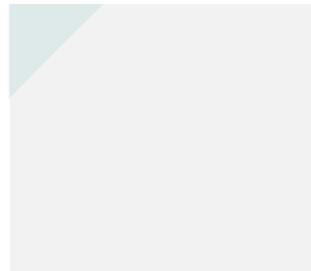
# Acceptance of inequality between children: Large-Scale Experimental Evidence from China and Norway

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**DISCUSSION PAPER** 







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# Acceptance of inequality between children: Large-Scale Experimental Evidence from China and Norway

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**Abstract:** In a novel experimental design with nearly 10,000 adults and children, we study how adults in two societies characterized by very different levels of income inequality, Shanghai (China) and Norway, make real distributive choices involving children. We document a large cross-societal difference in the acceptance of inequality between children: adults in Shanghai implement twice as much inequality between children as do adults in Norway. This finding is robust to varying the age of the children and key features of the economic environment. Finally, we show that the willingness to accept inequality between children is predictive of attitudes to child policies.

Key words: Childhood inequality, fairness, social preferences, moral development

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# **1** Introduction

Inequality considerations figure prominently in almost all spheres of society (Piketty, 2014). Childhood inequality is of particular concern since it not only impacts the children's current situation, but also affects their later life outcomes. Social and economic disadvantages in early life increase the risk of having lower earnings, lower standards of health, and lower skills in adulthood (Conti and Heckman, 2014, García et al., 2020, Heckman et al., 2013, Heckman, 2013, Zhou et al., 2021). How inequalities between children are handled is therefore a key feature of the way we organize society. At the same time, societies differ significantly in their child policies, in particular in the extent to which the most disadvantaged children are allowed to fall behind in terms of income, education, health and life satisfaction (OECD, 2022, UNICEF, 2016, 2020).

Despite the importance of childhood inequality, the large literature on social preferences has focused on attitudes to inequality among adults and largely ignored attitudes to childhood inequality (Andreoni and Miller, 2002, Balafoutas et al., 2013, Bellemare et al., 2008, Cappelen et al., 2007, 2020a, 2013, Cappelen and Tungodden, 2019, Charness and Rabin, 2002, Durante et al., 2014, Engelmann and Strobel, 2006, Falk et al., 2008, Falk and Szech, 2013, Konow, 2000). There are, however, reasons to expect that people may have different attitudes to inequality among children than to inequality among adults. While inequality among adults may be viewed as justifiable, for example if it reflects differences in merit, it is arguably more difficult to justify inequality between children, both because children are less developed cognitively and because their circumstances largely are beyond their control. Further, many decisions involving children, in the family, at school, or in society at large, involve making a trade-off between fairness considerations and efficiency considerations, and people may handle the trade-off between fairness and efficiency differently in distributive situations involving children rather than adults. It is therefore of great interest to study whether and in which economic environments people accept inequality between children, and if societal differences already emerge when considering early childhood inequality.

This paper aims to examine what the adult populations in two societies, Shanghai and Norway, view as acceptable inequality among children. To study this question, we implement a novel experimental design where a large sample of adults from the general populations in the two societies decide how to handle an income inequality between two children. Specifically, the adults decide whether to redistribute money between two children who have completed the same assignment, but have unequal earnings (Almås et al., 2020, Cappelen et al., 2013, Konow, 2000). In a between-subject design, we vary the age of the children in the pair, which allows us to study the causal effect of the children's age on the adults' willingness to accept inequality. Further, we vary two key dimensions of the economic environment; the source of inequality and the cost of redistribution. This allows us to study how the acceptance of inequality between children causally depends on the economic environment.

Shanghai and Norway differ significantly in their child policies, for example in education. In Shanghai, there is intense focus on differences in school performance from an early age (Zhang, 2018, Zhao, 2015), and academic rankings among classmates are extensively used as a motivational tool (Liang et al., 2016). In Norway, in contrast, very little attention is paid to differences in school performance among young children: children are not graded until 8th grade (*Regulations pursuant to the Norwegian Education Act*  $\S$  3-4), and there are no visible hierarchies of academic success. Another example is the organization of children's sports activities. In Shanghai, children as young as six years old are selected to attend elite sports schools with six to eight hours of daily training and a competitive environment, which contributes to highly visible inequality in athletic performance (Hong, 2010, XueDong and Chen, 2016). In Norway, there are policies designed to avoid large inequality in children's sports. There are strict guidelines against the use of rankings for younger children, children cannot compete in championships before the year they turn 13 years old, and coaches are encouraged to co-operate to facilitate even matches for children below this age (The Football Association of Norway, 2017). To what extent are these large differences in child policies also reflected in people's willingness to accept childhood inequality in these two societies? We study this question by examining the willingness of adults in Shanghai and Norway to accept inequality between children when they are placed in identical distributive situations and know the age of the children, the source of inequality, and the cost of redistribution.

The main contribution of the present study is to provide the first set of experimental evidence on how general populations consider inequality between children. Strikingly, we find that adults in Shanghai implement twice as much income inequality between children as do adults in Norway, when making consequential choices in the same distributive situations. The crosssocietal difference in acceptance of inequality between children is robust across subgroups and to varying the age of the children and key features of the economic environment. Even for children as young as five years old, adults in Shanghai are willing to accept large income inequality, while adults in Norway overwhelmingly choose to equalize incomes for this age group. In both societies, we find that acceptance of inequality between children increases with the age of the child, and is higher when the source of inequality is merit rather than luck and when there is a cost of redistribution. However, we find that the source of inequality is more important for adults in Norway than for adults in Shanghai, and that adults in Norway, but not adults in Shanghai, become increasingly sensitive to the source of inequality as the children get older. Finally, we show that the willingness to accept inequality between children is highly predictive of support for child policies targeting low-performing children.

Our study contributes to several literatures. First, it provides novel evidence to the large experimental literature on social preferences (Andreoni and Miller, 2002, Balafoutas et al., 2013, Bellemare et al., 2008, Cappelen et al., 2007, 2013, Cappelen and Tungodden, 2019, Charness and Rabin, 2002, Durante et al., 2014, Engelmann and Strobel, 2006, Falk et al., 2008, Falk and Szech, 2013, Konow, 2000), by being the first study of what adults view as acceptable

inequality between children and how inequality acceptance depends on the age of the children. We also enrich this literature by documenting how the willingness to accept inequality between children depends on the source of inequality and the cost of redistribution.

The paper further relates to the large literature on international differences in attitudes toward inequality and redistribution, which has relied on both non-incentivized surveys (Aarøe and Petersen, 2014, Alesina and Giuliano, 2011, Alesina and Glaeser, 2004, Ashok et al., 2015, Edlund, 1999, Falk et al., 2018, Fong, 2001, Luttmer and Singhal, 2011, Osberg and Smeeding, 2006, Svallfors, 1997) and incentivized experiments (Almås et al., 2020, Barrett et al., 2016, Cappelen et al., 2015, Grimalda et al., 2018, Henrich et al., 2010, Jakiela, 2015). We provide novel evidence on large cross-societal differences in adults' acceptance of inequality between children, even when the adults face identical distributive situations. We further show that the willingness to accept inequality in the experiment is predictive of people's views on child policies.

Finally, our study introduces a new approach to the literature on moral development in childhood and adolescence (Almås et al., 2010, Bauer et al., 2016, 2014, Cappelen et al., 2020b, Fehr et al., 2008, 2013, Kohlberg, 1984, Piaget, 1965, Sutter et al., 2019) and the literature on the cultural transmission of preferences across generations (Ben-Ner et al., 2017, Blake et al., 2015, 2016, Cowell and Decety, 2015, Dohmen et al., 2011, Henrich et al., 2010, House et al., 2013, Schäfer et al., 2015). How adults deal with distributive situations involving children is likely to be important both for how inequality acceptance develops with age and for the cultural transmission of inequality acceptance across generations. We further add to the growing literature in economics studying how the values of the older generation partly is transmitted to the younger generation through observing the behavior of unrelated adults, so-called oblique socialization (Besley and Persson, 2019, Bisin and Verdier, 2001, 2011, Bowles, 1998, Bowles and Gintis, 2000, Gintis, 2011, Le Garrec, 2018, Montgomery, 2010, Roth and Wohlfart, 2018, van Leeuwen et al., 2018).

The paper proceeds as follows. Section 2 describes the experimental design and the sample, and Section 3 outlines the empirical strategy. Section 4 reports the results, and Section 5 discusses alternative interpretations of the findings. Section 6 concludes.

# 2 Experimental design

There are two types of participants in the experiment: adults and children. The adults were recruited through two data-collection agencies, Opinion Research Shanghai in Shanghai and Norstat in Norway. Each adult was asked to make a distributive decision in situations involving two children, building on the design used in Almås et al. (2020). We recruited 3,000 adults residents in Shanghai (China) and 3,014 adult residents in Norway, with both groups constituting a general population sample (+18 years old) that is representative on a set of observable characteristics. In the Appendix, Table A1, we provide an overview of the background characteristics

of the adult participants, and in Appendix B.1, we provide a more detailed description of the samples. We specified the empirical strategy in two pre-analysis plans, one for Shanghai and one for Norway, registered in the AEA RCT Registry (AEARCTR-0002627 and AEARCTR-0003112).

To create real distributive situations for each of the adults in the experiment, we recruited 6,014 unique pairs of children from preschools and schools in Shanghai and Norway, who performed assignments that involved completing an age-appropriate real-effort task (instructions to the children are described in Appendix C.4). On average, each child completed three assignments and for each assignment, they were randomly matched with another child of the same age. One child in each pair initially earned a sum of money as a bonus for completing the assignment (24 CNY (3.5 USD) in Shanghai and 48 NOK (6 USD) in Norway), while the other child earned nothing. The earnings in the two societies were roughly similar in terms of purchasing parity. The children were only informed about the bonus and how it would be determined after they had completed the task.

#### [Figure 1 about here]

As illustrated in Figure 1, each adult was randomly matched with a unique pair of children in their society and asked to decide whether to redistribute from the child with initial earnings to the child without initial earnings (complete instructions are provided in Appendix C.1–C.3). The adults were informed that the children had not been told about their initial earnings. The matched adult's decision determined the payment of the two children in the pair.

The treatments varied in terms of the age of the children and key features of the economic environment in a between-individual design. The adults were randomly assigned to decide for a pair of children who were either five years old, nine years old, 13 years old or 17 years old (n = 1,494, 1,499, 1,512, and 1,509). They were further randomly assigned to one of three distributive situations, referred to as Luck, Merit, and Efficiency (n = 2,000, 2,009 and 2,005).

In the Luck situation, a random draw determines which child gets the initial earnings and which child gets no initial earnings. Furthermore, there is no cost of redistribution, i.e., for each unit transferred from the child with initial earnings, one unit is received by the child without initial earnings. In Shanghai, the adults could decide between not redistributing or redistributing 4CNY, 8CNY, 12CNY, 16CNY, 20CNY or everything to the child with no earnings, with a corresponding choice set in Norway.

