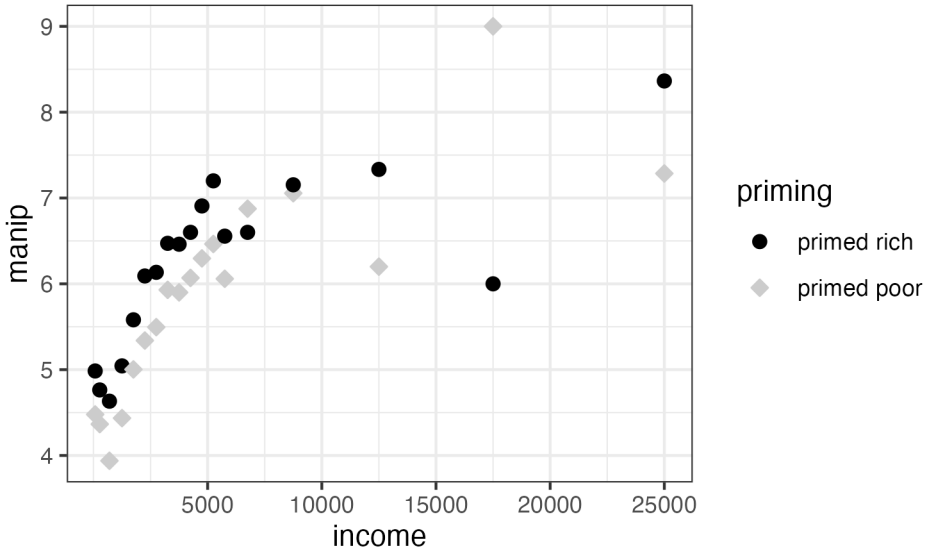


Figure A5: Payments vs. Income, grouped by "Primed-Rich" and "Primed-Poor" (Survey 1)

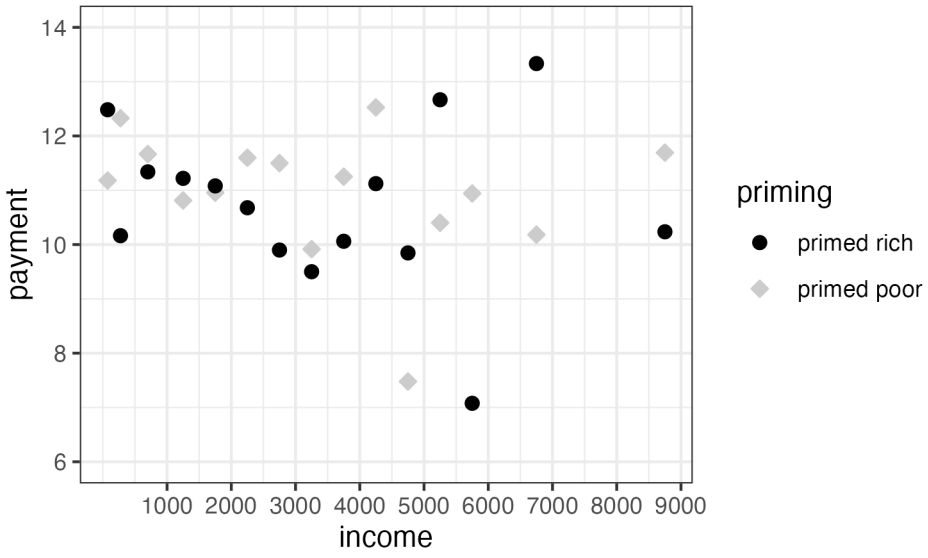


Figure A6: Payments vs. Income, grouped by "Primed-Rich" and "Primed-Poor" (Survey 2)

