

Does the Distribution of Bargaining Power Across Parents Affect Children's Well-being?

Experimental Evidence

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Abstract

In this study, we investigate bargaining power under risk and uncertainty among 70 rural couples of Okara, Punjab, Pakistan. We use risk and uncertainty experiments conducted individually and jointly with spouses to estimate their bargaining power. Survey data has also been collected for comparison purposes and to estimate the impact of women's bargaining power on child outcomes. The results reveal that in the context of rural Okara, it is the husband who has the higher bargaining power as compared to his wife and risk and ambiguity aversion has a high negative impact on the bargaining power of women. Our results reveal that as women bargaining power gets higher, child labor reduces, especially for daughters and child health improves specially for sons, but surprisingly, child schooling diminishes with the increase in women's bargaining power for both sons and daughters. Also we found that self-reported data is not reliable enough because huge differences are found when same questions regarding HH decisions were asked separately from spouses.

Introduction

Higher bargaining power in decision making process within a household is a vital facet for the progress of family unit, the communities, and then for the development of nations. Each individual in the household has his/her own preferences and ranges, thus, in order to advance the lives of dependent members of households, it is imperative to know the inclinations of the person who has higher bargaining power in the decision process within a household and how this higher power in decision process effects the dependent members of house hold, like children.

This study is four fold, first of all we observe risk and uncertainty attitudes of men, women and of couples. We perceive how females are different in taking decisions under risk and uncertainty from males and how men and women behave individually versus their behavior as a couple. Secondly, we calculate bargaining power of husbands and their wives through the experimental measures. We conduct risk and uncertainty experiments with husbands and wives individually and then jointly with the couples. The person whose individual decision is more close to joint decision is considered as having higher bargaining power. Thirdly, in addition to experiment generated bargaining power we also compute self-reported bargaining power. For self-reported bargaining power we gather data on decision making process of household using survey questionnaires. We asked several questions regarding decision making of household from both entities of couple and then using the responses to these questions of decision process we make an index of self-reported bargaining power through principal component analysis. Finally, after assessing that within a couple whose decision is being considered the final decision, in second half of the study we gauges how this decision power affects the dependent persons of household, as children. In this section we estimate the impact of experiment generated bargaining power

and self-reported bargaining power on child labor, child anthropometric measures as a proxy of child health and child schooling.

Further addition in existing literature is ensured through our new data set. We collect the data through experiments and from survey questionnaires from 70 randomly selected households of a rural area of Okara, Punjab Pakistan.

Our results of risk and uncertainty/ ambiguity attitudes indicates that on average degree of ambiguity aversion is higher as compared to risk aversion and woman expresses more repugnance in risk as well as in uncertainty experiment compared to the aversion level of men. Then using these risk and uncertainty aversion variables we measure bargaining power of husbands and wives. In both these experiments men's individual decisions finds to be more close to joint decisions so we considered men as having higher bargaining power in household decision process compared to women.

When we come to the self-reported bargaining power, self-reported data doesn't reveal the true dynamics in the household. The responses of individuals were conscious and were failed to show the true picture as enormous differences found in the replies of husbands and their wives for same questions asked about their household decisions. Because of these differences we couldn't combine their responses to construct the index of bargaining power. So we construct a single variable of self-reported bargaining power of women using the responses of wives only. Thus we can't conclude through self-reported answers that who is dominating within a couple.

After determining bargaining power we evaluate the impact of experiment generated negotiating power on child labor, child health and child schooling, respectively. Our results indicates that with the increase in mother's bargaining power child labor reduces and daughters acquire more benefit in lessening of child labor, child health improves with giving more advantage to sons but

surprisingly child schooling aggravates for both sons and daughters with increase in their mother's bargaining power.

However when we evaluate the impact of self-reported bargaining power index on child outcomes we could not catch any significant effect.

Our paper proceeds as follow: Section 2 discusses relative literature to our paper in detail. Section 3 describes our contribution and the questions to be answered in this paper. In Section 4 we describe the whole data collection through surveys and detailed design of experiments conducted along the methodology that we used. Section 5 discusses the results and lastly, Section 6 concludes the paper.

Literature Review

Empirical literature

'Who has the higher bargaining power within a household – Men or women?' is an important question in household decision making procedure. For the past few years, many researches have been done regarding this question. A vast literature supports the "unitary" or "common preference" model of household, according to which all the members of household have identical preferences and all the decisions are taken jointly by collective decisions of all members (Bourguignon, et al. 2009). On the other side, there are "individual preference" or "individual utility" models of household that challenged this unitary model (Shelly et al. 1997; Duflo. 2003; Chattopadhyay & Duflo. 2004). According to individual preference models, all members within a household have different preferences and thus take decisions differently. With the growing literature in contrast to common preference models by now, we can say that it is more important to test within a household whether husband or wife has higher bargaining power. As, there is a vast literature that shows mothers are more likely to spend on their children and fathers or

husbands are more likely to spend on other house expenditures (Shelly et al. 1997; Duncan et al. 2002; Rangel, M. A. 2006). Furthermore, many empirical studies have found that when income or power (land rights) is in the hands of women instead of man, it results in higher investment in children's health and/or education (Thomas et al. 2002; Duflo. 2003; Allendorf, K. 2007). Poor health or inadequate nutrition in childhood can result in decreasing productivity and also affect the cognitive skills in the later life (Barker. 1990; Strauss, J., & Thomas, D. 1998). So we can say that investment in children is most important for long run economic growth and welfare and thus it highlights the importance of higher bargaining power of women in decision making process. Other than gender, there are individual preferences that are more essential in decision power. Raghavendra Chattopadhyay and Esther Duflo used political reservations for women in India in 2004 to study the impact of leadership by women on the policy decisions and they found more investment by women leaders in the projects that directly related to the needs of women.

Experimental Literature

All these empirical studies, however, provide very little evidence about how the decisions are actually made in households. Also, the decision making power depends on many individual characteristics such as gender, literacy, and income etc. So, in empirical measurement of bargaining power, there are a lot of specification issues. In recent years, there is growing literature about using experimental method to study intra- household bargaining power for more sophisticated and reliable results by controlling over the decision process (Slovic et al. 2004; Munro et al. 2008 and Kebede et al. 2013).

In this paper we also used an experimental approach to measure the degree of bargaining power of specifically mothers within the households. We follow the experimental measures taken by Braaten, R. H., & Martinsson, P. for Peruvian peasant couples in 2015.

Peasant households have some common characteristics in decision making process regarding risk and uncertainty because the main sources of their earnings are related to agriculture and livestock which have risky outcomes. Catering this risk factor into account, there is a growing literature now-a-days on the use of experimental designs under risk to study the decision making process within a household (Munro et al.2008;De Palma et al. 2011; Gong, B. and C. L. Yang. 2012; Abdellaoui et al. 2013; Carlsson et al. 2013;Kebede et al. 2013). All these experiments suggest a common finding that usually women have higher risk aversion compared to men. But we also found in previous literature that, based on individual characteristics people tend to make different choices under risk. As Said et al, (2015) studied risk aversion and risk learning in rural Punjab Pakistan, they found that there is significant individual variation in behavior towards risk with lower risk aversion for the people who experience losses. Another study by Dohmen, et al,(2010) shows that individuals with higher cognitive ability are willing to take more risk. Akay et al,(2012) show farmers are more risk averse as compared to University students.

Similarly, some experimental results of risk show that joint decisions are more risk averse as compared to individual choices (Baker et al,2008; He, H., Martinsson, P., & Sutter, M. 2011; Zhang, J. and M. Casari 2012).

De Palma et al,(2011) studies couple and individual decision power using risk experiments conducted in a city of Germany with 22 couples in seven sessions. They find risk aversion at both individual and couple levels and that in most of the couples men usually have more bargaining power. Carlsson et al, (2012) also estimate decision making power using experimental approach in rural areas of Majiang, China. They measure relative influence of spouse's on joint decision among 101 rural couples and found more influence of husbands than their wives.

But in the context of rural households, uncertainty is a more striking feature because there is an unknown probability attached to the weather conditions like rains, wind, storms, and floods that directly impact the earnings of peasant households since their main sources of livelihood are concerned with agriculture and livestock. Thus, uncertainty is more important for peasant households. Taking this fact into account Ragnhild Haugli Braaten and Peter Martinsson (2015) also includes uncertainty with risk experiments to study intra-household bargaining power.

Following their experimental measures, we also conducted risk and uncertainty experiments in a rural area of OKARA, PUNJAB, PAKISTAN. We conduct these economic games first with husbands and wives separately and then with spouses jointly. To make our results more reliable and compatible, along these experiments, self-reported data has also been used along the experiments to study the intra-household bargaining power in a rural area.

In the previous literature, we risk experiments are used to study the higher decision power within a household, however, to my knowledge none of these experimental papers answer the question related to the different impact of men's and women's bargaining power on different child outcomes. Gender of dominant partner can affect child education, health, and labor patterns differently. Gender of child also matters a lot in receiving investments especially in the context like Pakistan because in all these developing countries there are high gender gaps even within the households. Emerson, P. M., & Souza, A. P. (2007) used Brazilian household survey data set to estimate the impact of each parents' education on the education and child labor of their sons and daughters separately and they found significant gender gap at both parent and child level. Their results indicate that father's education has a greater negative impact on the son's labor status while the mother's education has greater positive impact on the daughter's schooling. Likewise, Esther Duflo (2000) studied the impact of cash transfer in old age pension receivers in South

Africa on child nutritional status. Her results suggest that pension received by women has large positive impact on girls' anthropometric status but very little impact on boys', while pension received by men has no such affects. Lundberg et al,(1996) use a natural experiment that transferred child allowances from husbands to wives and they found that this transfer results in higher expenditures on women's and children's clothing relative to men's clothing. Schmidt, E. M. (2012) examine the impact of greater bargaining power in the hands of Bangladeshi women and found that greater participation of women in decision making process had positive impact on child health decisions, child height-for-age z-scores, and large household purchases and decisions regarding daily needs. Similar results that show women usually tend to spend more on children found in the work of Seth R. Gitter and Bradford L. Barham (2008).

Contribution

Thus, in this paper, we estimate the degree of bargaining power of the mothers in a household and then estimate its impact on different health and education indicators of sons and daughters by using a new data set of rural area of Punjab, Pakistan. We used the data of risk and uncertainty experiments conducted with peasant couples and also the data from a base-line survey conducted with same couples in that rural area to measure the bargaining power within household.

With the increasing popularity of individual preference models and with knowing the importance of gender in decision making process, first of all we will answer the question that within a household among the couple who has the higher bargaining power, wife or husband. We will answer this question using the risk and uncertainty games conducted first with husbands and wives individually and then with couples jointly. We expect that the member whose individual

decisions are close to the decisions of couple has higher bargaining power. We answer two main questions in our research that are as follows:

Research question1:

Whether the gender of dominating partner varies across households or not? We identify the gender of the parent who takes lead in taking decisions in household and identify the intensity of the dominance by counting the number of decisions taken by that partner alone matches with the final decisions couple made jointly.

Then, we estimate how the child outcomes vary based upon the gender of the dominant parent.

Research question 2:

Vast empirical literature shows that intra-household gender bias exists in developing countries that may have significant effect on the household decision making processes. Therefore, we plan to estimate whether child schooling, child health and child labor is affected by the gender of dominant parent.

To estimate the impact on different child outcomes following research questions are estimated in the paper;

Research question 2a: Does it make any change in labor status of son and labor status of daughter when decision power is in the hand of mother?

Research question 2b: Is there any gender difference in child schooling when parents exhibit different levels of bargaining power?

Research question 2c: Do anthropometric measures of girls and boys tend to vary when women in the household have different bargaining power from men?

Data and Design

We collect the data from a rural area of Okara, a district of Sahiwal division of Punjab, Pakistan. Okara has very fertile land; it is famous for the production of potato, tomato, sugarcane, rice and maize crops along with many fruits and dairy products. It is known as Pakistan's largest city for the production of maize and potato. Tube wells and river water is used for irrigation. Okara is also very rich in livestock population and production.

Catering this risk and uncertainty elements associated with the lives of these villagers, we demeanor the risk and uncertainty games with 70 rural couples of Okara. Summary statistics of our sample are shown in Appendix below. We have conducted both these experiments in separate sessions at a specific place instead of homes of participants, first with the husbands and wives separately and then with couples jointly. Individual session of experiment was conducted with one individual at a time in the absence of other spouse. Each individual played total four games; two in individual session and two in joint session. In every session we show the individuals two choice lists where individuals have to make 10 different choices. In the risk experiment, subjects had to choose between a specific amount, from Rs70 to Rs300 for sure and a lottery with 50% probability of winning Rs300 and 50% probability of getting nothing. Safe amount starts from Rs70 and continue increasing in rest of the nine choices till the maximum amount of Rs300 in the last choice. In the uncertainty experiment; individuals have to make same ten picks but now with an unknown probability of winning lottery. The choice lists are shown in the Appendix, Table B1. The higher number of safe choices a participant picks the more risk and uncertainty averse this participant is considered.

To explain the lottery to the rural individuals we used some physical objects that seems more explaining to them. To describe the lottery in risk experiment we showed them a box with 20

orange paper dies and 20 yellow paper dies. Individuals were asked to decide on the winning color by them -selves and then the participant drew a die out of the box. If the drawn die is that of winning color the participant got the winning amount but in the case of drawn other color, participant gets nothing. Similarly, in the lottery under uncertainty experiment same criterion was applied but now the proportion of orange and yellow paper dies in the box was not known to the participant. The participant decides on the color of die on the basis of his or her perceptions about the proportion of orange and yellow dies in the box. For example, if participant perceives that there are 70% orange dies present in the box then he or she chooses orange color as his or her winning color.

At the start of individual session, partakers were given full illustration about the experiment and were told that the decisions they make will decide their winning amount and their decisions will not be revealed to his/her spouse and will remain secretive. They were also permitted to ask for any supplementary information they required. Also to maintain the comfort level with rural residents we used the language preferred by them which was Punjabi in our case. After illustrating all the game rules, one of the spouses was asked to leave the room and other starts playing. Couple members decide them-selves who starts the game. Then we conduct the risk and uncertainty experiments with the first contestant in the absence of other spouse. To make sure the absence of one spouse while conducting experiments with other spouse is necessary in order to avoid individual to think what his/her spouse want him/her to do. After the first round with first spouse, second spouse is called in and first one leaves the room and both experiments are now played with second spouse. On the completion of individual session, joint session gets started and both spouses are called in the room at the same time. And once again both risk and uncertainty experiments are directed. In the joint session both spouses have to agree upon one

choice each time. In the case if they both did not agree on single decision, instructor leaves them alone until they reach the same decision; to get more realistic results.

Participants were paid in real for only one choice in both games from individual session as well as from joint session. After the individual and joint sessions, one spouse again was asked to leave the room and the other spouse made to choose one choice to be paid in real by choosing one choice card out of pile of twenty choice cards (10 from risk experiment and 10 from uncertainty experiment). And then this participant paid according to that choice. Afterwards second spouse came in and first one left and same procedure followed again. The winning amount was paid in sealed envelopes to both participants separately.

Survey data has also been collected for all of the couples who participated in experiments. Two instructors deal one household members at one time. But to avoid any possible enumerator bias only one person conducted both sessions of games and other instructor filled in the questionnaire. In the survey data we assemble information about household characteristics, child characteristics and respondent's and individual spouse' characteristics. We also call children if present at home to take their anthropometric measures and for rest of the children's data we took interviews of husbands and wives separately. In case if any household members did not want to take part, we simply move to the next home as their participation is voluntary.

Measuring the Risk and Ambiguity Aversion of Husbands, Wives and Couples (Jointly) in a household

From the experimental measures we construct the variables for risk aversion, separately for men, women and for couples. In the risk experiment, the more number of safe choices an individual makes, the more risk averse is that person. Risk aversion is a discrete variable taking the values from 1 to 10. The value of one in risk aversion variable indicate that the person is highly risk lover and chooses lottery all the time, vice versa the value of 10 in the variable of risk aversion

indicates that the person is highly risk averse and chooses safe amount in all 10 choices. The value of 5 will indicate that individual is risk neutral, higher the value more risk averse is a person.

On the same grounds three variables for uncertainty/ambiguity aversion have also been constructed, separately for men, women and couples. Based on our expectations that joint decisions can be more or less risk and uncertainty averse as compared to individual decisions, we are including separate variables for couples. Also, to distinguish more clearly the bargaining power amongst two different genders we are creating separate variable for men and for women.

Measuring the Bargaining Power of the Mother in a household through Experimental Designs

Using these variables, we estimate whether the men or women influence the decision making power at household level. If the joint decision of the couple closer to men as compared to the women, we can say that husbands have higher bargaining power in the households as compared to wives and vice versa.

We construct three types of bargaining power variables, two from experiment generated data and one from self-reported data. Using the risk and uncertainty aversion variables from experiments firstly, we make an index of bargaining power of women which takes the values from -10 to +10. A higher value in this index shows that women are more dominated and lower values indicate that men dominates in the decision making process. The value of zero in this index indicates that both spouses have equal power in decision making and no one is dominating. Using this criterion, we construct two variables of bargaining power; one from risk experiment and one from uncertainty experiment.

These variables are discrete variables that can't take decimal values because these have been calculated from decisions of individuals closer to joint decisions and these decisions are not in

decimal form. We were having three sets of decisions (with 10 decisions in each set) one from women's individual choices, one from men's individual choices and one from joint choices. We then calculate the joint decisions closer to men's individual choices and give each such decision a number of -1. Likewise we calculate joint choices closer to women's individual choices and give each such decision a number of +1. Then we add up all the -1s and +1s, the resulting number is the value in the variable of bargaining power. For example, in a couple we found 7 choices in the joint decision closer to men's individual choices and 3 joint choices to be closer to women's individual choices. In that case we will get seven -1s and three +1s and the adding result will be -4 which is a negative number indicating men is dominating and the degree of dominance of men is shown by the number 4.

Secondly, we make binary variables of bargaining power out of risk and uncertainty experiments. The binary variable of bargaining power of women takes the value of 1 if joint decision of experiment is closer to women's individual decision and 0 otherwise.

To examine the factors of decision making power we then conduct regression analysis with independent variables of individual and household characteristics. Individual effects include age, sex, education, income share in total family resources, square of income shares in total family income, health satisfaction (1 if have an acute disease), community participation dummy (1 if ever cast a vote) and dummy variables for main earning activities (agriculture, livestock, govt. employee, private employee and owned business). Household effects include perceived poverty level (not poor, more or less poor, poor or very poor), income stability level (very unstable, more or less unstable, stable), number of household members, number of household member < 16 years or number of sons and daughters, gender of HH head, education of HH head presence of mother in law in house, if women sleeps in the day time, number of hours women watch TV in a

day, monetary value of dowry that women brings at wedding, if father resides outside of home for at-least continuous three days.

When we are dealing with the index variables of bargaining power we estimate ordered probit regression as our dependent variable is an index and higher values in the index indicates that women have higher power in decision making. Likewise, if our dependent variable of bargaining power is a binary variable we use probit regressions instead of linear regression to estimate the effect of individual and household characteristics on bargaining power.

