

Abeler, Johannes; Fosgaard, Toke Reinholt; Gårn Hansen, Lars

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## The effect of the social environment during childhood on preferences in adulthood

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# IFRO Working Paper



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*Johannes Abeler*  
*Toke Reinholt Fosgaard*  
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Department of Food and Resource Economics (IFRO)

University of Copenhagen

Rolighedsvej 23

DK 1958 Frederiksberg DENMARK

<https://ifro.ku.dk/english/>

# The effect of the social environment during childhood on preferences in adulthood

Johannes Abeler, Toke Reinholt Fosgaard and Lars Garn Hansen\*

October 11, 2023

## Abstract

Preferences are key for shaping decision-making, yet it remains an open question where preferences originate from. We investigate the causal effect of the childhood social environment on adults' preferences. We utilize a natural experiment in Denmark, which randomized refugees to different neighbourhoods in the 1990s. We experimentally measure risk, time, and social preferences of adult refugees who were children at the time of arrival in Denmark. Using rich administrative register data on the entire Danish population we can measure a very broad range of aspects of the childhood social environment. We find that the randomly allocated childhood environment significantly affects adults' preferences, in particular, patience.

**Keywords:** Preference formation, natural experiment, register data

**JEL Codes:** C90, D15, D64, D81, D90, J62

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\*Abeler: University of Oxford, johannes.abeler@economics.ox.ac.uk. Fosgaard: University of Copenhagen, tf@ifro.ku.dk. Hansen: University of Copenhagen, lgh@ifro.ku.dk. We thank the Carlsberg Foundation for financial support under grant CF14-0759. We thank Thomas Epper, Ernst Fehr, Kristoffer Balle Hvidberg and Gregers Nytoft Rasmussen for sharing their data. We thank Peter André, Alexander Cappelen, Anna Pii Damm, Armin Falk, Uri Gneezy, Ingo Isphording, Hans-Martin von Gaudecker, Erik Wengström, and many others for helpful discussions. Many valuable comments were also received from numerous seminar and conference participants. Tom Schwantje, Hannah Bjørn Mackenzie and Hannah Zillesen provided outstanding research assistance. Ethical approval was obtained from the University of Oxford (ECONCIA17-18-032).

Life outcomes are unequally distributed. Differences in income, wealth, and health within a country are large and have strong effects on social welfare (e.g., Smith (1999); Currie (2009)). To understand where these differences come from, the literature has mostly focused on starting conditions and social mobility, e.g., the effect of parental income or education (e.g., Black, Devereux and Salvanes (2005)). However, outcomes are also determined by people’s own decisions. Economists usually measure individual differences in decision making and behavior using preferences and we know that preferences are critical in shaping behavior and thus long-term life outcomes. For example, patient individuals acquire more human capital, save more, and are less likely to become obese or criminal (e.g., Sunde et al. (2022); Golsteyn, Grönqvist and Lindahl (2014); Åkerlund et al. (2016)). More risk-averse individuals are less likely to be self-employed or to invest in stocks (e.g., Dohmen et al. (2011)). More prosocial individuals earn more and have higher life satisfaction (Dohmen et al. (2009)), while dishonest individuals are found to commit more petty crimes (e.g., Dai, Galeotti and Villeval (2018)). To understand the differences in behaviors and thus in life outcomes, it is therefore essential to understand how preferences are formed.

In this paper, we study the effect of the social environment during childhood on preferences in adulthood. Empirically, identifying the influence of the social environment on preferences is challenging for at least three reasons. First, the social environment is usually not randomly allocated, and establishing the causal effect of the environment is thus difficult (e.g., Manski (1993)). Second, the social environment is multidimensional, and estimating its effect requires capturing the many aspects of the social environment. Third, documenting the transmission from childhood social environment to adult preferences requires data collection, including the measurement of preferences, spanning a very long time.

In this paper, we overcome these three challenges by combining a natural experiment, register data and newly collected data on preferences. First, we rely on a natural experiment for the random allocation to neighbourhoods. In the 1990s, Denmark allocated refugee families to municipalities nationwide (Damm and Dustmann (2014)). The allocation relied only

on a handful of variables, and, conditional on these variables, allocation to the municipality was random. Most families stayed at their allocated address for many years, and we use this exogenous allocation of a refugee child to a particular neighborhood for the identification of the causal effect of the social environment. Second, we use rich administrative (register) data to measure a very broad range of aspects of the childhood social environment faced by the refugee children when they arrived, including a neighbourhood's average income, wealth, education, unemployment and crime, as well as many proxies of individual decision making, like stock market participation, charitable giving and marriage and fertility decisions. Third, we invite the refugee children, who are now mostly in their 30s, to participate in an incentivized preference elicitation. We measure participants' risk aversion, patience, altruism and honesty, using state-of-the-art experiments.

We find that the childhood social environment has a strong and highly significant effect on adult preferences. Note that we document this effect on average 26 years after the allocation to the neighborhood and on average 15 years after leaving the initially allocated neighborhood (we focus on the intention-to-treat effect). This is thus a very long-run effect. The effect is particularly large for patience. It is slightly smaller, but still very significant for honesty and altruism. The effect on risk aversion is yet smaller and not significantly different from zero.

We contribute to several literatures. First of all, we help to understand how preferences are determined. Finding the causal determinants of preferences is famously difficult because only intense and extended experiences will be strong enough to affect preferences and because such experiences are usually not randomly assigned. Moreover, a transitory change in behavior might not translate into persistent changes in preferences. We combine the random allocation of children to neighborhoods with the incentivized measure of preferences many years after the initial allocation. We can thus identify long-term changes to preferences. We already know that preferences can be transmitted from parents to children (e.g., Dohmen et al. (2012); Bauer, Chytilová and Pertold-Gebicka (2014); Almås et al. (2016); Chowd-

hury, Sutter and Zimmermann (2022)). For non-parental influences, previous studies have documented the effects of particular mentoring programs (e.g., Kosse et al. (2020); Abeler, Falk and Kosse (2021)) and of (pre-)school interventions (e.g., Cappelen et al. (2020)) on social and other preferences. Intense experiences of violence (Voors et al. (2012); Callen et al. (2014); Kim and Lee (2014); Brown et al. (2019)), natural disasters (Callen (2015)) or economic crises (Malmendier and Nagel (2011)) have also been shown to change preferences. In comparison to these papers, we study the effect of the everyday environment faced by all children, which has a potentially much larger impact on the preference distribution in the population than any one event or intervention.

We also contribute to the literature studying the effect of neighborhoods and peer groups on behavior and life outcomes (e.g., Chetty, Hendren and Katz (2016), Chetty (2022)). We add the study of preferences to this literature. The natural experiment we rely on has also been used to study the neighborhood effect on crime. Damm and Dustmann (2014) have shown that refugee children growing up in a neighborhood with many young Danish criminals are more likely to become criminals as well. Importantly, given the random allocation, any correlation between neighborhood characteristics and preferences is evidence for a causal effect of the social environment, even if the causal effect could come via different channels (Manski (1993)).

Third, by establishing the effect of neighborhoods on preferences and building on the previous evidence that preferences determine long-term outcomes, we add to the literature on social mobility and inequality (Heckman (2022)). We find that the effect on patience is particularly strong. In turn, the previous literature has documented that the effect of patience on economic outcomes is probably the strongest among all preferences considered by economists (Falk et al. (2018)).

Finally, our paper makes a methodological contribution by relying on a natural experiment for identification, then using register data to find the individuals affected by the experiment (as well as measuring the social environment in our case), and conducting tar-

geted surveys and lab experiments to collect the information needed to study the effect of the natural experiment (for related approaches see Cantoni et al. (2017) and Bagues and Roth (2023)). With the increased availability of register data, this method will be a useful complement to nationally representative surveys like the GSOEP or Understanding Society. These surveys often lack the sample size to study the effect of natural experiments that only affect a small share of the population and do not always contain the most relevant information for a particular research question, e.g., incentivized behavior measures.

## 1 Design

To understand the causal effect of the childhood social environment on adults' preferences we need to (1) randomly allocate children to social environments, (2) measure the many characteristics of this environment and (3) elicit preferences of the same individuals once they are adults. We now describe how we address these three steps.

### 1.1 Natural experiment

In the 1980s, Denmark experienced a large influx of refugees who were eligible to claim asylum and stay in Denmark. Refugee families having their asylum approved could choose where to live, and many chose to settle in the largest cities, particularly in the capital city Copenhagen. The high concentration of refugees was considered a problem for the large cities and the refugees. One concern was that refugees would not integrate into the Danish society when living in areas with too many other refugees and migrants. In addition, the affected cities had to cover the costs related to housing and supporting refugees. In 1986, the Danish government thus introduced a different process for newly arriving refugee families. Instead of allowing them to choose where to live, the new process aimed to distribute refugees evenly across the country. The process was managed by the Danish Refugee Council and applied to all refugees who arrived from eight countries (Iraq, Iran, Vietnam, Sri Lanka,



Lebanon, Ethiopia, Afghanistan and Somalia) arriving in Denmark between 1986 and 1998. The key element of this process, for the purpose of our study, is that refugee families were quasi-randomly allocated to municipality (Damm and Dustmann (2014)).

The process for refugees seeking asylum was the following: 1) When arriving in Denmark, refugees were located in Red Cross receiving camps across the country. 2) Within 10 days after receiving a positive answer to their asylum application, a refugee family was assigned to one of the 17 Danish counties and moved to a temporary housing facility in that county. The allocation to county did not take any information about the refugees into account and was purely designed to equalize the number of refugees per population across all counties. 3) In a given county, a location office of the Danish Refugee Council then allocated a refugee family to a flat or house in a municipality within the county. For this allocation, the location office only had information from a short questionnaire, with data on nationality, marital status, number of children, and the age of the adult refugees. No further information was available and no in-person meeting between refugee and the location office took place. The allocation across municipalities within a county was again proportional to population size. Conditional on flexibly controlling for the limited information provided to the location office, the assignment of refugee family to municipality is therefore random.

For the initial 18 months, refugees received social assistance and Danish-language classes. Relocation from the initially allocated address was not prohibited, but refugees were strongly encouraged to stay at least for the 18 months window. As a result, most families stayed for a long time in the initially allocated municipality. In the sample that we consider, families stay on average 11 years in the allocated municipality. The new process was successful in distributing refugees across the country and resulted in a much more equal distribution of refugees compared to before (see Damm and Dustmann (2014)).

In this paper, we focus on the children of refugee families allocated to municipalities in the process described above. We only consider children who were younger than 9 years when arriving in Denmark. The average age at arrival of our sample is 3.6 years.