The Merit situation is identical to the Luck situation, except that the earnings are determined by the productivity of the children on the task: the most productive child in the pair earns all the money. Hence, by comparing the Merit situation and the Luck situation, we can identify how the source of inequality matters for the acceptance of inequality between children. The Efficiency situation is identical to the Luck situation, except that redistribution is costly: for each unit redistributed, the income to the child with initial earnings is reduced by two units. The cost of redistribution implies that there is an efficiency loss of one-third of the total earnings if the adult chooses to equalize the incomes.

After the adults made their distributive choices, they were asked a set of survey questions, including questions about their policy attitudes. By combining the answers to these survey questions with the behavioral data from the experiment, we can shed light on the adults' motivations for their distributive decision and how their acceptance of inequality between children in the experiment relates to their views on child policies. At the end, the adults completed a set of background questions. As shown in Table A2 and A3 in the Appendix, the samples in the two societies are balanced across treatments with respect to these background characteristics.

# **3** Empirical strategy

The main empirical analysis consists of three parts. We study cross-societal differences in acceptance of inequality between children, the casual effects of the age of the children and key features of the economic environment (source of inequality and cost of redistribution) on inequality acceptance, and the interaction between the age of the children and the economic environment.

In the analysis, we use two measures of an adult's inequality acceptance  $u_i$ . First, we measure the inequality implemented by adult *i*:

$$u_i = \frac{|Income \ Child \ A_i - Income \ Child \ B_i|}{Total \ Income} \in [0, 1], \tag{1}$$

where *Income Child A<sub>i</sub>* is the income allocated to the child with initial earnings and *Income Child B<sub>i</sub>* is the income allocated to the child without initial earnings. This inequality measure is equivalent to the Gini coefficient in a two-person situation. It is equal to one if the adult decides to transfer nothing to the child without initial earnings and zero if the adult decides to equalize the incomes between the two children. Second, we measure inequality acceptance as an indicator variable for whether the adult decides to equalize the income of the two children, i.e., whether the adult is not willing to accept any inequality between them.

In the cross-societal comparison, we start out by comparing inequality acceptance pooled across treatments. In the analysis, we report the regression specification:

$$u_i = \alpha + \beta Norway_i + \gamma \mathbf{X}_i + \epsilon_i$$

where  $Norway_i$  is an indicator for the adult being from the Norwegian sample and  $\mathbf{X}_i$  is a vector of background variables that includes indicators for gender, age, income, education and having children. The estimated value of  $\beta$  provides us with a test of whether there is more or less inequality acceptance in Norway than in Shanghai across all treatments in the study. We report this regression analysis with and without background variables and separately for all the pre-specified subgroups in society. We also report the general regression specification that interacts the country dummy with each of the background variables, and a regression specification that compares inequality acceptance between participants in Shanghai with and without a Shanghai hukou ("citizenship") at birth.

In the analysis of the causal effect of the age of the children on the acceptance of inequality, we report the regression specification:

$$u_i = \alpha + \beta_1 Norway_i + \beta_2 9y_i + \beta_3 13y_i + \beta_4 17y_i + \gamma \mathbf{X}_i + \epsilon_i$$

where  $9y_i$ ,  $13y_i$  and  $17y_i$  are treatment indicators for the adult distributing between 9-yearolds, 13-year-olds or 17-year-olds, with 5-year-olds as the baseline treatment. The estimated values of  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$  thus provide us with the causal effects of varying the age of the children. This analysis is also reported separately for each country.

Correspondingly, in the analysis of the causal effect of key features of the economic environment on the acceptance of inequality between children, we report the regression specification:

$$u_i = \alpha + \beta_1 Norway_i + \beta_2 Merit_i + \beta_3 Efficiency_i + \gamma \mathbf{X}_i + \epsilon_i, \tag{2}$$

where  $Merit_i$  and  $Efficiency_i$  are treatment indicators for the adult being in a situation where the source of inequality is merit or in a situation with a cost of redistribution, with the Luck treatment as the baseline treatment. The estimated values of  $\beta_2$  and  $\beta_3$  provide us with the causal effects of varying the source of inequality and the cost of redistribution. We also report this analysis separately for each country.

Both for the analysis of how the age of the children and key features of the economic environment affect inequality acceptance, we further report the estimates for regression specifications that interact the country dummy with the treatment indicators in the Appendix. Finally, we also report results from separate regressions for Shanghai and Norway that include treatment indicators both for the age of the children and the economic environment, and interaction effects between these treatment indicators.

In the Appendix, we report p-values adjusted for multiple hypothesis testing. We calculate unadjusted p-values as bootstrap p-values following Davison and Hinkley (1997) and compute p-values adjusted for step-down multiple testing following the algorithm proposed by Romano and Wolf (2016).

#### **4 Results**

We here provide the main findings of our study, with supplementary analysis reported in the Appendix.

#### 4.1 Cross-societal differences

Figure 2 reports acceptance of inequality between children in Shanghai and Norway, pooled across all treatments.<sup>1</sup> From panel A in Figure 2, we observe that there is a large difference in the average implemented inequality in the two societies: 0.54 in Shanghai versus 0.26 in Norway (p < 0.001). Hence, adults in Shanghai are willing to accept twice as much inequality between children as Norwegian adults when making decisions in distributive situations that are identical in terms of the age of the children, the source of the inequality, and the cost of redistribution. Notably, as indicated in Figure 2, the difference in implemented inequality between the children is close to the difference in the disposable income inequality in the two societies.

#### [Figure 2 about here]

In panel B in Figure 2, we show that the difference in acceptance of inequality between children is even larger when comparing the share of adults that are not willing to accept any inequality between the children: 18.7% in Shanghai versus 61.6% in Norway (p < 0.001). In Table A4 in the Appendix, we show that these societal differences are robust to controlling for background characteristics on education, income, age, gender, and parental status. We can thus state our first main result:

**Result 1:** Acceptance of inequality between children differs significantly between Shanghai and Norway. Adults in Shanghai implement twice as much inequality between children as do adults in Norway. Only a small minority of adults in Shanghai are not willing to implement any inequality between the children, while a majority of adults in Norway implement an equal split.

The cross-societal differences in inequality acceptance are strikingly robust across subgroups, as shown in Figure A3 and Table A5 in the Appendix. In all subgroups, we find that adults in Shanghai implement significantly more inequality between the children than Norwegian adults.

Shanghai is the top metropolitan area for migration in China, with a large fraction of firstgeneration residents who have moved to Shanghai because they have excelled in their education

<sup>&</sup>lt;sup>1</sup>Histograms of the distributive choices by treatment are reported in Figure A1 (Shanghai) and Figure A2 (Norway) in the Appendix.

or career or simply because they seek out greater opportunities and a better life. Hence, it is interesting to study whether the observed differences between Shanghai and Norway largely are driven by these first-generation residents being particularly accepting of inequality among children. In Figure A4 and Table A6 in the Appendix, we compare the subgroup of adults with a Shanghai hukou ("citizenship") at birth and the subgroup of adults with a non-Shanghai hukou at birth. We observe that the adults with a non-Shanghai hukou at birth indeed accept more inequality between the children than the adults with a Shanghai hukou at birth, but the difference in implemented inequality is only 12% of the difference between Shanghai and Norway. All our main results are robust to comparing the general population in Norway to each of these two subgroups in Shanghai.<sup>2</sup>

#### 4.2 The causal effect of the children's age

In Panel A in Figure 3 and Table 1, we report how adults' acceptance of inequality between children is causally affected by the age of the child (5, 9, 13, or 17 years), pooled across the different economic environments. In both Shanghai and Norway, we find evidence of adults being more accepting of inequality among children as they mature and approach adulthood. In particular, we observe that adults in both societies implement significantly more inequality between 17-year-olds than between 5-year-olds (Shanghai: p = 0.005, Norway: p < 0.001). We also observe that the share who do not accept any inequality between the children is lower for 17-year-olds than for 5-year-olds, but this difference is only significant in Norway (Shanghai: p = 0.192, Norway: p < 0.001). In Table 1, we show that these findings are robust to controlling for background variables.

- [Figure 3 about here]
- [Table 1 about here]

However, the causal effect of the children's age is small compared with the societal effect: the difference in implemented inequality between Shanghai and Norway, pooled across treatments, is about four times the difference in implemented inequality between the 5-year-olds and the 17-year-olds in Norway and more than five times this age gradient in Shanghai.

We further observe from panel A in Figure 3 and from Table 1 that there is significantly more inequality acceptance among adults in Shanghai than in Norway for the youngest children in all distributive situations (all treatments: p < 0.001). There is also no general convergence in the acceptance of inequality between children with age. The difference in implemented inequality between Shanghai and Norway is present already among 5-year-olds and is virtually the same as between 17-year-olds: 0.309 (5-year-olds) versus 0.289 (17-year-olds) (p = 0.473).

<sup>&</sup>lt;sup>2</sup>In Figure A5 in the Appendix, we also show that there are no large differences in how respondents with Shanghai hukou at birth and non-Shanghai hukou at birth respond to the age of the children or to variations in the economic environment.

We summarize this analysis in the following result:

**Result 2:** Acceptance of inequality between children increases with the age of the child in both societies. The difference in acceptance of inequality between children in Shanghai and Norway is large already in early childhood and lasts throughout childhood and adolescence.

#### **4.3** The causal effect of the economic environment

In Panel B in Figure 3 and Table 2, we report how adults' acceptance of inequality between children is causally affected by key features of the economic environment. We find some evidence of the source of inequality mattering for whether adults accept inequality between children, with the effect being stronger in Norway than in Shanghai. In Norway, the estimated merit treatment effect on implemented inequality is 0.057 (p < 0.001), which implies that adults implement almost 20 percent more inequality when the source of inequality between children is merit rather than luck. We further observe that the share of adults in Norway that implements some inequality between the children is 19.4 percentage points higher in the merit treatment than in the luck treatment (p < 0.001). In Shanghai, we also observe an increase in inequality acceptance when the source of inequality is merit rather than luck, but the effect is more muted: implemented inequality increases with 0.031 (p = 0.054) and the share of adults implementing some inequality increases by 5.1 percentage points (p = 0.005).

[Table 2 about here]

The introduction of a cost of redistribution significantly increases inequality acceptance in both societies, which shows that adults make a trade-off between fairness and efficiency also when considering childhood inequality. In both societies, the average implemented inequality is significantly higher in the efficiency treatment than in the luck treatment (in both cases, p < 0.001), and correspondingly, the share of adults who do not accept any inequality between the children falls by 8.8 percentage points in Shanghai and 8.3 percentage points in Norway (in both cases, p < 0.001). In Table 2, we show that the findings on the effect of the economic environment on inequality acceptance are robust to controlling for background variables. Taken together, we state the following result:

**Result 3:** Acceptance of inequality between children is higher when the source of inequality is merit rather than luck and when there is a cost of redistribution. The difference in acceptance of inequality between children in Shanghai and Norway is robust across different economic environments.

