On-line appendix

Table S1: Summary Statistics

	Han Students	Mosuo Students	Test: Han=Mosuo (p-values)
Panel A: Elementary School Students			
Female	0.55	0.55	0.98
	(0.50)	(0.50)	
Age	9.96	9.23	0.00
	(1.67)	(1.49)	
# of family members	5.07	6.49	0.00
	(1.84)	(2.45)	
Maternal education is primary or lower	0.80	0.73	0.24
	(0.41)	(0.45)	
Average monthly allowance (RMB)	36.29	49.56	0.24
	(57.89)	(109.02)	
Math score (percentile rank)	0.51	0.47	0.28
	(0.33)	(0.33)	
Observations	137	216	
Panel B: Middle School Students			
Female	0.48	0.53	0.58
	(0.50)	(0.50)	
Age	13.25	13.28	0.86
	(1.10)	(0.96)	
# of family members	4.53	5.92	0.00
	(0.87)	(2.76)	
Maternal education is primary or lower	0.86	0.83	0.54
	(0.34)	(0.38)	
Average monthly allowance (RMB)	157.88	249.66	0.09
	(220.71)	(374.43)	
Math score (percentile rank)	0.55	0.44	0.02
	(0.29)	(0.29)	
Observations	81	76	

Note: Standard deviations in parentheses. The last column reports the p-values of the two-way tests of the equality of the means between Mosuo and Han as indicated. Elementary school sample includes students from first to fifth grades and middle school sample only includes those who were in the seventh grade in 2015 and in 2016. Number of observations reported are those who participate in the experiment and reported age and gender. For some of the variables, such as allowance, mothers' education only a subset of the students answered those questions.

Table S2: Distribution of Incentivized Lottery Choices

50/50 Gamble	Low Payout	High Payout	Expected payout	SD of payout
1	3	3	3	0
2	2.5	5	3.75	1.25
3	2	6	4	2
4	1.5	7.5	4.5	3
5	0.5	9	4.75	4.25
6	0	10	5	5

Notes: The cost of a lunch in elementary schools is about 5 yuan (roughly 75 cents).

Table S3: Mann-Whitney Test for Testing Equality between Male and Female Students

	Mosuo	Han
All	.181	001
Grade 1	.191	.116
Grade 2	.683	.065
Grade 3	.719	.264
Grade 4	.275	.334
Grade 5	.002	.31
Grade 7	.049	.136

Notes: Each cell reports the p-value of the Mann-Whitney U Test (Wilcoxon 1945; Mann and Whitney 1947) for whether male and female students have the same game choice distribution within the given ethnicity and grade. Column 1 restricts to Mosuo and Column 2 restricts to Han.

Table S4: Mann-Whitney Test for Testing Equality between Mosuo and Han

	Male	Female
All	.886	.021
Grade 1	.856	.006
Grade 2	.412	.128
Grade 3	.897	.027
Grade 4	.291	.218
Grade 5	.317	.373
Grade 7	.35	.984

Notes: Each cell reports the p-value of the Mann-Whitney U Test (Wilcoxon 1945; Mann and Whitney 1947) for whether Mosuo and Han have the same game choice distribution within the given gender and grade. Column 1 restricts to male students while column 2 represents female students.

Table S5: Gender Gap in Risk Preferences between Mosuo Students and Han Students

	(1) No control	(2) Col(1) + Age FE	(3) Col(2) + Year FE	(4) Col(3)+School FE
Mosuo × Female, β_1	0.300	0.310	0.313*	0.328*
	(0.187)	(0.190)	(0.190)	(0.195)
Female, β_2	-0.475***	-0.505***	-0.511***	-0.515***
	(0.134)	(0.137)	(0.137)	(0.138)
Mosuo, β_3	-0.001	-0.078	-0.106	-0.095
	(0.140)	(0.144)	(0.143)	(0.151)
N	510	509	509	509
$\beta_1 + \beta_2$	-.175	-.195	-.199	-.187
P-values for testing $\beta_1 + \beta_2 = 0$	.179	.137	.133	.171

Notes: The equation estimated is as follows: For each student i,
$Y_i = \beta_0 + \beta_1 Mosuo_i \times Female_i + \beta_2 Female_i + \beta_3 Mosuo_i + \varepsilon_i$. $Mosuo$ and $Female$ are two dummy variables. Dependent variable is the choice in the risk game (ranging from 1 to 6), with 1 being most risk averse and 6 being most risk loving. We estimate it using an ordered probit model. This regression includes both middle school and elementary school students. $\beta_1 + \beta_2$ indicates the gender gap in lottery choices between Mosuo males and Mosuo females. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table S6: Peer Effects in Elementary Schools

	Girls Only	Boys Only
	(1)	(2)
Age, γ_1	0.452*	1.427**
	(0.255)	(0.460)
Mosuo, γ_2	0.538**	0.020
	(0.267)	(0.380)
Mosuo Minority, γ_3	0.343	0.291
	(0.266)	(0.341)
Age × Mosuo, γ_4	-0.635**	-1.714***
	(0.275)	(0.485)
Age × Mosuo Minority, γ_5	-0.325	-1.433**
	(0.268)	(0.464)
Mosuo Minority × Mosuo, γ_6	-0.235	-0.242
	(0.329)	(0.431)
Age ×Mosuo Minority × Mosuo, γ_7	0.161	2.022***
	(0.300)	(0.497)
N	193	159