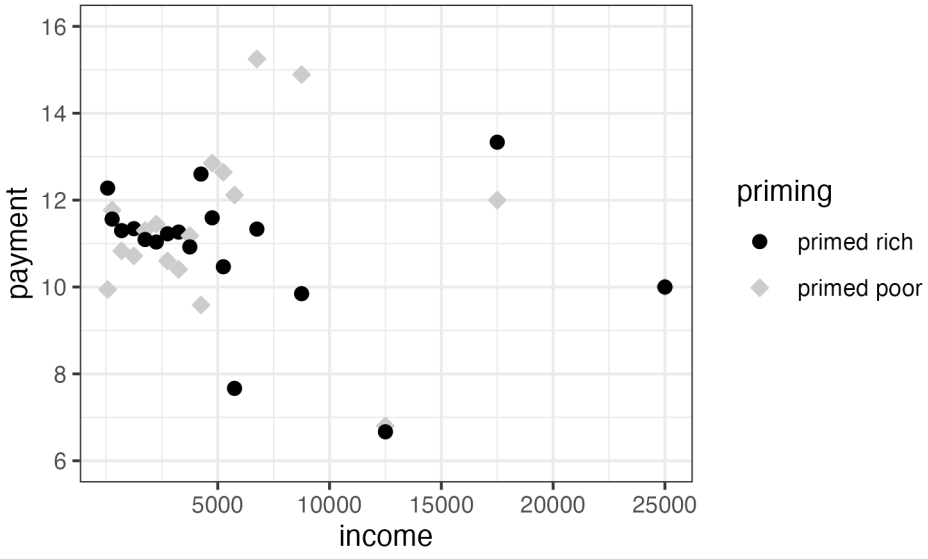


Figure A7: Payments vs. Age, grouped by "Primed-Rich" and "Primed-Poor" (Survey 1)

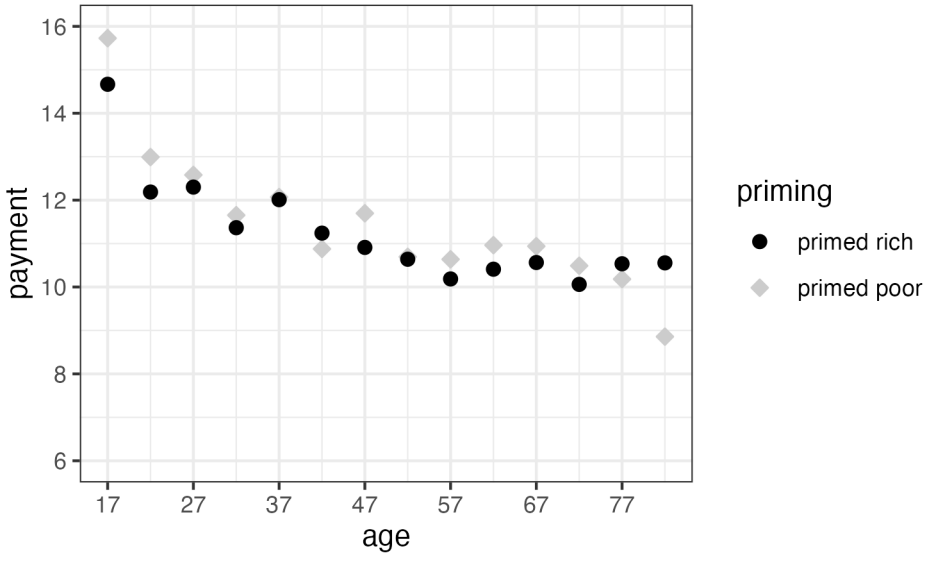


Figure A8: Payments vs. Age, grouped by "Primed-Rich" and "Primed-Poor" (Survey 2)

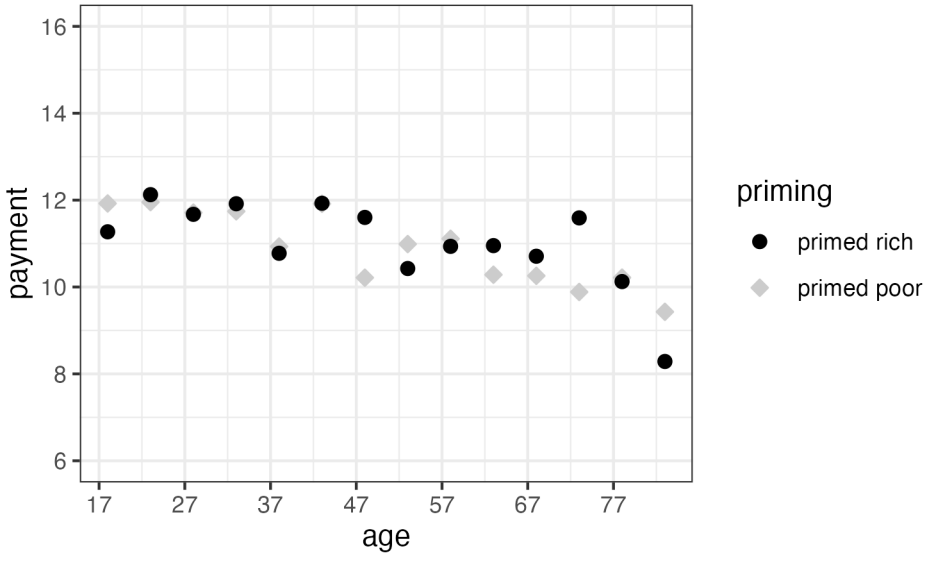


Figure A9: Payments vs. Education, grouped by "Primed-Rich" and "Primed-Poor" (Survey 1)