# 4.4 The interaction between the age of the children and the economic environment

In Panel C in Figure 3, we report the interaction effects between the age of the children and the economic environment, focusing on a comparison of the treatment effects for 5-year-olds and 17-year-olds. In Table A7 in the Appendix, we report the full regression analysis interacting all age groups and the different economic environments. The general impression from this analysis is that the treatment effects on inequality acceptance of varying the source of inequality and the cost of redistribution do not differ significantly across age groups.

An interesting exception is the effect of the source of inequality in Norway. As shown in Panel C in Figure 3, we find a significantly larger estimated merit effect for 17-year-olds than for 5-year-olds in Norway when considering the share of adults equalizing (p = 0.010). It shows that the meritocratic ideal is more accepted when considering inequality between older children than between younger children. However, as shown in Table A7, there is a significant merit effect even among 5-year-olds in Norway. Taken together, the evidence suggests that meritocratic considerations are present throughout childhood in Norway, but become increasingly important as the children mature. In Shanghai, we do not find any difference in the merit treatment effect between 5-year-olds and 17-year olds, and the merit treatment effect is not significant for any of the two age groups.

Finally, in Panel C in Figure 3, we observe that the interaction effect between age and the cost of redistribution is not statistically significant in Shanghai or Norway. As shown in Table A7, inequality acceptance even between 5-year-olds increases in both societies when there is a cost of redistribution, and the evidence suggests that adults generally make a trade-off between fairness and efficiency in their distributive decisions throughout childhood. The following result summarizes this discussion:

**Result 4:** We find a larger merit effect on inequality acceptance between older children in Norway, but not in Shanghai. The effect of the cost of redistribution is robust across age groups in both societies.

# **5** Alternative mechanisms

We have documented a large and robust cross-societal difference in adults' willingness to accept inequality between children, with adults in Shanghai implementing much more inequality between children than adults in Norway. Our preferred interpretation of the societal difference in inequality acceptance is that it reflects that the adults in the two societies have different views about what is a fair inequality between children. To support this interpretation, we examine three alternative mechanisms that could explain the observed cross-societal difference in inequality acceptance: a learning mechanism, a non-intervention mechanism, and a randomization mechanism.

The learning mechanism is that adults may be motivated in their decisions to prepare the children for adult life by teaching them that life is not always fair. The two societies are characterized by very different levels of income inequality, with Shanghai being one of the most unequal societies and Norway one of the most equal societies in the world. Hence, it could be that adults in Shanghai and Norway have the same fairness view, but that adults in Shanghai consider it more important than adults in Norway to teach children that life is not always fair. To shed light on the importance of this learning mechanism, we asked the adults to state whether they agreed with the statement 'It is important for children to learn that life is not always fair', on a scale from 1 to 10, where 10 indicated complete agreement. We find that adults in both societies on average agreed with this statement, but adults in Shanghai do consider it more important than Norwegian adults to teach children that life is not always fair: 7.19 (Shanghai) versus 6.66 (Norway), p < 0.001. However, as shown in the first column in Table 3, controlling for the response to this question only has a marginal effect on the estimated societal difference in implemented inequality, which suggests that this mechanism cannot explain the large difference in inequality acceptance between Shanghai and Norway.

A second possible mechanism is that a larger share of adults in Shanghai are reluctant to intervene in the distributive situation. Such a difference would result in more implemented inequality in Shanghai than in Norway, even if the adults in both societies had the same egalitarian fairness view. However, the second column in Table 3, shows that the difference between Shanghai and Norway is virtually unchanged when only considering the adults who actually intervened and redistributed a positive amount, which suggests that the non-intervention mechanism is not the main driver of the observed difference in inequality acceptance between the two societies.

A third possibility is that the share of adults who randomize when deciding for two children is different in the two societies. For example, it could be that the adults in Shanghai are as egalitarian as the Norwegian adults, but that a larger share of the adults in Shanghai randomize their response. If randomization was more prominent among the adults in Shanghai than in Norway, a larger fraction of the adults in Shanghai would give more than half of the money to the child without initial earnings. We do not find support for this randomization mechanism. Very few adults give more to the child without initial earnings, 3.5 per cent in Shanghai and 1.0 per cent in Norway, and, from the third column in Table 3, we observe that estimated crosssocietal difference in implemented is unaffected by only looking at adults who do not give more to the child without initial earnings.

Taken together, the results reported in Table 3 support the interpretation that the difference in implemented inequality between the two societies reflects that adults in Shanghai, to a greater extent than Norwegian adults, consider inequality among children to be fair.

# 6 Conclusion

It is well established that inequality in childhood has negative social and economic consequences and that redistributive policies, in particular policies aimed at improving early childhood education of disadvantaged children, have the potential to reduce these effects (Conti and Heckman, 2014, García et al., 2020, Heckman et al., 2013, Heckman, 2013, Zhou et al., 2021). However, there are large differences in policies and practices shaping childhood inequality across the world, as illustrated by the comparison of educational policies in Norway and Shanghai. We provide novel evidence suggesting that these differences partly may reflect that societies differ in what they view as a fair inequality between children. In identical distributive situations, adults in Shanghai implement twice as much inequality between children as adults in Norway.

To provide further evidence on the association between the elicited willingness to accept inequality between children and policy views, we asked the adults to state the extent to which they agreed that 'A society should have a particular focus on helping low-performing children in school'. In Table 4, we report separately for each society the estimated regression coefficient from a regression of the public policy response on the implemented inequality in the experiment.

#### [Table 4 about here]

We observe that implemented inequality in the experiment is highly predictive of policy attitudes: in both societies, the degree to which adults agree with having a particular focus on helping the low-performing children in school is strongly positively associated with the extent to which they equalize in the experiment (p < 0.001). These findings suggest that differences in policies towards children in the two societies partly may reflect differences in what is considered a fair inequality between children.

The findings in the present study show that children in different societies are exposed to very different distributive behaviors by adults, which may shape their views on inequality. Gene–culture co-evolution has facilitated the propensity in humans for cultural learning already at a very young age (Boyd and Richerson, 1985, Gintis, 2011, Henrich and Boyd, 1998), and the present study may be seen as providing initial evidence of the oblique socialization process of inequality acceptance being very different in Norway and Shanghai. How we handle inequality between children may thus contribute to explain how inequality acceptance is transmitted and sustained across generations in society.

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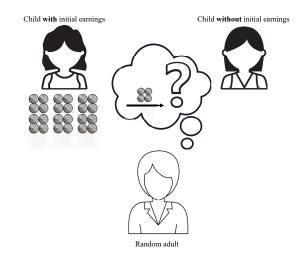
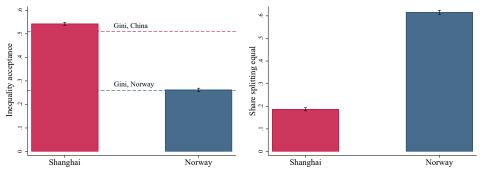


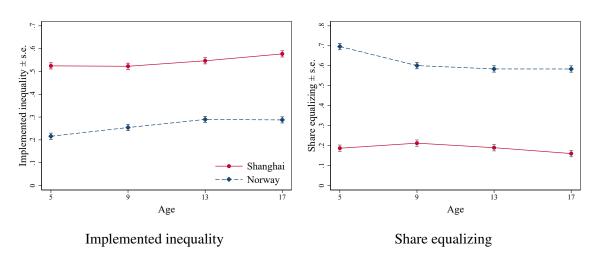
Figure 1: The figure illustrates the distributive decision, where an adult is matched with a unique pair of children and asked to decide whether to redistribute from the child with initial earnings to the child without initial earnings. In a between-individual design, we vary the age of the two children, the source of inequality, and the cost of redistribution.

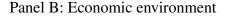


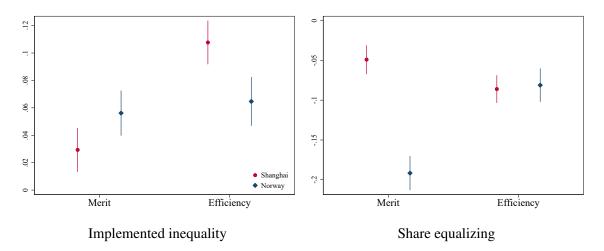
Panel A: Implemented inequality Panel B: Share equalizing

Figure 2: Panel A shows the implemented inequality across all treatments and age groups in the experiment, by society (Shanghai (n=3000) and Norway (n=3014)). The horizontal lines indicate the disposable income Gini coefficients for China (0.51) and for Norway (0.26) (OECD, 2018). There is a lack of statistics on income inequality in Shanghai, but there is reason to believe that the income inequality in Shanghai is even larger than in China as a whole (Chen et al., 2018). Panel B shows the share of adults who chose to equalize the income of the two children across all treatments and age groups, by society. Standard errors are indicated by bars.

Panel A: Age







Panel C: Interaction effects

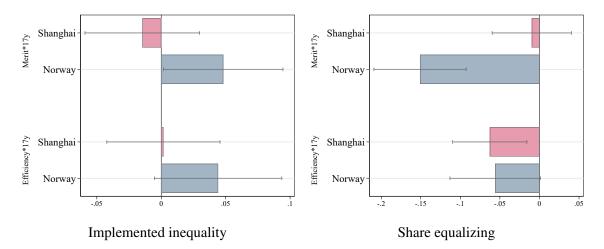


Figure 3: Panel A shows the mean implemented inequality (left panel) and the share equalizing (right panel) by age group and society (Shanghai and Norway). Estimates without control variables. Panel B shows the merit treatment effect, and the efficiency treatment effect on the mean implemented inequality (left panel) and the share equalizing (right panel) by society. Estimates without control variables. Panel B shows the merit treatment effect and the efficiency treatment effect for adults handling inequalities between 17-year old children, compared to the reference category of adults handling inequalities between 5-year old children, by society. The outcome variables are the mean implemented inequality (left panel) and the share equalizing (right panel). Estimates based on the full sample with control variables. Standard errors are indicated by bars.