Notes: Dependent Variable is the choice in the risk game (ranging from 1 to 6), with 1 being most risk averse and 6 being most risk loving. Ordered probit model is employed. This regression includes elementary school students and report the results from Equation 2. *Mosuominority* equals 1 if a student is in the school-grade cohort where less than 50% of his/her cohort are Mosuo. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table S7: Peer Effects in Elementary Schools, over grade

	Girls Only	Boys Only
	(1)	(2)
Grade, γ_1	0.397	1.700**
	(0.302)	(0.643)
Mosuo, γ_2	0.673**	0.549
	(0.280)	(0.418)
Mosuo Minority, γ_3	0.487*	0.723*
	(0.277)	(0.395)
Grade × Mosuo, γ_4	-0.624**	-1.929**
	(0.317)	(0.659)
Grade × Mosuo Minority	-0.282	-1.756**
	(0.315)	(0.649)
Mosuo Minority × Mosuo, γ_6	-0.409	-0.779*
	(0.338)	(0.462)
Mosuo × Mosuo Minority × Grade	0.097	2.190**
	(0.346)	(0.672)
N	193	160

Notes: Same as Table A7 except using grade instead of age. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table S8: Peer Effects in Middle School

Ordered Probit Estimates		
	Δ: Shareof Non-Mosuo Roommates	Δ: All three Best Friends are Non-Mosuo
$\Delta \times$ Mosuo $\times$ Female, β_1	-0.627*	-0.129
	(0.353)	(0.971)
$\Delta \times$ Female, β_2	-0.127	-0.332
	(0.185)	(0.782)
$\Delta \times$ Mosuo, β_3	0.810***	0.998
	(0.235)	(0.634)
Δ, β_4	-0.045	-0.170
	(0.137)	(0.517)
Mosuo $\times$ Female, β_5	-0.016	-0.058
	(0.370)	(0.821)
Female, β_6	-0.467**	-0.510
	(0.214)	(0.520)
Mosuo, β_7	0.213	-0.524
	(0.221)	(0.567)
N	129	49

Notes: Dependent variable is the choice in the risk game (ranging from 1 to 6), with 1 being most risk averse, and 6 being most risk loving. Ordered probit model is employed. Column 1 restricts to those who board at the school for either 2015 or 2016. Column 2 restricts to those from the 2015 survey. *Delta* represents the share of non-Mosuo roommates in a given dorm room in Column 1 and *Delta* represents a dummy variable indicating all three reported best friends are from non-Mosuo ethnic groups in Column 2. In Column 1, robust standard errors are clustered at the dorm room level. * significant at 10%, ** significant at 5%, *** significant at 1%.

Table S9: Mann-Whitney Test for Testing Equality between Students with Above and Below Median Observable Characteristics

	Academic performance	Maternal education attainment	Allowance
All	0.76	0.87	0.66
Grade 1	0.81	0.15	0.85
Grade 2	0.70	0.89	0.57
Grade 3	0.99	0.49	0.37
Grade 4	0.78	0.49	0.58
Grade 5	0.23	0.75	0.17
Grade 7	0.43	0.08	0.14

Notes: Column (2): We first define whether a student is above or below median academic performance by imputing the rank for end-of-semester math score within a school-grade-year. Each cell reports the p-values of the Mann-Whitney U Test (Wilcoxon 1945; Mann and Whitney 1947) for whether students with above and below median performance have the same game choice distribution within the given group. Column (3) and Column (4) report the p-values of the Mann-Whitney U Test for whether students with above and below median maternal education attainment or monthly allowance have the same game choice distribution within the given group.

Table S10: Correlation between Math Ability, Being Mosuo and Being Female

	(1)
Mosuo	-0.094
	(0.090)
Female	0.004
	(0.103)
Mosuo × Female	0.041
	(0.120)
R-squared	0.0123
N	153

Notes: The dependent variable is one's percentile rank in math scores within a given school-grade. This regression restricts to third grade students and below.