Ordered Probit Regression:

Decision Power Index (RISK) = $\alpha_0 + \alpha_1(\text{Most risk averse women}) + \alpha_2(X) + \alpha_2(Y) + \epsilon$

Decision Power Index (UNCERTAINTY) = $\alpha_0 + \alpha_1(\text{Most uncertainty averse women}) + \alpha_2(X) + \alpha_2(Y) + \epsilon$

Probit Regression:

Decision Power dummy (RISK) = $\alpha_0 + \alpha_1(\text{Most risk averse women}) + \alpha_2(X) + \alpha_2(Y) + \epsilon$

Decision Power dummy (UNCERTAINTY) = $\alpha_0 + \alpha_1(\text{Most uncertainty averse women}) + \alpha_2(X) + \alpha_2(Y) + \epsilon$

Where; X= Individual characteristics of men and women

Y= Household characteristics

Measuring the Bargaining Power of the Mother in a household through Self-Reported Data

For self-reported decision power we use the survey data collected through interviews of husbands and wives separately. For this determination, we embrace the questions; as, who in the household usually makes the final decision on (1) your own health care; (2) for child schooling; (3) making large household purchases; (4) making household purchases for daily needs; (5) visits to family, friends, and relatives; (6) what to cook every day and (7) who cooks the meal at home.

We ask these questions separately from husbands and wives, their responses to these questions were like; wife makes decision, husband make decision, they both make the decisions jointly,

father-in-law decides, mother in law decides, All family members decides jointly or some-one else makes the decisions. Answer to these entire question were different, as for some domains, husband makes the decisions but for some other domain, wife makes the decision or for some questions they answer that they both make the decisions jointly and so on.

We make dummy variables out of all these questions that take the value of 1 if answer suggests that women take the decision. Then we create an index of self-reported bargaining power out of these dummy variables through principal component analysis.

Measuring the Effect of The Mother's Bargaining Power on the Child Outcomes

After determining the bargaining power within households, we evaluate the impact of women's bargaining power on the characteristics of their sons and daughters. In these child outcomes we measure the influence on child labor status, child anthropometric status as a proxy for child health and child schooling.

Child Labor

To measure the child labor status we used several questions related to work. These include that whether child works or helps in growing farm produce, harvesting, or feeding, grazing, and milking animals. Whether child helps in family business or relative's business, whether child produce or sell any home- made articles, does child fetch water or collect firewood for home use or do any other cleaning, cooking, washing clothes or any other work at home. If child respond yes to at least one of these questions for last week, we consider that child to be working, Binci and Giannelli (2012).The sample size for child labor variable comprises of individuals from 5 to 17 years of age because minimum age required to work is 5 and above 17 years people are considered as labor in the labor market in Pakistan and thus do not include in child labor any more. These questions were asked for girls and boys separately to see whether parents

discriminate among children and also does it make any difference in child outcomes when women have higher bargaining power as compared to their husbands or vice versa.

We create another variable for child labor in which a child is considered to be working if he/she is working any number of hours during survey week. Emerson, P. M., & Souza, A. P. (2007).

For the dummy variable of child labor, we estimate probit regression but when our variable of interest is number of hours we applied tobit regression because in this variable minimum value is zero.

Probit Regression:

Child labor dummy = $\beta_0 + \beta_1$ (bargaining power of women RISK) + β_2 (Z) + β_3 X + ϵ

Child labor dummy = $\beta_0 + \beta_1$ (bargaining power of women UNCERTNTY) + β_2 (Z) + β_3 X + ϵ

Tobit Regression:

No of hours child is working = $\beta_0 + \beta_1$ (bargaining power of women RISK) + β_2 (Z) + β_3 X + ϵ

No of hours child is working = $\beta_0 + \beta_1$ (bargaining power of women UNCERTNTY) + β_2 (Z) + β_3 X + ϵ

Where, Z is denoting all child characteristics

X is the vector of all parent's and HH characteristics

We also run the separate regressions for sons and daughters.

Child Anthropometric Measures

For child anthropometric measures we collect child height and weight measures during the household surveys and make Z-scores using these measures. And then we use these indexes to measure the effects of dominance of women as compared to men on their sons and daughters separately.

We construct the weight for age and height for age Z-scores by subtracting the average of reference group from observed value and then dividing it by the standard errors in that age and

sex group of a reference population standardized by World Health Organization, Which includes children from developed and developing countries of the world.

$$Z - Score = \frac{(\text{Observed value}) - (\text{Average value of the reference population})}{(\text{Standard deviation of the reference population})}$$

Also to construct these Z-scores we limit our sample size of children from 0 to 5 years, as recommended by WHO 1986 with the reason that environmental factors have higher effects in starting years of life.

OLS Regression equation:

Weight for age Z-Score

$$WAZ_{if} = \beta_0 + \beta_1(\text{Women bargaining power RISK}) + \beta_2(Z) + \beta_3(X) + \tilde{u}$$

$$WAZ_{if} = \beta_0 + \beta_1(\text{Women bargaining power UNCERTNTY}) + \beta_2(Z) + \beta_3(X) + \tilde{u}$$

Height for age Z-Score

$$HAZ_{if} = \beta_0 + \beta_1(\text{Women bargaining power RISK}) + \beta_2(Z) + \beta_3(X) + \tilde{u}$$

$$HAZ_{if} = \beta_0 + \beta_1(\text{bargaining power UNCERTAINTY}) + \beta_2(Z) + \beta_3(X) + \tilde{u}$$

Where WAZ_{if} = Weight for Age Z-score of a child i born in family f.

HAZ_{if} = Height for age Z-score of a child i born in family f.

And Z indicates all child characteristics

X is a vector of parents' and household outcomes.

We also estimate separate regressions for sons and daughters.

Child Schooling

On the same grounds we gauge women's bargaining power impact on child schooling. For child schooling we use one dummy variable which takes the value of one if child is enrolled in the school and zero otherwise (Gitter, S. R., & Barham, B. L. 2008) and a variable of years of schooling of child.

Again, for the dummy variable of enrolment we estimate probit regression but for years of schooling variable we apply tobit regression for our censored data.

Proit Regression:

Child enrolled dummy= $\beta_0 + \beta_1$ (Women bargaining power RISK)+ β_2 (Z) + β_3 (X) + ϵ

Child enrolled dummy= $\beta_0 + \beta_1$ (Women bargaining power UNCERTNTY)+ β_2 (Z) + β_3 (X) + ϵ

Tobit Regression:

Child years of schooling= $\beta_0 + \beta_1$ (Women bargaining power RISK)+ β_2 (Z) + β_3 (X) + ϵ

Child years of schooling= $\beta_0 + \beta_1$ (Women bargaining power UNCERTNTY)+ β_2 (Z) + β_3 (X) + ϵ

Where, Z is denote all child characteristics

X is the vector of all parent’s and HH characteristic

Results

Risk and Uncertainty Attitudes

First of all, we assess behavior of participants under the risk and uncertainty in the experiments and then we use these risk and uncertainty attitudes to measure the degree of bargaining power in the decision process. We can rely on simple approach of comparing the choices because the choices given to each participant in the individual session are same, shown in the joint session.

Table 1: Risk and Uncertainty Attitudes of Husbands, Wives and Couples (Jointly)

Number of safe choices	Risk preference classification	Proportion of safe choices					
		Husbands		Wives		Couple	
		Risk Experiment	Uncertainty Experiment	Risk Experiment	Uncertainty Experiment	Risk Experiment	Uncertainty Experiment
0-1	Highest risk loving	40	22	10	6	35	8
2	Higher risk loving	3	4	4	3	2	4
3	Moderate Risk loving	3	5	5	2	2	3
4	Low risk loving	1	6	12	5	4	6
5	Risk Neutral	5	11	5	5	7	14
6	Low risk averse	3	10	6	12	3	12
7	Moderate Risk averse	2	7	4	7	3	15

8	Higher risk averse	2	3	2	12	2	2
9-10	Highest risk averse	11	2	22	17	12	6
Number of individuals /couples		70	70	70	70	70	70

The table above shows the risk and uncertainty attitudes of the participants in experiments. 0 to 4 numbers of safe choices shows the risk and uncertainty loving behavior of people, value 5 shows neutral behavior in both experiments while number of safe choices from 6 to 10 shows the risk and uncertainty averse behavior of participants. Columns 3 to 8 show the number of husbands, wives and of couples who chooses the respective number of safe choices. Results of both experiments shows that women are more risk and uncertainty averse as compared to men and couple, and that ambiguity aversion is higher as compared to risk aversion for all men, women and for couples.

Bargaining Power of Women and Men

For measuring the bargaining power we compare the risk and ambiguity aversion from individual sessions to joint sessions where risk and ambiguity aversion is simply the number of safe choices in risk and uncertainty experiments respectively. We consider the person whose individual choices are more close to joint decisions having higher bargaining power in the couple.

Table 2: Number of Dominating Individuals in the Decision Making Process, By Gender

	Number of individual choices closer to couple choices		
	Women	Men	Both
Risk Experiment	19	39	12
Uncertainty Experiment	22	33	12

The above table shows that out of 70; only 19 women in the risk experiment and 22 women in uncertainty experiment having their individual decisions close to joint decisions. This means that on average in 20 households out of 70, women were dominating. Likewise, on average, 36 households were having male dominance out of total 70 households. There were 12 households where no one was dominating and both husband and wife take decisions jointly. This whole picture indicates that men are more dominating in the decision process as compared to women in the rural households of Okara.

Determinants of the Women’s bargaining Power

To estimate what are the factors that contribute in increasing the bargaining power of a person at home, we then run regressions. Along with the risk and uncertainty aversion variables we regress bargaining power of women on several households, men and women characteristics.

Our results in Table 3 shows, that it is the least risk and uncertainty averse women who have higher bargaining power in decision making process. Also if women bore more children and brought more dowry at wedding and if she has positive community participation, then her bargaining power is more likely to increase. If men is diseased then women’s bargaining power is likely to reduce, it might be because men now is not involved in any kind of work and he stays home all the time, making all the decisions on his own. Likewise, if women are working outside in the fields, her decision power is more likely to reduce. The reason for this negative relation is very logical because if women is working in the fields then this shows that she has no qualification and thus she might not able to take better decisions than her husband takes the decisions for household.

Table 3: Determinants of the Women’s Bargaining power

Experiment generated Bargaining power Index	Dummy =1 if Women is Empowered (Experiment	Experiment generated Bargaining power Index	Dummy =1 if Women is Empowered (Experiment
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Variables	for Mothers	generated)	for Mothers	generated)
	ordered probit	Probit	ordered probit	Probit
Risk averse women	-0.129*** (0.0481)	-0.249 (0.175)		
Uncertainty averse women			-0.0772* (0.0468)	-0.314*** (0.0866)
Male age	-0.134*** (0.0374)	-0.528** (0.260)	-0.000291 (0.0311)	-0.0671 (0.0480)
Female age	0.0514 (0.0354)	0.385* (0.208)	0.0350 (0.0346)	0.0162 (0.0542)
No of HHmembers	-0.0455 (0.0929)	-0.262 (0.251)	-0.307*** (0.0973)	-0.599** (0.291)
No of members <16	0.124 (0.139)	0.00702 (0.290)	0.504*** (0.135)	1.189*** (0.380)
AgeofHHhead	-0.0218 (0.0158)	-0.0589* (0.0351)	-0.0733*** (0.0162)	-0.0167 (0.0261)
Eduof HH head	-0.0670 (0.0417)	-0.0729 (0.0879)	-0.170*** (0.0394)	-0.0540 (0.0595)
Male Shareofincome	3.62e-06 (2.23e-05)	0.000182*** (7.06e-05)	-3.33e-05 (2.24e-05)	3.08e-05 (2.83e-05)
Female share of income	7.61e-06 (4.88e-05)	-0.000203 (0.000158)	0.000154*** (5.18e-05)	4.49e-05 (7.11e-05)
Dowry	5.17e-06*** (1.45e-06)	1.08e-05*** (3.58e-06)	4.95e-06*** (1.45e-06)	4.93e-06* (2.61e-06)
No of hours women watch TV	0.564*** (0.142)	0.0879 (0.485)	0.587*** (0.143)	0.637** (0.259)
Male resides outside*	0.353 (0.354)	1.858** (0.831)	0.342 (0.359)	0.0392 (0.499)
Male diseased*	-1.349*** (0.403)	-7.533*** (2.672)	-0.986** (0.405)	-2.817** (1.174)
Female diseased*	0.464 (0.294)	0.901 (0.996)	-1.014*** (0.334)	0.341 (0.474)
Male community participation*	-0.732 (0.485)	-5.676*** (2.009)	-1.359*** (0.516)	0.202 (0.684)
Female community participation*	2.085*** (0.341)	6.713*** (2.421)	0.00638 (0.315)	0.460 (0.525)
Mother-in-law resides with female*	-0.155 (0.508)	3.783*** (1.003)	2.503*** (0.544)	0.334 (0.720)
GenderofHHhead (1=male)*	0.0893 (0.566)	-2.369 (2.505)	-1.618*** (0.597)	-1.214 (1.074)
Male own any land*	-0.896** (0.396)		0.155 (0.381)	
Female Sleep at day*	-0.0523 (0.307)	3.642** (1.621)	0.275 (0.312)	0.000760 (0.575)
Female workoutside(fields)*	-1.188***	-5.071***	-0.837**	-1.694**

	(0.411)	(1.921)	(0.424)	(0.729)
Male govtempooyee*	0.740		2.668***	
	(0.706)		(0.710)	
Male ownedbusiness*	0.00693		-0.425	
	(0.533)		(0.524)	
Male privateemployee*	-0.803**		0.0251	
	(0.376)		(0.390)	
Male workedonfarms*	0.415		-2.705***	
	(0.561)		(0.568)	
Observations	143	143	143	143
R-squared	Pseudo R2=0.2064	Pseudo R2=0.2254	Pseudo R2 = 0.5552	Pseudo R2= 0.4206

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Child Labor

Afterward, we look the effect of mother's bargaining power on child labor, child health and child schooling respectively. For child labor we consider two variables, a dummy variable which is equal to 1 if child is involved in work and other variable is number of hours child is working. With both these dependent variables we also run separate regressions for sons and daughters.

Table 4: Estimating the Impact of Mother's Bargaining Power on Child Labor, Using Risk Experiments

Variables	Child labor dummy	Child labor dummy	Child labor dummy	Child labor dummy
Bargaining power of women index, from risk exp	-0.0620*** (0.0213)	-0.0829* (0.0433)		
Bargaining power of women dummy, from risk exp			-0.627*** (0.22)	0.095 (0.495)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	190	153	190	153
Pseudo R-squared	0.2110	0.5254	0.1652	0.4306

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Our results indicate that with the rise in women’s bargaining power in decision making process, child labor is more likely to decrease as bargaining power of women is significant at 10% level of significance when we control for all child, parent and household characteristics. But dummy variable of women’s bargaining power has no significant effect. Here we are showing only our important results, full tables can be seen in appendix below.

Table 5: Estimating the Impact of Mother’s Bargaining Power on Child Labor, Using uncertainty Experiments

Variables	child labor dummy	child labor dummy	child labor dummy	child labor dummy
Bargaining power of women index, from uncertainty exp	-0.0845** (0.0328)	-0.263*** (0.0891)		
Bargaining power of women dummy, from uncertainty exp			-0.551*** (0.205)	-0.964** (0.455)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	190	153	190	153
Pseudo R-squared	0.1210	0.4254	0.2352	0.5306

Standard errors in Parentheses

*** p<0.01, ** p<0.05, * p<0.1

With the uncertainty experiment, bargaining power of women has even higher negative influence on child labor of their children, shown by the significance of both variables of women’s bargaining power. Index variable of women’s bargaining power is significant at 1% level of significance and dummy variable of bargaining power is significant at 5 % level of significance.

Table 6: Estimating the Impact of Mother’s Bargaining Power on Child Labor, Using Risk Experiments, By Gender

Variables	child labor dummy if child is boy	child labor dummy if child is girl	child labor dummy if child is boy	child labor dummy if child is girl
Bargaining power of women index, from risk exp	-0.0683 (0.0576)	-0.524** (0.255)		
Bargaining power of women dummy, from risk exp			-0.223 (0.812)	-5.247** (2.673)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	74	76	74	76
Pseudo R-squared	0.3210	0.5316	0.2212	0.4324

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When we observe the impact of women's bargaining power on disaggregated data at child gender level, we found that daughters are at more advantage if their mothers have higher power in decision making as compared to the sons. Both variables of bargaining power, index as well as dummy variable are significant for girls at 5% level of significance but it has no effect on that of boys.

Table 7: Estimating the Impact of Mother's Bargaining Power on Child Labor, Using Uncertainty Experiments, By Gender

Variables	child labor dummy if child is boy	child labor dummy if child is girl	child labor dummy if child is boy	child labor dummy if child is girl
Bargaining power of women Index, from uncertainty exp	-0.302* (0.173)	-0.889** (0.409)		
Bargaining power dummy, from uncertainty exp			-0.785 (0.735)	-5.307** (2.288)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	74	76	74	76
Pseudo R-squared	0.2210	0.4326	0.3213	0.5344

Standard errors in Parenthesis

*** p<0.01, ** p<0.05, * p<0.1

The results remain consistent with the Uncertainty experiments as well. We acquire that child labor for daughters to reduce significantly as compared to their brothers when their mothers gain more decision power. With the uncertainty experiment, index variable of bargaining power of women is also significant for son's labor status but still significance is higher for daughters.

Second variable through which we measure the child labor is number of hour's child works. The dependent variable of the following regression is the number of hours Child worked, where the independent variables are similar to those used in the above regressions.

Table 8: Estimating the Impact of Mother's Bargaining Power on Number of hours a Child worked, Using risk Experiments

Variables	No of Hours child worked	No of Hours child worked	No of Hours child worked	No of Hours child worked
Bargaining power of women Index, from risk exp	-0.500* (0.256)	-0.491** (0.205)		
Bargaining power of women dummy, from risk exp			-4.981* (2.734)	-2.109 (2.353)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	182	153	182	153
R-squared	0.021	0.591	0.018	0.575

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Again, our results show that number of hours a child worked diminishes with an increase in the bargaining power of women index calculated from risk experiment. But we could not find any effect of dummy variable of bargaining power which might be because index variable of

bargaining power comprises more information and is more reliable as compared to the dummy variable of bargaining power.

Table 9: Estimating the Impact of Mother’s Bargaining Power on Number of hours a Child worked, Using Uncertainty Experiments

Variables	No of Hours child worked	No of Hours child worked	No of Hours child worked	No of Hours child worked
Bargaining power of women Index, from uncertainty exp	-1.195*** (0.388)	-0.902** (0.352)		
Bargaining power of women dummy,from uncertainty exp			-7.350*** (2.493)	-4.658** (2.200)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	182	153	182	153
R-squared	0.050	0.593	0.046	0.587

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With the uncertainty experiment we get more significant results as compared to the results from risk experiment. Now with the uncertainty experiment both variables of bargaining power indicates significant reduction in the number of hours a child worked. Risk and uncertainty experiments provided somewhat changed results as both of these were having different scenarios. Also we found more ambiguity aversion in the people as compared to risk aversion.