		Inequality		Sh	are equalizi	ng
	Shanghai	Norway	Pooled	Shanghai	Norway	Pooled
Norway			-0.281*** (0.010)			0.434*** (0.011)
9 years	-0.003	0.036*	0.018	0.027	-0.093***	-0.035**
	(0.018)	(0.019)	(0.013)	(0.021)	(0.025)	(0.016)
13 years	0.019	0.073***	0.047***	0.005	-0.111***	-0.054***
	(0.018)	(0.020)	(0.013)	(0.020)	(0.024)	(0.016)
17 years	0.051***	0.071***	0.061***	-0.025	-0.113***	-0.070***
	(0.018)	(0.020)	(0.013)	(0.019)	(0.025)	(0.016)
Constant	0.489***	0.295***	0.541***	0.167***	0.599***	0.163***
	(0.025)	(0.024)	(0.019)	(0.028)	(0.029)	(0.022)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations $R^2$	3000	3014	6014	3000	3014	6014
	0.017	0.016	0.134	0.012	0.021	0.200

Table 1: Regression results on inequality: the age of the children

*Note:* The table reports OLS regressions with implemented inequality as the dependent variable in columns (1)–(3) and with the share that equalizes as the outcome variable in columns (4)–(6). The reference category across all regressions is the luck treatment with 5-year-old children. *Norway* is an indicator for the adult being from the Norwegian sample. *9 years*, *13 years*, and *17 years* are indicators for the children in the pair being 9 years old, 13 years old and 17 years old, respectively. Controls are indicators for gender, age, income, education and having children and are defined in Table A4 in the Appendix. Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. P-values adjusted for multiple hypothesis testing are provided in Table A11 in the Appendix.

		Inequality		Sh	are equalizi	ng
	Shanghai	Norway	Pooled	Shanghai	Norway	Pooled
Norway			-0.281*** (0.010)			0.434*** (0.011)
Merit	0.031*	0.057***	0.044***	-0.051***	-0.194***	-0.122***
	(0.016)	(0.016)	(0.011)	(0.018)	(0.021)	(0.014)
Efficiency	0.109***	0.066***	0.087***	-0.088***	-0.083***	-0.085***
	(0.016)	(0.018)	(0.012)	(0.017)	(0.021)	(0.014)
Constant	0.459***	0.300***	0.529***	0.216***	0.614***	0.194***
	(0.025)	(0.023)	(0.018)	(0.028)	(0.028)	(0.021)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations $R^2$	3000	3014	6014	3000	3014	6014
	0.030	0.016	0.138	0.018	0.039	0.208

Table 2: Regression results on inequality: the economic environment

*Note:* The table reports OLS regressions with implemented inequality as the dependent variable in columns (1)–(3) and with the share that equalizes as the outcome variable in columns (4)–(6). The reference category across all regressions is the pooled luck treatment. *Norway* is an indicator for the adult being from the Norwegian sample. *Merit* is an indicator for the adult being in the Merit situation and *Efficiency* is an indicator for the adult being in the situation. Controls are indicators for gender, age, income, education and having children and are defined in Table A4 in the Appendix. Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The results remain largely robust to multiple hypothesis testing (see Table A12 in the Appendix).

	Inequality	Inequ	uality
		$I_B > 0$	$I_B \le I_A$
Norway	-0.276*** (0.010)	-0.280*** (0.007)	-0.288*** (0.010)
Learn life is unfair	0.007*** (0.002)		
Constant	0.520*** (0.022)	0.392*** (0.012)	0.578*** (0.017)
Controls	Yes	Yes	Yes
Observations $R^2$	6014 0.132	4713 0.266	5878 0.136

Table 3: Robustness

*Note:* The table reports OLS regressions with the implemented inequality as the dependent variable. *Norway* is an indicator for the adult being from the Norwegian sample. *'Learn life is unfair'* is the adults' responses to the question about the extent to which they agreed with the statements 'Children should learn that life is unfair'. Responses were given on a 10-point scale where 10 indicates that they fully agree and 1 indicates that they fully disagree. Column 2 restricts the sample to adults who redistributed a positive amount. Column 3 restricts the sample to adults who did not redistribute more than half the money. Controls are indicators for gender, age, income, education and for having children and are defined in Table A4 in the Appendix. Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	Shar	nghai	Nor	way
Inequality	-0.501***	-0.360***	-0.602***	-0.664***
	(0.125)	(0.124)	(0.154)	(0.152)
Constant	7.197***	7.028***	7.025***	7.974***
	(0.077)	(0.162)	(0.074)	(0.170)
Controls	No	Yes	No	Yes
Observations $R^2$	3000	3000	3014	3014
	0.005	0.055	0.005	0.041

Table 4: Policy preferences: Helping low-performing

*Note:* The table reports OLS regressions where the dependent variable is the answer to the public policy question about the extent to which they agree with the statement 'A society should have a particular focus on helping low-performing children in school.' Responses to the question were given on a 10-point scale where 10 indicates that they fully agree and 1 indicates that they fully disagree. The sample are the Shanghai adults in columns (1) and (2), and Norwegian adults in columns (3) and (4). *Inequality* is the inequality implemented by the adult. Controls are indicators for gender, age, income, education and for having children and are defined in Table A4 in the Appendix and included in columns (2) and (4). Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

# Appendix

# A Figures and tables

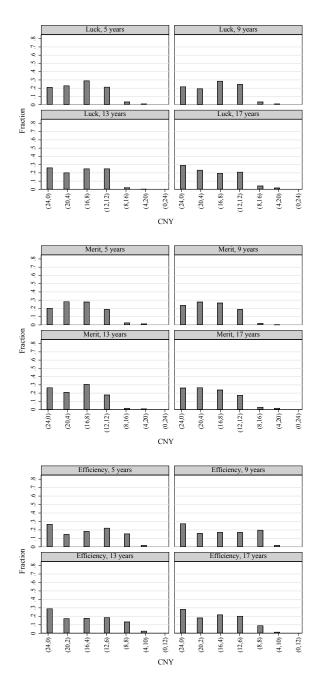


Figure A1: Distributive choices by treatment, Shanghai

*Note:* The figure shows the distributive choices made by the Shanghai adults in Chinese yuan (CNY) by treatment.

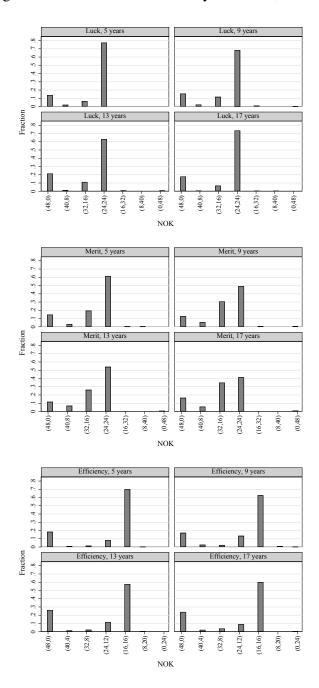
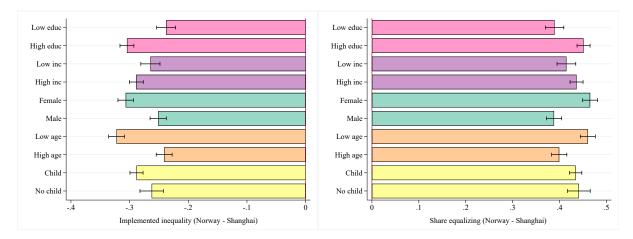
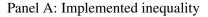


Figure A2: Distributive choices by treatment, Norway

*Note:* The figure shows the distributive choices made by the Norwegian adults in Norwegian kroner (NOK) by treatment.





Panel B: Share equalizing

Figure A3: This figure reports the difference in implemented inequality between Shanghai and Norway by subgroup. Panel A reports the societal difference in mean implemented inequality across all treatments by subgroup, while panel B reports the societal difference in the share that equalizes by subgroup. The subgroups for education, income and age are defined by whether the respondents are above or below the median in their society, where the above the median subgroups for education and income in Norway also include the participants with missing information on these variables (income: 20.3%, education: 4.6%). The results are robust to excluding the group in Norway with missing information from the analysis. The subgroups for parental status are defined by whether the respondent has a child or not. Standard errors are indicated by bars.

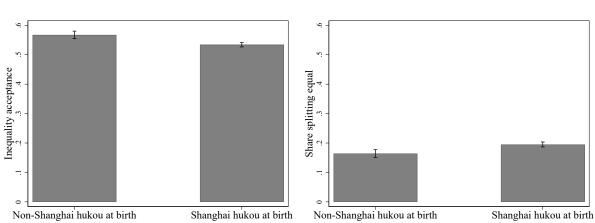
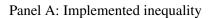


Figure A4: Inequality acceptance among Shanghai residents



Panel B: Share equalizing

*Note:* Panel A shows the implemented inequality across all treatments and age groups in the experiment, by Shanghai hukou status at birth (residents born with non-Shanghai hukou (n=779) and Shanghai hukou (n=2221)). Panel B shows the share equalizing across all treatments and age groups, by Shanghai hukou status at birth. The sample consists of all Shanghai respondents. Standard errors are indicated by bars.

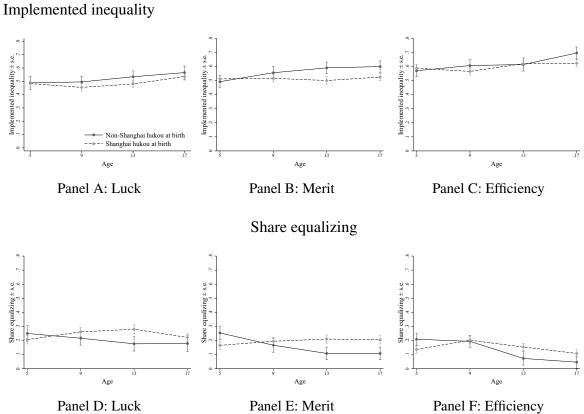


Figure A5: Inequality acceptance among Shanghai residents by treatment

*Note:* Panels A, B and C show the mean implemented inequality by age group for the luck, merit and efficiency treatments, by Shanghai hukou status at birth (residents born with non-Shanghai hukou and Shanghai hukou). Panels D, E and F show the share equalizing by age groups for the luck, merit and efficiency treatments, by Shanghai hukou status at birth. Estimates without control variables. Standard errors are indicated by bars.

	Shanghai	Norway
Female (share)	0.500	0.524
Age (year)		
Median	43	50
p10	27	27
p90	60	72
Education (share)		
High school or less	0.36	0.35
College/University	0.64	0.61
Income		
Median	16,000 USD	80,000 USD
p20	13,000 USD	55,000 USD
p80	41,000 USD	129,000 USD
Share with child(ren)	0.823	0.669
Number of participants	3000	3014

Table A1: Descriptive statistics

*Note:* The table reports descriptive statistics for the adult participants in Shanghai and Norway. Income is self-reported combined yearly income (gross household income before taxes) and is given in standard categories where we use the mid-point in the category. We use the exchange rate to convert incomes because there are no official PPP conversion rates for Shanghai (which has a different price level than China). Exchange rates are based on the dates of the experiments: 0.152 CNY/USD (December 2017), 0.123 NOK/USD (July 2018). In the Norway sample, the participants could select (i) *not knowing/not wanting to state* their yearly income, thus the income information is based on the participants who chose to report their income (2403 out of the full sample of 3014), and (ii) *other* as their highest completed education (139 out of the full sample of 2014).