Figure S1: Distribution of Lottery Choices, by Grade, by Gender, by Ethnicity

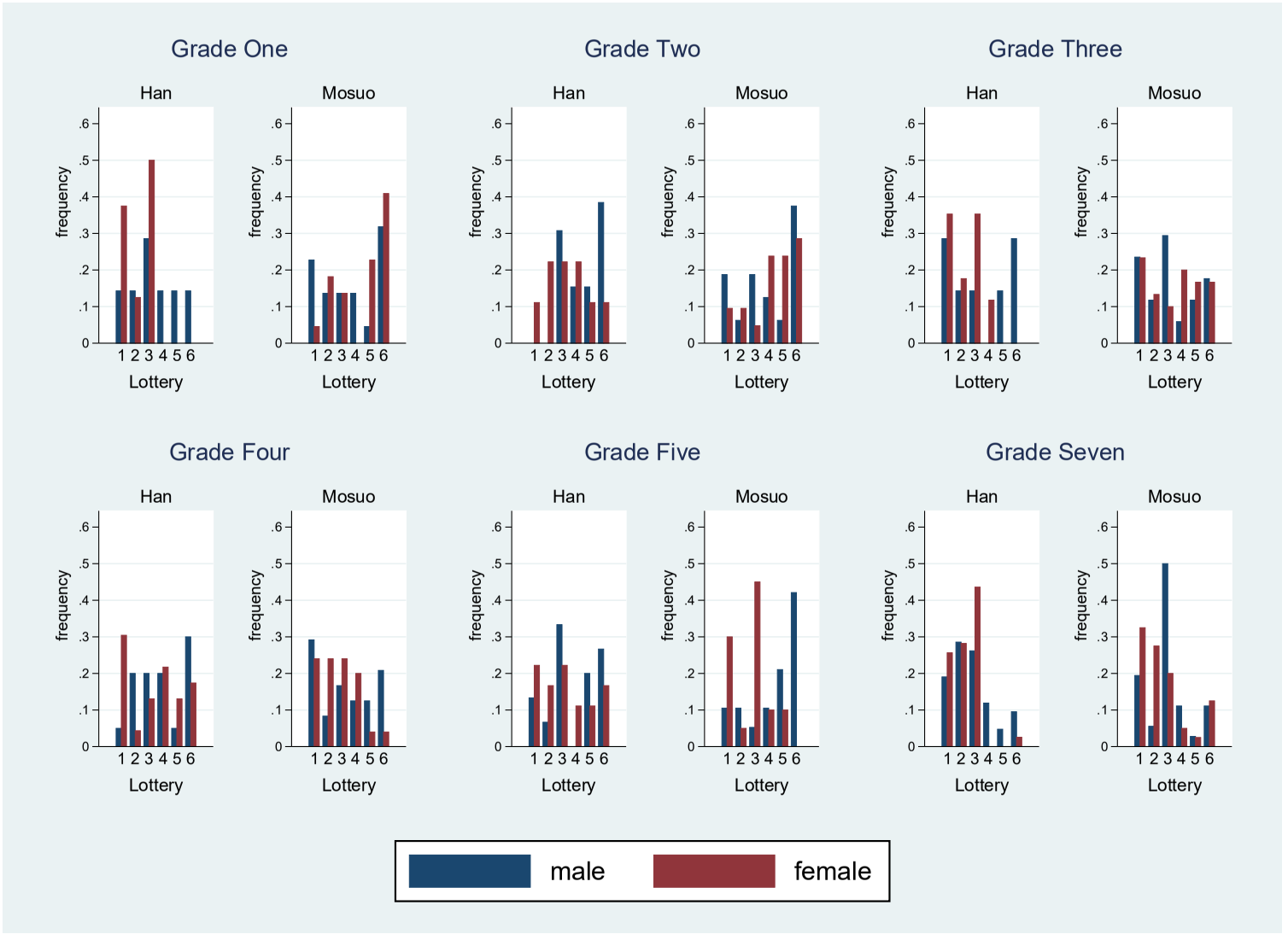


Figure S2: Mean of