Table 10: Estimating the Impact of Mother’s Bargaining Power on Number of hours a Child worked Using risk Experiments, By Gender

Variables	No of Hours child worked, if child is boy	No of Hours child worked , if child is girl	No of Hours child worked ,if child is boy	No of Hours child worked , if child is girl
Bargaining power of women Index, from risk exp	-0.469*	-0.446		

	(0.270)	(0.352)		
Bargaining power of women dummy, from risk exp			-1.575 (3.325)	-1.229 (3.991)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	77	76	77	76
R-squared	0.579	0.657	0.559	0.648

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When we estimate separate effects on daughter's and son's number of hours they are working with the increase in the bargaining power of women computed from risk experiment, unlikely our other results we found slightly significant negative impact on son's number of hours they worked but no significant impact found for daughters.

Table 11: Estimating the Impact of Mother's Bargaining Power on Number of hours a Child worked Using Uncertainty Experiments, By gender

VARIABLES	No of Hours child worked ,if child is boy	No of Hours child worked ,if child is girl	No of Hours child worked ,if child is boy	No of Hours child worked ,if child is girl
Bargaining power of women Index, from uncertainty exp	-0.973* (0.529)	-0.935* (0.503)		
Bargaining power of women dummy, from uncertainty exp			-5.641* (3.115)	-5.850* (3.285)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	77	76	77	76
R-squared	0.581	0.668	0.581	0.656

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Results in table 11 demonstrate that when the bargaining power of women measured from uncertainty experiment increases, number of hours child work reduces for both sons and daughters. Reduction in number of hour child works for both genders of children is significant at 10% level of significance when index and dummy variables of bargaining power of women from uncertainty experiment increases.

Child Anthropometric Measures

As an indicator of child health we measure height for age Z-Score and weight for age Z-Scores of children. We construct these Z-Scores using height of children in centimeters and weight in kilograms, following WHO standardized formula for Z-Scores.

Table 12: Estimating the Impact of Mother’s Bargaining Power on Height for age Z-Score, Using risk Experiments

Variables	Height for Age Z- Score	Height for Age Z- Score	Height for Age Z- Score	Height for Age Z-Score
Bargaining Power of women Index, from risk exp	0.0902** (0.0361)	0.104** (0.0445)		
Bargaining power of women dummy, from risk exp			0.296 (0.370)	-0.0449 (0.572)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	120	103	120	103
R-squared	0.050	0.309	0.005	0.264

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Our results in table 12, from ordinary least square regression shows that when bargaining power of women increases; Height for Age Z-Score is more likely to increase. The coefficient of bargaining power of women Index is significant at 5% level of significance. But for the dummy variable we could not find any significant effect.

Table 13: Estimating the Impact of Mother’s Bargaining Power on Height for age Z-Score, using Uncertainty Experiments

Variables	Height for Age Z- Height for Age		Height for Age Z- Height for Age	
	Score	Z-Score	Score	Z-Score
Bargaining Power of women Index, from uncertainty exp	0.0469 (0.0557)	0.0857 (0.0848)		
Bargaining Power of women dummy, from uncertainty exp			0.660* (0.335)	1.193** (0.492)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	120	103	120	103
R-squared	0.006	0.273	0.032	0.312

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Same regressions with the uncertainty experiment gave slightly different results but the same intuition as now, again one of the two bargaining power variables is significant but in the regressions from risk experiment index of bargaining power was affecting height for age significantly, but here dummy variable of bargaining power is giving significant effect. When bargaining power of women calculated from uncertainty experiment increases, height for age of children is also likely to increase.

To see whether parents discriminate among their sons and daughters we then run separate regressions for girls and boys with both types of data sets taken from risk experiment and from uncertainty experiment.

Table 14: Estimating the Impact of Mother’s Bargaining Power on Height for age Z-Score, using risk Experiments, By Gender

Variables	HAZ, if child is boy	HAZ, if child is girl	HAZ, if child is boy	HAZ, if child is girl
Bargaining Power of women Index, from risk exp	0.148*** (0.0526)	0.0455 (0.0749)		
Bargaining Power of women dummy, from risk exp			0.770 (0.742)	-0.593 (0.911)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	52	51	52	51
R-squared	0.573	0.394	0.490	0.395

Standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Our results in table 14 displays that when bargaining power of women from risk experiment increases height for age for their sons is more likely to increase as compared to their daughters. Index of bargaining power of women is significant at 1% level of significance for son’s HAZ but is insignificant for daughters, which indicates that boys are at greater advantage than girls in health matters.

Table 15: Estimating the Impact of Mother’s Bargaining Power on Height for age Z-Score, using Uncertainty Experiments, By Gender

VARIABLES	HAZ, if child is boy	HAZ, if child is girl	HAZ, if child is boy	HAZ, if child is girl
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Bargaining Power of women Index, from uncertainty exp	0.301*** (0.102)	-0.0427 (0.125)		
Bargaining Power of women dummy, from uncertainty exp			1.981*** (0.556)	0.268 (0.788)
Child level controls	Yes	Yes	yes	Yes
HH controls	Yes	Yes	yes	Yes
Parent's individual controls	Yes	Yes	yes	Yes
Observations	52	51	52	51
R-squared	0.581	0.390	0.617	0.390

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When we run same regressions on the data from uncertainty experiment our results turn out to be more defining and significant. Both variables of bargaining power of women calculated from uncertainty experiment highly significantly and positively affect the height for age of boys.

As height for age is considered as a long-term measure of health, we can say that on average, in long run, boys are on more benefit in terms of health.

Table 16: Estimating the Impact of Mother's Bargaining Power on weight for age Z-Score, Using risk Experiments

VARIABLES	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score
Bargaining Power of women Index, from risk exp	-0.0169 (0.0178)	0.0122 (0.0224)		
Bargaining Power of women dummy, from risk exp			0.00263 (0.189)	0.305 (0.251)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	190	153	190	153
R-squared	0.005	0.214	0.000	0.221

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 17: Estimating the Impact of Mother’s Bargaining Power on weight for age Z-Score, Using Uncertainty Experiments

Variables	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score
Bargaining Power of women Index, from uncertainty exp	0.00201 (0.0278)	0.0493 (0.0382)		
Bargaining Power of women dummy, from uncertainty exp			0.0572 (0.177)	0.371 (0.237)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	190	153	190	153
R-squared	0.000	0.222	0.001	0.227

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

We found insignificant impact of bargaining power of women on the weight for age of their children. Both variables of bargaining power of women computed from risk and uncertainty experiments turns out to be insignificant when regressed on weight for age z-scores of children. This indicates that in short run children health does not affected by the dominance of wife or husband.

Table 18: Estimating the Impact of Mother’s Bargaining Power on weight for age Z-Score Using Risk Experiments, By Gender

Variables	WAZ, If child is boy	WAZ, if child is girl	WAZ , if child is boy	WAZ, if child is girl
Bargaining Power of women	-0.00735	0.0491		

Index, from risk exp				
	(0.0259)	(0.0385)		
Bargaining Power of women dummy, from risk exp			0.263	0.829*
			(0.310)	(0.423)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	77	76	77	76
R-squared	0.346	0.352	0.353	0.375

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 19: Estimating the Impact of Mother’s Bargaining Power on weight for age Z-Score Using Uncertainty Experiments, By Gender

Variables	WAZ, if child is boy	WAZ, if child is girl	WAZ, if child is boy	WAZ, if child is girl
Bargaining Power of women Index, from uncertainty exp	0.0628	0.0487		
	(0.0503)	(0.0563)		
Bargaining Power of women dummy, from uncertainty exp			0.434	0.321
			(0.294)	(0.361)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	77	76	77	76
R-squared	0.362	0.342	0.368	0.343

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Our results indicate that weight for age also has no significant effect on sons and daughters separately. We found only one dummy variable of bargaining power of women computed from

risk experiment to be significant at 10% level of significance for girls but all other are insignificant.

Child Schooling

After child labor and child health, we measure the influence of women's bargaining power on child's schooling. For schooling measurement we use one variable of enrolment which is a dummy variable and takes the value of 1 if child is enrolled in school at the time of interview and second is the variable of years of schooling of child which is the school grades child had completed at the time of interview.

For Years of schooling our results reveal no significant effect of bargaining power of women from risk experiment but found negative impact from uncertainty experiment.

Table 20: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Risk Experiments

Variables	Years of Schooling	Years of Schooling	Years of Schooling	Years of Schooling
Bargaining Power of women Index, from risk exp	-0.108** (0.0470)	-0.0423 (0.0411)		
Bargaining power of women dummy, from risk exp			-1.786*** (0.491)	-0.437 (0.464)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	182	153	182	153
R-squared	0.029	0.608	0.068	0.607

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 21: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Uncertainty Experiments

Variables	Years of Schooling	Years of Schooling	Years of Schooling	Years of Schooling
Bargaining Power of women from uncertainty	-0.268*** (0.0706)	-0.320*** (0.0653)		
Bargaining Power of women dummy from uncertainty			-0.700 (0.468)	-0.656 (0.437)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	182	153	182	153
R-squared	0.074	0.665	0.012	0.611

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When we control for all factors we can't find any effect of bargaining power of women from risk experiment on years of child schooling but table 21 shows that bargaining power of women index calculated from uncertainty experiment, is more likely to reduce completed years of schooling of their children. One possible reason for this negative effect of bargaining power of women for schooling of children might be that women at Okara we interviewed were mostly illiterate and were not aware of importance of education so when they became empowered they did not pay any attention to the education of their children. Also, we did not find any significant variation in the years of schooling among different age grouped children, like for some reasons a 12 years old child and a 6 years old child were both enrolled in second grade.

Table 22: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Risk Experiments, By Gender

Variables	Years of schooling ,if child is boy	Years of schooling ,if child is girl	Years of schooling ,if child is boy	Years of schooling ,if child is girl
Bargaining Power of women Index,	-0.0352	-0.0834		

from risk exp

	(0.0491)	(0.0757)		
Bargaining power of women dummy, from risk exp			-0.570 (0.588)	-0.396 (0.854)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	77	76	77	76
R-squared	0.639	0.645	0.642	0.638

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

Table 23: Estimating the Impact of Mother’s Bargaining Power on Years of Schooling of Children Using Uncertainty Experiments, By Gender

Variables	Years of schooling ,if child is boy	Years of schooling , if child is girl	Years of schooling ,if child is boy	Years of schooling ,if child is girl
Bargaining Power of women Index, from uncertainty exp	-0.254*** (0.0909)	-0.362*** (0.100)		
Bargaining Power of women dummy, from uncertainty exp			-0.239 (0.568)	-1.061 (0.698)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	77	76	77	76
R-squared	0.679	0.704	0.637	0.651

Standard errors in parentheses
 *** p<0.01, ** p<0.05, * p<0.1

When we explore influence of women’s bargaining power from risk and uncertainty on their sons and daughters separately, again we did not find any impact of both bargaining power variables from risk experiment even on disaggregated data. But an increase in the index of

bargaining power of women from uncertainty experiment highly significantly cuts years of schooling of both girls and boys.

After investigating the impact of bargaining power of women on son's and daughter's years of schooling we also measure this impact for primary and secondary child schooling levels.

Table 24: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Risk Experiments,

Variables	Years of Schooling ,for 0-5 years of schooling	Years of Schooling ,for 5-8 years of schooling	Years of Schooling ,for 0-5 years of schooling	Years of Schooling ,for 5-8 years of schooling
Bargaining Power of women Index, from risk exp	-0.0212 (0.0250)	-0.0978 (0.136)		
Bargaining Power of women dummy, from uncertainty exp			-0.136*** (0.0475)	-0.0567 (0.105)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	133	15	133	15
R-squared	0.543	0.817	0.571	0.810

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Again when we examine separate impact on primary and secondary level of schooling we did not find any bearing of bargaining power of women from risk experiment. But an increase in bargaining power of women computed from uncertainty experiment is more likely to reduce primary education of children but secondary level of education remains unaffected. The coefficient of bargaining power of women from uncertainty experiment is significant at 1% level of significant when regressed on primary education of children.

Second variable of child schooling is enrolment which on average remains unaffected with increase in bargaining power of women from risk as well as from uncertainty experiment.

Table 25: Estimating the Impact of Mother’s Bargaining Power on Enrollment of Children in School Using Risk Experiments

Variables	Enrolled	Enrolled	Enrolled	Enrolled
Bargaining Power of women Index, from risk exp	-0.0350*	-0.0215		
	(0.0207)	(0.0354)		
Bargaining Power of women dummy, from risk exp			-0.519**	0.270
			(0.218)	(0.410)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	190	153	190	153
Pseudo R-squared	0.4210	0.5326	0.3613	0.4764

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 26: Estimating the Impact of Mother’s Bargaining Power on Enrollment of Children in School Using Uncertainty Experiments

Variables	Enrolled	Enrolled	Enrolled	Enrolled
Bargaining Power of women Index, from uncertainty exp	-0.0454	-0.0844		
	(0.0336)	(0.0726)		
Bargaining Power of women dummy, from uncertainty exp			0.107	0.00686
			(0.208)	(0.377)
Child level controls	No	Yes	No	Yes
HH controls	No	Yes	No	Yes
Parent's individual controls	No	Yes	No	Yes
Observations	190	153	190	153
Pseudo R-squared	0.2310		0.2613	0.4464

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 27: Estimating the Impact of Mother's Bargaining Power on Enrollment of Children in School Using Risk Experiments, By Gender

Variables	Enrolled, if child is boy	Enrolled, if child is girl	Enrolled, if child is boy	Enrolled, if child is girl
Bargaining Power of women Index, from risk exp	-0.00672 (0.0471)	-0.0645 (0.0666)		
Bargaining Power of women dummy, from risk exp			0.334 (0.604)	0.00363 (0.632)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes
Observations	77	76	77	76
Pseudo R-squared	0.4210	0.5623	0.3213	0.5321

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 28: Estimating the Impact of Mother's Bargaining Power on Enrollment of Children in School Using Uncertainty Experiments, By Gender

Variables	Enrolled, if child is boy	Enrolled, if child is girl	Enrolled, if child is boy	Enrolled, if child is girl
Bargaining Power of women Index, from uncertainty exp	0.0307 (0.121)	-0.187* (0.105)		
Bargaining Power of women dummy, from uncertainty exp			0.490 (0.547)	-0.514 (0.591)
Child level controls	Yes	Yes	Yes	Yes
HH controls	Yes	Yes	Yes	Yes
Parent's individual controls	Yes	Yes	Yes	Yes

Observations	77	76	77	76
Pseudo R-squared	0.3216	0.4232	0.3324	0.5743

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

From tables 25 to 28 we estimate the impact of bargaining power of women on child enrollment, but we did not find any significant impact. When we disaggregate the data at child gender level to see the impact of bargaining power of women from uncertainty experiment, we found significant negative impact on girl's enrollment at 10% level of significance but insignificant impact on that of boys.

Finally, we estimated the effects of self-reported bargaining power on all of the child outcomes mentioned above. The effects of self-reported bargaining power on all of the six child outcomes turned out to be insignificant (see Appendix). One of the potential reasons, we think has given insignificant results for the respective hypotheses tested otherwise is, that couples did not respond honestly when asked directly about who was most influential in the couple. Our data shows large variations in the responses of wives and husbands, when asked about the dominant partner in the couple, leading to inconsistent results.

Conclusions

In first half of the study, we estimate through experimental measures that within a couple who has the higher bargaining power in the course of decision making of household in the context of rural Punjab, Pakistan. Catering to the fact that rural households have higher risk and uncertainty attached to their earnings, in this paper we use experimental measures of risk and uncertainty following Braaten, R. H., & Martinsson, P. (2015) to measure risk and uncertainty attitudes and bargaining power of individuals in the household. We conducted risk and uncertainty experiments with each respective couple both individually as well as jointly to determine who

dominates in making choices within a couple. 70 couples from rural area of Okara in Punjab were selected to conduct the analysis in this paper.

We found on average ambiguity aversion to be higher for all participants as compared to risk aversion, which is a rational attitude of participants. Since, the risk associated with the choices decided in uncertainty aversion games is high compared to risk aversion games, we noticed a significant change in the responses of the participants generally, in terms of avoiding risk once they were exposed to high uncertainty. When we compared the degree of risk aversion amongst men and women in table 1, we found that women tend to take less risk as compared to men therefore women are more risk and uncertainty averse, these findings are consistent with literature (Munro et al.2008; De Palma et al. 2011).

Furthermore, the comparison of responses through individual experiments with joint experiments show that in the rural area of Okara, on average the women are less dominating as compared to men in household decision making, as men's individual decisions are more close to joint decisions. However, these women work in the fields with their husbands, and also perform household chores in addition to taking care of their children. The area selected to conduct experiment was a rural underdeveloped area of Pakistan. It is important to note that the norms and culture of area should be considered as important factors in addition to the other factors like education, age, income etc. which can influence women's bargaining power.

Along with these behavioral games we collected some data on basis of simple questionnaires to determine self- reported bargaining power of these couples. This exercise was repeated with same 70 couples of 70 different households. But we found huge variations in responses of husbands and their wives for the same questions, which reduces the reliability of self-reported data regarding bargaining power. Thus we could not conclude that who is dominating in the

couple using self-reported data, whether experiment generated bargaining power give a clear glance about men's domination.

In second half of the study we then gauge how this bargaining power of parents affects their children. The distinction in women's bargaining power across couples, affected the economic outcomes of each respective couple's children contrarily. We explore that households, with women having greater experiment generated bargaining power; benefits in terms of improving the health status of the children besides reducing the labor supply of the children. However, there is a negative impact on the schooling of the children. But self-reported bargaining power of women does not have any significant impact on any of child outcomes.

Moreover, backing the literature our experimental data gives the evidence that gender gap also persists at child level along the parent level gender difference (Emerson, P. M., & Souza, A. P.2007; Duflo. 2000). For the child labor we found that there is a tendency of lowering the child labor when their mother's bargaining power mends. But this reduction in child labor is not identical for sons and daughters, as our results illustrates that daughters are at more advantage in reducing their child labor as compared to sons with the increase in their mother's bargaining power in decision making. Likewise; child anthropometric measures also have different effects for sons and daughters due to a rise in their mother's decision power. Height for age of sons improves significantly as compared to daughters when their mother's decision power increases but weight for age, which is a short term measure of anthropometry, has no significantly different impact.

Unlikely the other two child outcomes, child schooling has negative impact of higher bargaining power of women. This paper gives the evidence that child schooling and even enrolment of both sons and daughter's reduces with the increase in their mother's decision power in household.

Minimal or no education of mothers could be the possible reason for this attitude of mothers. Also because women are hardworking and they do not deny to work any time, So when women got the power to take the decisions in home they do not let their daughters to work, which could be the possible reason for lowering the child labor for daughters more as compared to sons.

Likewise, the reason for higher positive impact of mother's decision power on height for age of their sons as compared to the daughters could be the norms of rural underdeveloped areas. It's a wide known phenomenon that in developing and underdeveloped areas women usually gives better nutrition to their sons as compared to their daughters so that's why in long term boy's anthropometric measures are more likely to improve.

Therefore, the analysis suggests that there is a need for devising policies that can improve the women's domain specifically, but related to specific tasks.

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Appendix
Household descriptive variables

Variable name	Description
Perceived poverty	1-not poor, 2-more or less poor, 3-poor, 4-very poor (bench mark is very poor)
Income Stability	1-very unstable, 2-more or less unstable, 3-stable (bench mark is very unstable)
Years of cohabitation	Years one have been married

No of HH members <16	Number of household members, aged less than 16 years.
Presence of Mother in law*	=1 if mother in law stays with respondent.

