Ownership of appliances, household work, and girls' school attendance and performance: a cross-sectional analysis using data on 70 thousand children aged 10–17 years in 8 countries, 2017–2021

AUTHORS

Omar Karlsson, PhD[1,2,*] (omar.karlsson@duke.edu)

AFFILIATIONS

[1]Visiting Research Fellow, Duke University Population Research Institute, Duke University, 140 Science Dr, NC 27710 Durham, USA

[2]Department of Economic History, School of Economics and Management, Lund University, P.O. Box 7083, 220 07 Lund, Sweden

*Corresponding author

ACKNOWLEDGEMENTS

Karlsson was funded by Vetenskapsradet (2019-06396).

FUNDING

None.

DECLARATIONS OF INTEREST

None.

DATA AVAILABILITY

All Multiple Cluster Indicator Surveys are available at https://mics.unicef.org/ (requiring a simple application).

COMPLIANCE WITH ETHICAL STANDARDS

This project used publicly accessible secondary data from the Demographic and Health Surveys website. These activities did not meet the regulatory definition of human subject research.

ABSTRACT

INTRODUCTION

Education helps individuals develop skills to improve labor market outcomes and improve their quality of life. Education also supplies economies with the human capital to fulfill the many roles needed to provide the highest living standards. Beyond enhancing capacity of the workforce, education—particularly that of girls—also improves child health. Further, female education is an important correlate of economic development, but education of girls has historically lagged that of boys.

In recent years, there have been significant improvements in primary school enrollment and completion, particularly in low- and middle-income countries. However, while net primary school enrolment (which only considers children of official school age) has reached 89% (2018), secondary school enrollment is considerably lower, at 66%, globally. Many factors contribute to the reduced school attendance after primary school, such as inadequate quality and access. Poverty plays a major underlying role, both in terms of public and private financing for the provision of quality education and overbearing costs to students' families. Direct costs of sending children to school for families include fees, school supplies, uniforms, and transport to and from schools. Often, there are also opportunity costs: In many low- and middle-income countries, children commonly do valuable work within the household, on a family farm, or outside the home, which interferes with school attendance.

The International Labour Organization defines child labor as # in their statistics: According to this definition, #% of children #–# engaged in child labor including chores in 20#, globally. Boys work more overall, outside the home, and on family farms, while girls work more within the households, for example, cooking, cleaning, doing laundry, fetching water, and caring for children.

Household appliances, such as washing machines, refrigerators, and cooking stoves, can decrease the amount of work required to run a household, which in turn reduce the need for children to work within the home, making it possible for them to attend school (Cowan, 1983; Mokyr, 2000). Not only do these and other appliances reduce the time spent on household work, but they can also improve children's physical health by removing microorganisms—for example, by reducing contamination when food is stored in a refrigerator rather than at ambient temperature (Karlsson et al., 2020; Shi et al., 2022) —and healthier children are more likely to attend and perform better in school.

A quasi-experimental study from China showed that when girls 12–18 years old lived in households with washing machines, they spent 102 minutes less on household work per week and were 17% more likely to attend school (Kerr, 2019). This effect is not as pronounced among boys. Similarly, in India, the ownership of time-saving household appliances, such as refrigerators, has led to increased school enrollment and decreased employment rates among adolescents aged 12–18 years (Bhargava and Kerr, 2021). However, a study of 10–19-years-olds in 19 middle income countries, only found a substantial association between washing machine ownership and school attendance in one country for girls, Turkey, and to a smaller extent Egypt and Albania (CITE). The significance of household appliance ownership for girls' school attendance is likely to vary across contexts, according to, for example, gender norms, school access, and other factors such as school quality, fertility, and the need for labor within the home. Further, although washing machine ownership may not have a large effect on whether or not an adolescent attends school at all in many settings, appliances may still improve school performance, for example through improved consistency of attendance throughout the school year or more energy to pay attention and participate at school.

Studies are lacking on the role of household work and appliance ownership for school attendance and performance, both in general and their role in explaining sex differences in schooling. To address this gap in the literature, this study aims to examine the relationship between the ownership of washing machines, refrigerators, and cooking stoves, household work, school attendance, and foundational learning skills (numeracy and reading comprehension) using representative data on # adolescents living in 7 countries and 4 provinces of Pakistan, surveyed (once) between 2017 and 2021. First, we studied the association of the number of hours spent on household work with school attendance and learning skills. Second, we examined sex difference in school attendance and learning skills and the role of household work in explaining these differences. Third, we studied the association of appliances ownership with hours spent on household work, school attendance, and learning skills. Then, we explored whether the number of hours spent on household work could explain differences in school attendance and learning skills between adolescents in household with and without a washing machine, refrigerators, and cooking stoves. We also considered other types of work in a supplementary analysis.

DATA AND METHODS

Data

The data comes from the Multiple Indicator Cluster Surveys (MICS) conducted by UNICEF in multiple countries and regions to assess the wellbeing of women and children. MICS uses a multi-stage stratified cluster sampling procedure to select representative samples. Stratification is based on administrative or geographical region and urban-rural locality and clusters consisting of neighborhoods or villages and are selected with a probability proportional to size. From the selected clusters, households are randomly sampled.