	Gender	Age	Income	Education	Child
Merit, 5 years	-0.000	0.248	-527.986	0.096	0.016
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Efficiency, 5 years	-0.000	0.256	-413.990	0.020	-0.008
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Luck, 9 years	-0.000	0.140	-477.990	0.128	-0.032
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Merit, 9 years	-0.000	0.140	-340.000	0.124	-0.012
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Efficiency, 9 years	-0.000	0.664	74.006	0.084	0.000
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Luck, 13 years	-0.000	-0.084	-489.994	0.104	0.016
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Merit, 13 years	-0.000	0.596	-858.000	0.076	0.016
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Efficiency, 13 years	-0.000	0.548	-933.994	0.096	0.020
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Luck, 17 years	-0.000	0.196	-253.996	0.128	0.004
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Merit, 17 years	-0.000	1.000	-293.998	0.088	-0.008
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Efficiency, 17 years	-0.000	0.904	154.006	0.048	0.020
	(0.045)	(1.138)	(811.882)	(0.106)	(0.034)
Observations $R^2$	3000	3000	3000	3000	3000
	0.000	0.001	0.001	0.001	0.002
Prob > F	1.0000	0.9981	0.9765	0.9852	0.9413

Table A2: Balance test, Shanghai

*Note:* The table reports OLS regressions with different background characteristics of the Shanghai sample as the dependent variables. For each background characteristic, we have reported the p-value of the joint F-test testing whether the 12 treatments are significantly different from each other with respect to that background characteristic. The reference category across all regressions is the Luck treatment with 5-year-old children. The dependent variable in column 1 is an indicator for being a male. The dependent variable in column 2 is the adult's age in number of years. The dependent variable in column 3 is the adult's reported household income (gross income before taxes). The dependent variable in column 4 is the education level, where 1 = primary school or below, 2 = junior middle school, 3 = senior middle school, 4 = college, 5 = university and 6 = graduate school or above. The dependent variable in column 5 is having at least one child. Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

	Cardan	<b>A</b>	T	E la setta a	Child
	Gender	Age	Income	Education	Child
Merit, 5 years	0.025 (0.045)	0.515 (1.535)	10550.088 (36347.862)	-0.030 (0.105)	0.080* (0.042)
				· · · ·	
Efficiency, 5 years	-0.037	1.407	40023.245	-0.005	0.087**
	(0.045)	(1.537)	(35340.763)	(0.105)	(0.042)
Luck, 9 years	-0.027	2.335	28369.234	-0.018	0.126***
	(0.045)	(1.539)	(36347.862)	(0.105)	(0.042)
Merit, 9 years	-0.027	-0.773	45108.282	-0.198*	0.016
	(0.045)	(1.535)	(35958.840)	(0.105)	(0.042)
Efficiency, 9 years	-0.017	2.199	-3774.385	-0.114	$0.070^{*}$
	(0.045)	(1.534)	(35774.538)	(0.105)	(0.042)
Luck, 13 years	-0.070	-1.134	17795.899	0.114	0.037
	(0.045)	(1.527)	(35058.060)	(0.104)	(0.042)
Merit, 13 years	0.026	0.731	49949.983	0.088	0.091**
	(0.045)	(1.528)	(36005.945)	(0.105)	(0.042)
Efficiency, 13 years	-0.017	0.558	-3832.068	-0.072	0.082*
	(0.045)	(1.534)	(35424.594)	(0.105)	(0.042)
Luck, 17 years	-0.001	-0.307	26846.269	0.063	0.113***
	(0.045)	(1.534)	(35729.465)	(0.105)	(0.042)
Merit, 17 years	-0.066	1.996	48924.342	0.035	0.125***
	(0.045)	(1.529)	(36005.945)	(0.104)	(0.042)
Efficiency, 17 years	-0.019	1.622	59225.618*	0.003	0.141***
	(0.045)	(1.529)	(35774.538)	(0.105)	(0.042)
Observations	3014	3014	2403	2875	3014
$R^2$	0.003	0.004	0.004	0.005	0.008
Prob > F	0.5209	0.2979	0.6622	0.1694	0.0117

Table A3: Balance test, Norway

*Note:* The table reports OLS regressions with different background characteristics of the Norwegian sample as the dependent variables. For each background characteristic, we have reported the p-value of the joint F-test testing whether the 12 treatments are significantly different from each other with respect to that background characteristic. The reference category across all regressions is the Luck treatment with 5-year-old children. The dependent variable in column 1 is an indicator for being a male. The dependent variable in column 2 is the adult's age in number of years. The dependent variable in column 3 is the adult's reported gross household income before taxes (the 611 participants who chose not to respond or did not know their income are not included here). The dependent variable in column 4 is the education level, where 1 = primary and junior middle school, 2 = high school, 3 = university/college up until 3 years, 4 = university/college up until 4 years and 5 = university/college more than 4 years (the 139 participants who responded 'other' are not included here). The dependent variable in column 5 is having at least one child. Robust standard errors in parentheses, where \* p < 0.10, \*\*\* p < 0.05, \*\*\*\* p < 0.01.

		Inequ	uality			Share eq	ualizing	
	Shanghai	Norway	Pooled	Pooled	Shanghai	Norway	Pooled	Pooled
Norway			-0.281*** (0.010)	-0.280*** (0.010)			0.429*** (0.011)	0.434*** (0.012)
Female	-0.020 (0.013)	-0.069*** (0.014)		-0.043*** (0.010)	0.027* (0.014)	0.098*** (0.018)		0.061*** (0.011)
Low educ.	-0.059*** (0.018)	-0.001 (0.015)		-0.030*** (0.011)	0.047** (0.020)	-0.005 (0.019)		0.021 (0.013)
Low age	0.057*** (0.018)	-0.028* (0.015)		0.015 (0.011)	-0.047** (0.020)	0.017 (0.019)		-0.015 (0.013)
Low inc.	0.029 (0.018)	-0.013 (0.015)		-0.006 (0.011)	-0.034 (0.021)	0.009 (0.019)		0.002 (0.014)
Have child(ren)	0.037** (0.017)	-0.034** (0.017)		-0.002 (0.012)	0.026 (0.018)	0.052** (0.021)		0.039*** (0.014)
Constant	0.506*** (0.023)	0.340*** (0.021)	0.543*** (0.007)	0.571*** (0.017)	0.169*** (0.025)	0.520*** (0.026)	0.187*** (0.007)	0.124*** (0.019)
Observations $R^2$	3000 0.014	3014 0.010	6014 0.125	6014 0.130	3000 0.010	3014 0.012	6014 0.191	6014 0.197

Table A4: Regression results on inequality

*Note:* The table reports OLS regressions with the implemented inequality as the dependent variable in columns (1)–(4) and with the share that equalizes as the outcome variable in columns (5)–(8). The sample is adults in Shanghai in columns (1) and (5), and Norwegian adults in columns (2) and (6). The full sample is used in columns (3)–(4) and (7)–(8). *Norway* is an indicator for the adult being from the Norwegian sample, *Female* is an indicator for the adult being female, *Low education* is an indicator for the adult having an education below the median in the sample (high school or less in both Shanghai and Norway), *Low age* is an indicator for the adult being below the median age in the sample (43 years in Shanghai and 50 years in Norway), *Low income* is an indicator for the adult having an income below the median gross household income per year in the sample (8,999.5 CNY in Shanghai and 649,999.5 NOK in Norway) and *Have child(ren)* is an indicator for the adult having at least one child. Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. P-values adjusted for multiple hypothesis testing of subgroups are provided in Tables A9 and A10.

	Female	Male	Low educ.	High educ.	Low age	High age	Low inc.	High inc.	Child(ren)	Child(ren) No child(ren)
Norway	-0.310*** (0.013)	-0.249*** (0.014)	-0.219*** (0.019)	-0.298*** (0.012)	$-0.310^{***}$ (0.015)	-0.244*** (0.015)	-0.259*** (0.020)	-0.278*** (0.012)	-0.286*** (0.011)	-0.244*** (0.021)
Controls	X	Х	Х	Х	Х	Х	Х	Х	Х	X
Constant	0.586***	0.519***	0.518***	0.579***	0.598***	0.567***	0.551***	0.571***	0.564***	0.597***
	(0.024)	(0.022)	(0.029)	(0.020)	(0.016)	(0.027)	(0.029)	(0.019)	(0.013)	(0.027)
Observations $R^2$	3078	2936	2114	3900	2920	3094	2007	4007	4483	1531
	0.157	0.102	0.107	0.146	0.168	0.098	0.124	0.135	0.136	0.110
B. Share equalizing	rg Female	Male	Low educ.	High educ.	Low age	High age	Low inc.	High inc.	Child(ren)	Child(ren) No child(ren)
Norway	$0.473^{***}$	0.393***	0.376***	0.448***	0.453***	0.398***	0.412***	0.426***	0.430***	0.422***
	(0.016)	(0.017)	(0.023)	(0.015)	(0.018)	(0.017)	(0.023)	(0.015)	(0.014)	(0.024)
Controls	Х	X	Х	Х	Х	Х	Х	Х	Х	X
Constant	0.128***	0.175***	0.180***	0.113***	0.091***	0.141***	$0.141^{***}$	0.125***	0.178***	$0.074^{**}$
	(0.027)	(0.027)	(0.036)	(0.023)	(0.018)	(0.032)	(0.035)	(0.022)	(0.015)	(0.033)
Observations $R^2$	3078	2936	2114	3900	2920	3094	2007	4007	4483	1531
	0.224	0.164	0.166	0.217	0.230	0.169	0.184	0.206	0.201	0.187