Individual descriptive variables

Variable name	Description
Income share	Share of respondent's income in total family resources.
Main earning activity	Dummies for main earning activities; Agriculture, livestock, Govt. employee, Private employee and others. With agriculture as benchmark.
Health satisfaction*	=1 if have any acute disease.
Education	0-did not complete class 1, 1-primary(>=5), 2-middle (>=8), 3-matric, 4-under graduation, 5-graduation, 6-masters, 7-others
Community participation*	=1 if ever cast a vote.
Sometimes resides outside*	=1 if respondent resides outside the home at least three continuous days.

Summary Statistics:

Table A1: Household Characteristics

Variables	Mean	Minimum	Maximum
Number of HH	36.8421	1	70
Total income of HH	24158.3	4,000	100,000
Number of HH members	8.1210	2	22
No of members < 16 years	4.668	0	10
Number of boys	2.0684	0	8
Number of girls	2.2315	0	6
Age of HH head	43.5052	22	80
Education of HH head	3.7210	0	16
Sex of HH head* (1=male)	.88421	0	1
Mother in law resides with female*	0.3	0	1

Note= * represents dummy variables

For dummy variable mean represents the proportions of that variable

Total number of households involved in this study was 70. Average total income of households was almost twenty four thousand. Average number of members in a household was 8. Average number of children was in a household was 5. Average number of boys and girls in every household was 2. Average age of head of household was 44 years. Average education of head of household was 4 grades only. Rest are dummy variables.

Table A2: Child Characteristics:

Variables	Mean	Minimum	Maximum
Age of child(years)	8	0	17.5
Sex of child (1=male)*	.4842	0	1
Order of child	2.5659	1	10
Child enrolled in school*	.6315	0	1
Child years of schooling	2.2362	0	10
Child work on farm*	.25789	0	1
Child work for business*	.14210	0	1
Child produce or sell any articles*	.03684	0	1
Child involve in any kind of earnings*	.09473	0	1
Child fetch water or firewood*	.3157	0	1
Child involve in cooking or cleaning*	.21578	0	1
Child wash clothes*	.2157	0	1
Child take care of other children at home*	.2421	0	1
Child takes care of old or sick at home*	.26315	0	1
Child performs any other HH Task*	.2947	0	1
Child labor*	.5526	0	1
Number of hours child is working	11.5549	0	60
Z-Score weight for age	-0.9056	-5.2163	1.8853
Z-Score height for age	-1.6720	-5.9420	2.4558

Note= * represents dummy variables

For dummy variable mean represents the proportions of that variable

Average age of child in our sample was 8 years. Average child observed in our study was having third order in his/her family. Average schooling of children were 2 grades. Average number of hours a child is working were 12 hours a week. Average weight for age z-score of children was negative =-0.905. Average height for age z-score was more deteriorate =-1.672. All other variables in above table are dummy variables.

Table A3: Individual Parent's Characteristics:

Variables	Mean	Minimum	Maximum
Male age	34.6	22	50

Female age	29.7	14	45
Years of cohabitation	10.6	1	28
Male education	5.17	0	16
Female education	4.18	0	16
Male share of income	15137.9	0	50,000
Female share of income	2228.3	0	25,000
Male reside outside*	.14210	0	1
Female reside outside*	.06315	0	1
Male diseased*	.14289	0	1
Female diseased*	.29473	0	1
Male's community participation*	.89473	0	1
Female's community participation*	.71052	0	1
Male owned any land*	.2315	0	1
Female owned any land*	.1210	0	1
Can Male read or write*	.44210	0	1
Can Female read or write*	.42631	0	1
No of Hrs women watch TV	0.801	0	6
Dowry	156965.1	0	700,000
Women sleep in the day*	.5105	0	1

Note= * represents dummy variables

For dummy variable mean represents the proportions of that variable

Average age of males/fathers was 35 years. Average age of females was 30 years. Average married years for each couple were 11 years. Average education of males and females were 5 and 4 grades, respectively. Average share in total family income of males was almost fifteen thousand but for females it is almost two thousand only. Average number of hours women watch TV in a day is one hour. Average monetary value of dowry women bring at wedding was one hundred and fifty six thousand. All other variables in the above table are dummy variables.

Table A4: Estimating the Impact of Mother's Bargaining Power on Child Labor Using Risk Experiments

VARIABLES	child labor	child labor	child labor	child labor
Bargaining power Index, risk	-0.0620*** (0.0213)	-0.0829* (0.0433)		
Bargaining power Dummy, risk			-0.627*** (0.220)	0.0950 (0.495)
No of HH members		-0.452**		-0.400**

		(0.199)		(0.190)
Members < 16		1.083***		0.960***
		(0.379)		(0.362)
Male Share of income		9.17e-05		9.92e-05
		(0.000135)		(0.000133)
Sq Male share of income		-3.87e-09		-4.29e-09
		(4.44e-09)		(4.40e-09)
Female share in income		0.000213		0.000182
		(0.000188)		(0.000184)
Sq female share of income		-5.70e-09		-3.58e-09
		(8.18e-09)		(8.00e-09)
Age of child		0.0115**		0.0131**
		(0.00571)		(0.00577)
Order of child		-0.647***		-0.581***
		(0.205)		(0.202)
HH head is male*		0.553		0.939
		(1.031)		(0.973)
Child is male*		0.0268		-0.0999
		(0.331)		(0.323)
Perceived poverty		0.391**		0.291*
		(0.168)		(0.154)
Male resides outside*		0.0871		-0.220
		(0.567)		(0.530)
Male govt employee*		-0.159		-0.268
		(1.282)		(1.289)
Male owned business*		0.870		0.798
		(0.672)		(0.701)
Male private employee*		0.526		0.639
		(0.523)		(0.519)
Male worked on farms*		0.844		0.531
		(0.604)		(0.587)
Female work outside*		-0.305		-0.281
		(0.786)		(0.781)
Income stability		-0.159		-0.0451
		(0.212)		(0.209)
Constant	0.0110	-3.232*	0.278***	-3.221*
	(0.102)	(1.894)	(0.105)	(1.878)
Observations	190	153	190	153
Pseudo R-squared	0.2110	0.5254	0.1652	0.4306
*** p<0.01, ** p<0.05, * p<0.1				

Above table shows that when bargaining power of women from risk experiment increases child labor reduces. Bargaining power of women index has higher impact as compared to bargaining power dummy variable.

Table A5: Estimating the Impact of Mother's Bargaining Power on Child Labor Using Uncertainty Experiments

VARIABLES	child labor	child labor	child labor	child labor
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Bargaining power Index, uncertainty	-0.0845** (0.0328)	-0.263*** (0.0891)		
Bargaining power dummy, uncertainty			-0.551*** (0.205)	-0.964** (0.455)
No of HH members		-0.567*** (0.216)		-0.387** (0.173)
Members < 16		1.234*** (0.410)		0.964*** (0.336)
Male Share of income		0.000124 (0.000119)		8.38e-05 (0.000129)
Sq male share of income		-3.97e-09 (3.73e-09)		-3.55e-09 (4.19e-09)
Female share of income		0.000191 (0.000201)		0.000236 (0.000187)
Sq female share of income		-4.29e-09 (8.83e-09)		-6.02e-09 (8.29e-09)
Age of child		0.0108* (0.00586)		0.0136** (0.00569)
Order of child		-0.828*** (0.231)		-0.647*** (0.204)
HH head is male*		1.299 (0.990)		1.399 (0.955)
Child is male*		0.0545 (0.349)		-0.0344 (0.325)
Perceived poverty		0.462*** (0.178)		0.327** (0.160)
Male resides outside*		0.0408 (0.550)		-0.411 (0.539)
Male govt employee*		-0.288 (1.634)		0.221 (1.397)
Male owned business*		1.160* (0.675)		1.271* (0.690)
Male private employee*		0.545 (0.537)		0.719 (0.521)
Male worked on farms*		0.392		0.363

		(0.606)		(0.579)
Female work outside*		0.180		-0.492
		(0.829)		(0.785)
Income stability		-0.0821		0.00426
		(0.211)		(0.206)
Constant	0.0112	-4.219**	0.288***	-3.574**
	(0.103)	(1.872)	(0.109)	(1.822)
Observations	190	153	190	153
Pseudo R-squared	0.1210	0.4254	0.2352	0.5306

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Above table shows that when bargaining power of women from uncertainty experiment increases child labor reduces. Bargaining power of women from uncertainty show higher impact as compared to risk experiment for both index as well as for dummy variable.

Table A6: Estimating the Impact of Mother's Bargaining Power on Child Labor Using Risk Experiments, By Gender

VARIABLES	child labor if child is boy	child labor if child is girl	child labor if child is boy	child labor if child is girl
Bargaining power index, risk	-0.0683 (0.0576)	-0.524** (0.255)		
Bargaining power dummy, risk			-0.223 (0.812)	-5.247** (2.673)
No of HH members	-0.239 (0.335)	1.013 (1.201)	-0.212 (0.328)	1.067 (1.014)
No of members <16	0.641 (0.564)	0.0578 (1.760)	0.562 (0.568)	-0.797 (1.708)
Male Share of income	0.000166 (0.000240)	0.00167 (0.00159)	0.000161 (0.000230)	0.00220 (0.00179)
Sq male share of income	-6.32e-09 (9.30e-09)	-8.64e-08 (8.17e-08)	-5.82e-09 (8.77e-09)	-1.24e-07 (9.55e-08)
Female Share of income	-0.00385** (0.00170)	0.00107 (0.00117)	-0.00405** (0.00182)	0.00177 (0.00129)
Sq female share of income	5.48e-07** (2.30e-07)	-8.51e-08 (7.94e-08)	5.81e-07** (2.50e-07)	-1.23e-07 (9.02e-08)
Age of child	0.0153* (0.00898)	0.0667 (0.0440)	0.0165* (0.00887)	0.0935* (0.0508)
Order of child	-0.681** (0.297)	-0.901 (0.775)	-0.608** (0.285)	-0.161 (0.793)

Perceived poverty	0.512 (0.364)	0.723 (0.748)	0.461 (0.341)	0.692 (0.750)
Male resides outside*	1.038 (1.090)	4.632 (2.874)	1.030 (1.094)	2.543 (2.413)
Male owned business*	0.413 (1.286)	3.332 (3.125)	0.223 (1.191)	9.144* (5.169)
Male private employee*	-2.273* (1.369)	3.086 (3.840)	-2.202 (1.385)	8.040 (5.246)
Male worked on farms*	0.262 (1.047)	-0.790 (2.453)	0.0442 (1.010)	0.760 (2.401)
Female work outside*	5.926* (3.045)	0.419 (3.010)	6.243** (3.103)	-2.154 (3.144)
Income stability	-0.318 (0.358)	-0.865 (1.027)	-0.217 (0.352)	-0.823 (1.005)
Male govt employee*		35.12 (33.02)		52.96 (39.70)
Constant	-2.664 (2.442)	-22.08* (13.33)	-2.679 (2.499)	-23.07 (14.74)
Observations	74	76	74	76
Pseudo R-squared	0.3210	0.5316	0.2212	0.4324

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

For the aggregated data at child gender level with the increase in bargaining power of women from risk experiment child labor for girls reduces significantly but child labor for boys do not have any significant impact.

Table A7: Estimating the Impact of Mother's Bargaining Power on Child Labor Using Uncertainty Experiments, By Gender

VARIABLES	child labor if child is boy	child labor if child is girl	child labor if child is boy	child labor if child is girl
Bargaining power index, uncertainty	-0.302* (0.173)	-0.889** (0.409)		
Bargaining power dummy, uncertainty			-0.785 (0.735)	-5.307** (2.288)
No of HH members	-0.531 (0.367)	-1.578 (1.077)	-0.255 (0.303)	-0.270 (0.889)
No of members <16	1.164* (0.681)	2.784 (1.873)	0.669 (0.554)	1.097 (1.337)
Male Share of income	0.000194 (0.000228)	0.00132 (0.00147)	0.000170 (0.000225)	0.00137 (0.00143)
Sq male share of income	-5.77e-09 (8.29e-09)	-6.29e-08 (6.42e-08)	-6.44e-09 (8.42e-09)	-6.79e-08 (7.07e-08)
Female Share of income	-0.00443**	5.55e-05	-0.00392**	0.00103

	(0.00187)	(0.000688)	(0.00172)	(0.000930)
Sq female share of income	6.34e-07**	-2.43e-08	5.61e-07**	-6.09e-08
	(2.53e-07)	(4.51e-08)	(2.35e-07)	(6.25e-08)
Ageofchild	0.0165*	0.0490	0.0160*	0.0904**
	(0.00912)	(0.0341)	(0.00875)	(0.0363)
Order ofchild	-0.972**	-1.240	-0.693**	-0.469
	(0.404)	(0.838)	(0.304)	(0.623)
Perceived poverty	0.613	1.335	0.437	0.428
	(0.375)	(1.105)	(0.366)	(0.569)
Male resides outside*	1.621	1.529	0.753	0.139
	(1.272)	(1.870)	(1.093)	(2.181)
Male owned business*	0.716	3.519	0.876	5.404*
	(1.242)	(2.844)	(1.421)	(2.814)
Male private employee*	-3.074*	7.830*	-2.210*	5.650
	(1.638)	(4.630)	(1.337)	(3.557)
Male worked on farms*	-0.334	1.573	-0.193	0.715
	(1.083)	(2.880)	(1.089)	(2.118)
Female work outside*	7.396**	4.419	6.022**	-1.732
	(3.423)	(3.471)	(3.050)	(2.917)
Income stability	-0.203	-0.0247	-0.130	0.724
	(0.344)	(0.949)	(0.343)	(0.951)
Male govt employee*		25.90		27.76
		(24.01)		(28.20)
Constant	-3.441	-18.20	-2.399	-19.05*
	(2.477)	(12.60)	(2.461)	(11.41)
Observations	74	76	74	76
Pseudo R-squared	0.2210	0.4326	0.3213	0.5344
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

For the aggregated data at child gender level with the increase in bargaining power of women from uncertainty experiment child labor for girls reduces with a higher significant effect as compared to child labor of boys.

Table A8: Estimating the Impact of Mother's Bargaining Power on Number of Hours a Child Worked Using Risk Experiments

VARIABLES	No of Hours child worked	No of Hours child worked	No of Hours child worked	No of Hours child worked
Bargaining power index, risk	-0.500*	-0.491**		
	(0.256)	(0.205)		
Bargaining power dummy, risk			-4.981*	-2.109
			(2.734)	(2.353)
No of HHmembers		-0.465		-0.431
		(0.550)		(0.561)
No of members <16		2.183**		1.893*
		(1.048)		(1.063)
Male Shareof income		-0.000314		-0.000303

		(0.000342)		(0.000348)
Sq male shareofincome		3.27e-09		2.28e-09
		(5.90e-09)		(5.99e-09)
Female Shareof income		-0.000258		-0.000305
		(0.000739)		(0.000753)
Sq female shareofincome		2.78e-08		3.24e-08
		(3.08e-08)		(3.13e-08)
Ageofchild		0.0809***		0.0885***
		(0.0260)		(0.0267)
Order ofchild		-3.428***		-3.227***
		(0.864)		(0.888)
HH head is male*		7.599*		7.861*
		(4.340)		(4.418)
Child is male*		-2.584		-2.633
		(1.577)		(1.606)
Perceived poverty		3.226***		2.731***
		(0.833)		(0.820)
Male resides outside*		-2.117		-3.246
		(2.899)		(2.908)
Male govt. employee*		-3.590		-4.530
		(4.909)		(4.980)
Male owned business*		-1.866		-1.509
		(2.858)		(2.985)
Male private employee*		-1.203		-0.858
		(2.626)		(2.671)
Male worked on farms*		2.587		1.774
		(2.835)		(2.895)
Female work outside*		3.712		3.633
		(3.400)		(3.462)
Income stability		-3.373***		-2.927**
		(1.138)		(1.142)
Constant	10.49***	-4.887	12.62***	-2.518
	(1.245)	(7.404)	(1.266)	(7.621)
Observations	182	153	182	153
R-squared	0.021	0.591	0.018	0.575
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

Number of hours a child worked reduces with an increase in the bargaining power of women index measured from risk experiment. Dummy variable of bargaining power of women has no significant effect.

Table A9: Estimating the Impact of Mother's Bargaining Power on Number of Hours a Child Worked Using Uncertainty Experiments

VARIABLES	No of Hours child worked	No of Hours child worked	No of Hours child worked	No of Hours child worked
Bargaining power index,	-1.195***	-0.902**		

uncertainty	(0.388)	(0.352)		
Bargaining power dummy, uncertainty			-7.350*** (2.493)	-4.658** (2.200)
No of HH members		-0.956 (0.590)		-0.600 (0.560)
No of members <16		2.595** (1.080)		2.282** (1.067)
Male Share of income		-0.000165 (0.000345)		-0.000306 (0.000344)
Sq male share of income		2.73e-10 (5.90e-09)		2.54e-09 (5.91e-09)
Female Share of income		-0.000502 (0.000741)		-9.97e-05 (0.000749)
Sq female share of income		3.40e-08 (3.06e-08)		2.20e-08 (3.14e-08)
Age of child		0.0745*** (0.0264)		0.0835*** (0.0260)
Order of child		-3.706*** (0.885)		-3.444*** (0.873)
HH head is male*		7.268* (4.333)		8.677** (4.368)
Child is male*		-2.376 (1.576)		-2.664* (1.584)
Perceived poverty		3.294*** (0.834)		2.864*** (0.812)
Male resides outside*		-2.905 (2.839)		-4.614 (2.894)
Male govt. employee*		-1.933 (4.992)		-0.858 (5.239)
Male owned business*		-1.298 (2.865)		-0.514 (2.967)
Male private employee*		-1.511 (2.629)		-0.409 (2.633)
Male worked on farms*		1.293 (2.768)		1.071 (2.789)
Female work outside*		5.215 (3.443)		2.382 (3.469)
Income stability		-2.760** (1.107)		-2.545** (1.121)
Constant	9.658*** (1.264)	-4.390 (7.369)	13.53*** (1.293)	-2.808 (7.429)
Observations	182	153	182	153
R-squared	0.050	0.593	0.046	0.587
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

Bargaining power of women from uncertainty experiment has higher negative impact on number of hours a child worked for both index as well as for dummy variable as compared to risk experiment.