Lottery Choices, by Age, by Gender, by Ethnicity

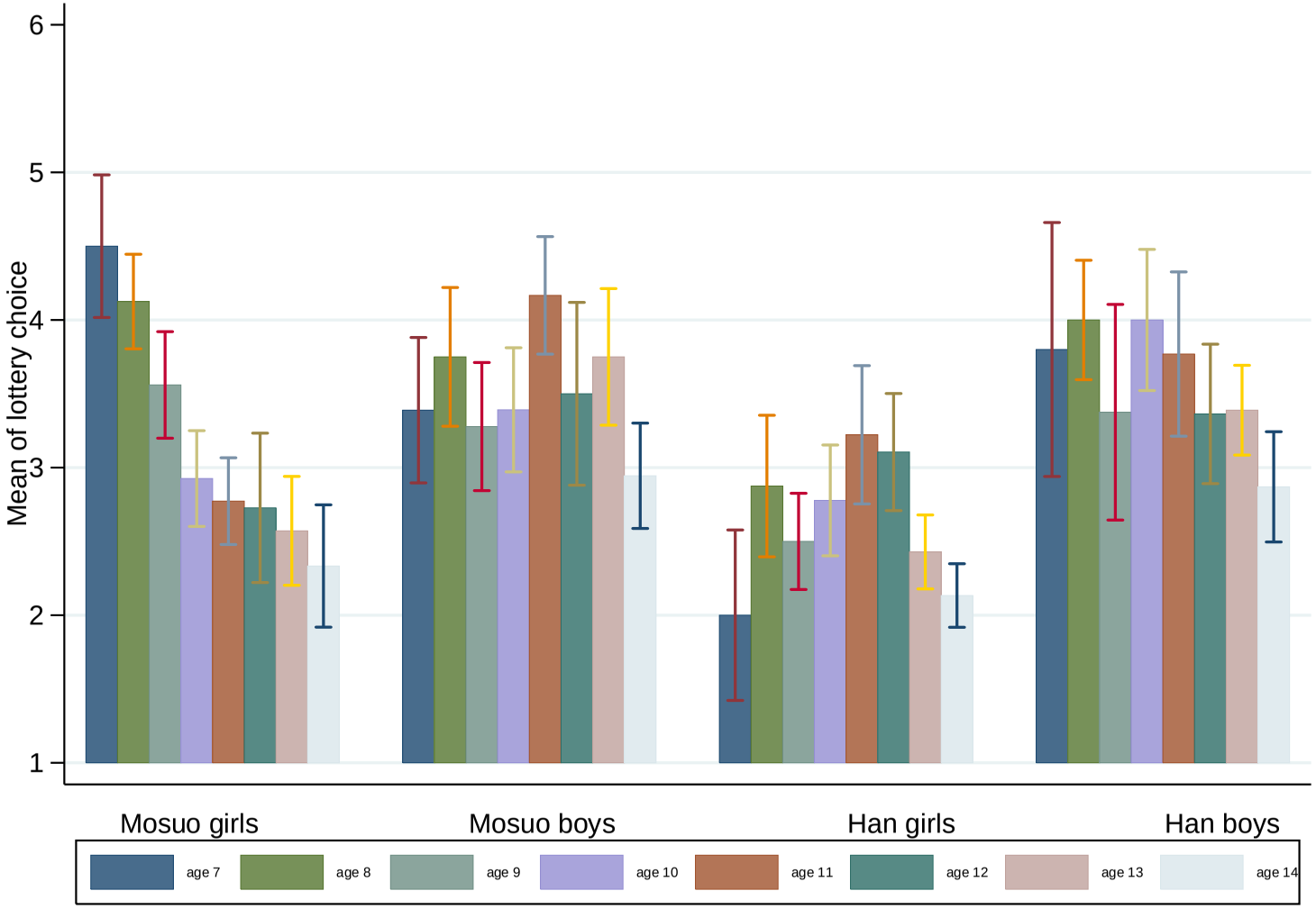


Figure S3: Median of Lottery Choices, by Grade, by Gender, by Ethnicity