To identify our target population, we used the BEF register data set, which we accessed via Statistics Denmark. The allocation process applied to all people who arrived as migrants in Denmark between 1986 and 1998 and who originated from a list of eight countries (Iraq, Iran, Vietnam, Sri Lanka, Lebanon, Ethiopia, Afghanistan, and Somalia). We restrict to children arriving with at least one parent and to families where parents are not married to a person from a non-refugee sending country. The register data sets cover all people legally living in Denmark. Each person is identified by their social security number, and migrants receive their social security number soon after arriving in Denmark. The BEF register contains, for each year, data on the citizenship status (Danish citizen, immigrant, or decedent), country of origin, year of arrival, marital status, gender, age, and municipality. The register also contains parents' social security numbers such that we can match children to their parents. We thus have all the data necessary to find all individuals affected by the allocation process (see Damm and Dustmann (2014) for more details).

Overall, 6571 children younger than 9 were allocated to municipalities between 1986 and 1998 in this way. This is our target population.

## 1.2 Measuring the social environment

In the second step, we need to measure characteristics of the social environment of the refugee children when they were young. We again use administrative register data to do so, now combining several different registers, still accessed via Statistics Denmark. We use data from the central population register (BEF), from the official records of the Danish tax authorities (IND), from the central police register (KRAF)) and from records of the Danish Ministry of Education (UDDA). We essentially know everything that the Danish state needs to know for maintaining its functions.

To preserve the conditionally random assignment to municipality and thus to establish the causal effect of the social environment, we focus on the intention-to-treat effect. We thus only use municipality-level averages from the initially-allocated municipality, regardless

of how long the child actually lived in this municipality. To avoid any reverse causality, we only use data from the year of arrival in our main causal analysis. These data cannot have been affected by the presence of the child or their family and thus allow for a clear causal interpretation. In an extension, we will add some data from later years (see below for details).

In the selection of variables, we tried to be as broad as possible and to cover as many aspects of the social environment as possible. Table 1 lists all the explanatory variables used in our study and which register or data source they are taken from.

To describe the economic environment, we use data on income (both as average and as the within-municipality Gini coefficient), wealth, and housing values. We calculate the local employment rate and, separately, the employment rate among 18- to 21-year-olds. The local political environment is captured as the share of the ten years preceding the assignment year in which the municipality elected a mayor from a right-wing party. On average, 26 percent of municipalities had a right-wing mayor during the time of the natural experiment. To describe the population structure, we take the share of inhabitants who are female, young (under 16 years) or married. We also use the average family size (number of people living at the same address). For educational achievements, we take the share of inhabitants who have more than primary education and the share with a university degree (at any level). We also calculate the share of 18- to 21-year old who are still in education. To study the effect of other migrants, we calculate the share of migrants coming from non-Western countries in the municipality (all countries except Europe and North America) as well as the number of inhabitants coming from the same country as the refugee. As a measure of criminal activity, we calculate the average number of crimes committed over the lifetime (we only count convictions) and the average number of crimes committed until age 19. Damm and Dustmann (2014) have shown that youth criminality has a particularly strong effect in this setting. We also control for average healthcare spending and the number of inhabitants in the municipality.

Table 1: Variables used to measure the social environment.

Variables	Data source
<b>Data from assignment year</b>	
Average income	Income register (IND)
Within-municipality Gini coefficient	Income register (IND)
Share right-wing mayors (last 10 years)	Kjær and Opstrup (2018)
Average wealth	Income register (IND)
Average house value	Income register (IND)
Share female	Administrative Register (BEF)
Share young (under 16 years)	Administrative Register (BEF)
Average family size	Household register (FAM)
Share married	Administrative Register (BEF)
Share more than primary education	Educational Institution Register (UDDF)
Share university degree	Educational Institution Register (UDDF)
Share in education (18-21)	Educational Institution Register (UDDF)
Employment rate	Employment Register (AKM)
Employment rate (18-21)	Employment Register (AKM)
Share non-Western migrants	Administrative Register (BEF)
Number co-nationals	Administrative Register (BEF)
Average crimes committed over lifetime	Central Police Register (KRAF)
Average crimes committed until 19 years	Central Police Register (KRAF)
Spending on health	Public Health Care register (SSKO)
Inhabitants in municipality	Administrative Register (BEF)
Share union membership	Unemployment Association Register (AKAS)
Average charitable donations	Income Register (IND)
Average primary school mark	Educational Institution Register (UDDF)
Average primary school mark (Danish)	Educational Institution Register (UDDF)
Share married to Dane	Administrative Register (BEF)
Average wealth share invested in stocks	Income register (IND)
<b>Data from 2017</b>	
Share more than primary educ. among peers	Educational Institution Register (UDDF)
Youth unemployment rate among peers	Employment Register (AKM)
Youth crime rate among peers	Central Police Register (KRAF)
<b>Data from 2015</b>	
Patience in municipality	Epper et al. (2020)
Risk aversion in municipality	Epper et al. (2020)
Altruism in municipality	Epper et al. (2020)

Notes: We always compute the municipality-level average of the respective variable for the municipality to which the refugee family was initially assigned to (except for the Gini-coefficient, which is not a simple average).

To identify other characteristics of the social environment that might affect preferences, we perform a preliminary analysis to find refugees’ variables that are correlated with their own preferences (see next section for details on our four preference measures). We do this since one potential mechanism for how the social environment affects preferences is that the environment could affect the refugee’s behavior, and our preference measures then capture this behavior change. In particular, we take information on the refugee, for example, their income, in 2017, i.e., the year when we measured preferences, and correlate the refugee’s information with their preferences measures. We repeat this analysis for a large number of variables. For any variable that is significantly correlated with any of the preferences (within refugee), we add the municipality-level average of that variable as an explanatory variable in our main regression analysis. We thus include the share of inhabitants who are union members, the average amount donated to charity, the average primary school grade across all subjects and the average primary school grade in Danish, the share of inhabitants married to a Dane, and the average wealth share invested in stocks.

For all variables describe above, we use data from the assignment year. In two extensions, we add two further sets of variables. First, the data in the assignment year do not contain much information about children of the same age as the refugee children (who were 3.6 years on average on arrival). Since same-age children form an important part of the social environment, we collect data on these children from later dates. In particular, we compute the share of same-age children in the allocated municipality who achieve more than primary education, the unemployment rate while they were between 18 and 21 years old, and the youth crime rate, i.e., committed crimes until age 19. We will refer to these variables as the “peer” variables.

Moreover, the registers do not contain information about preferences, like the ones we collect for the refugees. We thus use data from Epper et al. (2020), who collect data on patience, risk aversion, and altruism for a representative sample of 18–19 olds in the Danish population measured in 2015. Their preference measures are very similar to our preference

measures (see next section). Patience is measured in the so-called "money earlier or later task". Risk aversion is measured using 15 choices between a safe payment or a lottery. Altruism is measured by the transfer in a dictator game. For our analysis, we use the average value of each preference for each municipality. Given that Epper et al. (2020) collect data from 2254 participants, the municipality values are based on about 14 participants per municipality on average. We will refer to these variables as the "preference" variables.

To interpret the variables in these two extensions as causal, even though they pertain to a time well after the arrival of the refugee, one needs to assume that there is no reverse causality, i.e., that the presence of the refugee child and their family does not affect those variables. Given that there are only very few refugees compared to the size of the local population, we think this assumption is quite weak. The fact that refugees were conditionally randomly assigned to municipality excludes self-selection. Still, our main analysis only uses variables from the assignment year.

### 1.3 Measuring preferences

To measure the preferences of our target population, we invited the 6571 identified individuals to participate in an online laboratory experiment. The invitation was sent out by Statistics Denmark (DST) in late 2017 and early 2018 through the Danish public digital platform (e-boks). This platform is mandatory to use in Denmark and is used for communication between citizens and all public institutions, as well as between customers and private enterprises with an existing relationship. A copy of the invitation letter is shown in the Appendix C. The invitation letter explained that the study was a research study conducted by DST in collaboration with the University of Copenhagen about personal opinions and choices and that it was voluntary to take part. It was also mentioned that participants could earn money from participating in the study.

We randomized the level of the promised show-up fee in order to create an instrument for the decision to participate in the study. The show-up fee varied between 20 DKK and 100

DKK in steps of 10 DKK. The invitation stated a range of typical earnings from participating going from 195 DKK to 445 DKK (about 30 to 70 USD, for the 20 DKK show-up fee) to 275 DKK to 525 DKK (for the 100 DKK show-up fee). The show-up fee was always included in the overall earnings and not shown separately.

To create a second instrument, we also varied the recruitment effort, orthogonal to the participation fee. Some participants only received the invitation letter, others received the invitation and a reminder letter after 10 days if the initial invitation letter did not result in participation. A third group received an invitation and reminder, and a phone call from DST reminding them about the invitation and taking any questions they might have about the study.

An invited person could participate by clicking on a link provided in the invitation letter. When reaching the experiment site, an individual code provided in the invitation letter had to be typed in order to begin the experiment. The invitation letter and the experiment were in Danish. The experiment was hosted by DST.

The experiment consisted of four incentivized preference measurements, as well as a survey with questions about opinions and attitudes. The full instructions are shown in Appendix B.

We included four different incentivized measures of preferences on time discounting, risk-taking, altruism, and honesty. To measure time preferences we used the so-called staircase model (Falk et al. (2018)). Participants faced a sequence of five binary choices between receiving a payment of 40 DKK in “about a week” or a payment in “about a month”. All participants started with the same initial choice: receive 40 DKK in a week or 100 DKK in a month. The later payment offered in subsequent choices depended on the participant’s decision in the previous choice. If they chose the early payment, the next later payment increased. If they chose the later payment, the next later payment decreased. Under the maintained assumption of consistency of decisions, this method allows us to cover a large range of choices with only a few questions. We can thus pinpoint the lowest amount of the

later payment for which the participant is willing to wait for the later payment. This is our measure of time preferences. The algorithm determining the sequence of later payments was unknown to the participants. They only knew that they would face five choices, that one of the choices would be randomly selected, and that their decision in that choice would be paid out.

For measuring risk preferences, we also applied the staircase model (Falk et al. (2018)). Participants faced a sequence of five choices between a safe payment or a fifty-fifty lottery resulting in either nothing or 200 DKK. Initially, everybody was offered a safe payment of 60 DKK and the lottery. Depending on the previous choice, the safe payment was either increased (if the lottery was chosen) or decreased (if the safe payment was chosen). We can thus find the smallest safe payment participants are willing to accept over the lottery. This is our measure of risk preferences. As for the time preferences staircase, one choice was randomly selected for payment.