Table A10: Estimating the Impact of Mother's Bargaining Power on Number of Hours a Child Worked Using Risk Experiments, By Gender

VARIABLES	No of Hours child worked if child is boy	No of Hours child worked if child is girl	No of Hours child worked if child is boy	No of Hours child worked if child is girl
Bargaining power index, risk	-0.469*	-0.446		
	(0.270)	(0.352)		
Bargaining power dummy, risk			-1.575	-1.229
			(3.325)	(3.991)
No of HH members	0.276	-2.241***	0.337	-2.245***
	(0.767)	(0.790)	(0.796)	(0.801)
No of members <16	-0.00959	4.583***	-0.461	4.400***
	(1.586)	(1.603)	(1.635)	(1.627)
Male Share of income	0.000178	-0.000559	0.000238	-0.000570
	(0.000515)	(0.000507)	(0.000529)	(0.000518)
Sq male share of income	-6.43e-09	1.01e-08	-8.26e-09	9.46e-09
	(9.14e-09)	(8.40e-09)	(9.44e-09)	(8.55e-09)
Female Share of income	-0.000506	0.000657	-0.000596	0.000671
	(0.00126)	(0.00105)	(0.00129)	(0.00107)
Sq female share of income	6.00e-09	1.37e-08	1.10e-08	1.63e-08
	(4.98e-08)	(4.25e-08)	(5.11e-08)	(4.30e-08)
Age of child	0.139***	0.0744**	0.154***	0.0799**
	(0.0380)	(0.0343)	(0.0394)	(0.0355)
Order of child	-2.670**	-3.844***	-2.274*	-3.681***
	(1.172)	(1.229)	(1.214)	(1.258)
Perceived poverty	4.600***	2.462*	4.121***	2.087
	(1.250)	(1.338)	(1.248)	(1.320)
Male resides outside*	-1.052	-4.326	-2.182	-5.396
	(4.287)	(4.404)	(4.336)	(4.374)
Male Govt. employee*	-2.611	-10.22	-3.621	-11.00
	(7.840)	(7.990)	(8.134)	(8.113)
Male owned business*	-3.905	2.051	-3.352	1.945
	(4.442)	(4.128)	(4.543)	(4.458)
Male private employee*	-4.907	1.193	-4.796	1.753
	(4.195)	(3.824)	(4.300)	(3.862)
Male worked on farms*	-2.572	9.059*	-4.087	8.704*
	(4.032)	(4.608)	(4.185)	(4.672)
Female work outside*	8.739	0.0165	9.273	-0.468
	(5.497)	(4.810)	(5.628)	(4.857)
Income stability	-3.198**	-1.698	-2.561	-1.438
	(1.577)	(1.860)	(1.580)	(1.872)
Constant	-12.03	5.947	-11.12	8.559
	(9.684)	(10.29)	(10.32)	(10.25)
Observations	77	76	77	76
R-squared	0.579	0.657	0.559	0.648

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With disaggregated data at child gender level bargaining power of women from risk experiment has no significant effect on number of hours worked by boys and girls.

Table A11: Estimating the Impact of Mother’s Bargaining Power on Number of Hours a Child Worked Using Uncertainty Experiments, By Gender

VARIABLES	No of Hours child worked if child is boy	No of Hours child worked if child is girl	No of Hours child worked if child is boy	No of Hours child worked if child is girl
Bargaining power index, uncertainty	-0.973* (0.529)	-0.935* (0.503)		
Bargaining power dummy, uncertainty			-5.641* (3.115)	-5.850* (3.285)
No of HH members	-0.259 (0.843)	-2.683*** (0.815)	0.101 (0.780)	-2.452*** (0.813)
No of members <16	0.467 (1.654)	5.024*** (1.610)	0.0204 (1.583)	4.786*** (1.640)
Male Share of income	0.000382 (0.000514)	-0.000392 (0.000510)	0.000254 (0.000511)	-0.000569 (0.000508)
Sq Male share of income	-1.07e-08 (9.01e-09)	6.94e-09 (8.40e-09)	-8.38e-09 (8.99e-09)	9.87e-09 (8.41e-09)
Female Share of income	-0.000591 (0.00126)	0.000405 (0.00105)	-0.000270 (0.00128)	0.000873 (0.00107)
Sq Female share of income	4.62e-09 (4.97e-08)	1.97e-08 (4.19e-08)	-7.67e-09 (5.09e-08)	6.25e-09 (4.34e-08)
Age of child	0.140*** (0.0376)	0.0600* (0.0353)	0.145*** (0.0368)	0.0767** (0.0341)
Order of child	-2.921** (1.208)	-4.254*** (1.246)	-2.542** (1.149)	-3.872*** (1.238)
Perceived poverty	4.972*** (1.300)	2.544* (1.307)	4.532*** (1.238)	2.102 (1.305)
Male resides outside*	-2.150 (4.208)	-4.874 (4.254)	-4.071 (4.313)	-6.452 (4.391)
Male Govt. employee*	0.783 (8.248)	-8.690 (7.937)	1.959 (8.519)	-8.438 (8.239)
Male Owned business*	-2.119 (4.481)	1.897 (4.046)	-1.055 (4.620)	2.607 (4.226)
Male Private employee*	-5.517 (4.195)	1.191 (3.745)	-4.439 (4.194)	1.987 (3.791)
Male Worked on farms*	-4.381 (3.820)	8.089* (4.530)	-4.714 (3.817)	8.486* (4.601)
Female work outside*	10.47* (5.489)	1.338 (4.820)	7.857 (5.543)	-1.738 (4.927)
Income stability	-2.338 (1.505)	-1.343 (1.818)	-2.096 (1.515)	-1.081 (1.870)
Constant	-14.69 (9.726)	6.859 (9.987)	-11.26 (9.684)	9.401 (10.16)
Observations	77	76	77	76

R-squared 0.581 0.668 0.581 0.656
Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Bargaining power of women index from uncertainty experiment has negative impact on number of hours worked by girls as well as worked by boys. Dummy variable of bargaining power has negative impact on number of hours worked by boys.

Table A12: Estimating the Impact of Mother’s Bargaining Power on Height for age Z-Score Using Risk Experiments

VARIABLES	Height for Age Z-Score	Height for Age Z-Score	Height for Age Z-Score	Height for Age Z-Score
Bargaining power index, risk	0.0902** (0.0361)	0.104** (0.0445)		
Bargaining power dummy, risk			0.296 (0.370)	-0.0449 (0.572)
No of HHmembers		0.287*** (0.108)		0.268** (0.112)
No of members <16		-0.517** (0.216)		-0.435* (0.226)
Male Share of income		0.000110 (6.97e-05)		0.000123* (7.17e-05)
Sq male share of income		-2.60e-09** (1.17e-09)		-2.62e-09** (1.21e-09)
Female Share of income		0.000105 (0.000165)		0.000150 (0.000169)
Sq female share of income		-2.79e-09 (6.29e-09)		-5.42e-09 (6.46e-09)
Age of child		0.00211 (0.00544)		-0.00106 (0.00584)
Order of child		0.158 (0.182)		0.0534 (0.193)
HH head is male*		1.811** (0.838)		1.713* (0.865)
Child is male*		0.562 (0.343)		0.600* (0.354)
Perceived poverty		-0.0890 (0.180)		-0.0238 (0.186)
Male resides outside*		0.793 (0.642)		1.202* (0.652)
Male Govt. employee*		0.642 (0.995)		0.565 (1.031)
Male Owned business*		1.011 (0.652)		0.953 (0.705)
Male Private employee*		0.268 (0.594)		-0.0476 (0.623)
Male Worked on farms*		0.501 (0.586)		0.649 (0.639)

Female work outside*		-0.148 (0.735)		-0.194 (0.774)
Income stability		-0.0366 (0.263)		-0.223 (0.277)
Constant	-1.541*** (0.162)	-4.882*** (1.480)	-1.741*** (0.179)	-4.778*** (1.665)
Observations	120	103	120	103
R-squared	0.050	0.309	0.005	0.264
Standard errors in parentheses				

*** p<0.01, ** p<0.05, * p<0.1

With the increase in bargaining power of women index measured from risk experiment, height for age z-score tends to improve.

Table A13: Estimating the Impact of Mother's Bargaining Power on Height for age Z-Score Using Uncertainty Experiments

VARIABLES	Height for Age Z-Score	Height for Age Z-Score	Height for Age Z-Score	Height for Age Z-Score
Bargaining power Index, uncertainty	0.0469 (0.0557)	0.0857 (0.0848)		
Bargaining power dummy, uncertainty			0.660* (0.335)	1.193** (0.492)
No of HH members		0.315*** (0.119)		0.287*** (0.107)
Members < 16		-0.513** (0.230)		-0.511** (0.215)
Male Share of income		0.000108 (7.28e-05)		0.000106 (6.96e-05)
Sq male share of income		-2.43e-09** (1.22e-09)		-2.46e-09** (1.17e-09)
Female share of income		0.000160 (0.000168)		7.47e-05 (0.000166)
Sq female share of income		-4.99e-09 (6.36e-09)		-1.06e-09 (6.43e-09)
Age of child		0.00119 (0.00580)		0.00169 (0.00538)
Order of child		0.130 (0.195)		0.150 (0.180)
HH head is male*		1.801** (0.863)		1.594* (0.837)
Child is male*		0.576 (0.352)		0.549 (0.342)
Perceived poverty		-0.0544 (0.185)		-0.00564 (0.177)
Male resides outside*		1.084* (0.643)		1.286** (0.618)
Male govt employee*		0.377 (1.036)		-0.115 (1.030)

Male Owned business*		0.944		0.751
		(0.668)		(0.654)
Male Private employee*		0.223		0.380
		(0.647)		(0.602)
Male worked on farms*		0.675		0.886
		(0.600)		(0.591)
Female work outside*		-0.323		0.112
		(0.767)		(0.743)
Income stability		-0.199		-0.228
		(0.259)		(0.251)
Constant	-1.608***	-4.901***	-1.875***	-5.235***
	(0.174)	(1.520)	(0.186)	(1.486)
Observations	120	103	120	103
R-squared	0.006	0.273	0.032	0.312

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With the increase in bargaining power of women dummy variable measured from uncertainty experiment, height for age z-score improves.

Table A14: Estimating the Impact of Mother's Bargaining Power on Height for age Z-Score Using Risk Experiments, By Gender

VARIABLES	HAZ if child is boy	HAZ if child is girl	HAZ if child is boy	HAZ if child is girl
Bargaining power index, risk	0.148*** (0.0526)	0.0455 (0.0749)		
Bargaining power dummy, risk			0.770 (0.742)	-0.593 (0.911)
No of HH members	0.413*** (0.123)	0.0109 (0.191)	0.421*** (0.135)	-0.0124 (0.192)
No of members <16	-0.876*** (0.253)	-0.208 (0.396)	-0.826*** (0.280)	-0.116 (0.404)
Male Share of income	6.84e-05	0.000174	9.99e-05	0.000188*
Bargaining power index, risk	(9.02e-05)	(0.000110)	(9.97e-05)	(0.000110)
Sq male share of income	-2.07e-09 (1.55e-09)	-3.18e-09* (1.80e-09)	-2.30e-09 (1.72e-09)	-3.35e-09* (1.81e-09)
Female Share of income	-0.000470* (0.000252)	0.000467* (0.000272)	-0.000439 (0.000277)	0.000480* (0.000271)
Sq female share of income	1.72e-08* (9.26e-09)	-1.81e-08* (8.95e-09)	1.55e-08 (1.02e-08)	-1.93e-08** (8.86e-09)
Ageofchild	-0.00385 (0.00707)	0.00918 (0.00748)	-0.00609 (0.00804)	0.00628 (0.00791)
Order of child	0.363* (0.212)	0.118 (0.287)	0.216 (0.236)	0.0441 (0.294)

Perceived poverty	-0.398 (0.238)	-0.194 (0.303)	-0.230 (0.256)	-0.198 (0.303)
Male resides outside*	0.798 (0.770)	2.427** (1.130)	1.125 (0.834)	2.732** (1.088)
Male Govt. employee*	-1.400 (1.261)	-0.598 (2.094)	-1.804 (1.407)	-0.630 (2.092)
Male Owned business*	1.419 (0.957)	0.813 (0.883)	0.743 (1.055)	1.162 (0.977)
Male Private employee*	-1.296 (0.785)	0.453 (0.875)	-1.643* (0.855)	0.204 (0.900)
Male Worked on farms*	0.641 (0.708)	1.717 (1.019)	0.512 (0.854)	1.926* (1.044)
Female work outside*	1.433 (1.061)	-0.526 (1.068)	1.547 (1.207)	-0.607 (1.082)
Income stability	-0.159 (0.309)	-0.138 (0.482)	-0.325 (0.349)	-0.272 (0.480)
Constant	0.00963 (1.757)	-3.999* (2.152)	-0.657 (2.198)	-3.730 (2.230)
Observations	52	51	52	51
R-squared	0.573	0.394	0.490	0.395

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When the index variable of bargaining power of women increases Height for Age Z-score for boys improves but Height for Age Z-score of girls do not have any significant effect. Also the dummy variable of mother's bargaining power has no significant effect on the Z-scores of boys and girls.

Table A15: Estimating the Impact of Mother's Bargaining Power on Height for age Z-Score Using Uncertainty Experiments, By Gender

VARIABLES	HAZ if child is boy	HAZ if child is girl	HAZ if child is boy	HAZ if child is girl
Bargaining power index, uncertainty	0.301*** (0.102)	-0.0427 (0.125)		
Bargaining power dummy, uncertainty			1.981*** (0.556)	0.268 (0.788)
No of HH members	0.576*** (0.135)	-0.0113 (0.198)	0.443*** (0.117)	0.0163 (0.193)
No of members <16	-1.046*** (0.265)	-0.142 (0.408)	-0.849*** (0.237)	-0.205 (0.402)
Male Share of income	3.21e-05 (9.08e-05)	0.000189 (0.000113)	4.55e-05 (8.59e-05)	0.000174 (0.000112)

Sq male share of income	-1.12e-09 (1.57e-09)	-3.33e-09* (1.84e-09)	-1.41e-09 (1.48e-09)	-3.16e-09* (1.82e-09)
Female Share of income	-0.000447* (0.000249)	0.000473* (0.000273)	0.000538** (0.000241)	0.000451 (0.000284)
Sq female share of income	1.72e-08* (9.16e-09)	-1.90e-08** (8.89e-09)	2.16e-08** (8.98e-09)	-1.77e-08* (9.57e-09)
Ageofchild	-0.00369 (0.00700)	0.00704 (0.00815)	-0.00715 (0.00648)	0.00868 (0.00746)
Order of child	0.418* (0.217)	0.0569 (0.305)	0.300 (0.189)	0.113 (0.291)
Perceived poverty	-0.466* (0.241)	-0.159 (0.306)	-0.337 (0.221)	-0.164 (0.304)
Male resides outside*	1.126 (0.745)	2.685** (1.093)	1.678** (0.719)	2.635** (1.082)
Male Govt. employee*	-2.674** (1.309)	-0.591 (2.103)	-2.899** (1.256)	-0.656 (2.104)
Male Owned business*	0.692 (0.939)	0.864 (0.880)	0.459 (0.905)	0.842 (0.886)
Male Private employee*	-1.187 (0.785)	0.243 (0.942)	-1.185 (0.744)	0.464 (0.911)
Male Worked on farms*	1.010 (0.696)	1.727 (1.026)	1.437** (0.682)	1.788* (1.022)
Female work outside*	1.173 (1.048)	-0.381 (1.109)	1.751* (1.014)	-0.407 (1.091)
Income stability	-0.423 (0.284)	-0.210 (0.472)	-0.478* (0.271)	-0.217 (0.473)
Constant	0.593 (1.733)	-4.192* (2.152)	-0.355 (1.673)	-4.197* (2.153)
Observations	52	51	52	51
R-squared	0.581	0.390	0.617	0.390

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When the index variable of bargaining power of women from uncertainty experiment increases Height for Age Z-score for boys improves for both variables of bargaining power dummy variable as well as index variables but Height for Age Z-score of girls do not have any significant effect.

Table A16: Estimating the Impact of Mother's Bargaining Power on Weight for age Z-Score Using Risk Experiments

VARIABLES	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score
Bargaining power index, risk	-0.0169 (0.0178)	0.0122 (0.0224)		
Bargaining power dummy, risk			0.00263 (0.189)	0.305 (0.251)
No of HH members		0.0168 (0.0599)		0.0207 (0.0597)
No of members <16		-0.103 (0.114)		-0.114 (0.113)
Male Share of income		3.12e-05		3.07e-05

		(3.73e-05)		(3.71e-05)
Sq male share of income		-7.52e-10		-7.52e-10
		(6.43e-10)		(6.39e-10)
Female Share of income		-1.61e-05		-1.49e-05
		(8.06e-05)		(8.02e-05)
Sq female share of income		3.46e-10		4.32e-10
		(3.36e-09)		(3.34e-09)
Ageofchild		0.00872***		0.00931***
		(0.00283)		(0.00285)
Order of child		0.0249		0.0412
		(0.0942)		(0.0946)
HH head is male*		0.349		0.358
		(0.473)		(0.471)
Child is male*		0.163		0.159
		(0.172)		(0.171)
Perceived poverty		-0.193**		-0.183**
		(0.0908)		(0.0874)
Male resides outside*		-0.249		-0.257
		(0.316)		(0.310)
Male Govt. employee*		-0.212		-0.213
		(0.535)		(0.531)
Male Owned business*		0.234		0.153
		(0.311)		(0.318)
Male Private employee*		-0.0188		-0.00889
		(0.286)		(0.285)
Male Worked on farms*		-0.261		-0.308
		(0.309)		(0.308)
Female work outside*		0.225		0.231
		(0.371)		(0.369)
Income stability		0.0745		0.0806
		(0.124)		(0.122)
Constant	-0.534***	-1.143	-0.501***	-1.335
	(0.0869)	(0.807)	(0.0907)	(0.812)
Observations	190	153	190	153
R-squared	0.005	0.214	0.000	0.221
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

Weight for age z-score has no significant effect of increase in bargaining power of women measured from risk experiment.

Table A17: Estimating the Impact of Mother's Bargaining Power on Weight for age Z-Score Using Uncertainty Experiments

VARIABLES	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score
Bargaining power index, uncertainty	0.00201 (0.0278)	0.0493 (0.0382)		
Bargaining power dummy,			0.0572	0.371

uncertainty			(0.177)	(0.237)
No of HHmembers		0.0459		0.0317
		(0.0641)		(0.0603)
No of members <16		-0.139		-0.135
		(0.118)		(0.115)
Male Shareof income		2.33e-05		3.11e-05
		(3.76e-05)		(3.70e-05)
Sq male shareofincome		-6.24e-10		-7.60e-10
		(6.42e-10)		(6.36e-10)
Female Shareof income		-4.13e-06		-3.13e-05
		(8.06e-05)		(8.06e-05)
Sq female shareofincome		1.96e-10		1.16e-09
		(3.33e-09)		(3.38e-09)
Ageofchild		0.00949***		0.00929***
		(0.00288)		(0.00279)
Order ofchild		0.0514		0.0469
		(0.0962)		(0.0940)
HH head is male*		0.379		0.285
		(0.471)		(0.470)
Child is male*		0.149		0.164
		(0.171)		(0.170)
Perceived poverty		-0.212**		-0.192**
		(0.0907)		(0.0874)
Male resides outside*		-0.249		-0.129
		(0.309)		(0.311)
Male Govt. employee*		-0.337		-0.493
		(0.543)		(0.564)
Male Owned business*		0.196		0.113
		(0.312)		(0.319)
Male Private employee*		0.0130		-0.0546
		(0.286)		(0.283)
Male Worked on farms*		-0.231		-0.216
		(0.301)		(0.300)
Female work outside*		0.141		0.328
		(0.374)		(0.373)
Income stability		0.0586		0.0409
		(0.120)		(0.121)
Constant	-0.497***	-1.133	-0.516***	-1.240
	(0.0895)	(0.801)	(0.0936)	(0.799)
Observations	190	153	190	153
R-squared	0.000	0.222	0.001	0.227

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Weight for age z-score has also no significant effect of increase in bargaining power of women measured from uncertainty experiment.