Table A5: Regression results on inequality by subgroup

 $p < 0.10, \ ^{**} p < 0.05, \ ^{***} p < 0.01.$ 

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		Inequality	ty			Share equalizing	izing	
	non-Shanghai	Shanghai	Pooled	Pooled	non-Shanghai	Shanghai	Pooled	Pooled
Shanghai			-0.034** (0.015)	-0.025 (0.015)			0.031* (0.016)	0.016 (0.016)
Female	-0.041 (0.025)	-0.017 (0.015)		-0.020 (0.013)	0.070*** (0.026)	0.016 (0.017)		$0.028^{*}$ (0.014)
Low educ.	-0.152*** (0.037)	-0.035* (0.021)		-0.061*** (0.018)	0.073* (0.038)	0.048** (0.024)		0.049** (0.020)
Low age	-0.040 (0.038)	0.076*** (0.021)		0.051*** (0.018)	0.018 (0.037)	-0.058** (0.023)		-0.043** (0.020)
Low inc.	-0.009 (0.036)	0.037* (0.021)		0.029 (0.018)	0.056 (0.040)	-0.060** (0.024)		-0.034 (0.021)
Have child(ren)	0.018 (0.028)	0.055** (0.022)		$0.041^{**}$ (0.017)	0.046 (0.029)	0.014 (0.024)		0.024 (0.019)
Constant	$0.651^{***}$ (0.046)	0.463*** (0.027)	0.568*** (0.013)	0.525*** (0.025)	0.047 (0.045)	$0.203^{***}$ (0.031)	$0.164^{***}$ (0.013)	0.157*** (0.027)
Observations $R^2$	779 0.032	2221 0.012	3000 0.002	3000 0.015	779 0.028	2221 0.008	3000 0.001	3000 0.010
<i>Note:</i> The table reports OLS regressions with the implemented inequality as the dependent variable in columns (1)–(4) and with the share that equalizes as the outcome variable in columns (5)–(8). The sample is Shanghai residents who did not have a Shanghai hukou at birth in columns (1) and (5), and Shanghai residents who had a Shanghai hukou at birth in columns (2) and (6). The full sample of Shanghai residents is used in columns (3)–(4) and (7)–(8). <i>Shanghai</i> is an indicator for the adult having a Shanghai hukou at birth, <i>Female</i> is an indicator for the adult having a Shanghai hukou at birth, <i>Female</i> is an indicator for the adult being female, <i>Low education</i> is an indicator for the adult being below the median age in the sample (43 years in Shanghai), <i>Low income</i> is an indicator for the adult having an indicator for the adult having an indicator for the median ge in the sample (43 years in Shanghai), <i>Low income</i> is an indicator for the adult having an indicator for the adult having at least one child. Robust standard errors in parentheses, where * p < 0.10, ** p < 0.05, *** p < 0.01.	ports OLS regres that equalizes as ai hukou at birth I (6). The full sc ult having a Shar the adult having ult being below th ome below the m an indicator for th *** $p < 0.01$ .	ssions with t the outcome in columns ample of Sha nghai hukou an educatio he median ag hedian gross he adult havi	he implem e variable i (1) and (5 anghai resi, at birth, $Fe$ at birth, $Fe$ in below th se in the san household ing at least	ented inequ n columns ), and Shar dents is use <i>male</i> is an ine median i mple (43 ye income per one child.	ports OLS regressions with the implemented inequality as the dependent variable in columns $(1)-(4)$ that equalizes as the outcome variable in columns $(5)-(8)$ . The sample is Shanghai residents who did ii hukou at birth in columns (1) and (5), and Shanghai residents who had a Shanghai hukou at birth (6). The full sample of Shanghai residents is used in columns $(3)-(4)$ and $(7)-(8)$ . <i>Shanghai</i> is an ult having a Shanghai hukou at birth, <i>Female</i> is an indicator for the adult being female, <i>Low education</i> the adult having an education below the median in the sample (high school or less), <i>Low age</i> is an ilt being below the median age in the sample (high school or less), <i>Low age</i> is an ilt being below the median age in the sample (43 years in Shanghai), <i>Low income</i> is an indicator for the one below the median gar least one child. Robust standard errors in parentheses, where * $p < \cdots * p < 0.01$ .	ndent variab ple is Shang ho had a Sh )-(4) and $(7))-(4)$ and $(7)adult being fadult being fadult being fschool orLow incomele (8,999.5 Cerrors in pare$	le in colurr hai residen anghai huk $\vdash$ (8). <i>Shan</i> $\vdash$ (8). <i>Shan</i> $\vdash$ (8). <i>Low</i> is an indic is an indic is an indic is an indic is an indic	ms $(1)-(4)$ ts who did ou at birth <i>ighai</i> is an <i>education</i> age is an ator for the nghai) and here * p <

		Inequality		Sh	are equalizi	ng
	Shanghai	Norway	Pooled	Shanghai	Norway	Pooled
Norway			-0.281*** (0.010)			0.434*** (0.011)
Merit	0.022	0.069**	0.044**	-0.029	-0.166***	-0.096***
	(0.031)	(0.032)	(0.022)	(0.036)	(0.041)	(0.027)
Efficiency	0.100***	0.061*	0.078***	-0.061*	-0.078**	-0.068**
	(0.031)	(0.034)	(0.023)	(0.035)	(0.040)	(0.027)
9 years	-0.019	0.047	0.013	0.035	-0.093**	-0.029
	(0.032)	(0.033)	(0.023)	(0.038)	(0.040)	(0.028)
13 years	0.007	0.102***	0.055**	0.038	-0.139***	-0.051*
	(0.032)	(0.034)	(0.024)	(0.038)	(0.040)	(0.028)
17 years	0.055*	0.041	0.046**	-0.001	-0.044	-0.022
	(0.032)	(0.033)	(0.023)	(0.037)	(0.039)	(0.027)
Merit *9 years	0.038	-0.012	0.016	-0.034	-0.023	-0.030
	(0.044)	(0.046)	(0.032)	(0.051)	(0.060)	(0.040)
Merit *13 years	0.011	-0.082*	-0.035	-0.045	0.064	0.009
	(0.045)	(0.046)	(0.032)	(0.051)	(0.059)	(0.039)
Merit *17 years	-0.015	0.048	0.019	-0.010	-0.151***	-0.084**
	(0.044)	(0.046)	(0.032)	(0.050)	(0.058)	(0.039)
Efficiency*9 years	0.011	-0.019	-0.001	0.010	0.020	0.013
	(0.045)	(0.048)	(0.033)	(0.051)	(0.058)	(0.039)
Efficiency*13 years	0.023	-0.005	0.011	-0.055	0.016	-0.021
	(0.045)	(0.050)	(0.034)	(0.049)	(0.058)	(0.038)
Efficiency*17 years	0.002	0.044	0.025	-0.063	-0.056	-0.061
	(0.044)	(0.049)	(0.033)	(0.047)	(0.057)	(0.037)
Constant	0.449***	0.253***	0.501***	0.197***	0.684***	0.219***
	(0.031)	(0.029)	(0.022)	(0.036)	(0.035)	(0.027)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations $R^2$	3000	3014	6014	3000	3014	6014
	0.034	0.025	0.143	0.022	0.053	0.212

Table A7: Regressions on inequality: Key features of the distribution situation and age of the children

*Note:* The table reports OLS regressions with implemented inequality as the outcome variable in columns (1)–(3) and with the share equalizing as the outcome variable in columns (4)–(6). The reference category across all regressions is Luck treatment with 5-year-old children. *Norway, Merit, Efficiency, 9 years, 13 years* and *17 years* are indicators defined in Tables 1 and 2. Controls are indicators for gender, age, income, education and having children and are defined in Table A4. Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

				Inequality			
		Gender	Education	Age	Income	Child(ren)	All
Norway	-0.281*** (0.010)	-0.253*** (0.014)	-0.303*** (0.012)	-0.244*** (0.014)	-0.280*** (0.012)	-0.253*** (0.020)	-0.166*** (0.031)
Norway*Female		-0.054*** (0.019)					-0.049** (0.019)
Norway*Low education			0.063*** (0.022)				0.058** (0.023)
Norway*Low age				-0.075*** (0.021)			-0.085*** (0.024)
Norway*Low income					0.001 (0.022)		-0.043* (0.024)
Norway*Child						-0.036 (0.023)	-0.072*** (0.024)
Female		-0.016 (0.013)	-0.043*** (0.010)	-0.045*** (0.010)	-0.043*** (0.010)	-0.042*** (0.010)	-0.020 (0.013)
Low education		-0.030*** (0.011)	-0.066*** (0.016)	-0.020* (0.011)	-0.030*** (0.011)	-0.031*** (0.011)	-0.059*** (0.018)
Low age		0.014 (0.011)	0.007 (0.012)	0.057*** (0.016)	0.015 (0.011)	0.014 (0.011)	$\begin{array}{c} 0.057^{***} \ (0.018) \end{array}$
Low income		-0.006 (0.011)	0.001 (0.011)	0.003 (0.011)	-0.006 (0.016)	-0.008 (0.011)	0.029 (0.018)
Have child(ren)		-0.002 (0.012)	-0.001 (0.012)	-0.004 (0.012)	-0.002 (0.012)	0.019 (0.017)	0.037** (0.017)
Constant	0.543*** (0.007)	0.558*** (0.017)	0.585*** (0.017)	0.546*** (0.018)	0.571*** (0.017)	0.555*** (0.018)	0.506*** (0.023)
Observations $R^2$	6014 0.125	6014 0.131	6014 0.132	6014 0.132	6014 0.130	6014 0.131	6014 0.135

Table A8: Regression results on inequality

*Note:* The table reports OLS regressions with implemented inequality as the dependent variable. *Norway, Female, Low education, Low age, Low income* and *Have child(ren)* are indicators defined in Table A4. *Norway\*Female, Norway\*Low education, Norway\*Low age, Norway\*Low income* and *Norway\*Have child(ren)* are indicator variables interacting *Norway* and the respective subgroup. Robust standard errors in parentheses, where \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

### Multiple hypothesis testing

We here report the p-values adjusted for multiple hypothesis testing. We calculate unadjusted p-values as bootstrap p-values following Davison and Hinkley (1997) and compute p-values adjusted for step-down multiple testing following the algorithm proposed by Romano and Wolf (2016). Bootstrapping is done with 10,000 replications.

	Differences	Unadjusted p-values	Romano–Wolf adjusted p-values
Shanghai			
Females vs. males	-0.020	0.137	0.356
Low education vs. high education	-0.059	0.001	0.011
Low age vs. high age	0.057	0.002	0.013
Low income vs. high income	0.029	0.106	0.356
Have child(ren) vs. no child	0.037	0.033	0.201
Norway			
Females vs. males	-0.069	0.000	0.000
Low education vs. high education	-0.001	0.967	0.964
Low age vs. high age	-0.028	0.068	0.296
Low income vs. high income	-0.013	0.382	0.617
Have child(ren) vs. no child	-0.034	0.041	0.210

Table A9: Multiple hypothesis adjustments: effect of background characteristics

Note: The multiple hypothesis test is based on the following OLS regression specification

$$\begin{split} u_{i} &= \alpha + \beta_{1} Norway_{i} + \beta_{2} Female_{i} + \beta_{3} Loweduc_{i} + \beta_{4} Lowage_{i} + \beta_{5} Lowinc_{i} + \\ &\beta_{6} HaveChild(ren)_{i} + \beta_{7} Norway \times Female_{i} + \beta_{8} Norway \times Loweduc_{i} + \\ &\beta_{9} Norway \times Lowage_{i} + \beta_{10} Norway \times Lowinc_{i} + \beta_{11} Norway \times HaveChild(ren)_{i} + \epsilon_{i} \end{split}$$

where  $u_i$  is implemented inequality by participant *i*, Norway, Female<sub>i</sub>, Loweduc<sub>i</sub>, Lowage<sub>i</sub>, Lowinc. and Havechild(ren) are indicators for adult *i* and are defined in Table A4. Norway × Female<sub>i</sub>, Norway × Loweduc<sub>i</sub>, Norway × Lowage<sub>i</sub>, Norway × Lowinc<sub>i</sub> and Norway × HaveChild(ren)<sub>i</sub> are interactions between Norway and the respective background characteristic, and  $\varepsilon_i$  is an idiosyncratic error term. Column 1 reports the estimated differences in implemented inequality in the 10 paired subgroups. Column 2 reports the unadjusted p-values and column 3 reports the Romano–Wolf adjusted p-values.