To measure altruism, participants played a one-shot dictator game (Kahneman, Knetsch and Thaler (1986)). Each participant received 100 DKK and could decide how much of this amount to transfer to an anonymous other participant. The decision maker had no information about the other participant and no information about the decision maker was communicated to the recipient. Unbeknown to the participant at the time of the dictator game, each participant played the role of receiver at a later point. The amount sent to the other participant will be our measure of altruism.

Our final incentivized measure was on honesty, and used a modified version of the mind-game (Greene and Paxton (2009)). Specifically, we asked participants to predict the outcome of a uniform draw of an integer number between 1 and 10. Participants were requested to only make the prediction in their mind and were not asked to report it anywhere. After having made the prediction, participants were asked to click a button on the screen to initiate the random draw and to observe if their prediction was correct. Participants had to report if their prediction was correct or not. A correct prediction was rewarded with 50 DKK while



incorrect predictions did not yield any extra income.<sup>1</sup> Since each number 1 to 10 was equally likely to be drawn, about 10 percent of participants will have made a correct prediction (by chance). In these kinds of experiments, usually more than 10 percent of participants report that they have predicted correctly and thus receive the additional payment. Any individual report could be truthful or not, but the fraction of liars among participants who reported not having predicted correctly will be lower than among participants who reported to have predicted correctly.<sup>2</sup> We thus take a report of not having predicted correctly, and foregoing the payment, as our proxy of honesty.

Participants also answered a range of questions on attitudes and opinions, including a short version of the big-5 personality test (Lang et al. (2011)) and several questions, mostly taken from the world value survey (Inglehart (2018)), on trust, tax evasion and fare avoidance, homosexuality, and opinions regarding family, marriage, and parenthood.

At completion, the participants were told that their earnings would be transferred to their bank account through the public payment system (NemKonto) used for all transactions between citizens and the public sector. On average, it took 34 minutes to complete the study, and 937 people completed all parts of the study, which is 14.3 percent of the invited.

## 2 Results

We will first establish whether the childhood social environment has a causal effect on preferences observed in adulthood (Section 2.1). Section 2.2 studies heterogeneous treatment effects and Section 2.3 shows that our results are robust to a range of alternative approaches.

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<sup>1</sup>Before the report, participants were asked to draw two more times to check that the draw is indeed random. This is a design feature in many experiments on lying as it increases the transparency to participants.

<sup>2</sup>It is, for example sufficient if participants are more likely to “lie up”, i.e., predict incorrectly but report to have predicted correctly anyway, compared to “lie down”, i.e., predict correctly but report to not have done so. Previous papers (e.g., Abeler, Nosenzo and Raymond (2019)) suggest that the fraction of downward lying is very small and most papers on lying assume that it is zero.

## 2.1 Causal effect on preferences

### 2.1.1 Empirical specification

We have a sample of individuals indexed by  $i$ . We separately analyze four outcome variables  $y_{pi}$  with  $p$  indicating the four preferences (time, risk, altruism, honesty). The treatment vector  $D_i$  measures the social environment. As described in Section 1.2,  $D_i$  is randomly assigned conditional on an individual's assignment variables  $X_i$  (parental age, country of origin, etc.). We focus on the intention-to-treat effect and only use data from the initially allocated municipality and from the year of assignment. We normalize all variables to make the results easier to interpret and to aid the comparability across regressions. We use OLS regressions and cluster standard errors on municipality level. The estimation equation is thus:

$$y_{pi} = \beta_i D_i + \beta_x X_i + \epsilon_i \quad (1)$$

Establishing the causal effect of the social environment is not straightforward since the social environment has many dimensions and since there are many possible mechanisms of how the social environment could affect preferences. Moreover, the individual variables we can measure will often only be correlates of the true causal variables. We thus take a broad but conservative approach. We include many variables in the treatment vector  $D_i$  but then focus on the joint effect of  $D_i$ , namely the contribution of  $D_i$  to the  $R^2$  and an F-test of  $D_i$ . We measure the contribution of  $D_i$  to the  $R^2$  using the Owen value (Huettner and Sunder (2012)), a generalization of the Shapley value  $R^2$  decomposition to groups of variables. For simplicity, we will refer to the Owen value as the partial  $R^2$ .

### 2.1.2 Results

**Result 1** *The childhood social environment significantly affects adults' preferences, in particular patience and social preferences.*

Figure 1 summarizes the main findings from the regressions. The figure shows the partial  $R^2$  of the treatment vector for each of the four preferences. The significance stars are from an F-test of the treatment vector. Table 2 lists the full results of the regressions (suppressing the coefficients of  $X_i$ ).

We see that the social environment has a strong and highly significant effect on patience, altruism and honesty (with  $p < 0.01$  for all three F-tests). The effect on risk preferences is smaller and less significant ( $p = 0.0656$ ). The effect on patience is particularly large, with a partial  $R^2$  of almost 5 percent. To evaluate whether the effect of the social environment differs across preferences, we carry out pairwise bootstrapped permutation tests. We thus take two preferences, draw a bootstrap sample, calculate the partial  $R^2$  explained by the social environment for each preference and take the difference of the  $R^2$ 's. We do this 10,000 times and then calculate the share of differences that are smaller than zero and take this as our p-value. We find that the effect on patience is marginally stronger than on risk preferences or honesty. None of the other comparisons is significant (time vs. risk:  $p = 0.0623$ ; time vs. honesty:  $p = 0.0826$ ; time vs. altruism:  $p = 0.1485$ ; all other comparisons:  $p > 0.30$ ).

We can also estimate the effect of the social environment on all four preferences combined. Using seemingly-unrelated regressions, the F-test of  $D_i$  across all four preferences together is highly significant ( $p < 0.0001$ ).

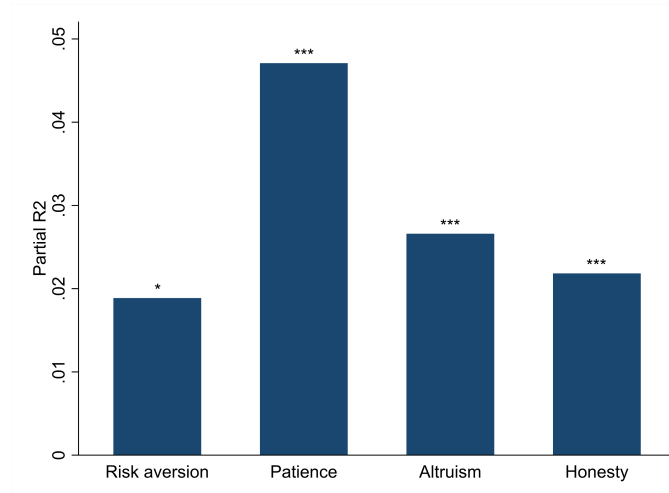
The variables used in Table 2 contain only data from the assignment year and thus allow for a clear causal interpretation. At the same time, they contain very little information about children of the same age since the average age at assignment is 3.6 years, and there is just little data on 3-year olds. Because same-age children form an important part of the social environment, we collect data on these children from a later date and include them in a second set of regressions. As discussed in Section 1.2, to interpret these regressions as causal, one needs to assume that the presence of the refugee child and their family does not affect the outcomes of the same-age children in the municipality. Figure A.1 and Table A.1 in the appendix report the results of these regressions. The results are extremely similar

Table 2: Overall effect of childhood social environment on preferences

	Risk aversion	Patience	Altruism	Honesty
Average income	-0.466* (0.258)	0.168 (0.244)	0.256 (0.288)	-0.000 (0.311)
Within-municipality Gini coefficient	0.060 (0.100)	0.003 (0.095)	-0.014 (0.119)	-0.200* (0.103)
Share right-wing mayors (last 10 years)	0.077* (0.046)	-0.085* (0.044)	-0.004 (0.054)	0.020 (0.047)
Average wealth	0.134 (0.092)	-0.122 (0.094)	-0.190** (0.095)	-0.036 (0.127)
Average house value	-0.156 (0.107)	0.086 (0.115)	0.012 (0.108)	-0.012 (0.130)
Share female	0.076 (0.079)	0.059 (0.075)	0.010 (0.079)	-0.055 (0.091)
Share young (under 16 years)	-0.029 (0.105)	0.137 (0.101)	-0.046 (0.110)	0.028 (0.123)
Average family size	-0.166* (0.086)	0.064 (0.093)	-0.134 (0.105)	0.052 (0.097)
Share married	0.251 (0.331)	-0.190 (0.310)	0.373 (0.337)	-0.034 (0.304)
Share more than primary education	-0.164* (0.097)	-0.081 (0.111)	-0.275*** (0.104)	-0.148 (0.121)
Share university degree	0.223 (0.195)	-0.003 (0.184)	0.529** (0.206)	0.351* (0.194)
Share in education (18-21)	0.006 (0.045)	-0.081 (0.079)	0.024 (0.069)	0.022 (0.068)
Employment rate	0.151 (0.136)	0.076 (0.143)	-0.089 (0.167)	0.028 (0.169)
Employment rate (18-21)	-0.007 (0.074)	-0.111 (0.083)	0.132* (0.071)	0.010 (0.094)
Share non-Western migrants	-0.015 (0.104)	-0.083 (0.109)	0.124 (0.101)	-0.008 (0.119)
Number co-nationals	-0.027 (0.045)	-0.095 (0.075)	-0.060 (0.043)	-0.080 (0.069)
Average crimes committed over lifetime	0.091 (0.098)	-0.046 (0.104)	0.197** (0.097)	0.154 (0.096)
Average crimes committed until 19 years	-0.101 (0.097)	-0.015 (0.098)	-0.122 (0.103)	-0.191* (0.101)
Spending on health	0.088 (0.058)	0.096 (0.063)	-0.019 (0.061)	0.085 (0.073)
Inhabitants in municipality	-0.099 (0.092)	0.293*** (0.098)	-0.011 (0.113)	0.066 (0.108)
Share union membership	0.221 (0.180)	-0.572*** (0.199)	0.045 (0.205)	-0.143 (0.196)
Average charitable donations	-0.032 (0.042)	-0.031 (0.044)	0.011 (0.046)	-0.028 (0.051)
Average primary school mark	0.027 (0.099)	0.109 (0.101)	-0.007 (0.124)	0.065 (0.122)
Average primary school mark (Danish)	0.009 (0.094)	-0.161* (0.090)	0.032 (0.115)	-0.058 (0.109)
Share married to Dane	-0.171 (0.324)	0.435 (0.297)	0.196 (0.340)	0.108 (0.312)
Average wealth share invested in stocks	0.007 (0.028)	-0.001 (0.032)	-0.052* (0.028)	0.020 (0.043)
Observations	937	937	937	937
Clusters	165	165	165	165
Partial R2	0.0189	0.0471	0.0266	0.0218
F test (p-value)	0.0656	0.0000	0.0038	0.0001

Notes: OLS regressions. Robust standard errors, clustered on municipality level, in parentheses. The regressions also include all assignment variables known by the institutions allocating refugees to municipalities (not shown in table). All variables are normalized. The partial  $R^2$ , i.e., the Owen value, and the F-test refer to the set of variables listed in the table.