Table A18: Estimating the Impact of Mother's Bargaining Power on Weight for age Z-Score Using Risk Experiments, By Gender

VARIABLES	WAZ if child is boy	WAZ if child is girl	WAZ if child is boy	WAZ if child is girl
Bargainingpowerindex,risk	-0.00735 (0.0259)	0.0491 (0.0385)		
Bargaining power dummy,risk			0.263 (0.310)	0.829* (0.423)
No of HHmembers	0.161** (0.0736)	-0.112 (0.0864)	0.175** (0.0742)	-0.104 (0.0850)
No of members <16	-0.368** (0.152)	0.0891 (0.175)	-0.413*** (0.152)	0.0688 (0.173)
Male Shareof income	9.46e-06 (4.94e-05)	2.11e-05 (5.55e-05)	1.70e-05 (4.94e-05)	9.86e-06 (5.49e-05)
Sq male shareofincome	-7.91e-10 (8.77e-10)	-4.50e-10 (9.18e-10)	-9.98e-10 (8.80e-10)	-2.30e-10 (9.06e-10)
Female Shareof income	-2.17e-05 (0.000121)	-5.24e-05 (0.000115)	-3.02e-05 (0.000121)	-5.13e-05 (0.000113)
Sq female shareofincome	3.75e-09 (4.78e-09)	-2.19e-09 (4.65e-09)	4.34e-09 (4.77e-09)	-2.36e-09 (4.56e-09)
Ageofchild	0.00992*** (0.00364)	0.00780** (0.00375)	0.0114*** (0.00367)	0.00893** (0.00376)
Order ofchild	0.108 (0.112)	-0.0658 (0.134)	0.148 (0.113)	-0.0375 (0.133)
Perceived poverty	-0.123 (0.120)	-0.303** (0.146)	-0.130 (0.116)	-0.273* (0.140)
Male resides outside*	-0.515 (0.411)	0.0316 (0.482)	-0.568 (0.404)	0.0927 (0.464)
Male Govt. employee*	-1.161 (0.752)	0.538 (0.874)	-1.326* (0.759)	0.749 (0.860)
Male Owned business*	0.585 (0.426)	0.0419 (0.452)	0.575 (0.424)	-0.228 (0.473)
Male Private employee*	-0.544 (0.403)	-0.0216 (0.418)	-0.564 (0.401)	-0.000377 (0.409)
Male Worked on farms*	-0.438 (0.387)	0.0837 (0.504)	-0.590 (0.390)	0.0465 (0.495)
Female work outside*	0.246 (0.528)	0.248 (0.526)	0.295 (0.525)	0.306 (0.515)
Income stability	-0.0702 (0.151)	0.224 (0.203)	-0.0310 (0.147)	0.212 (0.198)
Constant	-0.561 (0.929)	-0.121 (1.125)	-0.796 (0.962)	-0.510 (1.087)
Observations	77	76	77	76
R-squared	0.346	0.352	0.353	0.375
Standard errors in parentheses				

*** p<0.01, ** p<0.05, * p<0.1

With disaggregated data at child gender level we find no significant influence of bargaining power of women index and dummy measured from risk experiment.

Table A19: Estimating the Impact of Mother's Bargaining Power on Weight for age Z-Score Using Uncertainty Experiments, By Gender

VARIABLES	WAZ if child is boy	WAZ if child is girl	WAZ if child is boy	WAZ if child is girl
Bargaining power index, uncertainty	0.0628 (0.0503)	0.0487 (0.0563)		
Bargaining power dummy, uncertainty			0.434 (0.294)	0.321 (0.361)
No of HHmembers	0.207** (0.0801)	-0.0894 (0.0912)	0.187** (0.0737)	-0.0945 (0.0894)
No of members <16	-0.451*** (0.157)	0.0810 (0.180)	-0.431*** (0.150)	0.0790 (0.180)
Male Shareof income	4.00e-06 (4.88e-05)	1.43e-05 (5.71e-05)	1.24e-05 (4.83e-05)	2.28e-05 (5.59e-05)
Sq male shareofincome	-7.37e-10 (8.57e-10)	-2.68e-10 (9.40e-10)	-9.00e-10 (8.50e-10)	-4.25e-10 (9.25e-10)
Female Shareof income	-2.65e-05 (0.000120)	-4.03e-05 (0.000117)	-5.17e-05 (0.000121)	-7.09e-05 (0.000117)
Sq female shareofincome	4.47e-09 (4.73e-09)	-2.67e-09 (4.68e-09)	5.52e-09 (4.81e-09)	-1.64e-09 (4.78e-09)
Ageofchild	0.0116*** (0.00357)	0.00805** (0.00395)	0.0114*** (0.00348)	0.00738* (0.00375)
Order ofchild	0.171 (0.115)	-0.0588 (0.139)	0.152 (0.109)	-0.0701 (0.136)
Perceived poverty	-0.185 (0.124)	-0.285* (0.146)	-0.162 (0.117)	-0.263* (0.143)
Male resides outside*	-0.550 (0.400)	0.128 (0.476)	-0.405 (0.408)	0.240 (0.483)
Male Govt. employee*	-1.526* (0.784)	0.490 (0.888)	-1.681** (0.805)	0.403 (0.906)
Male Owned business*	0.506 (0.426)	0.0850 (0.453)	0.407 (0.437)	0.0116 (0.465)
Male Private employee*	-0.505 (0.399)	-0.0625 (0.419)	-0.581 (0.396)	-0.107 (0.417)
Male Worked on farms*	-0.499 (0.363)	0.163 (0.507)	-0.479 (0.361)	0.145 (0.506)
Female work outside*	0.195 (0.522)	0.207 (0.539)	0.384 (0.524)	0.407 (0.542)
Income stability	-0.0618 (0.143)	0.189 (0.203)	-0.0812 (0.143)	0.165 (0.206)
Constant	-0.425 (0.925)	-0.309 (1.117)	-0.661 (0.915)	-0.474 (1.117)
Observations	77	76	77	76
R-squared	0.362	0.342	0.368	0.343

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

With disaggregated data at child gender level we find no significant influence of bargaining power of women index and dummy measured from uncertainty experiment.

Table A20: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Risk Experiments

VARIABLES	Years of Schooling	Years of Schooling	Years of Schooling	Years of Schooling
Bargaining power index, risk	-0.108** (0.0470)	-0.0423 (0.0411)		
Bargaining power dummy,risk			-1.786*** (0.491)	-0.437 (0.464)
No of HHmembers		0.0328 (0.110)		0.0310 (0.110)
No of members <16		-0.101 (0.210)		-0.107 (0.210)
Male Shareof income		0.000145** (6.86e-05)		0.000147** (6.87e-05)
Sq male shareofincome		-2.23e-09* (1.18e-09)		-2.29e-09* (1.18e-09)
Female Shareof income		5.93e-05 (0.000148)		5.53e-05 (0.000148)
Sq female shareofincome		-3.11e-09 (6.18e-09)		-2.92e-09 (6.17e-09)
Ageofchild		0.0408*** (0.00521)		0.0406*** (0.00527)
Order ofchild		0.112 (0.173)		0.108 (0.175)
HH head is male*		-0.479 (0.870)		-0.472 (0.871)
Child is male*		-0.157 (0.316)		-0.156 (0.317)
Perceived poverty		-0.129 (0.167)		-0.170 (0.162)
Male resides outside*		0.751 (0.581)		0.690 (0.573)
Male Govt. employee*		-0.960 (0.984)		-1.016 (0.981)
Male Owned business*		-0.454 (0.573)		-0.350 (0.588)
Male Private employee*		-0.109 (0.527)		-0.0976 (0.526)
Male Worked on farms*		0.00758 (0.568)		0.00554 (0.570)
Male Mother work outside*		0.415 (0.682)		0.404 (0.682)
Income stability		-0.151 (0.228)		-0.130 (0.225)
Constant	2.007***	-2.090	2.619***	-1.752

	(0.228)	(1.485)	(0.227)	(1.502)
Observations	182	153	182	153
R-squared	0.029	0.608	0.068	0.607

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Bargaining power of women index and dummy measured from risk experiment finds to have no significant effect on years of schooling.

Table A21: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Uncertainty Experiments

VARIABLES	Years of Schooling	Years of Schooling	Years of Schooling	Years of Schooling
Bargainingpowerindex,uncertainty	-0.268*** (0.0706)	-0.320*** (0.0653)		
Bargaining power dummy,uncertainty			-0.700 (0.468)	-0.656 (0.437)
No of HHmembers		-0.161 (0.110)		0.00975 (0.111)
No of members <16		0.164 (0.201)		-0.0626 (0.212)
Male Shareof income		0.000196*** (6.42e-05)		0.000146** (6.83e-05)
Sq male shareofincome		-2.97e-09*** (1.10e-09)		-2.27e-09* (1.17e-09)
Female Shareof income		-1.46e-05 (0.000138)		8.42e-05 (0.000149)
Sq female shareofincome		-2.60e-09 (5.69e-09)		-4.28e-09 (6.23e-09)
Ageofchild		0.0347*** (0.00491)		0.0404*** (0.00516)
Order ofchild		-0.0883 (0.164)		0.0892 (0.174)
HH head is male*		-0.702 (0.805)		-0.349 (0.868)
Child is male*		-0.0582 (0.293)		-0.163 (0.315)
Perceived poverty		0.0321 (0.155)		-0.152 (0.161)
Male resides outside*		0.855 (0.528)		0.477 (0.575)
Male Govt. employee*		-0.0639 (0.928)		-0.513 (1.041)
Male Owned business*		-0.187 (0.532)		-0.250 (0.590)
Male Private employee*		-0.352 (0.489)		-0.0242 (0.523)
Male Worked on farms*		-0.0828		-0.131

		(0.514)		(0.554)
Female work outside*		0.961		0.230
		(0.640)		(0.689)
Income stability		-0.0916		-0.0665
		(0.206)		(0.223)
Constant	1.810***	-2.253	2.425***	-1.867
	(0.230)	(1.370)	(0.243)	(1.476)
Observations	182	153	182	153
R-squared	0.074	0.665	0.012	0.611
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

When bargaining power of women index from uncertainty experiment improves years of schooling of children worsens.

Table A22: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Risk Experiments, By Gender

VARIABLES	Years of schooling if child is boy	Years of schooling if child is girl	Years of schooling if child is boy	Years of schooling if child is girl
Bargainingpowerindex,risk	-0.0352 (0.0491)	-0.0834 (0.0757)		
Bargaining power dummy,risk			-0.570 (0.588)	-0.396 (0.854)
No of HHmembers	-0.0419 (0.139)	0.0869 (0.170)	-0.0578 (0.141)	0.0845 (0.171)
No of members <16	0.0148 (0.288)	-0.123 (0.345)	0.0402 (0.289)	-0.147 (0.348)
Male Shareof income	0.000150 (9.35e-05)	0.000134 (0.000109)	0.000144 (9.36e-05)	0.000135 (0.000111)
Sq male shareofincome	-2.33e-09 (1.66e-09)	-1.91e-09 (1.81e-09)	-2.19e-09 (1.67e-09)	-2.06e-09 (1.83e-09)
Female Shareof income	0.000206 (0.000230)	-4.27e-05 (0.000226)	0.000211 (0.000229)	-4.07e-05 (0.000228)
Sq female shareofincome	-6.88e-09 (9.05e-09)	5.60e-10 (9.14e-09)	-7.31e-09 (9.04e-09)	1.02e-09 (9.21e-09)
Ageofchild	0.0386*** (0.00690)	0.0415*** (0.00737)	0.0378*** (0.00696)	0.0421*** (0.00759)
Order ofchild	0.0840 (0.213)	-0.0359 (0.264)	0.0606 (0.215)	-0.0164 (0.269)
Perceived poverty	-0.0777 (0.227)	-0.332 (0.288)	-0.114 (0.221)	-0.399 (0.283)
Maleresides outside*	0.827 (0.779)	1.054 (0.947)	0.797 (0.767)	0.867 (0.936)
Male Govt.employee*	-1.577 (1.424)	-0.528 (1.718)	-1.418 (1.438)	-0.703 (1.737)
Male Ownedbusiness*	-0.560 (0.807)	-0.136 (0.887)	-0.489 (0.803)	-0.0887 (0.954)
Male Privateemployee*	1.223	-0.950	1.266	-0.865

	(0.762)	(0.822)	(0.760)	(0.827)
Male Workedonfarms*	0.160	0.242	0.248	0.194
	(0.732)	(0.991)	(0.740)	(1.000)
Femaleworkoutside*	-0.716	1.251	-0.740	1.159
	(0.998)	(1.034)	(0.995)	(1.040)
Income stability	-0.108	-0.142	-0.106	-0.0973
	(0.286)	(0.400)	(0.279)	(0.401)
Constant	-2.538	-2.157	-2.078	-1.644
	(1.759)	(2.211)	(1.824)	(2.195)
Observations	77	76	77	76
R-squared	0.639	0.645	0.642	0.638

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Bargaining power of women index and dummy from risk experiment has no effect on the schooling of girls as well as schooling of boys.

Table A23: Estimating the Impact of Mother's Bargaining Power on Years of Schooling of Children Using Uncertainty Experiments, By Gender

VARIABLES	Years of schooling if child is boy	Years of schooling if child is girl	Years of schooling if child is boy	Years of schooling if child is girl
Bargainingpowerindex,uncertainty	-0.254*** (0.0909)	-0.362*** (0.100)		
Bargaining power dummy,uncertainty			-0.239 (0.568)	-1.061 (0.698)
No of HHmembers	-0.206 (0.145)	-0.0860 (0.162)	-0.0449 (0.142)	0.0280 (0.173)
No of members <16	0.262 (0.284)	0.0994 (0.321)	-0.00537 (0.289)	-0.0440 (0.349)
Male Shareof income	0.000186** (8.83e-05)	0.000205** (0.000102)	0.000156* (9.32e-05)	0.000134 (0.000108)
Sq male shareofincome	-2.94e-09* (1.55e-09)	-3.05e-09* (1.67e-09)	-2.51e-09 (1.64e-09)	-1.93e-09 (1.79e-09)
Female Shareof income	0.000208 (0.000216)	-0.000144 (0.000209)	0.000212 (0.000233)	1.53e-05 (0.000227)
Sq female shareofincome	-8.70e-09 (8.54e-09)	2.35e-09 (8.34e-09)	-7.21e-09 (9.29e-09)	-1.73e-09 (9.24e-09)
Ageofchild	0.0347*** (0.00646)	0.0342*** (0.00704)	0.0396*** (0.00672)	0.0414*** (0.00725)
Order ofchild	-0.0898 (0.208)	-0.244 (0.248)	0.108 (0.210)	-0.0652 (0.263)
Perceived poverty	0.108 (0.224)	-0.221 (0.260)	-0.0961 (0.226)	-0.396 (0.277)
Maleresides outside*	0.786 (0.723)	1.076 (0.848)	0.656 (0.787)	0.571 (0.934)
Male GovtempLOYEE*	-0.350 (1.418)	0.178 (1.581)	-1.443 (1.555)	0.0140 (1.752)
MaleOwnedbusiness*	-0.177	-0.0750	-0.425	0.0705

	(0.770)	(0.806)	(0.843)	(0.899)
MalePrivateemployee*	1.065	-1.093	1.243	-0.794
	(0.721)	(0.746)	(0.765)	(0.806)
MaleWorkedonfarms*	0.100	-0.0354	-0.00327	0.127
	(0.657)	(0.903)	(0.697)	(0.978)
Femaleworkoutside*	-0.406	1.858*	-0.729	0.810
	(0.943)	(0.960)	(1.012)	(1.047)
Income stability	-0.0318	-0.0626	-0.0353	0.00234
	(0.259)	(0.362)	(0.276)	(0.398)
Constant	-3.148*	-2.291	-2.520	-1.421
	(1.672)	(1.990)	(1.767)	(2.161)
Observations	77	76	77	76
R-squared	0.679	0.704	0.637	0.651

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Schooling bot both genders of children declines with an increase in the bargaining power of women index from uncertainty experiment.

Table A24: Estimating the Impact of Mother’s Bargaining Power on Years of Schooling of Children Using Risk and Uncertainty Experiments with different levels of Child Schooling

VARIABLES	Years of Schooling for 0-5 years of schooling	Years of Schooling for 5-8 years of schooling	Years of Schooling for 0-5 years of schooling	Years of Schooling for 5-8 years of schooling
Bargainingpowerindex,risk	-0.0212 (0.0250)	-0.0978 (0.136)		
Bargaining power index, Uncertainty			-0.136*** (0.0475)	-0.0567 (0.105)
No of HHmembers	-0.00505 (0.0666)		-0.0895 (0.0714)	
No of members <16	0.0219 (0.136)	0.0459 (0.160)	0.155 (0.141)	-0.0257 (0.141)
Male Shareof income	9.20e-05** (4.23e-05)	2.13e-06 (5.33e-05)	0.000110*** (4.13e-05)	1.30e-05 (6.06e-05)
Sq male shareofincome	-1.28e-09* (7.19e-10)		-1.58e-09** (6.99e-10)	
Female Shareof income	0.000175* (9.57e-05)	-4.96e-05 (6.67e-05)	0.000138 (9.34e-05)	-5.21e-05 (6.82e-05)
Sq female shareofincome	-6.39e-09* (3.82e-09)		-5.78e-09 (3.70e-09)	
Ageofchild	0.0222*** (0.00359)	0.0286* (0.0117)	0.0197*** (0.00356)	0.0324** (0.0112)
Order ofchild	0.147 (0.114)	0.0265 (0.312)	0.0327 (0.118)	0.135 (0.299)
HH head is male*	-0.213 (0.519)		-0.235 (0.502)	
Child is male*	0.372* (0.199)	-1.176* (0.548)	0.352* (0.193)	-1.219* (0.551)
Perceivedpoverty	0.105		0.136	

	(0.104)		(0.0995)	
Maleresides outside*	0.0728	1.681	0.0893	1.471
	(0.351)	(1.043)	(0.336)	(0.973)
MaleGovtempoyee*	-0.0628		0.349	
	(0.617)		(0.616)	
MaleOwnedbusiness*	0.142		0.216	
	(0.349)		(0.339)	
MalePrivateemployee*	0.382		0.238	
	(0.332)		(0.326)	
MaleWorkedonfarms*	0.194		0.245	
	(0.378)		(0.355)	
Femaleworkoutside*	-0.349		-0.187	
	(0.443)		(0.431)	
Income stability	0.00215		0.000997	
	(0.142)		(0.133)	
Constant	-2.459***	1.675	-2.277**	1.233
	(0.904)	(2.418)	(0.877)	(2.702)
Observations	133	15	133	15
R-squared	0.543	0.817	0.571	0.810

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

When we disaggregate the data at child schooling level we find women's bargaining power index from uncertainty experiment to negatively impact the primary level of schooling.