	Differences	Unadjusted p-values	Romano–Wolf adjusted p-values
Shanghai vs. Norway			
Females vs. males	-0.049	0.011	0.031
Low education vs. high education	0.058	0.012	0.031
Low age vs. high age	-0.085	0.000	0.002
Low income vs. high income	-0.043	0.072	0.070
Have child(ren) vs. no child	-0.072	0.003	0.013

Table A10: Multiple hypothesis adjustments: differences in the effect of background characteristics

*Note:* The multiple hypothesis test is based on the OLS regression specified in Table A9. Column 1 reports the estimated difference-in-difference in implemented inequality between Shanghai and Norway for each of the paired subgroups. Column 2 reports the unadjusted p-values and column 3 reports the Romano–Wolf adjusted p-values.

Table A11: Multiple hypothesis adjustments: the effect of the age of the children

	Differences	Unadjusted p-values	Romano–Wolf adjusted p-values
Shanghai			
5 years vs. 9 years	-0.003	0.886	0.886
5 years vs. 13 years	0.019	0.305	0.490
5 years vs. 17 years	0.051	0.005	0.018
Norway			
5 years vs. 9 years	0.036	0.060	0.163
5 years vs. 13 years	0.073	0.000	0.002
5 years vs. 17 years	0.071	0.000	0.002

*Note:* The multiple hypothesis test is based on the following OLS regression specification

$$\begin{split} u_{i} &= \alpha + \beta_{1} Norway_{i} + \beta_{2} 9y_{i} + \beta_{3} 13y_{i} + \beta_{4} 17y_{i} + \beta_{5} Norway \times 9y_{i} + \\ &\beta_{6} Norway \times 13_{i} + \beta_{7} Norway \times 17_{i} + \gamma \mathbf{X}_{i} + \epsilon_{i} \end{split}$$

where  $u_i$  is implemented inequality by participant *i*,  $Norway_i$  is an indicator for the adult being from the Norwegian sample.  $9y_i$ ,  $13y_i$  and  $17y_i$  are indicators for the adult distributing between 9-year-olds, 13-year-olds or 17-year-olds, respectively.  $Norway \times 9y_i$ ,  $Norway \times 13y_i$  and  $Norway \times 17y_i$  are interactions between  $Norway_i$  and the respective age group,  $\mathbf{X}_i$  is a vector of control variables and includes indicators for gender, age, income, education and having children as defined in Table A4, and  $\epsilon_i$  is an error term. Column 1 reports the estimated difference in implemented inequality in the paired treatments. Column 2 reports the unadjusted p-values and column 3 reports the Romano–Wolf adjusted p-values.

	Differences	Unadjusted p-values	Romano–Wolf adjusted p-values
Shanghai			
Luck vs. merit	0.030	0.064	0.069
Luck vs. efficiency	0.108	0.000	0.000
Norway			
Luck vs. merit	0.058	0.001	0.001
Luck vs. efficiency	0.066	0.000	0.000

Table A12: Multiple hypothesis adjustments: the effect of the economic environment

*Note:* The multiple hypothesis test is based on the following OLS regression specification

$$\begin{split} u_{i} &= \alpha + \beta_{1} Norway_{i} + \beta_{2} Merit_{i} + \beta_{3} Efficiency_{i} + \beta_{4} Norway \times Merit_{i} + \\ & \beta_{5} Norway \times Efficiency_{i} + \gamma \mathbf{X}_{i} + \epsilon_{i} \end{split}$$

where  $u_i$  is implemented inequality by participant *i*,  $Norway_i$  is an indicator for the adult being from the Norwegian sample.  $Merit_i$  is an indicator variable for the adult being in the Merit situation and  $Efficiency_i$  is an indicator variable for the adult being in the situation with a cost of redistribution,  $Norway \times Merit_i$ and  $Norway \times Efficiency_i$  are interactions between  $Norway_i$  and the respective treatment,  $\mathbf{X}_i$  is a vector of control variables and includes indicators for gender, age, income, education and having children as defined in Table A4, and  $\epsilon_i$  is an error term. Column 1 reports the estimated difference in implemented inequality in the paired treatments. Column 2 reports the unadjusted p-values and column 3 reports the Romano–Wolf adjusted p-values.

# **B** Shanghai (China) and Norway

In this paper, we study how adults in two societies characterized by very different levels of income inequality, Shanghai (China) and Norway, make real distributive choices involving children. We use the Gini coefficient for income inequality in China as a whole when comparing Shanghai to Norway, because there is a lack of statistics on income inequality in Shanghai. There is reason to believe that the income inequality in Shanghai is even larger than in China as a whole (Chen et al., 2018), and thus the difference in income inequality between the two societies may be even larger than indicated in the main paper.

Shanghai is a major financial center in Asia, and one of the top metropolitan areas for migrates in China. The large number of migrants arriving in Shanghai every year, has resulted in the Shanghai hukou ("citizenship") becoming increasingly hard to obtain — also in comparison to China as a whole (Li et al., 2010, Zhang et al., 2019). Having a Shanghai hukou allows residents rights such as education, health care, and social insurance in Shanghai. The competition and difficulty in obtaining these rights, results in large inequalities in access to these services within Shanghai. In the analysis, we also report separate analysis for participants with a Shanghai hukou at birth and participants with a non-Shanghai hukou at birth.

## **B.1** Sample vs. population

**The Shanghai sample:** We recruited the Shanghai sample from the population in Shanghai that has lived and worked in Shanghai for more than two years, aiming for the sample to be representative of the adult Shanghai population on a limited set of observable characteristics (gender, age and income). In the targeted population, there is roughly gender balance with 50.4 per cent females (2018 Shanghai Statistical Yearbook), which corresponds well to our sample with 50.0 per cent females. The average age in Shanghai is 40-44 years old (Chinese Population Census, 2010, reported in five-year age brackets), and the median age in our sample is 43 years old.

The average and median yearly household income in the Shanghai sample are USD 25,000 and USD 16,000. Income data for Shanghai are only available per capita (not per household) for the full population, for the 20 per cent poorest, and for the 20 per cent richest (2018 Shanghai Statistical Yearbook). We estimate the average household disposable income for Shanghai Statistical Yearbook). We estimate average household disposable income for Shanghai Statistical Yearbook). The estimated average yearly household disposable income for Shanghai is USD 24,000 in 2017, and thus relatively similar to the average household income reported in the sample. Based on additional data on the average household sizes among the 20 per cent poorest and the 20 per cent richest in Shanghai (Shanghai Statistical Bureau), we estimate the average yearly household disposable income among the 20 per cent poorest to be USD 12,000 and among the 20 per cent richest to be USD 39,000. The average household income reported for

these two groups in the sample are USD 13,000 and USD 53,000.

Education statistics are only available for Shanghai, not specifically for Shanghai residents, and are only reported separately for employed and unemployed individuals (China Population & Employment Yearbook 2017). The population data for education thus include migrants with relatively low education and temporary employment in Shanghai. This may explain why a higher share of our sample has some form of higher education than the Shanghai population, 64 per cent versus 47 per cent.

There are no data available for the actual share of the Shanghai population (+18 years old) that has at least one child.

**The Norway sample:** The Norwegian adult population is balanced with 49.9 per cent females (2018, Statistics Norway). Our sample is also relatively balanced with 52.4 per cent females. The median age in our sample is 50 years old, and the 10th and 90th percentiles are 27 and 72 years old, respectively. These numbers are close to the actual median age of the adult Norwegian population at 47 years old, and the 10th and 90th percentile at 24 and 74 years old (2018, Statistics Norway).

Among Norwegian adults, the median household income before taxes is USD 102,000. The 20th and 80th percentiles are USD 54,000 and USD 162,000 (2017, Statistics Norway). The numbers are slightly lower in our sample, where the median household income before taxes is USD 80,000, the 20th percentile is USD 55,000 and the 80th percentile is USD 129,000.

Comparable statistics for educational attainment among the Norwegian population are only reported for 16+ years, where 33.4 per cent have higher education (2017, Statistics Norway). 61.0 per cent of the Norway sample have attained some form of higher education. The difference in educational attainment can partly be explained by our sample being older(18+ years old versus 16+ years old), but likely also reflects that our sample has a higher education than the general population.

There are no data available for the actual share of the Norwegian population (18+ years old) who have at least one child.

# **C** Experimental protocol

Below are the instructions for the distributive choice, the survey questions and the background questions. The instructions for the distributive choice are provided for each of the three distributive situations (Luck, Merit and Efficiency) when the children in the pair were 5-years-old. The instructions for the adults assigned to make a distributive choice for 9-year-olds, 13-year-olds or 17-year-olds only vary in the specified age. The instructions were translated from Mandarin to English. The Norwegian sample received identical instructions except for the children being from Bergen (Norway) and the amount to distribute in each setting being 48 NOK instead of 24 CNY.

# C.1 Distributive choice

#### Treatment 1: Luck. 5-year-old children.

In contrast to traditional survey questions that are about hypothetical situations, we now ask you to make a choice that has real consequences for two children. We have recruited two children, let us call them child A and child B. They are both 5 years old and go to school in Shanghai.

After completing the same assignment, the children are told that their earnings from the assignment are determined by a lottery. The child winning the lottery earns 24 CNY for the assignment and the other child earns nothing for the assignment. They are not informed about the outcome of the lottery. However, they are told that a third person will be informed about the assignment and the outcome of the lottery. They are also told that this third person will be given the opportunity to redistribute the earnings and thus determine how much they are paid for the assignment.

You are the third person and we now want you to choose whether to redistribute the earnings for the assignment between child A and child B. Your decision is completely anonymous. The two children will receive the payment that you choose for the assignment within a short period, but will not receive any further information.

Child A is the winner of the lottery and earns 24 CNY for the assignment, thus child B earns nothing for the assignment.

Please state which of the following alternatives you choose:

I do not redistribute:

• child A is paid 24 CNY and child B is paid 0 CNY.

I do redistribute:

- child A is paid 20 CNY and child B is paid 4 CNY.
- child A is paid 16 CNY and child B is paid 8 CNY.
- child A is paid 12 CNY and child B is paid 12 CNY.
- child A is paid 8 CNY and child B is paid 16 CNY.
- child A is paid 4 CNY and child B is paid 20 CNY.
- child A is paid 0 CNY and child B is paid 24 CNY.

#### Treatment 2: Merit. 5-year-old children.

In contrast to traditional survey questions that are about hypothetical situations, we now ask you to make a choice that has real consequences for two children. We have recruited two children, let us call them child A and child B. They are both 5 years old and go to school in Shanghai.