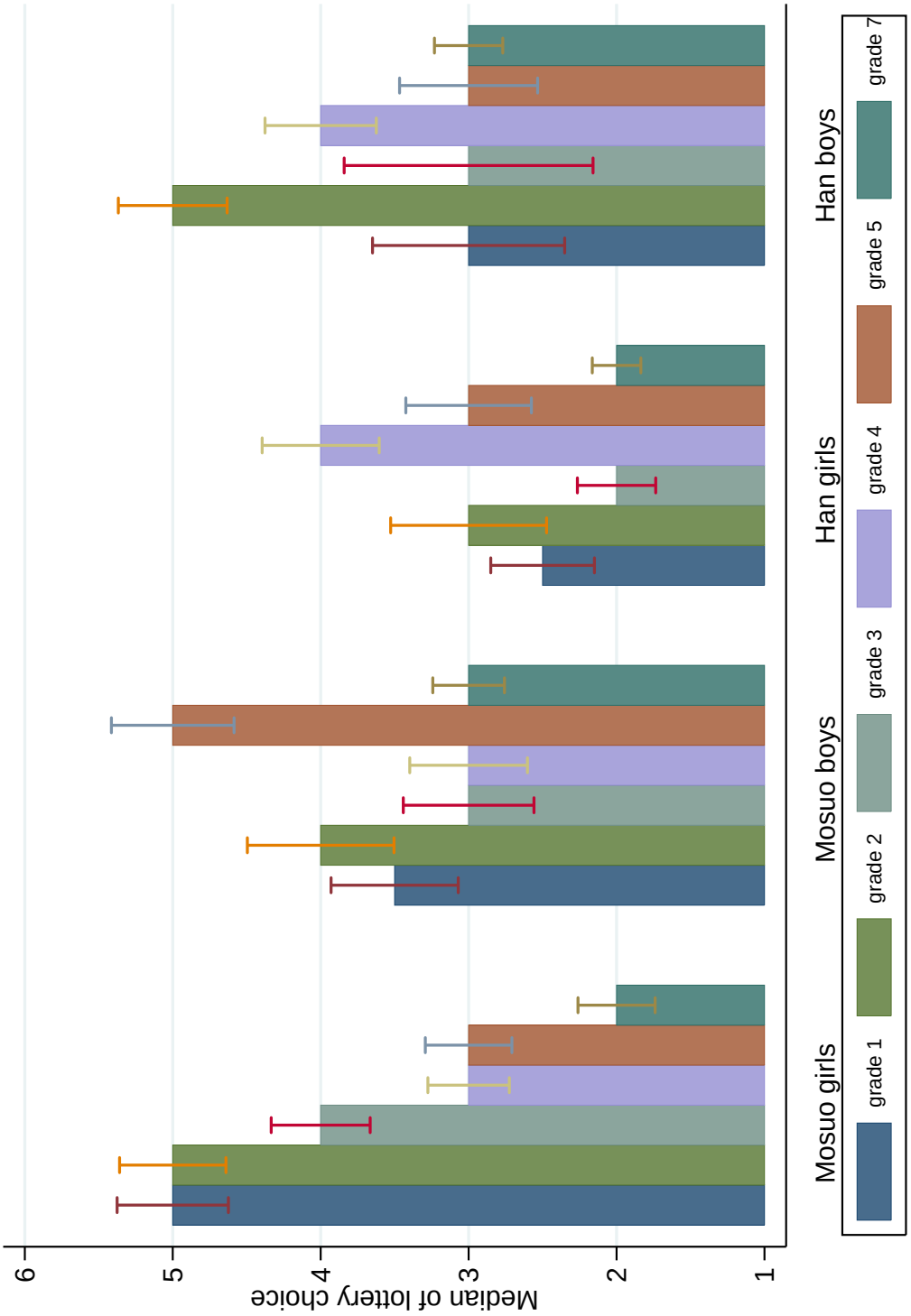
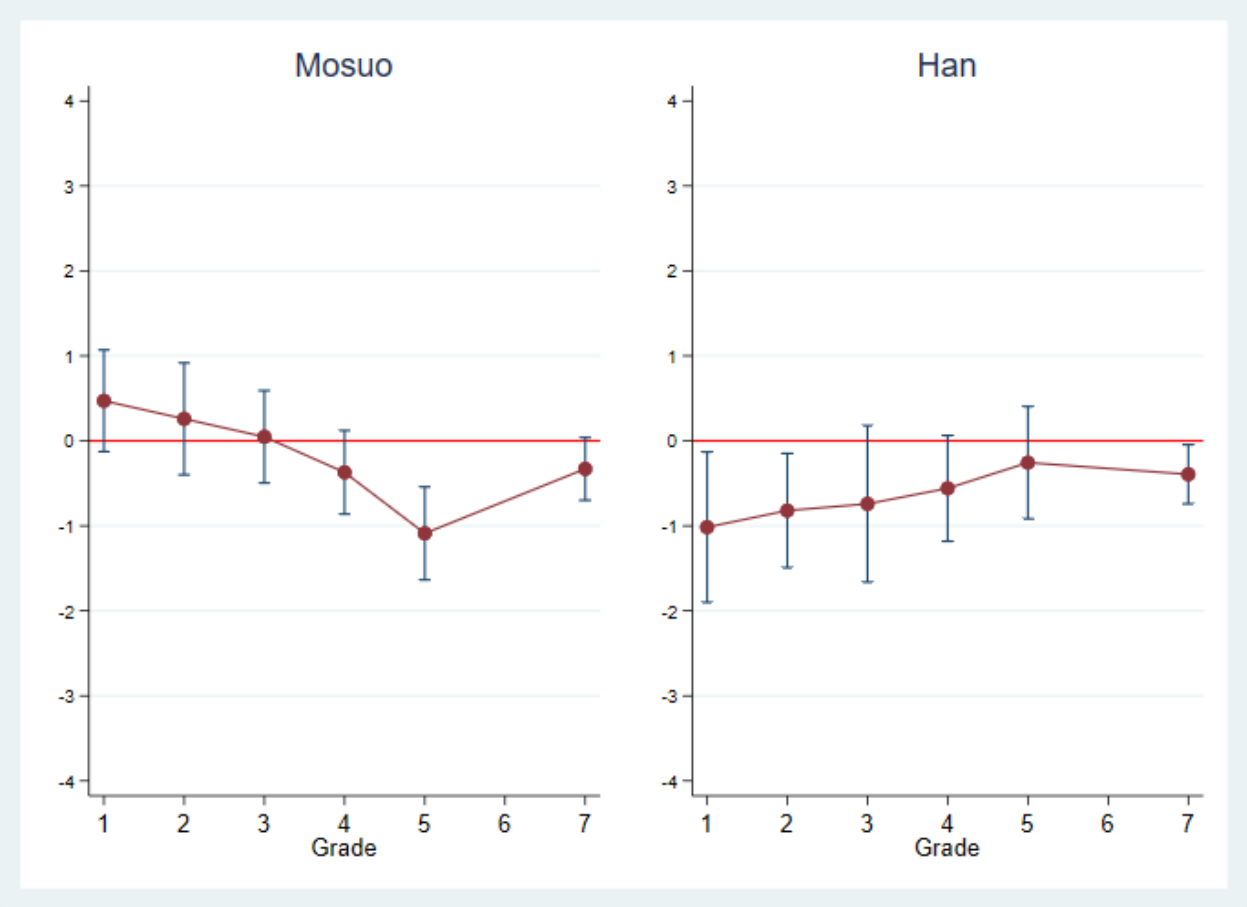
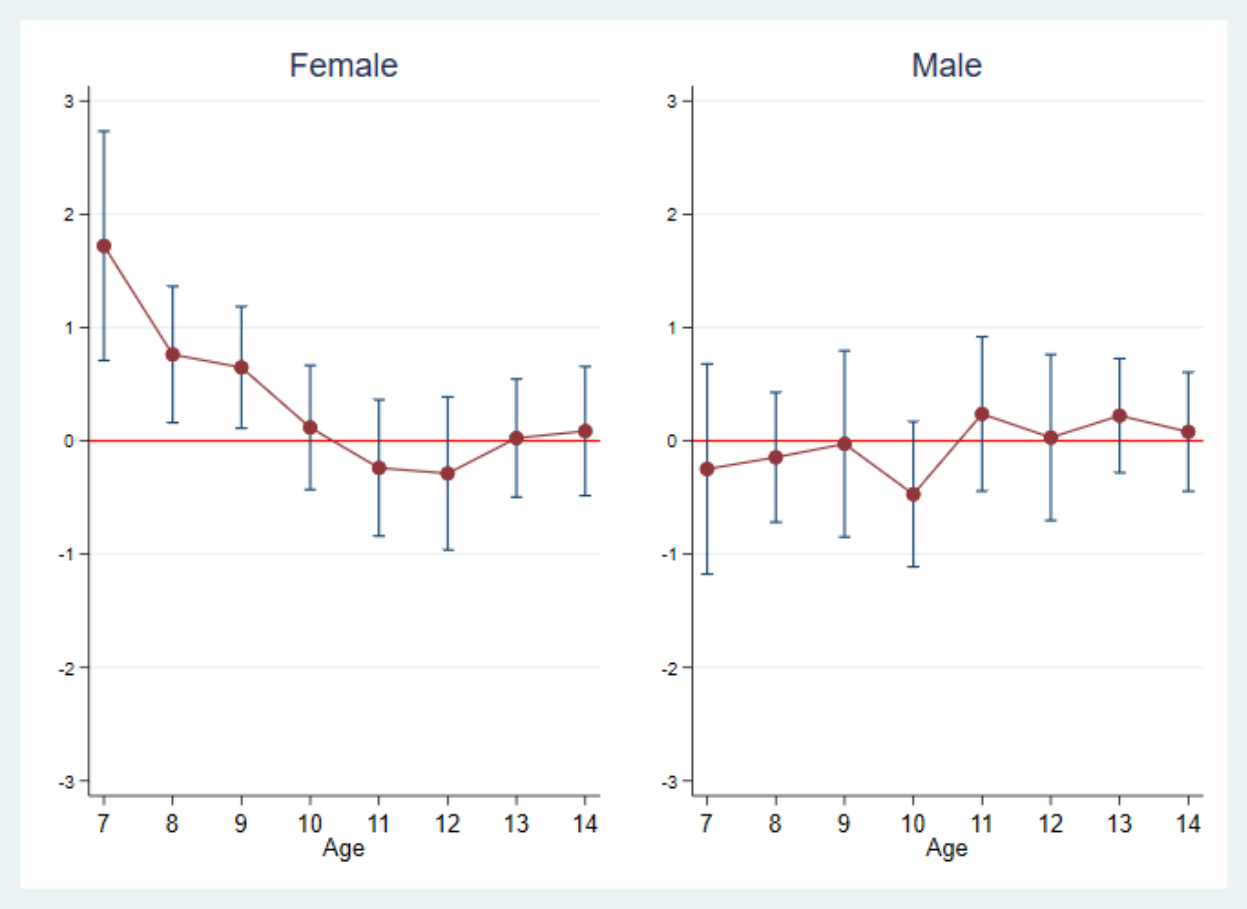