Figure 1: Overall effect of childhood social environment on preferences (partial  $R^2$ )



Notes: The figure shows the partial  $R^2$ , i.e., the Owen value, from the regressions shown in Table 2. We regress each preference on all variables containing data from the assignment year (these are included in the partial  $R^2$ ) and on the assignment variables. The significance stars are from an F-test as shown in Table 2.

to the regressions reported in Table 2. As before, there is a significant overall effect on all four preferences ( $p < 0.0001$ ) as well as individually for patience, altruism, and honesty (all  $p < 0.01$ ).

In a third set of regressions, we also add measures of the preferences of the local population, collected in 2015 by Epper et al. (2020), about two years before our preference measurements. As shown in Figure A.2 and Table A.2, results are again very similar, with a highly significant overall effect ( $p < 0.0001$ ). The effect on risk preferences is now also significant ( $p = 0.0067$ ).

## 2.2 Effect heterogeneity

The average impact of the social environment on preferences might mask underlying heterogeneity in the effect across sub-groups. It is reasonable to expect that gender and age when arriving in Denmark could influence the impact of the social environment. Damm and Dustmann (2014), for example, have shown in the same setting that boys are more influenced

by being assigned to a municipality with high crime than girls are. In terms of age, the early phases of childhood are known as particularly defining (e.g., Lynch and Smith (2005)). We, however, find no such differences.

**Result 2** *There is no differential impact of the social environment on preferences by gender or age at arrival.*

We repeat our analysis for sub-samples defined by gender (male vs. female) or by age at assignment (median split: 0–3 years vs. 4–8 years). The outcome of this exercise is shown in Figures A.3 and A.4 in the appendix. The influence for boys’ patience seems stronger than for girls’, and the opposite for risk preferences, while the effect on altruism and honesty are very similar. However, none of these differences are significant (bootstrapped permutation tests, all  $p > 0.1$ ). In terms of age, we again find only small and non-significant differences (all  $p > 0.1$ ). Note that since we restrict our overall sample to quite young children (younger than 9 at arrival), we can only compare a relatively small age range. It would be interesting to compare our results to the effect on older arrivals.

## 2.3 Robustness checks

We are taking several steps to confirm that our main findings are robust.

First, we analyze the impact of outliers in the measurements of the social environment. It could be that some municipalities have extreme values in some dimension and that this has a large effect on the overall result. To guard against this, we repeat our main analysis with winsorized versions of all independent variables. This means that we identify the top and bottom 1 percent of observations of each independent variable. We then replace the top observations with the 99<sup>th</sup> percentile and the bottom observations with the first percentile. We leave unchanged the assignment variables, i.e., the variables that were used during the assignment of refugee families to municipalities and that we include in all regressions. Appendix Table A.3 reports the results. They are extremely similar to our main specification

in Table 2. We still find that the social environment has a strong and significant effect on patience, altruism, and honesty. The effect on risk preferences are not significant. We therefore conclude that outliers do not drive our main findings.

Second, we analyze the effect of selection into the survey. While we invited the entire target population, participation in the survey was voluntary and thus not random. We account for the influence of this selection by estimating an alternative specification of our main model, which takes selection into account. We use a Heckman selection model and utilize the fact that we created two instruments for participating, namely the randomly allocated size of the participation fee, which was mentioned prominently in the invitation letter, and the randomly allocated recruitment intensity (see Section 1.3 for details). In the Heckman regressions, we include dummies for the different levels of show-up fees and recruitment intensities as instruments.

The results of the Heckman regression models are shown in Table A.6 in the appendix. We use Maximum Likelihood (ML) for the estimation. For one of the four dependent variables, patience, the estimation does not converge. For completeness, we instead report the results of the Heckman two-step procedure. However, given that the ML estimation does not converge, we wouldn't rely too much on this estimation. Moreover, the two-step procedure cannot cluster standard errors on municipalities, as we do throughout the rest of the analysis.

We find that the reminders had a strong influence on participation for all four preferences, and the reminder variables are highly significant in the selection equations (all  $p < 0.001$ ). In contrast, the show-up fee had only a small and non-significant effect on participation. The correlation  $\rho$  between the error terms of selection and estimation equation is always close to zero and never significantly different from zero, indicating a small effect of selection. Moreover, the overall estimation results are similar to the results of the main specification reported in Table 2. We thus conclude that selection into the survey does not play a large role.<sup>3</sup>

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<sup>3</sup>We cannot test whether the effect we document for our target population (refugee children arriving in Denmark in the 1990s) is different from the potential effect for other populations had they been allocated to

Third, in the main analysis, we only included participants who completed the entire survey. However, we do have some additional observations of participants who started the survey and completed some preference measures but then dropped out (the order of measurements in the survey was: risk, time, altruism, honesty). These participants did not receive a payment for any of their decisions, but their answers might still contain useful information. To check if our conclusions are robust to excluding these later-attriting participants, we repeat the main analysis with all available data included. Results are shown in Appendix Table A.5. We see that the number of observations increases for the early measurements, in particular for the measurement of risk preferences where the sample increases by about 6 percent. The effect on risk preferences is consequently slightly less noisy with a p-value of now  $p = 0.0420$  (down from  $p = 0.0656$ ), while the partial  $R^2$  is essentially unchanged. All other results are extremely similar to our main specification. We therefore conclude that excluding participants who attrite after having started the survey, does not alter our main findings.

Finally, we are using the staircase method (Falk et al. (2018)) for risk and time preferences. This method has many advantages (see Section 1.3 for details). However, one potential drawback is that confused or inattentive participants could have a disproportional effect on the overall result. If an inattentive participants made the same choice in all five decisions, e.g., always choose the lottery, we would classify them as having an extreme preference, e.g., extremely risk loving. While such decision noise might wash out in other methods, here the regression estimates put extra weight on these extreme outcomes. At the same time, extreme choices could well reflect careful decision making of participants who just happen to have extreme preferences. As a robustness check, we thus repeat our main analysis for risk and time preferences and drop all participants who always made the same choice in all five decisions, as a very rough proxy for inattentive decision making.<sup>4</sup> 30 percent of participants always make the same choice in the risk-preference measurement (either always lottery or always

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municipalities in a similar way.

<sup>4</sup>Our measurements of altruism and honesty are not affected by this as they are based on a single choice.



sure payment) and 19 percent of participants make the same choice in the time-preference measurement (either always later payment or always sooner payment).

Table A.4 shows the results of the analysis. We find that, despite dropping the potentially most informative observations, the social environment still has a significant effect for the formation of patience, even if the partial  $R^2$  is slightly smaller and the p-value slightly larger compared to the original specification in Table 2. The individual coefficients are also overall quite similar. This shows that the result for patience is not spuriously driven by inattentive participants who disproportionately affect the result. If anything, these results are in line with participants, who make the same choice five times in a row, doing so deliberately. The effect of the social environment is now also significant for risk preferences, while it was only marginally significant in the main specification. Even though the difference is not large, this would be in line with at least some of the excluded participants being inattentive or confused.<sup>5</sup> Still, the overall result remains quite similar.

### 3 Conclusion

In this paper, we estimate the effect of the childhood social environment on adults' preferences, using a combination of natural experiment, register data and incentivized preference measurements. We find that the social environment has a strong effect on adults' preferences, in particular for patience. We measure the effect on average 15 years after the child left their allocated neighbourhood – a very long-run effect.

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<sup>5</sup>Note that participants first completed the risk-preference task and then the time-preference task. The additional experience could have affected the quality of decision making.

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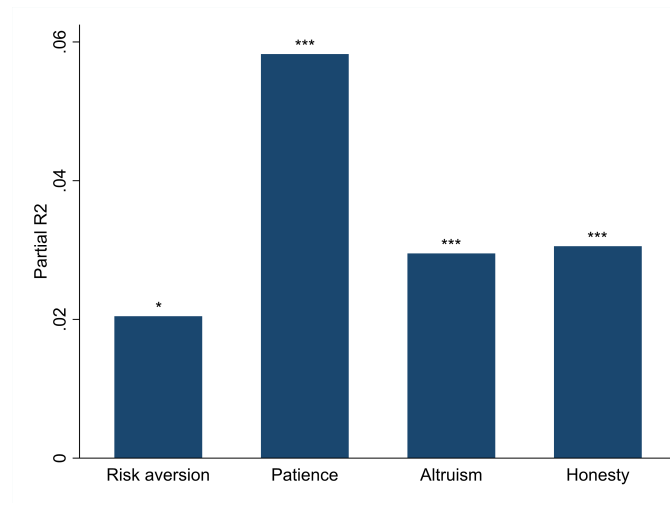
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## A Additional results

Figure A.1: Overall effect of childhood social environment on preferences (partial  $R^2$ ), including peers variables



Notes: The figure shows the partial  $R^2$ , i.e., the Owen value, from the regressions shown in Table A.1. We regress each preference on all variables containing data from the assignment year and the “peer variables”, i.e., data about later outcomes of same-age children in the allocated municipality (these are included in the partial  $R^2$ ) and on the assignment variables. The significance stars are from an F-test as shown in Table A.1.