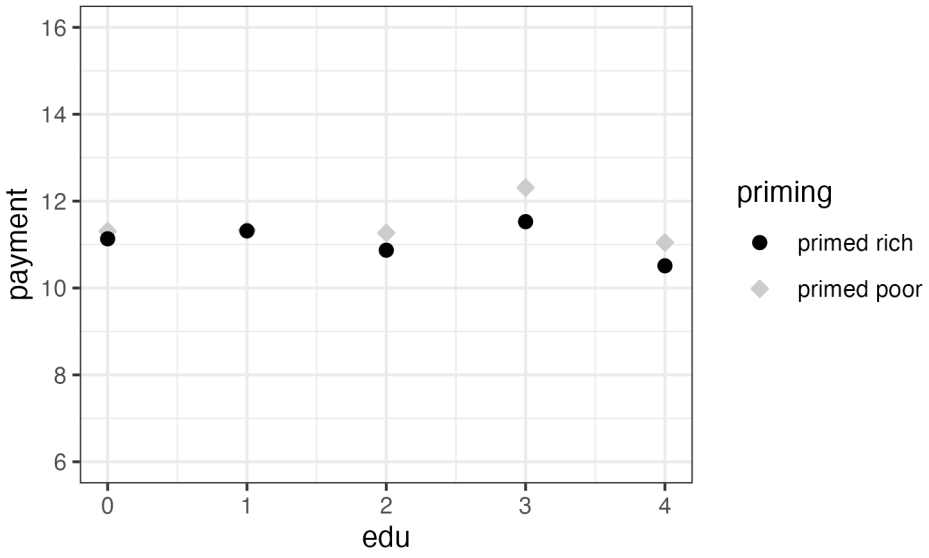
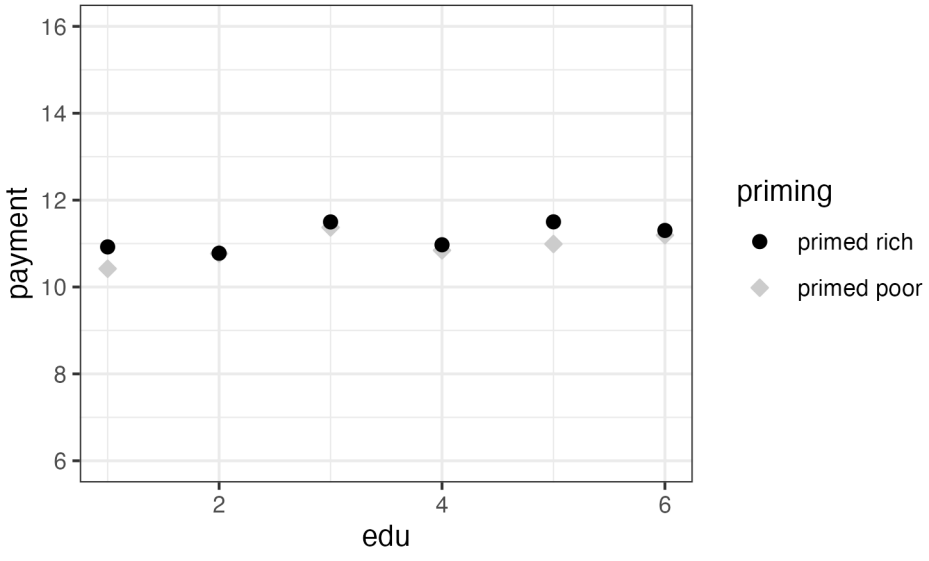


Figure A10: Payments vs. Education, grouped by "Primed-Rich" and "Primed-Poor" (Survey 2)



Appendix B. Appendix Tables

Table A1: Manipulation check: Survey 1

	Real	*Real − rich*	*All*
PrimedPoor	4.83	$5.69^{\dagger\dagger\dagger}$	5.27
	$(N = 831)$	$(N = 674)$	$(N = 2392)$
PrimedRich	5.54^{***}	$6.54^{***,\dagger\dagger\dagger}$	6.04^{***}
	$(N = 844)$	$(N = 665)$	$(N = 2393)$
All	5.19	$6.11^{\dagger\dagger\dagger}$	5.65
	$(N = 1675)$	$(N = 1339)$	$(N = 4785)$