Table A25: Estimating the Impact of Mother's Bargaining Power on Enrollment of Children in Schools Using Risk Experiments

VARIABLES	enrolled	enrolled	enrolled	enrolled
Bargaining power index, risk	-0.0350*	-0.0215		
	(0.0207)	(0.0354)		
Bargaining power dummy, risk			-0.519**	0.270
			(0.218)	(0.410)
No of HH members		-0.0667		-0.0686
		(0.121)		(0.118)
Members <16		0.210		0.185
		(0.232)		(0.226)
Male Share of income		0.000117		0.000117
		(7.67e-05)		(7.63e-05)
Sq male share of income		-1.50e-09		-1.56e-09
		(1.23e-09)		(1.22e-09)
Female share of income		7.09e-05		6.19e-05
		(0.000161)		(0.000161)
Sq female share of income		-5.32e-11		6.36e-10
		(6.35e-09)		(6.35e-09)
Age of child		0.0226***		0.0240***
		(0.00510)		(0.00512)
Order of child		0.211		0.249
		(0.170)		(0.170)
HH head is male*		0.578		0.532
		(0.968)		(0.943)

Child is male*		0.611**		0.597**
		(0.298)		(0.297)
Perceived poverty		0.0774		0.0520
		(0.150)		(0.143)
Male resides outside*		0.169		0.0856
		(0.477)		(0.472)
Male govt employee*		-0.171		-0.318
		(1.150)		(1.083)
Male Owned business*		0.286		0.193
		(0.501)		(0.512)
Male Private employee*		0.649		0.697
		(0.484)		(0.485)
Male worked on farms*		0.363		0.229
		(0.550)		(0.554)
Female work outside*		0.00583		0.0660
		(0.648)		(0.648)
Income stability		0.245		0.292
		(0.205)		(0.201)
Constant	0.270***	-5.436***	0.462***	-5.436***
	(0.101)	(1.830)	(0.108)	(1.792)
Observations	190	153	190	153
Pseudo R-squared	0.4210	0.5326	0.3613	0.4764
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

Increaser in bargaining power of women from risk experiment has no impact on the enrollment of children in school.

Table A26: Estimating the Impact of Mother's Bargaining Power on Enrollment of Children in Schools Using Uncertainty Experiments

VARIABLES	enrolled	enrolled	enrolled	enrolled
Bargaining power index, uncertainty	-0.0454 (0.0336)	-0.0844 (0.0726)		
Bargaining power dummy, uncertainty			0.107 (0.208)	0.00686 (0.377)
No of HH members		-0.129 (0.134)		-0.0653 (0.122)
Member s <16		0.317 (0.258)		0.190 (0.238)
Male Share of income		0.000133* (7.77e-05)		0.000118 (7.61e-05)
Sq male share of income		-1.75e-09 (1.24e-09)		-1.56e-09 (1.22e-09)
Female share of income		7.38e-05 (0.000167)		6.71e-05 (0.000162)
Sq female share of income		-4.96e-10 (6.51e-09)		2.10e-10 (6.43e-09)
Age of child		0.0212*** (0.00521)		0.0232*** (0.00509)

Order of child		0.149 (0.180)		0.229 (0.171)
HH head is male*		0.518 (0.961)		0.541 (0.955)
Child is male*		0.628** (0.302)		0.608** (0.298)
Perceived poverty		0.0983 (0.151)		0.0531 (0.144)
Male resides outside*		0.203 (0.472)		0.123 (0.474)
Male Govt employee*		-0.0345 (1.109)		-0.264 (1.141)
Male Owned business*		0.364 (0.506)		0.274 (0.520)
Male Private employee*		0.558 (0.488)		0.676 (0.482)
Male worked on farms*		0.293 (0.554)		0.309 (0.540)
Female work outside*		0.129 (0.654)		0.0402 (0.654)
Income stability		0.267 (0.199)		0.276 (0.200)
Constant	0.272*** (0.104)	-5.478*** (1.836)	0.307*** (0.109)	-5.346*** (1.804)
Observations	190	153	190	153
Pseudo R-squared	0.2310	0.4326	0.2613	0.4464
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				

Enrollment of children in schools does not effected with an increase in the women's bargaining power measured from uncertainty experiment.

Table A27: Estimating the Impact of Mother's Bargaining Power on Enrollment of Children in Schools Using Risk Experiments, By Gender

VARIABLES	Enrolled if child is boy	Enrolled if child is girl	Enrolled if child is boy	Enrolled if child is girl
Bargaining power index, risk	-0.00672 (0.0471)	-0.0645 (0.0666)		
Bargaining power dummy, risk			0.334 (0.604)	0.00363 (0.632)
Member s <16	-0.134 (0.381)	0.398 (0.313)	-0.139 (0.386)	0.306 (0.292)
Male Share of income	-4.92e-05 (0.000113)	0.000273** (0.000130)	-4.99e-05 (0.000111)	0.000252** (0.000124)
Sq male share of income	1.18e-09 (2.10e-09)	-3.72e-09* (1.97e-09)	1.10e-09 (2.03e-09)	-3.61e-09* (1.91e-09)
Female share of income	-0.000690 (0.000513)	0.000128 (0.000287)	-0.000676 (0.000526)	0.000129 (0.000276)
Sq female share of income	5.37e-08 (5.03e-08)	-7.46e-09 (1.43e-08)	5.27e-08 (5.11e-08)	-7.23e-09 (1.32e-08)

Age of child	0.0287*** (0.00841)	0.0234*** (0.00683)	0.0297*** (0.00845)	0.0239*** (0.00677)
Order of child	0.463* (0.261)	0.196 (0.207)	0.491* (0.260)	0.214 (0.206)
Perceived poverty	-0.434 (0.279)	0.514* (0.273)	-0.411 (0.280)	0.448* (0.261)
Male resides outside*	0.373 (0.748)	0.628 (0.661)	0.269 (0.722)	0.589 (0.667)
Female work outside*	1.645 (1.206)	0.233 (0.951)	1.624 (1.260)	0.147 (0.938)
Income stability	0.296 (0.316)	0.0621 (0.316)	0.338 (0.310)	0.00572 (0.318)
Constant	-1.324 (2.244)	-7.673*** (2.749)	-1.618 (2.253)	-6.808*** (2.432)
Observations	77	76	77	76
Pseudo R-squared	0.4210	0.5623	0.3213	0.5321

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Bargaining power of women from risk experiment has no significant impact on the enrolment of girls and boys even separately.

Table A28: Estimating the Impact of Mother's Bargaining Power on Enrollment of Children in Schools Using Uncertainty Experiments, By Gender

VARIABLES	enrolled if child is boy	enrolled if child is girl	enrolled if child is boy	enrolled if child is girl
Bargaining power index, uncertainty	0.0307 (0.121)	-0.187* (0.105)		
Bargaining power dummy, uncertainty			0.490 (0.547)	-0.514 (0.591)
No of HH members	0.0796 (0.207)	-0.372* (0.217)	0.101 (0.170)	-0.222 (0.182)
Members<16	-0.193 (0.435)	0.755* (0.425)	-0.262 (0.382)	0.469 (0.355)
Male Share of income	-5.32e-05 (0.000113)	0.000349** (0.000150)	-5.89e-05 (0.000108)	0.000281** (0.000130)
Sq male share of income	1.20e-09 (2.05e-09)	-4.85e-09** (2.21e-09)	1.18e-09 (2.00e-09)	-3.90e-09** (1.96e-09)
Female share of income	-0.000747 (0.000573)	0.000202 (0.000320)	-0.000775 (0.000544)	0.000157 (0.000284)
Sq female share of income	6.01e-08 (5.66e-08)	-1.06e-08 (1.68e-08)	6.31e-08 (5.34e-08)	-8.22e-09 (1.37e-08)
Age of child	0.0298*** (0.00906)	0.0190*** (0.00705)	0.0317*** (0.00902)	0.0231*** (0.00678)
Order of child	0.501* (0.290)	0.00363 (0.239)	0.551** (0.275)	0.146 (0.220)
Perceived poverty	-0.452 (0.289)	0.566* (0.294)	-0.448 (0.276)	0.467* (0.267)

Male resides outside*	0.330 (0.726)	0.734 (0.666)	0.438 (0.714)	0.441 (0.674)
Female work outside*	1.721 (1.265)	0.374 (0.986)	1.818 (1.285)	0.0776 (0.946)
Income stability	0.312 (0.305)	0.165 (0.337)	0.282 (0.308)	0.0936 (0.333)
Constant	-1.318 (2.229)	-8.268*** (2.950)	-1.545 (2.208)	-7.107*** (2.515)
Observations	77	76	77	76
Pseudo R-squared	0.3216	0.4232	0.3324	0.5743

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Bargaining power of women index measured from uncertainty experiment negatively affect the enrollment of girls in the schools. This negative impact is significant at 10% level of significance.

Table A29: Estimating the Impact of Self-reported Mother's Bargaining Power on Child Labor and Number of Hours a Child Worked

VARIABLES	child labor with complete data	child labor if child is boy	child labor if child is girl	hours of working with complete data	hours of working if child is boy	hours of working if child is girl
Self-reported bargaining power	-0.135 (0.241)	-0.267 (0.200)	0.0278 (0.210)	-0.0978 (0.578)	-0.142 (0.835)	-0.680 (0.766)
Gender of HH head*	2.306 (1.920)			13.48*** (4.668)		
Mthr-in-law resides with female*	0.151 (0.810)			1.057 (2.214)		
Female Diseased*	0.207 (0.747)	-0.491 (0.558)	0.959 (0.783)	-4.187** (2.080)	-3.422 (2.996)	-1.894 (3.099)
Male diseased*	1.641* (0.962)	-0.233 (0.765)	0.258 (0.976)	5.237** (2.627)	4.942 (3.760)	-1.953 (4.213)
Male resides outside*	1.048 (0.946)	-0.817 (0.730)	0.0114 (0.912)	-2.230 (2.570)	-4.779 (3.662)	-5.898 (3.557)
Order of child	-2.046*** (0.523)	-1.202*** (0.357)	-0.525 (0.409)	-4.341*** (1.028)	-2.695** (1.287)	-0.552 (1.485)
Age of child	0.000343 (0.0120)	-0.0103 (0.00834)	0.0333*** (0.0125)	0.0494 (0.0323)	0.0887** (0.0434)	0.158*** (0.0449)
Female share of income	9.16e-05 (8.89e-05)			0.000624** (0.000239)		
Male share of	-			-		

income	0.000177*** (5.40e-05)			0.000387*** (9.91e-05)		
Edu of HH head	0.0501 (0.0780)			-0.224 (0.214)		
No of Girls	1.478** (0.616)			0.626 (1.300)		
No of boys	1.313** (0.596)			1.092 (1.266)		
Members <16 years	0.225 (0.400)	0.560*** (0.195)	0.336 (0.295)	1.642 (1.007)	0.518 (0.725)	0.157 (0.827)
Male age	0.0308 (0.0688)	0.0872 (0.0596)	0.0153 (0.0783)	-0.0674 (0.200)	-0.294 (0.273)	-0.119 (0.342)
Female age	0.134 (0.0998)	0.148** (0.0700)	0.135 (0.139)	0.244 (0.258)	0.502 (0.356)	-0.0193 (0.409)
Gender of child*	-0.0201 (0.651)			-3.823** (1.689)		
Male edu		-0.142* (0.0739)	0.0822 (0.0870)		-0.246 (0.322)	-0.474 (0.370)
Female edu		0.111 (0.101)	0.0867 (0.106)		0.00540 (0.387)	-0.380 (0.330)
Total income		-	-		-	-3.08e-05
		0.000236*** (8.45e-05)	0.000110* (6.53e-05)		0.000190** (8.25e-05)	0.05 (7.92e-05)
Constant	-7.272** (3.238)	-1.773 (1.247)	-6.740** (3.170)	-8.792 (7.578)	5.557 (7.608)	8.805 (9.009)
Observations	153	79	78	153	79	78
R-squared	(0.076)	(0.055)	(0.213)	0.606	0.453	0.532

Standard errors in parentheses
 *** p<0.01, ** p<0.05,
 * p<0.1

R-squared in parenthesis are Pseudo R-squared.

Self-reported bargaining power of women has no significant effect on both variables of child labor.

Table A30: Estimating the Impact of Self-reported Mother's Bargaining Power on Height for Age and Weight for Age Z-Scores of Children

VARIABLES	ZHA with complete data	ZHA For 0-5 years of age	ZWA with complete data	ZWA For 0-5 years
Self-reported bargaining power	-0.139 (0.155)	0.00765 (0.260)	0.0235 (0.116)	0.117 (0.177)
Male age	-0.0397 (0.0530)	-0.0637 (0.0865)	-0.0666* (0.0390)	-0.123** (0.0591)
Female age	-0.0646 (0.0606)	-0.0141 (0.0908)	-0.0811* (0.0446)	-0.0900 (0.0621)
Years of cohabitation	0.0237	0.0282	0.148**	0.245***

	(0.0889)	(0.129)	(0.0619)	(0.0879)
Male edu	0.381	-0.530	0.392	0.270
	(0.477)	(0.759)	(0.346)	(0.519)
Female edu	-0.402	0.355	-0.0966	-0.725
	(0.509)	(0.827)	(0.373)	(0.565)
No of boys	-0.0956	-0.278	-0.288	-0.191
	(0.248)	(0.457)	(0.205)	(0.312)
No of Girls	-0.103	-0.270	-0.0752	0.0809
	(0.254)	(0.542)	(0.195)	(0.370)
Male share of income	7.25e-05	0.000121	5.32e-06	2.69e-05
	(5.64e-05)	(8.57e-05)	(4.02e-05)	(5.86e-05)
Female share of income	7.45e-05	0.000106	-1.54e-05	-3.90e-05
	(4.90e-05)	(6.89e-05)	(3.51e-05)	(4.71e-05)
Age of child	0.00620		0.00822	
	(0.00829)		(0.00627)	
Order of child	0.237	0.479	0.113	-0.241
	(0.265)	(0.480)	(0.209)	(0.328)
Gender of HH head*	0.630	0.730	0.130	-0.0892
	(0.572)	(0.878)	(0.399)	(0.600)
Gender of child*	0.465	1.453**	0.173	0.00115
	(0.397)	(0.696)	(0.294)	(0.476)
Constant	-0.589	-1.097	2.789**	6.385***
	(1.790)	(2.890)	(1.304)	(1.974)
Observations	103	54	92	54
R-squared	0.186	0.289	0.275	0.430

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Height for age z-score and weight for age z-score also tend out to be insignificant as a result of increase in the self-reported bargaining power.

Table A31: Estimating the Impact of Self-reported Mother's Bargaining Power on Years of Schooling and Enrollment of Children in Schools

VARIABLES	enrolled	years of schooling	For 0-5 years of schooling	For 5-8 years of schooling
Self-reported bargaining power	0.180 (0.264)	0.294*** (0.108)	0.0541 (0.0763)	-0.00485 (0.198)
Gender of HH head*	-2.236 (1.894)	-1.177 (0.869)	-0.922* (0.540)	
Mthr-in-law resides with female*	1.002 (0.977)	0.228 (0.412)	-0.00492 (0.271)	
Female Diseased*	1.931** (0.882)	0.143 (0.387)	0.0861 (0.257)	0.0146 (1.332)
Male diseased*	0.202 (1.014)	0.231 (0.489)	0.0923 (0.331)	0.150 (1.289)
Male resides outside*	0.827 (0.974)	0.380 (0.479)	0.0281 (0.306)	0.647 (1.467)
Order of child	-0.134 (0.418)	-0.130 (0.192)	-0.0143 (0.132)	0.245 (0.355)
Age of child	0.0411*** (0.0139)	0.0336*** (0.00601)	0.0193*** (0.00403)	0.0459* (0.0181)
Female share of income	-1.80e-05 (9.36e-05)	1.05e-05 (4.46e-05)	6.43e-06 (2.84e-05)	-8.82e-05 (0.000186)
Male Share of income	5.75e-05 (4.15e-05)	-1.11e-07 (1.85e-05)	2.07e-05* (1.19e-05)	
Edu of HH head	0.0694 (0.0781)	0.143*** (0.0399)	0.0888*** (0.0255)	
No of Girls	1.138** (0.578)	0.229 (0.242)	0.262 (0.163)	-0.160 (0.259)
No of boys	0.619 (0.542)	0.114 (0.236)	0.252 (0.154)	-0.305 (0.240)
Members <16 years	-0.685* (0.397)	-0.225 (0.188)	-0.136 (0.126)	
Male age	0.192** (0.0772)	0.137*** (0.0372)	0.0829*** (0.0237)	
Female age	-0.104 (0.104)	-0.0936* (0.0481)	-0.0731** (0.0319)	
Gender of child*	1.415** (0.655)	-0.0342 (0.315)	0.272 (0.203)	-1.265 (0.793)
Constant	-7.597** (3.135)	-1.486 (1.411)	-1.343 (0.897)	1.282 (2.482)
Observations	153	153	133	16
R-squared	(0.435)	0.675	0.599	0.849

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

R-squared in parenthesis are Pseudo R-squared.