Table A.1: Overall effect of childhood social environment on preferences, including peers variables

	Risk aversion	Patience	Altruism	Honesty
Average income	-0.457*	0.109	0.254	0.051
	(0.257)	(0.231)	(0.293)	(0.302)
Within-municipality Gini coefficient	0.059	-0.003	-0.019	-0.202**
	(0.101)	(0.093)	(0.118)	(0.100)
Share right-wing mayors (last 10 years)	0.080*	-0.081*	-0.006	0.018
	(0.046)	(0.044)	(0.056)	(0.047)
Average wealth	0.136	-0.102	-0.192*	-0.050
	(0.090)	(0.094)	(0.098)	(0.126)
Average house value	-0.155	0.088	0.012	-0.012
	(0.106)	(0.115)	(0.110)	(0.128)
Share female	0.075	0.098	0.002	-0.090
	(0.080)	(0.073)	(0.082)	(0.087)
Share young (under 16 years)	-0.039	0.184*	-0.038	-0.009
	(0.109)	(0.097)	(0.115)	(0.125)
Average family size	-0.157*	0.118	-0.158	0.011
	(0.091)	(0.091)	(0.106)	(0.104)
Share married	0.248	-0.132	0.340	-0.106
	(0.329)	(0.305)	(0.340)	(0.301)
Share more than primary education	-0.151	-0.043	-0.288***	-0.165
	(0.098)	(0.110)	(0.104)	(0.118)
Share university degree	0.195	0.030	0.520**	0.279
	(0.202)	(0.186)	(0.207)	(0.198)
Share in education (18-21)	0.012	-0.094	0.028	0.041
	(0.048)	(0.073)	(0.069)	(0.070)
Employment rate	0.161	0.124	-0.091	0.010
	(0.136)	(0.139)	(0.168)	(0.168)
Employment rate (18-21)	-0.009	-0.092	0.130*	-0.007
	(0.073)	(0.079)	(0.070)	(0.095)
Share non-Western migrants	-0.014	-0.076	0.130	-0.007
	(0.103)	(0.105)	(0.102)	(0.118)
Number co-nationals	-0.030	-0.100	-0.058	-0.079
	(0.044)	(0.074)	(0.043)	(0.063)
Average crimes committed over lifetime	0.093	0.003	0.177*	0.109
	(0.101)	(0.100)	(0.104)	(0.094)
Average crimes committed until 19 years	-0.056	-0.061	-0.090	-0.069
	(0.103)	(0.101)	(0.120)	(0.111)
Spending on health	0.079	0.073	-0.014	0.090
	(0.060)	(0.064)	(0.062)	(0.073)
Inhabitants in municipality	-0.089	0.255**	0.011	0.124
	(0.093)	(0.100)	(0.119)	(0.109)
Share union membership	0.213	-0.600***	0.046	-0.137
	(0.180)	(0.189)	(0.204)	(0.203)
Average charitable donations	-0.039	-0.050	0.009	-0.026
	(0.043)	(0.043)	(0.046)	(0.051)
Average primary school mark	0.040	0.149	-0.025	0.043
	(0.099)	(0.102)	(0.126)	(0.129)
Average primary school mark (Danish)	0.000	-0.169*	0.042	-0.058
	(0.092)	(0.091)	(0.115)	(0.115)
Share married to Dane	-0.191	0.383	0.208	0.122
	(0.320)	(0.286)	(0.342)	(0.309)
Average wealth share invested in stocks	0.008	-0.001	-0.051*	0.022
	(0.028)	(0.030)	(0.028)	(0.040)
Later: Share more than primary educ. among peers	0.057	0.105	0.078	0.082
	(0.065)	(0.079)	(0.068)	(0.082)
Later: Youth unemployment rate among peers	0.023	0.142***	-0.034	-0.087**
	(0.042)	(0.037)	(0.054)	(0.039)
Later: Youth crime rate among peers	-0.052	0.025	-0.010	-0.101
	(0.054)	(0.062)	(0.060)	(0.062)
Observations	935	935	935	935
Clusters	165	165	165	165
Partial R2	0.0205	0.0583	0.0295	0.0305
F test (p-value)	0.0582	0.0000	0.0026	0.0000

Notes: OLS regressions. Robust standard errors, clustered on municipality level, in parentheses. Compared to the main specifications in Table 2, these regressions also includes the “peer variables”, i.e., data about later outcomes of same-age children in the allocated municipality. The regressions also include all assignment variables known by the institutions allocating refugees to municipalities (not shown in table). All variables are normalized. The partial  $R^2$ , i.e., the Owen value, and the F-test refer to the set of variables listed in the table.

Table A.2: Overall effect of childhood social environment on preferences, including peers and preferences variables variables

	Risk aversion	Patience	Altruism	Honesty
Average income	-0.528*	0.138	0.313	0.085
	(0.272)	(0.267)	(0.292)	(0.312)
Within-municipality Gini coefficient	0.064	-0.006	-0.027	-0.206**
	(0.098)	(0.096)	(0.120)	(0.101)
Share right-wing mayors (last 10 years)	0.075*	-0.085*	-0.015	0.017
	(0.045)	(0.044)	(0.059)	(0.047)
Average wealth	0.137	-0.128	-0.221**	-0.053
	(0.091)	(0.093)	(0.092)	(0.128)
Average house value	-0.150	0.122	0.053	-0.007
	(0.107)	(0.115)	(0.108)	(0.131)
Share female	0.056	0.107	0.001	-0.087
	(0.082)	(0.076)	(0.078)	(0.088)
Share young (under 16 years)	-0.025	0.171*	-0.046	-0.013
	(0.106)	(0.098)	(0.113)	(0.124)
Average family size	-0.162*	0.116	-0.161	0.012
	(0.087)	(0.090)	(0.104)	(0.105)
Share married	0.232	-0.167	0.295	-0.108
	(0.324)	(0.301)	(0.343)	(0.304)
Share more than primary education	-0.114	-0.052	-0.285***	-0.173
	(0.097)	(0.113)	(0.101)	(0.114)
Share university degree	0.214	0.013	0.495**	0.269
	(0.199)	(0.185)	(0.205)	(0.199)
Share in education (18-21)	0.003	-0.085	0.032	0.043
	(0.048)	(0.075)	(0.068)	(0.070)
Employment rate	0.205	0.097	-0.135	-0.011
	(0.144)	(0.159)	(0.176)	(0.175)
Employment rate (18-21)	-0.007	-0.089	0.134*	-0.007
	(0.072)	(0.081)	(0.069)	(0.096)
Share non-Western migrants	-0.031	-0.041	0.169*	0.002
	(0.102)	(0.104)	(0.098)	(0.121)
Number co-nationals	-0.039	-0.091	-0.046	-0.075
	(0.044)	(0.075)	(0.043)	(0.064)
Average crimes committed over lifetime	0.085	-0.012	0.154	0.107
	(0.100)	(0.096)	(0.100)	(0.094)
Average crimes committed until 19 years	-0.055	-0.039	-0.066	-0.067
	(0.105)	(0.103)	(0.115)	(0.113)
Spending on health	0.081	0.061	-0.030	0.087
	(0.063)	(0.065)	(0.060)	(0.074)
Inhabitants in municipality	-0.096	0.237**	-0.007	0.125
	(0.093)	(0.109)	(0.120)	(0.114)
Share union membership	0.204	-0.608***	0.044	-0.133
	(0.177)	(0.190)	(0.198)	(0.205)
Average charitable donations	-0.025	-0.055	0.010	-0.029
	(0.042)	(0.042)	(0.045)	(0.053)
Average primary school mark	0.075	0.147	-0.007	0.039
	(0.105)	(0.102)	(0.129)	(0.133)
Average primary school mark (Danish)	-0.032	-0.164*	0.031	-0.054
	(0.097)	(0.089)	(0.118)	(0.117)
Share married to Dane	-0.214	0.435	0.260	0.133
	(0.317)	(0.282)	(0.339)	(0.316)
Average wealth share invested in stocks	0.009	-0.004	-0.057**	0.020
	(0.029)	(0.032)	(0.027)	(0.041)
Later: Share more than primary educ. among peers	0.059	0.103	0.074	0.081
	(0.064)	(0.079)	(0.068)	(0.083)
Later: Youth unemployment rate among peers	0.034	0.139***	-0.029	-0.088**
	(0.042)	(0.036)	(0.054)	(0.041)
Later: Youth crime rate among peers	-0.043	0.020	-0.011	-0.103
	(0.055)	(0.062)	(0.061)	(0.062)
Later: Patience in municipality	-0.004	-0.027	-0.021	0.001
	(0.034)	(0.035)	(0.034)	(0.039)
Later: Risk aversion in municipality	0.016	0.023	0.061*	0.010
	(0.030)	(0.038)	(0.036)	(0.045)
Later: Altruism in municipality	-0.079**	0.042	0.014	0.017
	(0.033)	(0.033)	(0.034)	(0.043)
Observations	935	935	935	935
Clusters	165	165	165	165
Partial R2	0.0247	0.0610	0.0343	0.0308
F test (p-value)	0.0067	0.0000	0.0003	0.0000

Notes: OLS regressions. Robust standard errors, clustered on municipality level, in parentheses. Compared to the main specifications in Table 2, these regressions also includes the “peers” and “preferences” variables, i.e., data about later outcomes of same-age children in the allocated municipality, as well as later-collected data on preferences in the municipality. The regressions also include all assignment variables known by the institutions allocating refugees to municipalities (not shown in table). All variables are normalized. The partial  $R^2$ , i.e., the Owen value, and the F-test refer to the set of variables listed in the table.



Table A.3: Overall effect of childhood social environment on preferences (causal variables, winsorized)