Figure S4: Gender (Female-Male) Gap in Risk Preference, by Ethnicity, by Grade



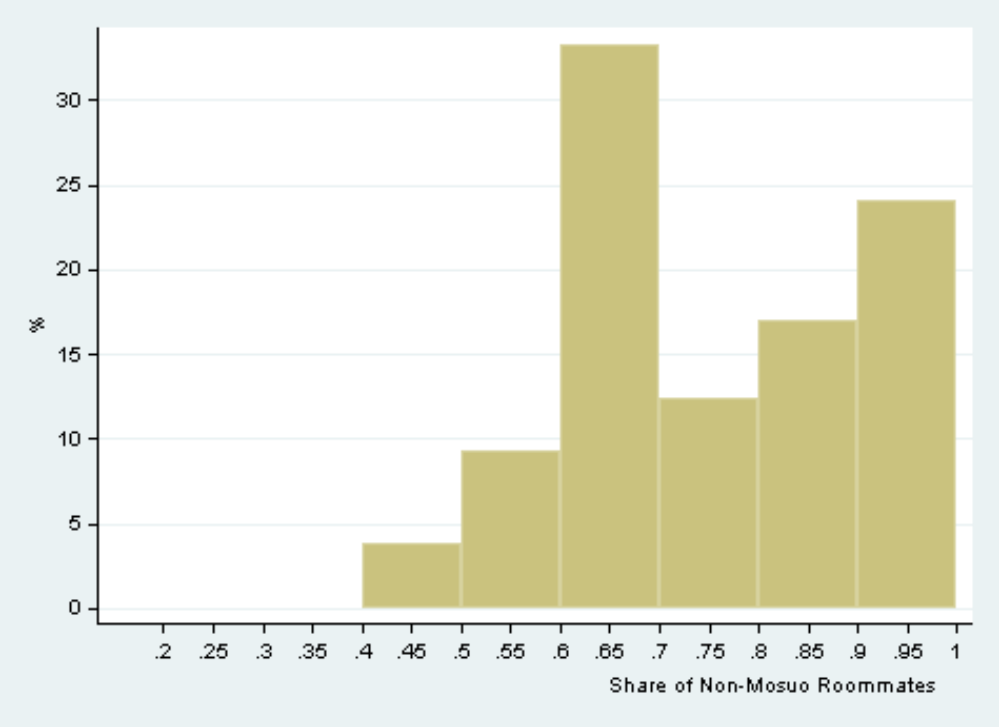
Notes: Regression estimates from Equation 1 (but with grade instead of age) are plotted. Positive indicates females have higher attitudes toward risk loving than males. The dot and the bar correspond to the coefficient estimates with 90% confidence intervals.

Figure S5: Mosuo-Han Gap in Risk Preference, by Gender, by Age



Notes: Regression estimates from Equation 1 are plotted. Positive indicates Mosuo have higher attitudes toward risk loving than Han. The dot and the bar correspond to the coefficient estimates with 90% confidence intervals.