Table A2: Payments in Euro: Survey 1

	Real	*Real − rich*	*All*
PrimedPoor	11.2	11.16	11.28
	$(N = 831)$	$(N = 674)$	$(N = 2392)$
PrimedRich	11.19	$10.28^{**,\dagger\dagger\dagger}$	10.93^{*}
	$(N = 844)$	$(N = 665)$	$(N = 2393)$
All	11.2	$10.72^{\dagger\dagger}$	11.11
	$(N = 1675)$	$(N = 1339)$	$(N = 4785)$

Table A3: Manipulation check: Survey 2

	Real	*Real − rich*	*All*
PrimedPoor	4.48	$5.75^{\dagger\dagger\dagger}$	5.05
	$(N = 1153)$	$(N = 945)$	$(N = 2098)$
Neutral	5.53	6.57	5.99
	$(N = 1150)$	$(N = 923)$	$(N = 2073)$
PrimedRich	5.08^{***}	$6.38^{***,\dagger\dagger\dagger}$	5.67^{***}
	$(N = 1140)$	$(N - 932)$	$(N = 2072)$
All	5.03	$6.23^{\dagger\dagger\dagger}$	5.57
	$(N = 3443)$	$(N = 2800)$	$(N = 6243)$

Table A4: Payments in Euro: Survey 2

	Real	*Real − rich*	*All*
PrimedPoor	10.93	11.19	11.05
	$(N = 1153)$	$(N = 945)$	$(N = 2098)$
Neutral	11.09	11.47	11.26
	$(N = 1150)$	$(N = 923)$	$(N = 2073)$
PrimedRich	11.32	11.1	11.22
	$(N = 1140)$	$(N - 932)$	$(N = 2072)$
All	11.11	11.25	11.18
	$(N = 3443)$	$(N = 2800)$	$(N = 6243)$

Notes: Average payment ranging from €0 to €20. Wilcoxon-Mann-Whitney tests indicate no significant differences for any pairwise comparison.

Table A5: Table A2 1

	(1)	(2)	(3)	(4)
Primed-rich=1	0.777***	0.766***		
	(0.053)	(0.052)		
Real-rich (dummy)=1	0.933***	0.871***		
	(0.052)	(0.061)		
Primed-poor			-0.859***	-0.833***
			(0.071)	(0.069)
Real-poor			-1.006***	-0.932***
			(0.071)	(0.080)
Primed-poor × Real-poor			0.148	0.121
			(0.104)	(0.102)
Controls	No	Yes	No	Yes
Primed-rich x Real-poor			-1.006	-0.932
Primed-rich x Real-poor p-Value			0.000	0.000
Primed-poor x Real-poor			-1.718	-1.645
Primed-poor x Real-poor p-Value			0.000	0.000
Primed-poor x Real-rich			-0.859	-0.833
Primed-poor x Real-rich p-Value			0.000	0.000
N	3014	3014	3014	3014

Table A6: Table A2 2

	(1)	(2)	(3)	(4)
Primed-neutral	0.948***	0.938***		
	(0.052)	(0.052)		
Primed-rich	0.613***	0.621***		
	(0.052)	(0.051)		
Real-rich	1.200***	1.128***		
	(0.042)	(0.045)		
Primed-poor			-0.624***	-0.641***
			(0.071)	(0.071)
Real-poor			-1.291***	-1.223***
			(0.073)	(0.075)
Primed-neutral × Real-poor			0.256**	0.250**
			(0.103)	(0.102)
Primed-poor × Real-poor			0.020	0.035
			(0.103)	(0.102)
Controls	No	Yes	No	Yes
Primed-poor x Real-poor			-1.896	-1.829
Primed-poor x Real-rich			-0.624	-0.641
Primed-neutral x Real-poor			-0.842	-0.795
Primed-neutral x Real-rich			0.193	0.178
Primed-rich x Real-poor			-1.291	-1.223
N	6243	6243	6243	6243

Table A7: Data Check for Figure A3.2

q37	q38	treatment	payoff
15	3	Primed_poor	16
15	3	Primed_poor	8
15	3	Primed_rich	10
15	3	Primed_rich	20
15	3	Primed_rich	10
15	3	control	16

Note that q37 and q38 are for income with codes described in the file 'Supplementary-Survey2.Rmd' from the replication package. So the 'Primed_poor' group has an average payoff of 12 and the 'Primed_rich' has an average payoff of 13.33. This matches our replication figure A6, which indeed has reversed labels from the original appendix figure A3.2.