	Risk aversion	Patience	Altruism	Honesty
Average income (winsorized)	-0.282 (0.256)	0.009 (0.220)	0.224 (0.264)	-0.045 (0.288)
Within-municipality Gini coefficient (winsorized)	0.018 (0.096)	0.035 (0.087)	-0.018 (0.114)	-0.202** (0.097)
Share right-wing mayors (last 10 years) (winsorized)	0.077* (0.046)	-0.086** (0.044)	-0.011 (0.054)	0.023 (0.047)
Average wealth (winsorized)	0.075 (0.078)	-0.100 (0.085)	-0.111 (0.091)	-0.019 (0.115)
Average house value (winsorized)	-0.114 (0.097)	0.077 (0.104)	-0.013 (0.100)	-0.030 (0.115)
Share female (winsorized)	0.048 (0.077)	0.071 (0.070)	0.020 (0.077)	-0.057 (0.085)
Share young (under 16 years) (winsorized)	-0.014 (0.105)	0.141 (0.096)	-0.044 (0.105)	-0.008 (0.120)
Average family size (winsorized)	-0.116 (0.084)	0.058 (0.088)	-0.132 (0.101)	0.019 (0.096)
Share married (winsorized)	0.242 (0.320)	-0.227 (0.283)	0.446 (0.299)	-0.092 (0.302)
Share more than primary education (winsorized)	-0.127 (0.101)	-0.054 (0.113)	-0.296*** (0.105)	-0.178 (0.122)
Share university degree (winsorized)	0.098 (0.205)	-0.028 (0.176)	0.566*** (0.204)	0.391** (0.194)
Share in education (18-21) (winsorized)	0.024 (0.048)	-0.077 (0.083)	0.010 (0.071)	-0.013 (0.073)
Employment rate (winsorized)	0.097 (0.135)	0.130 (0.138)	-0.086 (0.140)	0.026 (0.163)
Employment rate (18-21) (winsorized)	-0.053 (0.068)	-0.122 (0.080)	0.141* (0.074)	0.011 (0.094)
Share non-Western migrants (winsorized)	-0.078 (0.106)	-0.068 (0.110)	0.122 (0.104)	0.015 (0.116)
Number co-nationals (winsorized)	-0.001 (0.054)	-0.117 (0.080)	-0.077 (0.047)	-0.066 (0.075)
Average crimes committed over lifetime (winsorized)	0.097 (0.099)	-0.022 (0.103)	0.204** (0.092)	0.137 (0.089)
Average crimes committed until 19 years (winsorized)	-0.122 (0.100)	-0.024 (0.103)	-0.142 (0.104)	-0.206** (0.098)
Spending on health (winsorized)	0.082 (0.060)	0.093 (0.062)	-0.009 (0.062)	0.117 (0.074)
Inhabitants in municipality (winsorized)	-0.067 (0.095)	0.306*** (0.098)	-0.015 (0.115)	0.016 (0.108)
Share union membership (winsorized)	0.177 (0.174)	-0.616*** (0.186)	0.094 (0.190)	-0.094 (0.197)
Average charitable donations (winsorized)	-0.020 (0.043)	-0.023 (0.045)	-0.009 (0.045)	-0.025 (0.051)
Average primary school mark (winsorized)	0.071 (0.110)	0.085 (0.106)	-0.022 (0.125)	0.090 (0.125)
Average primary school mark (Danish) (winsorized)	-0.039 (0.105)	-0.138 (0.094)	0.046 (0.115)	-0.076 (0.113)
Share married to Dane (winsorized)	-0.251 (0.314)	0.502* (0.269)	0.124 (0.291)	0.171 (0.317)
Average wealth share invested in stocks (winsorized)	0.004 (0.030)	-0.015 (0.029)	-0.044 (0.029)	0.032 (0.039)
Observations	937	937	937	937
Clusters	165	165	165	165
Partial R2	0.0185	0.0474	0.0246	0.0229
F test (p-value)	0.1845	0.0000	0.0087	0.0008

Notes: OLS regressions. Robust standard errors, clustered on municipality level, in parentheses. Compared to the main specifications in Table 2, these regressions include the same set of right-hand side variables but winsorizing the top and bottom 1 percent of observations. The regressions also include all assignment variables known by the institutions allocating refugees to municipalities (not winsorized and not shown in table). All variables are normalized. The partial  $R^2$ , i.e., the Owen value, and the F-test refer to the set of variables listed in the table.

Table A.4: Overall effect of childhood social environment on preferences (causal variables, censored time and risk preference observations dropped)

	Risk aversion (censored)	Patience (censored)
Average income	-0.252 (0.332)	-0.185 (0.348)
Within-municipality Gini coefficient	0.045 (0.108)	0.005 (0.109)
Share right-wing mayors (last 10 years)	0.083 (0.054)	0.019 (0.045)
Average wealth	-0.036 (0.109)	-0.025 (0.151)
Average house value	-0.060 (0.135)	-0.018 (0.161)
Share female	0.025 (0.089)	0.102 (0.080)
Share young (under 16 years)	0.106 (0.136)	0.164 (0.127)
Average family size	-0.124 (0.125)	-0.147* (0.089)
Share married	0.148 (0.398)	-0.521 (0.387)
Share more than primary education	-0.114 (0.112)	0.050 (0.139)
Share university degree	0.183 (0.244)	0.050 (0.211)
Share in education (18-21)	-0.029 (0.084)	-0.150 (0.116)
Employment rate	0.024 (0.180)	0.089 (0.177)
Employment rate (18-21)	-0.027 (0.088)	-0.076 (0.096)
Share non-Western migrants	0.036 (0.132)	0.099 (0.147)
Number co-nationals	0.032 (0.072)	-0.070 (0.063)
Average crimes committed over lifetime	0.048 (0.125)	-0.118 (0.119)
Average crimes committed until 19 years	-0.079 (0.108)	0.125 (0.111)
Spending on health	0.126* (0.066)	0.077 (0.076)
Inhabitants in municipality	-0.155 (0.122)	0.201* (0.117)
Share union membership	0.151 (0.225)	-0.520** (0.253)
Average charitable donations	0.019 (0.060)	-0.064 (0.067)
Average primary school mark	0.061 (0.130)	0.127 (0.122)
Average primary school mark (Danish)	-0.053 (0.125)	-0.161 (0.113)
Share married to Dane	-0.200 (0.385)	0.922** (0.374)
Average wealth share invested in stocks	-0.017 (0.042)	0.025 (0.031)
Observations	662	758
Clusters	149	156
Partial R2	0.0237	0.0339
F test (p-value)	0.0029	0.0132

Notes: OLS regressions. Robust standard errors, clustered on municipality level, in parentheses. Compared to the main specifications in Table 2, we drop all observations in which the participant made the same decision in all five steps of the risk or time preference elicitation, e.g., five times “sure payment”. The regressions also include all assignment variables known by the institutions allocating refugees to municipalities (not shown in table). All variables are normalized. The partial  $R^2$ , i.e., the Owen value, and the F-test refer to the set of variables listed in the table.

Table A.5: Overall effect of childhood social environment on preferences (causal variables, alternative sample)

	Risk aversion	Patience	Altruism	Honesty
Average income	-0.551** (0.256)	0.222 (0.245)	0.219 (0.290)	-0.000 (0.311)
Within-municipality Gini coefficient	0.086 (0.100)	-0.026 (0.094)	0.007 (0.119)	-0.200* (0.102)
Share right-wing mayors (last 10 years)	0.088** (0.043)	-0.079* (0.044)	-0.000 (0.054)	0.020 (0.047)
Average wealth	0.099 (0.089)	-0.117 (0.092)	-0.192** (0.091)	-0.035 (0.126)
Average house value	-0.130 (0.106)	0.094 (0.113)	0.039 (0.102)	-0.012 (0.129)
Share female	0.094 (0.077)	0.071 (0.074)	0.024 (0.078)	-0.055 (0.091)
Share young (under 16 years)	0.044 (0.105)	0.152 (0.099)	-0.076 (0.107)	0.028 (0.124)
Average family size	-0.168** (0.079)	0.080 (0.089)	-0.101 (0.106)	0.053 (0.098)
Share married	0.187 (0.329)	-0.166 (0.316)	0.391 (0.348)	-0.035 (0.308)
Share more than primary education	-0.105 (0.097)	-0.073 (0.110)	-0.276*** (0.103)	-0.148 (0.121)
Share university degree	0.127 (0.189)	0.007 (0.184)	0.476** (0.200)	0.350* (0.194)
Share in education (18-21)	-0.001 (0.047)	-0.080 (0.075)	0.020 (0.071)	0.022 (0.068)
Employment rate	0.204 (0.135)	0.014 (0.141)	-0.063 (0.167)	0.028 (0.168)
Employment rate (18-21)	-0.042 (0.072)	-0.087 (0.084)	0.129* (0.068)	0.011 (0.095)
Share non-Western migrants	-0.014 (0.101)	-0.117 (0.108)	0.130 (0.100)	-0.009 (0.120)
Number co-nationals	-0.040 (0.039)	-0.075 (0.072)	-0.086** (0.042)	-0.080 (0.069)
Average crimes committed over lifetime	0.048 (0.093)	-0.023 (0.102)	0.196** (0.096)	0.154 (0.096)
Average crimes committed until 19 years	-0.082 (0.095)	-0.030 (0.095)	-0.118 (0.097)	-0.192* (0.102)
Spending on health	0.081 (0.057)	0.068 (0.063)	-0.004 (0.060)	0.085 (0.073)
Inhabitants in municipality	-0.053 (0.089)	0.244** (0.095)	0.019 (0.110)	0.067 (0.109)
Share union membership	0.155 (0.181)	-0.470** (0.210)	0.026 (0.204)	-0.142 (0.196)
Average charitable donations	-0.014 (0.037)	-0.037 (0.040)	0.010 (0.042)	-0.028 (0.053)
Average primary school mark	0.071 (0.094)	0.077 (0.104)	-0.007 (0.121)	0.065 (0.122)
Average primary school mark (Danish)	-0.039 (0.089)	-0.121 (0.091)	0.037 (0.113)	-0.058 (0.110)
Share married to Dane	-0.167 (0.314)	0.336 (0.302)	0.160 (0.342)	0.109 (0.315)
Average wealth share invested in stocks	0.001 (0.024)	0.012 (0.028)	-0.050* (0.030)	0.020 (0.045)
Observations	994	981	965	937
Clusters	168	168	168	165
Partial R2	0.0178	0.0445	0.0250	0.0218
F test (p-value)	0.0420	0.0000	0.0027	0.0001

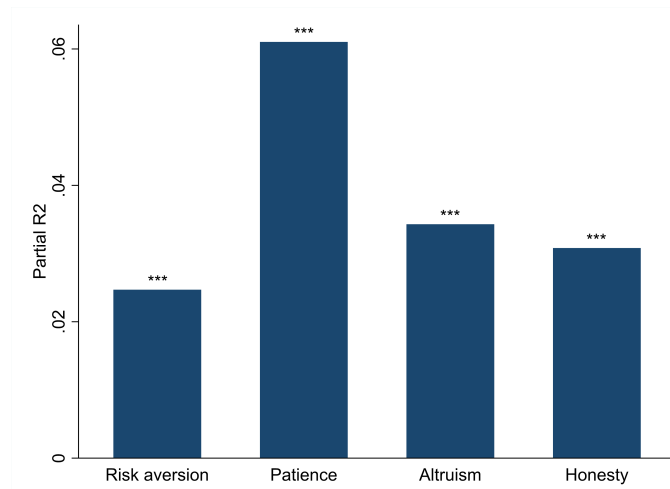
Notes: OLS regressions. Robust standard errors, clustered on municipality level, in parentheses. Compared to the main specifications in Table 2, we now also include observations from participants who dropped out at some point during the online experiments and who thus did not receive any payment for any of their decisions. The regressions also include all assignment variables known by the institutions allocating refugees to municipalities (not shown in table). All variables are normalized. The partial  $R^2$ , i.e., the Owen value, and the F-test refer to the set of variables listed in the table.