After completing the same assignment, the children are told that their earnings from the assignment are determined by their productivity. The most productive child earns 24 CNY for the assignment and the other child earns nothing for the assignment. They are not informed about who is the most productive child. However, they are told that a third person will be informed about the assignment and who is the most productive child. They are also told that this third person will be given the opportunity to redistribute the earnings and thus determine how much they are paid for the assignment.

You are the third person and we now want you to choose whether to redistribute the earnings for the assignment between child A and child B. Your decision is completely anonymous. The two children will receive the payment that you choose for the assignment within a short period, but will not receive any further information.

Child A is the most productive and earns 24 CNY for the assignment, thus child B earns nothing for the assignment.

Please state which of the following alternatives you choose:

I do not redistribute:

• child A is paid 24 CNY and child B is paid 0 CNY.

I do redistribute:

- child A is paid 20 CNY and child B is paid 4 CNY.
- child A is paid 16 CNY and child B is paid 8 CNY.

- child A is paid 12 CNY and child B is paid 12 CNY.
- child A is paid 8 CNY and child B is paid 16 CNY.
- child A is paid 4 CNY and child B is paid 20 CNY.
- child A is paid 0 CNY and child B is paid 24 CNY.

#### Treatment 3: Efficiency. 5-year-old children.

In contrast to traditional survey questions that are about hypothetical situations, we now ask you to make a choice that has real consequences for two children. We have recruited two children, let us call them child A and child B. They are both 5 years old and go to school in Shanghai.

After completing the same assignment, the children are told that their earnings from the assignment are determined by a lottery. The child winning the lottery earns 24 CNY for the assignment and the other child earns nothing for the assignment. They are not informed about the outcome of the lottery. However, they are told that a third person will be informed about the assignment and the outcome of the lottery. They are also told that this third person will be given the opportunity to redistribute the earnings and thus determine how much they are paid for the assignment.

You are the third person and we now want you to choose whether to redistribute the earnings for the assignment between child A and child B. Your decision is completely anonymous. The two children will receive the payment that you choose for the assignment within a short period, but will not receive any further information.

Child A is the winner of the lottery and earns 24 CNY for the assignment, thus child B earns nothing for the assignment. There is a cost of redistribution. If you choose to redistribute, increasing child B's payment by 1 CNY will decrease child A's payment by 2 CNY.

Please state which of the following alternatives you choose:

I do not redistribute:

• child A is paid 24 CNY and child B is paid 0 CNY.

I do redistribute:

- child A is paid 20 CNY and child B is paid 2 CNY.
- child A is paid 16 CNY and child B is paid 4 CNY.
- child A is paid 12 CNY and child B is paid 6 CNY.
- child A is paid 8 CNY and child B is paid 8 CNY.

- child A is paid 4 CNY and child B is paid 10 CNY.
- child A is paid 0 CNY and child B is paid 12 CNY.

## C.2 Survey questions

## Question 1

We now want you to indicate to what extent you agree with the following statement. 1 means that you agree completely with the statement on the left, 10 means that you agree completely with the statement on the right, and the numbers in between indicate the extent to which you agree or disagree with the statements.

A society should									A society should
aim to equalize incomes.									not aim to equalize incomes.
1	2	3	4	5	6	7	8	9	10

#### **Question 2**

We now want you to indicate to what extent you agree with the following statement. 1 means that you agree completely with the statement on the left, 10 means that you agree completely with the statement on the right, and the numbers in between indicate the extent to which you agree or disagree with the statements.

A society should have a particular focus on helping low- performing children									A society should not have a particular focus on helping low- performing children
in school.	2	3	4	5	6	7	8	9	in school. 10

### Question 3

We now want you to indicate to what extent you agree with the following statement. 1 means that you agree completely with the statement on the left, 10 means that you agree completely with the statement on the right, and the numbers in between indicate the extent to which you agree or disagree with the statements.

Children should be held respon-									Children should not be held
sible for their own choices.									respon- sible for their own
1	2	3	4	5	6	7	8	9	choices. 10

## **Question 4**

We now want you to indicate to what extent you agree with the following statement. 1 means that you agree completely with the statement on the left, 10 means that you agree completely with the statement on the right, and the numbers in between indicate the extent to which you agree or disagree with the statements.

It is im-									It is not
portant									important
for chil-									for chil-
dren to									dren to
learn that									learn that
life is not									life is not
always									always
fair.									fair.
1	2	3	4	5	6	7	8	9	10

# C.3 Background questions

### Shanghai sample:

We asked the Shanghai adult respondents to answer the following set of background questions. The background questions below are translated from Mandarin to English.

• Please fill in your gender:

– Male

- Female
- What is your exact age?
  - \_\_\_\_ years old.
- Which of the following income levels best describe your monthly household income? Please include all sources of income, e.g. bonus, bank deposit interest, 2nd-job payment, rental allowance etc.

- Below RMB 4,000
- **–** RMB 4,000–5,999
- RMB 6,000-7,999
- RMB 8,000-9,999
- **–** RMB 10,000–12,999
- RMB 13,000–14,999
- RMB 15,000–17,999
- RMB 18,000–19,999
- RMB 20,000–24,999
- RMB 25,000–29,999
- RMB 30,000–34,999
- RMB 35,000–39,999
- **–** RMB 40,000–44,999
- RMB 45,000-49,999
- RMB 50,000 or over
- What is your final education level? Please choose the one which best describe your final education level.
  - Primary school or below
  - Junior middle school
  - Senior middle school
  - College
  - University
  - Graduate school or above
- Do you have children or not?
  - Yes/No
- How many children do you have? (Only asked to the respondents who have children)
  - 1 child/2 children /3 children/4 children or more
- What is your occupation?
  - Student

- Technician
- Professional (professor, teacher, artist, doctor, lawyer etc.)
- Blue collar (servant, delivery man, salesperson, office clerk etc.)
- White collar (company managers, executives, director, owner etc.)
- Government officer/civil servant
- Self-employed, small private business
- Freelancer
- Full-time housewife
- Unemployed
- Retired
- Others
- Please tell me the province where your Hukou was at your birth.
  - Answer list of 34 provinces in mainland China + others (Hongkong, Taiwan, Macao etc.).

#### Norwegian sample:

We asked the Norwegian adult respondents to answer the following set of background questions. The background questions below are translated from Norwegian to English.

- What is your age?
- What is your zip code?
- Are you a man or a woman?
  - Man
  - Woman
- County: (list of counties)
- Region: (list of regions)
- Do you live in?
  - Oslo
  - Town with more than 50,000 inhabitants
  - Town with between 5,000 and 50,000 inhabitants
  - Town/large village (2,000–4,999 inhabitants)

- Village (less than 2,000 inhabitants)
- Do not know.
- How many persons are there in the household? (1, 2, 3, 4, 5 or more, do not want to respond)
- How many persons are there in the household below 18 years old? (None, 1, 2, 3, 4, 5 or more, do not want to respond)
- Child 1 (list of years of birth)
- Child 2 (list of years of birth)
- Child 3 (list of years of birth)
- Child 4 (list of years of birth)
- Child 5 (list of years of birth)
- What is the household's gross income (before taxes)?
  - 0-100,000 NOK
  - 100,001–200,000 NOK
  - 200,001-300,000 NOK
  - 300,001–400,000 NOK
  - 400,001–500,000 NOK
  - 500,001-600,000 NOK
  - 600,001-700,000 NOK
  - 700,001-800,000 NOK
  - 800,001–900,000 NOK
  - 900,001–1,000,000 NOK
  - 1,000,001-1,100,000 NOK
  - 1,100,001-1,200,000 NOK
  - 1,200,001-1,300,000 NOK
  - 1,300,001-1,400,000 NOK
  - 1,400,001-1,500,000 NOK
  - 1,500,001 NOK or more.
  - Do not want to respond.

- Do not know.
- How would you describe your daily situation?
  - Studies
  - Full time employee
  - Part time employee
  - Work in my own firm
  - Military/sivil service
  - Parental leave
  - Retired
  - Job seeker
  - Homemaker
  - Temporarily laid off
  - On government welfare
- What is your area of work? (list of areas of work)
- What sector do you work in?
  - Public sector
  - Private sector
  - Do not work
  - Other
- Did you vote in the parliamentary elections in 2017? If so, what party did you vote for? (List of Norwegian parties and other, did not vote, do not want to respond, do not remember, did not have voting rights).
- If there was an election tomorrow, which party would you then vote for? (List of Norwegian parties and other, did not vote, do not want to respond, not sure, do not have voting rights).
- What is your relationship status?
  - Single
  - Married/Partnership/Cohabitation (without children in the household)
  - Married/Partnership/Cohabitation (with children in the household)
  - Live with my parents

- Widow/widower
- Divorced
- Do not want to respond
- Other
- What is your highest completed education?
  - Compulsory education (primary and junior middle school)
  - High school
  - University/college up until 3 years (Bachelor or equivalent)
  - University/college up until 4 years
  - University/college more than 4 years (Master degree or equivalent and higher degree)
  - Other
- How many children do you have?
  - 0 children / 1 child /2 children / 3 children / 4 children or more

# C.4 Children's instructions

The 3714 children participating in the project were recruited from preschools and schools in Shanghai (China) and Bergen (Norway). Parents gave consent for the children who made decisions in the experiment. The children received age-appropriate information about the study and were informed that their participation was voluntary, and that they could opt out at any point. Children who only conducted an anonymous task and for which we did not collect any non-anonymized data could participate without parental consent.

On average, each child completed 3.24 assignments and for each assignment they were randomly matched with another child of the same age, generating 6,014 unique pairs of children  $((3714 \text{ children} \times 3.24 \text{ tasks})/2 = 6014)$ . The children participated in the project together with children their age, and except for the 5-year-old children in Bergen (who participated at a local science centre), they completed the assignments and received their payments in sealed bags and envelopes in classroom settings at their respective preschool or school. We adapted the size of the sessions and the assignments to the age of the children. They received a brief introduction before being asked to complete a set of assignments. We provide two examples below (translated to English). The first is an assignment for 5-year-old children, the second is an assignment for 17-year-old children.



#### Task X

Maren, Kari, Olav and Hans are watching a movie together. There are four chairs in a row. In how many different orders can the friends sit together?



Answer:\_\_\_\_\_

After having completed the set of assignments, the children were informed about how their earnings would be determined for the different assignments, i.e. that they would be matched with another child their age who had completed the same assignment, and that either through a lottery or depending on merit, all the earnings would initially be allocated to one of them, and none to the other. They were also told that a third person would be informed about the outcome, and would be given the opportunity to redistribute the earnings and thus determine how much each of them would be paid for the assignment. The children received their payments in sealed envelopes or bags. The youngest two age groups received their payments in the form of age-appropriate toys and gifts (with purchase price equal to their payments).

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