Figure S6: Probability Distribution of Share of Non-Mosuo Roommates



Notes: Bin width is 0.1. The mean share is 0.74 with standard deviation 0.15.

Pilot Experiment and the Choice of Experimental Protocol

Pilot Experiment Procedure We conduct 2 rounds of pilot experiment with 5 children in each round from a nearby region in Yunnan province. The age of these kids ranges from 5 to 8. In the first round of the pilot, we tried to use the multiple price listing (MPL) elicitation method. We conducted this experiment with one-on-one, face-to-face explanation. This game has six rows with two choices in each row. One is a risky choice with 50-50 chance to win a large payoff and zero payoff. The other is a fixed payment. The risky choice is constant across six rows but the fixed payment increases from row 1 to row 6. When playing MPL, subjects need to make a choice within each row, and one of these six rows will be randomly chosen to realize his choice. After we explained the MPL game to our subjects, and the choice they have to make we asked, "Do you understand?" and all said "Do not understand." We tried to explain one more time and, although a couple subjects knew how to make a choice the second time, they still replied, "Do not understand" or "Do not quite understand." Although there are studies using similar simplified MPL among subjects of comparable age groups (Levin and Hart 2003, 2007), we decided not to proceed with this game design.

Next, we tried the Eckel and Grossman (EG) game design. We try this in group setting by having all children in the same room. We first followed the standard protocol to distribute the answer sheet and let children read themselves. We realized the younger kids read much more slowly than the older kids, and some did not understand all the words on the protocol. We decided to add a verbal explanation. Studies also suggest that speaking aloud can help subjects understand better (Charness et.al. 2018). When we finished our verbal explanation with a few demonstrations, we asked, "Do you understand?" and most kids replied, "Yes." Then we asked, "Do you have any questions?" A child also asked us to show them the Ping-Pong ball/bag. A local math teacher present at the pilot experiments also suggested that we draw the circles which are shown on the answer sheet on the blackboard while we explained the protocol and use demonstration to test whether students understand the protocol.

Based on the experience with the first five kids, we finalized how we conducted the games. For the second round, we first distributed the answer sheet, and then we drew the pictures (shown in Appendix X) on the blackboard while explaining verbally. And we showed them the Ping-Pong ball/bag they were going to draw. We used a couple rounds of demonstrations to test whether they can understand. For example, "if I choose number 2 and the ball I draw is white (while drawing the ball out of the bag), how much money can I get?" We wait for children to speak their answers out loud to see whether they get it or not. Then we walk them through the explanation of the correct answer by pointing to the circles on the blackboard. Then we do the demonstration again. "If I choose number 5, and draw a yellow ball (all while pointing to the blackboard and drawing ball out of the bag), how much money do I get?" Again, we wait for the spoken answers from the students again. The finalized version of the experimental script and protocol used in the actual experiments are also included in the online appendix (page 17-20).

References:

1. Charness, Gary, Catherine Eckel, Uri Gneezy, and Agne Kajackaite. "Complexity in risk elicitation may affect the conclusions: A demonstration using gender differences." *Journal of Risk and Uncertainty* 56, no. 1 (2018): 1-17.

2. Levin, Irwin P., and Stephanie S. Hart. "Risk preferences in young children: Early evidence of individual differences in reaction to potential gains and losses." *Journal of Behavioral Decision Making* 16, no. 5 (2003): 397-413.

3. Levin, Irwin P., Stephanie S. Hart, Joshua A. Weller, and Lyndsay A. Harshman. "Stability of choices in a risky decision-making task: A 3-year longitudinal study with children and adults." *Journal of behavioral decision making* 20, no. 3 (2007): 241-252.

Experimental Procedure

We asked the principals/teachers to help distribute the parental permission letters to all Han and Mosuo students' parents. No one chose to not participate in the experiments. The experiments were conducted immediately after school (2:30 p.m.) for elementary school students and in the evening for the middle school students. (Most middle school students are required to participate in the "study session" in the evening at the school.) For each school, we held sessions in one of the classrooms, and each session lasts no more than an hour. Each session ranges from 20 to 40 students. We gave each of them a pencil and an eraser as a show-up reward. Students could get some money as payment depending on their choices and the draw during the experiment. We first read the informed consent form, so the subjects had a chance to leave if they chose not to participate. We distributed the answer sheet and described the details of the experiment. We did demonstrations of the experiments multiple times. Students wrote down their choices and there was no talking among students. Answer sheets were collected when they finished. Next, we distributed the questionnaire. We collected the questionnaire. Students were called out one by one to go outside the classroom to draw a ball and we gave them a cash reward depending on their choice and their draw. We did this one by one to ensure that no one but the experimenter and the students themselves knew their choices and their reward.

Experiment Script

One child is seated in one seat. Each student is separated from the other by space.

Hello, everyone! Welcome to participate in the game. Today's experiment has no impact on your course grade. It will take about 20 minutes. You will have a chance to win some cash as prize depending on your choice in the exercise. The game is simple, but please listen carefully to the instructions and if you have any questions please raise your hands.

The experimenter distributes the answer sheet and then draws the circles showing on the answer sheet on the blackboard with white chalk.