Table A.6: Overall effect of childhood social environment on preferences, Heckman selection model

	Risk aversion	Patience	Altruism	Honesty
Average income	-0.462*	0.206	0.275	-0.039
	(0.263)	(0.311)	(0.287)	(0.308)
Within-municipality Gini coefficient	0.075	0.023	-0.008	-0.239**
	(0.104)	(0.112)	(0.126)	(0.105)
Share right-wing mayors (last 10 years)	0.070	-0.092*	-0.007	0.030
	(0.043)	(0.047)	(0.053)	(0.046)
Average wealth	0.147	-0.155	-0.223**	-0.024
	(0.105)	(0.131)	(0.106)	(0.142)
Average house value	-0.162	0.098	0.015	-0.021
	(0.111)	(0.133)	(0.112)	(0.136)
Share female	0.069	0.048	0.007	-0.043
	(0.075)	(0.082)	(0.076)	(0.083)
Share young (under 16 years)	-0.034	0.123	-0.048	0.039
	(0.099)	(0.119)	(0.106)	(0.113)
Average family size	-0.159**	0.067	-0.129	0.046
	(0.080)	(0.094)	(0.100)	(0.094)
Share married	0.236	-0.208	0.362	-0.010
	(0.314)	(0.335)	(0.323)	(0.297)
Share more than primary education	-0.159*	-0.071	-0.273***	-0.162
	(0.095)	(0.123)	(0.100)	(0.122)
Share university degree	0.220	-0.018	0.535***	0.376**
	(0.193)	(0.209)	(0.206)	(0.190)
Share in education (18-21)	0.010	-0.076	0.027	0.014
	(0.044)	(0.080)	(0.072)	(0.068)
Employment rate	0.136	0.054	-0.093	0.052
	(0.132)	(0.152)	(0.155)	(0.162)
Employment rate (18-21)	-0.002	-0.105	0.139*	-0.001
	(0.075)	(0.093)	(0.071)	(0.095)
Share non-Western migrants	-0.013	-0.080	0.126	-0.013
	(0.101)	(0.119)	(0.100)	(0.116)
Number co-nationals	-0.027	-0.096	-0.062	-0.085
	(0.045)	(0.067)	(0.042)	(0.069)
Average crimes committed over lifetime	0.095	-0.037	0.199**	0.144
	(0.093)	(0.106)	(0.094)	(0.094)
Average crimes committed until 19 years	-0.105	-0.020	-0.125	-0.187*
	(0.094)	(0.108)	(0.101)	(0.099)
Spending on health	0.086	0.092	-0.021	0.093
	(0.058)	(0.068)	(0.061)	(0.074)
Inhabitants in municipality	-0.109	0.264**	-0.018	0.090
	(0.091)	(0.126)	(0.108)	(0.105)
Share union membership	0.236	-0.539***	0.055	-0.178
	(0.177)	(0.198)	(0.199)	(0.199)
Average charitable donations	-0.027	-0.021	0.015	-0.042
	(0.043)	(0.052)	(0.048)	(0.051)
Average primary school mark	0.025	0.105	-0.008	0.070
	(0.095)	(0.130)	(0.120)	(0.119)
Average primary school mark (Danish)	0.014	-0.152	0.035	-0.070
	(0.090)	(0.121)	(0.112)	(0.107)
Share married to Dane	-0.168	0.415	0.188	0.109
	(0.301)	(0.329)	(0.318)	(0.300)
Average wealth share invested in stocks	0.009	0.001	-0.060*	0.020
	(0.031)	(0.040)	(0.031)	(0.049)
All observations	6571	6571	6571	6571
Selected observations	937	937	937	937
Estimation	MLE	Two step	MLE	MLE
$\rho$	-0.1444	-0.2572	-0.0831	0.2949
LR test $\rho = 0$ (p-value)	0.5689		0.7296	0.0648
F test (p-value)	0.0669	0.0677	0.0007	0.0000

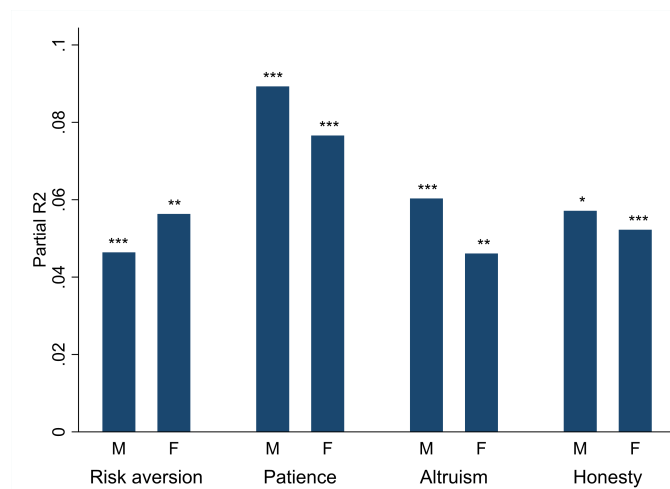
Notes: Heckman selection model (outcome regression). Robust standard errors, clustered on municipality level, in parentheses for the regressions estimated via maximum likelihood. The time preference specification is estimated via the two-step procedure and thus uses non-robust standard errors (see text for details). Both selection and outcome regressions also include all assignment variables known by the institutions allocating refugees to municipalities (not shown in table). The selection regression additionally contains dummies for the randomly allocated show-up fee and recruitment intensity. All variables are normalized. The F-test refers to the outcome regression and the set of variables listed in the table.

Figure A.2: Overall effect of childhood social environment on preferences (partial  $R^2$ ), including peers and preferences variables



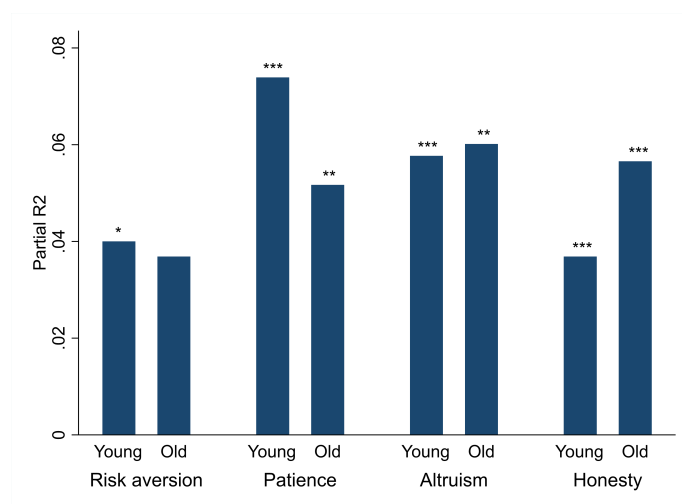
Notes: The figure shows the partial  $R^2$ , i.e., the Owen value, from the regressions shown in Table A.2. We regress each preference on all variables containing data from the assignment year, the “peer” and “preferences” variables, i.e., data about later outcomes of same-age children in the allocated municipality as well as later-collected data on preferences in the municipality (these are included in the partial  $R^2$ ) and on the assignment variables. The significance stars are from an F-test as shown in Table A.2.

Figure A.3: Overall effect of childhood social environment on preferences (partial  $R^2$ ), by male vs. female



Notes: The figure shows the partial  $R^2$ , i.e., the Owen value, from a regression of each preference on all variables containing data from the assignment year (these are included in the partial  $R^2$ ) and on the assignment variables. Regressions are run separately for male (M) and female (F) participants. The significance stars are from F-tests, as in Table 2.

Figure A.4: Overall effect of childhood social environment on preferences (partial  $R^2$ ), by age at arrival



Notes: The figure shows the partial  $R^2$ , i.e., the Owen value, from a regression of each preference on all variables containing data from the assignment year (these are included in the partial  $R^2$ ) and on the assignment variables. Regressions are run separately for participants who were 0–3 years (Young) or 4–8 years (Old) when arriving in Denmark. The significance stars are from F-tests, as in Table 2.

## B Instructions

### Screen 1

Please type in your password and press continue to start the survey. Note that the password should be entered without a dash, e.g., XX123456 Password: [entry]

### Screen 2

Information

Welcome

You are now logged in. We appreciate very much that you are participating. Your answers about your attitudes and beliefs are important to ensure everybody is heard regardless of gender, age, and social background.

In the study you will earn money. You will typically receive between 205 and 455 kr [numbers adjusted according to the randomized show-up fee]. How much you earn will depend on your and others' decisions. The earned amount is transferred to your NemKonto (the public bank account system) when you have completed the study. It is important that you complete the entire study, which is estimated to take up to 25 minutes. Remember that the invitation to participate is only for you. Only you are allowed to complete the study.

You will remain entirely anonymous to the other participants and the researchers of the study. If you have any questions, you are welcome to contact us on phone [redacted] or via email: [redacted]

### Screen 3

Some statements about you

On the next pages, you find a series of statements. Read each statement carefully and click how well it fits you. Click one of the following answers: 'Completely agree': If the statement is 100% correct or you strongly agree. 'Agree': If the statement is correct or you

agree. 'Neutral': If the statement is neither correct nor incorrect, or you are in doubt or neutral towards the statement. 'Disagree': If the statement is incorrect or you disagree with it. 'Completely disagree': If the statement is 100% incorrect or you strongly disagree.

There are no correct answers, and your answers do not require any particular knowledge. Answer the questions and describe yourself as honest and precise as possible.

#### **Screen 4**

I see myself as someone who...

Is quiet and reserved [entry]

Is talkative [entry]

#### **Screen 5**

I see myself as someone who...

Tends to be lazy [entry]

Is outgoing and social [entry]

#### **Screen 6**

I see myself as someone who...

Has a lively fantasy [entry]

Appreciates artistic and aesthetic experiences [entry]

#### **Screen 7**

I see myself as someone who...

Is innovative [entry]

Works thoroughly [entry]



## Screen 8

I see myself as someone who...

Is effective [entry]

Worries a lot [entry]

## Screen 9

I see myself as someone who...

Is relaxed and finds it hard to be stressed [entry]

Quickly get nervous [entry]

## Screen 10

I see myself as someone who...

Can be rude to others [entry]

Easily forgives others [entry]

## Screen 11

Information about the next task

In this part you will earn money. You will choose five times between a lottery and a sure payment. If you choose the lottery, the computer performs a 'coin toss'. If the coin comes up heads, you will receive 200 kr. If the coin comes up tails, you will not receive anything. If you choose the sure payment, you will receive the stated amount.

How will you receive the money? At the end of the study, the computer will randomly pick one of the five decisions you have to make. You will receive the payment for your choice in the chosen decision.

## Screen 12

Please make your first choice.

Which one do you prefer: A lottery where the chances of winning 200 kr are just a big as winning nothing, or instead a 60 kr sure payment?