Child enrollment and child years of schooling have not effected with the increase in the self-reported bargaining power of women

Robustness check:

Table A32: Impact of mother's bargaining power on child labor with robust standard errors

VARIABLES	Child labor	Child labor	Child labor	Child labor
Bargaining power Index, risk	-0.0829* (0.0439)			
Bargaining power Dummy, risk		0.0950 (0.567)		
Bargaining power Index, uncertainty			-0.263*** (0.0898)	
Bargaining power Dummy, uncertainty				-0.964** (0.447)
No of HH members	(-0.452**) (0.121)	-0.400** (0.187)	-0.567*** (0.218)	-0.387** (0.171)
Members < 16	1.083*** (0.381)	0.960*** (0.364)	1.234*** (0.415)	0.964*** (0.340)
Male Share of income	9.17e-05 (0.000213)	9.92e-05 (0.000345)	0.000124 (0.000423)	8.38e-05 (0.000121)
Sq Male share of income	-3.87e-09 (4.32e-09)	-4.29e-09 (4.44e-09)	-3.97e-09 (4.03e-09)	-3.55e-09 (4.32e-09)
Female share in income	0.000213 (0.000154)	0.000182 (0.000111)	0.000191 (0.000200)	0.000236 (0.000180)
Sq Female share of income	-5.70e-09 (8.16e-09)	-3.58e-09 (8.23e-09)	-4.29e-09 (8.32e-09)	-6.02e-09 (8.12e-09)
Age of child	0.0115** (0.00574)	0.0131** (0.00579)	0.0108* (0.00590)	0.0136** (0.00573)
Order of child	-0.647*** (0.209)	-0.581*** (0.200)	-0.828*** (0.234)	-0.647*** (0.201)
HH head is male*	0.553 (1.037)	0.939 (1.242)	1.299 (1.310)	1.399 (1.054)
Child is male*	0.0268 (0.339)	-0.0999 (0.720)	0.0545 (0.589)	-0.0344 (0.227)
Perceived poverty	0.391** (0.170)	0.291* (0.149)	0.462*** (0.179)	0.327** (0.159)
Male resides outside*	0.0871 (0.669)	-0.220 (0.587)	0.0408 (0.623)	-0.411 (0.738)
Male govt employee*	-0.159 (1.272)	-0.268 (1.185)	-0.288 (1.565)	0.221 (1.199)
Male owned business*	0.870 (0.692)	0.798 (0.699)	1.160* (0.643)	1.271* (0.765)
Male private employee*	0.526 (0.673)	0.639 (0.459)	0.545 (0.438)	0.719 (0.429)
Male worked on farms*	0.844 (0.678)	0.531 (0.686)	0.392 (0.578)	0.363 (0.456)

Female work outside*	-0.305 (0.643)	-0.281 (0.581)	0.180 (0.630)	-0.492 (0.562)
Income stability	-0.159 (0.243)	-0.0451 (0.215)	-0.0821 (0.234)	0.00426 (0.239)
Constant	-3.232* (1.895)	-3.221* (1.885)	-4.219** (1.877)	-3.574** (1.824)
Observations	153	153	153	153
Pseudo R-squared	0.4523	0.5445	0.2764	0.3765

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A33: Impact of mother's bargaining power on Number of Hours Child Worked with robust standard errors

VARIABLES	No of Hours child worked	No of Hours child worked	No of Hours child worked	No of Hours child worked
Bargaining power Index, risk	-0.491** (0.214)			
Bargaining power Dummy, risk		-2.109 (2.361)		
Bargaining power Index, uncertainty			-0.902** (0.356)	
Bargaining power Dummy, uncertainty				-4.658** (2.204)
No of HH members	-0.465 (0.564)	-0.431 (0.568)	-0.956 (0.602)	-0.600 (0.578)
Members < 16	2.183** (1.052)	1.893* (1.070)	2.595** (1.085)	2.282** (1.071)
Male Share of income	-0.000314 (0.000547)	-0.000303 (0.000481)	-0.000165 (0.000519)	-0.000306 (0.000408)
Sq Male share of income	3.27e-09 (5.90e-10)	2.28e-09 (5.99e-11)	2.73e-10 (5.90e-11)	2.54e-09 (5.91e-10)
Female share in income	-0.000258 (0.000872)	-0.000305 (0.000798)	-0.000502 (0.000801)	-9.97e-05 (0.000787)
Sq Female share of income	2.78e-08 (3.08e-09)	3.24e-08 (3.13e-10)	3.40e-08 (3.06e-10)	2.20e-08 (3.14e-10)
Age of child	0.0809*** (0.0254)	0.0885*** (0.0262)	0.0745*** (0.0243)	0.0835*** (0.0222)
Order of child	-3.428*** (0.867)	-3.227*** (0.894)	-3.706*** (0.891)	-3.444*** (0.876)
HH head is male*	7.599* (4.350)	7.861* (4.467)	7.268* (4.359)	8.677** (4.379)
Child is male*	-2.584 (1.577)	-2.633 (1.606)	-2.376 (1.576)	-2.664* (1.584)
Perceived poverty	3.226***	2.731***	3.294***	2.864***

	(0.840)	(0.825)	(0.841)	(0.824)
Male resides outside*	-2.117	-3.246	-2.905	-4.614
	(2.931)	(2.956)	(2.897)	(2.930)
Male govt employee*	-3.590	-4.530	-1.933	-0.858
	(4.976)	(5.080)	(6.202)	(5.360)
Male owned business*	-1.866	-1.509	-1.298	-0.514
	(2.971)	(5.267)	(2.971)	(3.538)
Male private employee*	-1.203	-0.858	-1.511	-0.409
	(2.678)	(2.699)	(2.675)	(2.681)
Male worked on farms*	2.587	1.774	1.293	1.071
	(2.873)	(3.327)	(2.802)	(2.890)
Female work outside*	3.712	3.633	5.215	2.382
	(3.413)	(3.474)	(3.456)	(3.493)
Income stability	-3.373***	-2.927**	-2.760**	-2.545**
	(1.142)	(1.148)	(1.114)	(1.127)
Constant	-4.887	-2.518	-4.390	-2.808
	(7.423)	(7.667)	(7.381)	(7.437)
Observations	153	153	153	153
R-squared	0.492	0.531	0.487	0.538

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, *p<0.1

Table A34: Impact of mother's bargaining power on Height for Age Z-score with robust standard errors

VARIABLES	Height for Age Z-Score	Height for Age Z-Score	Height for Age Z-Score	Height for Age Z-Score
Bargaining power Index, risk	0.104** (0.0451)			
Bargaining power Dummy, risk		-0.0449 (0.585)		
Bargaining power Index, uncertainty			0.0857 (0.0862)	
Bargaining power Dummy, uncertainty				1.193** (0.497)
No of HH members	0.287*** (0.114)	0.268** (0.115)	0.315*** (0.123)	0.287*** (0.113)
Members < 16	-0.517** (0.211)	-0.435* (0.214)	-0.513** (0.226)	-0.511** (0.221)
Male Share of income	0.000110 (7.04e-05)	0.000123* (7.33e-05)	0.000108 (7.47e-05)	0.000106 (7.27e-05)
Sq Male share of income	-2.60e-09** (1.26e-10)	-2.62e-09** (1.32e-09)	-2.43e-09** (1.45e-09)	-2.46e-09** (1.25e-09)
Female share in income	0.000105 (0.000265)	0.000150 (0.000321)	0.000160 (0.000318)	7.47e-05 (0.000298)
Sq Female share of income	-2.79e-09	-5.42e-09	-4.99e-09	-1.06e-09

	(6.87e-10)	(6.52e-11)	(6.96e-10)	(6.51e-09)
Age of child	0.00211	-0.00106	0.00119	0.00169
	(0.00642)	(0.00621)	(0.00741)	(0.00698)
Order of child	0.158	0.0534	0.130	0.150
	(0.193)	(0.202)	(0.841)	(0.201)
HH head is male*	1.811**	1.713*	1.801**	1.594*
	(0.876)	(0.874)	(0.874)	(0.848)
Child is male*	0.562	0.600*	0.576	0.549
	(0.343)	(0.361)	(0.387)	(0.361)
Perceived poverty	-0.0890	-0.0238	-0.0544	-0.00564
	(0.187)	(0.193)	(0.194)	(0.183)
Male resides outside*	0.793	1.202*	1.084*	1.286**
	(0.653)	(0.663)	(0.655)	(0.626)
Male govt employee*	0.642	0.565	0.377	-0.115
	(1.023)	(1.053)	(1.264)	(1.062)
Male owned business*	1.011	0.953	0.944	0.751
	(0.663)	(0.714)	(0.672)	(0.642)
Male private employee*	0.268	-0.0476	0.223	0.380
	(0.602)	(0.629)	(0.650)	(0.607)
Male worked on farms*	0.501	0.649	0.675	0.886
	(0.554)	(0.623)	(0.532)	(0.531)
Female work outside*	-0.148	-0.194	-0.323	0.112
	(0.739)	(0.775)	(0.772)	(0.748)
Income stability	-0.0366	-0.223	-0.199	-0.228
	(0.268)	(0.279)	(0.264)	(0.255)
Constant	-4.882***	-4.778***	-4.901***	-5.235***
	(1.472)	(1.659)	(1.519)	(1.481)
Observations	103	103	103	103
R-squared	0.298	0.201	0.234	0.267

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A35: Impact of mother's bargaining power on Weight for Age Z-score with robust standard errors

VARIABLES	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score	Weight for Age Z-Score
Bargaining power Index, risk	0.0122 (0.0234)			
Bargaining power Dummy, risk		0.305 (0.265)		
Bargaining power Index, uncertainty			0.0493 (0.0412)	
Bargaining power Dummy, uncertainty				0.371 (0.240)
No of HH members	0.0168 (0.0623)	0.0207 (0.0643)	0.0459 (0.0696)	0.0317 (0.0627)

Members < 16	-0.103 (0.136)	-0.114 (0.152)	-0.139 (0.141)	-0.135 (0.165)
Male Share of income	3.12e-05 (3.53e-06)	3.07e-05 (3.89e-04)	2.33e-05 (3.87e-06)	3.11e-05 (4.01e-06)
Sq Male share of income	-7.52e-10 (6.76e-10)	-7.52e-10 (6.68e-11)	-6.24e-10 (6.65e-11)	-7.60e-10 (6.74e-11)
Female share in income	-1.61e-05 (8.32e-06)	-1.49e-05 (8.09e-06)	-4.13e-06 (8.36e-06)	-3.13e-05 (8.36e-05)
Sq Female share of income	3.46e-10 (4.76e-09)	4.32e-10 (4.26e-09)	1.96e-10 (4.33e-09)	1.16e-09 (4.54e-09)
Age of child	0.00872*** (0.00296)	0.00931*** (0.00294)	0.00949*** (0.00297)	0.00929*** (0.00292)
Order of child	0.0249 (0.153)	0.0412 (0.176)	0.0514 (0.132)	0.0469 (0.119)
HH head is male*	0.349 (0.462)	0.358 (0.398)	0.379 (0.498)	0.285 (0.467)
Child is male*	0.163 (0.193)	0.159 (0.201)	0.149 (0.206)	0.164 (0.208)
Perceived poverty	-0.193** (0.0923)	-0.183** (0.0887)	-0.212** (0.0945)	-0.192** (0.0851)
Male resides outside*	-0.249 (0.367)	-0.257 (0.387)	-0.249 (0.374)	-0.129 (0.359)
Male govt employee*	-0.212 (0.435)	-0.213 (0.391)	-0.337 (0.601)	-0.493 (0.487)
Male owned business*	0.234 (0.307)	0.153 (0.374)	0.196 (0.348)	0.113 (0.336)
Male private employee*	-0.0188 (0.291)	-0.00889 (0.263)	0.0130 (0.289)	-0.0546 (0.241)
Male worked on farms*	-0.261 (0.327)	-0.308 (0.331)	-0.231 (0.325)	-0.216 (0.329)
Female work outside*	0.225 (0.301)	0.231 (0.313)	0.141 (0.309)	0.328 (0.320)
Income stability	0.0745 (0.225)	0.0806 (0.319)	0.0586 (0.231)	0.0409 (0.202)
Constant	-1.143 (0.841)	-1.335 (0.852)	-1.133 (0.794)	-1.240 (0.743)
Observations	153	153	153	153
R-squared	0.201	0.238	0.265	0.204

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A36: Impact of mother's bargaining power on Years of Schooling of Children with robust standard errors

VARIABLES	Years of Schooling	Years of Schooling	Years of Schooling	Years of Schooling
Bargaining power Index, risk	-0.0423 (0.0443)			

Bargaining power Dummy, risk		-0.437		
		(0.445)		
Bargaining power Index, uncertainty			-0.320**	
			(0.0973)	
Bargaining power Dummy, uncertainty				-0.656
				(0.418)
No of HH members	0.0328	0.0310	-0.161	0.00975
	(0.142)	(0.139)	(0.142)	(0.138)
Members < 16	-0.101	-0.107	0.164	-0.0626
	(0.204)	(0.206)	(0.209)	(0.217)
Male Share of income	0.000145**	0.000147**	0.000196***	0.000146**
	(6.73e-05)	(6.94e-05)	(6.64e-05)	(6.85e-05)
Sq Male share of income	-2.23e-09*	-2.29e-09*	-2.97e-09***	-2.27e-09*
	(1.46e-09)	(1.38e-09)	(1.01e-09)	(1.26e-09)
Female share in income	5.93e-05	5.53e-05	-1.46e-05	8.42e-05
	(0.000765)	(0.000429)	(0.000598)	(0.000527)
Sq Female share of income	-3.11e-09	-2.92e-09	-2.60e-09	-4.28e-09
	(6.64e-11)	(6.56e-11)	(5.64e-11)	(6.68e-11)
Age of child	0.0408***	0.0406***	0.0347***	0.0404***
	(0.00536)	(0.00541)	(0.00521)	(0.00531)
Order of child	0.112	0.108	-0.0883	0.0892
	(0.276)	(0.121)	(0.203)	(0.141)
HH head is male*	-0.479	-0.472	-0.702	-0.349
	(0.598)	(0.891)	(0.872)	(0.791)
Child is male*	-0.157	-0.156	-0.0582	-0.163
	(0.367)	(0.287)	(0.315)	(0.671)
Perceived poverty	-0.129	-0.170	0.0321	-0.152
	(0.187)	(0.191)	(0.183)	(0.201)
Male resides outside*	0.751	0.690	0.855	0.477
	(0.429)	(0.487)	(0.593)	(0.482)
Male govt employee*	-0.960	-1.016	-0.0639	-0.513
	(0.992)	(0.991)	(0.996)	(0.987)
Male owned business*	-0.454	-0.350	-0.187	-0.250
	(0.672)	(0.601)	(0.591)	(0.651)
Male private employee*	-0.109	-0.0976	-0.352	-0.0242
	(0.589)	(0.682)	(0.502)	(0.500)
Male worked on farms*	0.00758	0.00554	-0.0828	-0.131
	(0.575)	(0.603)	(0.502)	(0.564)
Female work outside*	0.415	0.404	0.961	0.230
	(0.631)	(0.723)	(0.687)	(0.701)
Income stability	-0.151	-0.130	-0.0916	-0.0665
	(0.197)	(0.236)	(0.174)	(0.201)
Constant	-2.090	-1.752	-2.253	-1.867
	(1.531)	(1.497)	(1.404)	(1.513)
Observations	153	153	153	153
R-squared	0.513	0.684	0.583	0.431

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table A37: Impact of mother's bargaining power on Enrollment of Children in schools with robust standard errors

VARIABLES	Enrolled	Enrolled	Enrolled	Enrolled
Bargaining power Index, risk	-0.0215 (0.0401)			
Bargaining power Dummy, risk		0.270 (0.453)		
Bargaining power Index, uncertainty			-0.0844 (0.0831)	
Bargaining power Dummy, uncertainty				0.00686 (0.321)
No of HH members	-0.0667 (0.173)	-0.0686 (0.101)	-0.129 (0.154)	-0.0653 (0.154)
Members < 16	0.210 (0.194)	0.185 (0.274)	0.317 (0.202)	0.190 (0.257)
Male Share of income	0.000117 (7.84e-05)	0.000117 (7.86e-05)	0.000133* (7.63e-05)	0.000118 (7.75e-05)
Sq Male share of income	-1.50e-09 (2.35e-09)	-1.56e-09 (2.28e-09)	-1.75e-09 (2.24e-09)	-1.56e-09 (2.63e-09)
Female share in income	7.09e-05 (0.000625)	6.19e-05 (0.000375)	7.38e-05 (0.000563)	6.71e-05 (0.000674)
Sq Female share of income	-5.32e-11 (6.47e-10)	6.36e-10 (6.53e-10)	-4.96e-10 (6.68e-10)	2.10e-10 (6.64e-10)
Age of child	0.0226*** (0.00535)	0.0240*** (0.00564)	0.0212*** (0.00522)	0.0232*** (0.00534)
Order of child	0.211 (0.203)	0.249 (0.231)	0.149 (0.265)	0.229 (0.207)
HH head is male*	0.578 (0.899)	0.532 (0.957)	0.518 (0.978)	0.541 (0.901)
Child is male*	0.611** (0.235)	0.597** (0.229)	0.628** (0.287)	0.608** (0.243)
Perceived poverty	0.0774 (0.132)	0.0520 (0.119)	0.0983 (0.127)	0.0531 (0.157)
Male resides outside*	0.169 (0.502)	0.0856 (0.503)	0.203 (0.462)	0.123 (0.431)
Male govt employee*	-0.171 (1.174)	-0.318 (1.127)	-0.0345 (1.134)	-0.264 (1.102)
Male owned business*	0.286 (0.565)	0.193 (0.554)	0.364 (0.542)	0.274 (0.553)
Male private employee*	0.649 (0.443)	0.697 (0.456)	0.558 (0.454)	0.676 (0.434)
Male worked on farms*	0.363 (0.546)	0.229 (0.526)	0.293 (0.543)	0.309 (0.538)
Female work outside*	0.00583 (0.637)	0.0660 (0.658)	0.129 (0.668)	0.0402 (0.631)
Income stability	0.245	0.292	0.267	0.276

	(0.237)	(0.225)	(0.201)	(0.234)
Constant	-5.436***	-5.436***	-5.478***	-5.346***
	(1.838)	(1.785)	(1.843)	(1.800)
Observations	153	153	153	153
Pseudo R-squared	0.4578	0.3215	0.3527	0.2513

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Experimental script for eliciting choices individually and jointly

Separate decisions (for each of the two spouses respectively)

After receiving the consents and filling up the survey questionnaire only one participant (husband or wife) sits with an experimenter in a separate room of a specific place where they have called.

“Thank you for coming and participating in this research. We are going to introduce a few options for making money to you, on which you have to decide which option you would choose. This game may take 2-3 hours, so if you think you will not be able to stay that long without leaving please let us know now. But if you want to leave in between the experiment you can still go but in that case you will not get any money. Before we begin I want to make some general comments about what we are doing here today and explain some rules that we need to follow for our experiments.

We have two activities, in each activity you have to make 10 different choices. For each choice we will ask you to pick one of two options. There is no right or wrong answer; we just want you to make the choice you like best.

We will not tell anyone even your spouse what you decide. During the experiment, we are also going to ask you not to discuss any of your decisions with any one, or to talk. If you do, we may have to stop the experiment and ask you to leave. At the end of the experiment we will give you any money that you earn in a sealed envelope. For this actual payment when your household has answered all the questions, you will draw a card out of a pile of 20 cards one time at the end of the completion of the entire game by the couple. These cards comprise of the 20 decisions taken by the couple out of which only one will be selected for the final payment to the couple. Even though you will make 20 decisions, only one of these will end up affecting your earnings, but you will not know in advance which decision will be used for the payment. Each decision has an equal chance of being used in the end.

You will be asked to make 10 decisions in risk (or first) experiment and 10 choices in (second) uncertainty experiment. Let us look at the first decision of risk experiment [show choice list]. In this case you can either receive 10 rupees for sure or choose a lottery with 50% chances of winning 100 rupees and 50% chances of getting nothing.”

Note the decision taken by participant from safe amount or lottery, If chooses safe amount moves to next option if chooses lottery then show the Physical objects to explain lottery,

“There is a bag in front of you. You can see there are five red and five blue balls in it. You have to choose a winning color for you from red and blue.”

Let the Participant choose a winning color for him/herself,“Now draw a ball randomly out of the bag.”

Observe the color of drawn ball, and note it down.

“Do you have any questions?” [Experimenters need leave enough time and opportunity to the subjects] If NOT, “Shall we proceed with the all decisions?”

If he/she has any queries explain him/her in more detail and then proceed further,

After the risk choices explain the difference with uncertainty experiment.

“Now for the second activity again you have to make 10 different choices but only difference is that this time proportion of red and blue balls is not known to you. There are still 10 balls in total but there could be 2 blue and 8 red balls, 2 red and 8 blue, 7 blue and 3 red, 3 blue and 7 red, or even there could be all 10 red and no blue or all 10 blue and no red ball, thus there could be any proportion of these balls. Again you have to choose one winning color for you and likewise, all the other rules will be same as previous experiment.”

Joint decisions

Call-in both spouses in the room and let them sit together; enumerator will sit in front of them.

“In this part of experiment, we will again ask you to make decisions in 20 different choices of both activities for earning money. But this time we want you to make decisions together. The questions are exactly the same as before.











The way to determine your payments is the same as before, but this time each of you will receive the amount of money separately, stated in the chosen card. That is, you will draw a card out of a pile of 20 cards one time to determine the one of the 20 decisions to be used.

“Do you have any questions?” [Experimenters need to leave enough time and opportunity to the subjects] If NOT “Shall we proceed with the 20 decisions?”

If on some choice both spouses did not agree on same choice, enumerator have to leave them alone and have to give them enough time to agree upon a single choice to get more purified results.

Table B1: Choice List

	Safe Amount	Lottery	
1			0
2			0
3			0
4			0

5			0
6			0
7			0
8			0
9			0

10



0