In this game, there are six groups which you can choose one of them to win money. How much you can win depends on the color of a pin pang ball you draw from a black plastic bag. There are two ping pong balls in this bag, where one is yellow and the other is white.

The experimenter lifts the bag/box and shows it in front of all students. Students will see these two balls and the box/bag. Then the experimenter will point on circles on the blackboard and give an example.

For example, if you would like to choose number one. Fill in the number "1'' in the blank. After all students submit the sheet, we will ask you to draw the ball from the box/bag one by one, and if the ball you draw is yellow, you will get 3 yuan, if the ball you draw is white, you will get 3 yuan. If you would like to choose number six. Fill in the number "6'' in the blank. After all students submit the sheet, we will ask you to draw the ball from the box/bag one by one, and if the ball you draw is yellow, you will get 10 yuan, if

the ball you draw is white, you will get 0 yuan. Now, let me ask you. If I choose number "3'', and later on the ball I draw is white, how much money can I earn?

The experimenter will observe the response from the students and pause for a moment.

If I choose number "4", and later on the ball I draw is yellow, how much money can I earn?

The experimenter will observe the response from the students and pause for a moment again.

Do you have any questions? Do you understand?

The experimenter will observe the response from the students. If all students answered "yes", the experimenter will ask students to write down their answers on the sheet. If some students show some hesitation, the experimenter will explain the game with several other examples. After all students fill in their answers, the experimenter will collect the answer sheets.

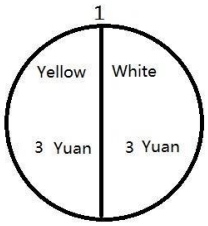
Student ID: _____

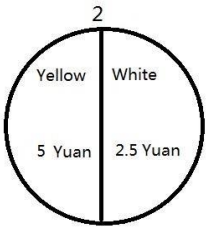
Experiment Instruction (Translation)

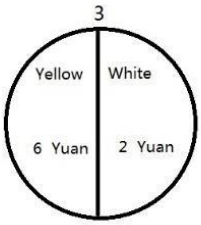
Hello, everyone! Welcome to participate in the game. Today's experiment has no impact on your course grade. It will take about 20 minutes. You will have a chance to win some cash as prize depending on your choice in the exercise. The game is simple, but please listen carefully to the instructions and if you have any questions please raise your hands. In this game, there are six groups which you can choose one of them to win money. How much you can win depends on the color of a pin pang ball you draw from a black plastic bag. There are two ping pong balls in this bag, where one is yellow and the other is white. Do you have any questions? Do you understand?

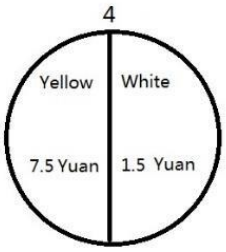
Please write down the number of the group you choose on the following blank.

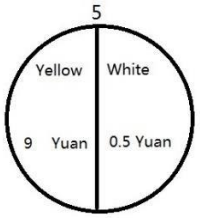
I would like to choose number _____.

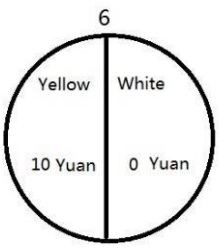












学生编号：_____

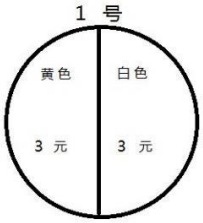
实验指引

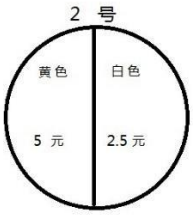
大家好，欢迎同学们来参加今天的游戏。今天的游戏对你们的学习成绩没有任何的影响。游戏大概持续 20 分钟。 同时根据你在游戏中的选择每个人都有机会赢得现金作为奖励，所以你要认真做出决定 喔。这个游戏很简单，但是请认真听我们的游戏规则，如果有任何问题，请举手。

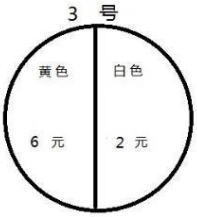
在这个游戏里，我们有六种得奖的组合，每种组合中有两笔钱。你可以选择其中的任何一种，当你选择好以后，你能赢得多少钱将由你摸到乒乓球的颜色来决定。总共有两个乒乓球在这个黑色塑料袋里，其中一个是黄色，另外一个是白色。

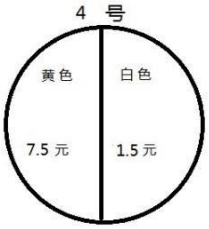
请你做出选择，并将你选择的组合序号填在下面的横线上。

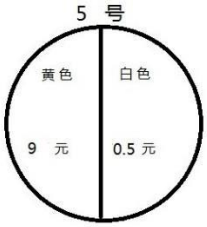
我愿意选择_____ 号。

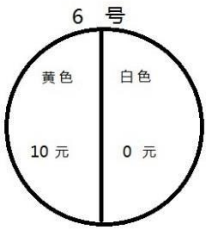












Why do we only examine 7th grade students in roommate study?

At the beginning of each new academic year, classes and dorm room assignments are reorganized. Since we only have administrative room assignment information for the current year, and accounting for the impact of exposure when roommates change every year is difficult, we focus on the peer effects of seventh-graders in this paper.