[entry: Lottery or sure payment]

[The following table summarizes how the 5 questions were selected based on the subject responses. The sequence started with question No 1.]

### **Screen 13**

Information about the next task

In this part you will earn money. You will choose five times between receiving 40 kr in about a week or receiving a larger payment in about 5 weeks. If you want the larger amount, you thus have to wait about a month. The payment will be done as a bank transfer, regardless of your choice.

How will you receive the money? At the end of the study, the computer will randomly pick one of the five decisions you have to make. You will receive the payment for your choice in the chosen decision.

### **Screen 14**

Please make your first choice.

Which one do you prefer: 40 kr in about a week or 100 kr in about 5 weeks?

[entry: Payment in a week or payment in 5 weeks]

[The following table summarizes how the 5 questions were selected based on subject responses. The sequence started with question No 1.]

### **Screen 15**

Information about task

In this part you can earn money. You will be paired with another person, and you have to decide how to divide 100 kr between the two of you. You will never learn who the other

Question number	Iteration	Lottery EV	Sure payment	If lottery chosen go to	If sure payment chosen go to
1	1	100	60	17	2
2	2	100	28	10	3
3	3	100	12	4	7
4	4	100	20	5	6
5	5	100	24	Stop	Stop
6	5	100	16	Stop	Stop
7	4	100	4	8	9
8	5	100	8	Stop	Stop
9	5	100	0	Stop	Stop
10	3	100	44	14	11
11	4	100	36	13	12
12	5	100	32	Stop	Stop
13	5	100	40	Stop	Stop
14	4	100	52	15	16
15	5	100	56	Stop	Stop
16	5	100	48	Stop	Stop
17	2	100	92	25	18
18	3	100	76	22	19
19	4	100	68	20	21
20	5	100	72	Stop	Stop
21	5	100	64	Stop	Stop
22	4	100	84	23	24
23	5	100	88	Stop	Stop
24	5	100	80	Stop	Stop
25	3	100	108	29	26
26	4	100	100	27	28
27	5	100	104	Stop	Stop
28	5	100	96	Stop	Stop
29	4	100	116	31	30
30	5	100	112	Stop	Stop
31	5	100	120	Stop	Stop

Q number	Iteration	Early payment	Delayed payment	If early payment chosen go to	If delayed payment chosen go to
1	1	40	100	17	2
2	2	40	60	10	3
3	3	40	44	7	4
4	4	40	41	6	5
5	5	40	40	Stop	Stop
6	5	40	42	Stop	Stop
7	4	40	52	8	9
8	5	40	56	Stop	Stop
9	5	40	48	Stop	Stop
10	3	40	76	14	11
11	4	40	68	13	12
12	5	40	64	Stop	Stop
13	5	40	72	Stop	Stop
14	4	40	88	16	15
15	5	40	82	Stop	Stop
16	5	40	94	Stop	Stop
17	2	40	140	18	25
18	3	40	156	22	19
19	4	40	148	20	21
20	5	40	152	Stop	Stop
21	5	40	144	Stop	Stop
22	4	40	164	23	24
23	5	40	168	Stop	Stop
24	5	40	160	Stop	Stop
25	3	40	124	29	26
26	4	40	112	28	27
27	5	40	106	Stop	Stop
28	5	40	118	Stop	Stop
29	4	40	132	31	30
30	5	40	128	Stop	Stop
31	5	40	136	Stop	Stop

person is, and the other person will never learn who you are. The other person has no say in how the money is divided and will just receive the amount you decide to send to that person. You can choose to send any amount from 0 to 100 kr.

### **Screen 16**

Choose the amount you wish to send to the other person. You will receive the rest of the 100 kr.

[entry: Transfer]

### **Screen 17**

In this part, you are the receiver in a situation equal to the one you just faced.

Another person possesses 100 kr and decides how to divide the money between the two of you. The amount the other person chooses to send to you will be added to your earnings. We do not know the amount yet.

### **Screen 18**

What is your opinion on this?

All in all, do you think people can be trusted or that you cannot be careful enough when dealing with other people?

[entry: Most can be trusted, You cannot be careful enough]

How much do you agree or not with the following statement?

Being a housewife is just as satisfying as having a paid day job

[entry: Completely agree, Agree, Disagree, Completely disagree ]

### **Screen 19**

To what extent do you think each of the following actions is okay: [Each action listed on a separate page]

Is it okay to ride public transportation (e.g., bus or train) without a ticket?

[entry: 1, Not at all okay; 10, Completely okay]

Is it okay to avoid tax if given the opportunity?

[entry: 1, Not at all okay; 10, Completely okay]

Is homosexuality okay?

[entry: 1, Not at all okay; 10, Completely okay]

## Screen 20

Do you agree or not with the following statement?

For a child to have a happy childhood, it is necessary that the mom and the dad live in the same household.

[entry: Agree, Disagree]

Marriage is an outdated institution.

[entry: Agree, Disagree]

## Screen 21

Do you think it is okay if a single female wishes to have a child without being in a permanent relationship?

[entry: Yes, No]

How much trust do you have in the parliament?

[entry: Fully trusting, Trusting a lot, Not trusting too much, No trust]

## Screen 22

Here is a list of skills children can be encouraged to learn at home.

Which of these skills do you consider particularly important? You can choose up to 5 skills.

[entry : Independence, Working hard, Being responsible, Being imaginative, Being tolerant and respectful toward others, Being thrifty, Being determined / showing endurance, Being raised in a religious faith, Being thoughtful of others, Being obedient]

### **Screen 23**

According to you, how appropriate is it to tell friends that:

You were the one doing best at your workplace last month.

[entry: Completely appropriate, appropriate, Moderately appropriate, Neither appropriate nor inappropriate, Moderately inappropriate, Inappropriate, Completely inappropriate]

You received a salary increase and have bought a new car to celebrate it.

[entry: Completely appropriate, appropriate, Moderately appropriate, Neither appropriate nor inappropriate, Moderately inappropriate, Inappropriate, Completely inappropriate]

[following two on a separate page]

You got fired, and it makes you depressed.

[entry: Completely appropriate, appropriate, Moderately appropriate, Neither appropriate nor inappropriate, Moderately inappropriate, Inappropriate, Completely inappropriate]

Your partner has cheated on you.

[entry: Completely appropriate, appropriate, Moderately appropriate, Neither appropriate nor inappropriate, Moderately inappropriate, Inappropriate, Completely inappropriate]

### **Screen 24**

How appropriate do you find this joke: “Why did the blonde sell her car? To afford gasoline”

[entry: Completely appropriate, appropriate, Moderately appropriate, Neither appropriate nor inappropriate, Moderately inappropriate, Inappropriate, Completely inappropriate]

## Screen 25

When riding the train, how appropriate do you think it is to talk to people you do not know but who accidentally are sitting next to you?

[entry: Completely appropriate, appropriate, Moderately appropriate, Neither appropriate nor inappropriate, Moderately inappropriate, Inappropriate, Completely inappropriate]

## Screen 26

### Instruction

As the last item, you have to do something different: you have to play the “Guess a number game”, and you can even earn money.

The rules of the game are:

We randomly draw a number from 1 to 10. Your task is to guess what number we will draw.

We draw a random number three times, but it is your guess for the first number with counts. Given that only you know the guess, we can obviously not check if your guess is correct, so you have to keep track of it yourself. After you have seen the first number, you will be asked to click on the ‘number’ button to start a new draw so you can see that the draw ends in different numbers. You have to do this twice. In the end, we ask you to state if you have guessed right or wrong. If the number you had guessed was drawn, you will earn 50 kr. Otherwise you will earn nothing.

Ready? Click next to begin the game.

## Screen 27

Guess a number between 1 and 10.

When you have guessed, click on the “number” button to start the first draw.

Click here: “number” [a random number is shown]



## Screen 28

Ready to try the draw again?

This time don't guess the number. Click on the 'number' button to start the draw. When you have seen the number, you have to click on the arrow to continue. [a random number is shown]

## Screen 29

Ready to try the draw one last time?

Again, don't guess the number. Click on the 'number' button to start the draw. When you have seen the number, you have to click on the arrow to continue. [a random number is shown]

## Screen 30

Did you guess correctly?

Please answer if you guessed correctly or not the first time a random number was drawn.  
[entry: Yes (You earn 50 kr), No (you earn 0 kr)]

## Screen 31

Thank you for your participation

Your total earnings are [total earning shown]. The amount will be transferred to your NemKonto. You earnings from the part when another participant divided 100 kr will be added later.

## Screen 32

Your answers have been received. Thank you for your participation.

## C Invitation letter



«Navn1»  
«PostAdresse»  
«PostNr» «PostNavn»

1. juli 2017  
[www.dst.dk/ditsvar](http://www.dst.dk/ditsvar)

### Hvad vælger du når der er penge på spil?” – fortæl os og tjen penge

#### Kære «Navn1»

Danmarks Statistik undersøger, hvordan borgerne træffer valg med økonomiske konsekvenser. Hvad lægger du vægt på, når du træffer dine beslutninger?

#### Du tjener penge!

Ved at deltage i undersøgelsen tjener du penge. Du vil typisk tjene mellem «FEE+175» og «FEE+425» afhængigt af dine og andres beslutninger. Det tjente beløb bliver udbetalt på din NEM-konto. For at være sikker på at få din gevinst skal du gennemføre hele undersøgelsen, der kan tage op til 25 min.


Alle beløb er fratrukket præmieskat (15% præmieafgift af beløb over 200 kr.) før udbetaling. Du skal således ikke gøre andet end at deltage for at tjene pengene

#### Sådan deltager du:

- Gå ind på internetadressen [www.dst.dk/ditsvar](http://www.dst.dk/ditsvar)
- Tast adgangskoden «Resp\_ID1»
- Svar!

Undersøgelsen gennemføres i samarbejde med Københavns Universitet. Vi håber, at du vil hjælpe os og deltage.

Med venlig hilsen

  
Peter Linde  
Kontorchef

#### Fortrolighed

Danmarks Statistik står inde for, at dit svar er fortroligt. Resultaterne bliver offentliggjort sådan, at ingen kan se den enkeltes svar. Undersøgelsen gennemføres for Copenhagen Business School og er finansieret af Statens Samfundsvidenskabelige Forskningsråd.

Adgangskode: «Resp\_ID1»

Danmarks Statistik  
Sejrogade 11  
2100 København Ø

Tlf. 80 30 22 02 (kl. 09-15)  
[ditsvar@dst.dk](mailto:ditsvar@dst.dk)  
[www.dst.dk](http://www.dst.dk)