Data are collected on households, regarding, for example, ownership of appliances, and interviews were done for children 5–17 years on topics such as education and work. Most of the questionnaire was administered to the mother (or caretaker) of one randomly selected child 5–17 years living in the household. When no caretakes was present, a slightly modified questionnaire was administered directly to the child. For foundational learning skills, only children 7–14 years old were interviewed.

Study population and inclusion criterion

WHO defines adolescents as 10–19 years old: Following this definition we included adolescents 10–17 years for school attendance and household work and 10–14 for learning skills (since adolescents 18–19 years were not interviewed in general and 15–19 years were not tested for learning skills).

The core questionnaire of the MICS does not include information on washing machine ownership, but it may be included in some surveys to cater to specific needs and local requirements. Surveys that included information on washing machine ownership were taken into consideration. The study was limited to countries where at least 5% and no more than 95% of the sample attended school and owned a washing machine, refrigerator, or cooking stove, to ensure enough variation in the outcome and exposure variables to obtain reliable estimates. Similarly, we only included samples that had at least 1000 valid observations to improve the reliability of the estimates.

Further, we excluded observations with missing values: 75 for school attendance, 917 for household work, and 155 for ownership of washing machine, refrigerator, and stove, and 236 for covariates, as well as 236 neighborhoods with only a single remining observations (which does

not contribute meaningfully to our estimates since we focus on within neighborhood comparisons). These exclusions resulted in a sample of 73,456 adolescents 10–17 years old, in 7 diverse countries —Dominican Republic, Fiji, Lao, Mongolia, Samoa, Suriname, and Viet Nam—and four Pakistani provinces— Balochistan, Khyber Pakhtunkhwa, Punjab, and Sindh — for the analyses of school attendance and household work (Supplementary Table 1.1).

The foundational learning questionnaire was not administered at all in Dominican Republic and Lao and had less than 1000 observations in Suriname, Samoa, Fiji, and Balochistan in Pakistan, which were excluded from the analysis of learning skills. Additionally, we excluded 16,433 adolescents that were over 14 years, 12,147 observations without information from the numeracy or reading comprehension questions, and 1,106 neighborhoods with only a single remaining observation.

Outcomes

All outcomes were derived from the *"questionnaire for children aged 5-17."* The main outcome variable studied was school attendance among adolescents 10–17 years old. The variable was constructed based on the question *"At any time during the current school year did (name) attend school or any early childhood education programme?"* from the "*child's background"* module of the questionnaire. Those answering with "*Yes"* were coded as one and those answering "*No"* were coded as zero.

Secondary variables studied were constructed from the *foundational learning skills* module of the questionnaire. Numeracy was assessed using a variable measuring the number of mistakes (or incomplete answers) made on several questions. First, a multipart question was asked to assess basic numeracy: the child was asked *"what is this number?"* and those

identifying two out of three numbers (9, 12, 30) were asked further questions. The second questions asked the child to identify the bigger of two numbers from five sets of numbers (7 & 5, 11 & 24, 58 & 49, 65 & 67, 146 & 154). The third question asked children to solve five basic additions (3+2, 8+6, 7+3, 13+6, and 12+24). The mistakes were summed up proving an outcome variable ranging from 0 to eleven mistakes. (Those answering the first question incorrectly were coded as having 11 mistakes or incomplete answers.)

A variable measuring basic reading comprehension was constructed from five questions based on a short story (usually 60–70 words) the child was asked to read. ("*Mary is seven years old. One morning, her grandmother sent her to the market to buy carrots. She gave Mary some money. Mary put it in her bag. The bag had a big hole. On the way, Mary lost the money. Peter saw the money and gave it to Mary. She was happy. Mary thanked Peter and walked to the market."*) In English, the questions were "*[A] How old is Mary? [B] Who sent Mary to the market? [C] What was Mary asked to buy? [D] Why did Mary lose the money? [E] Why was Mary happy?"* A variable measuring reading comprehension ranging from 0–5 mistakes (or incomplete answers) was constructed based on the answers.

The number of hours spent on household work was also studied as an outcome (although primarily as an exposure and a mediator). First, children that had done specific chores were identified from the multipart yes-or-no question "*Since last (day of the week), did (name) do any of the following for this household? [A] Shopping for the household? [B] Cooking? [C] Washing dishes or cleaning around the house? [D] Washing clothes? [E] Caring for children? [F] Caring for someone old or sick? [X] Other household tasks?"* For adolescents whose caretaker answered *"Yes"* on any of these questions, a follow up question was asked: *"Since last (day of the week), about how many hours did (name) engage in (this activity/these activities), in total?"*

on which the variable was based on. Those answering *"No"* to all household tasks, were coded as having done zero hours of household work.

Exposure

The number of hours spent on household work was first studied as an exposure, when studying school attendance, numeracy, and reading comprehension as outcomes (see description of variable definition in the section *Outcomes* above). Second, we studied sex difference school attendance and learning skills.

Third, we studied the role of appliances for school attendance and learning skills; whether the household where the adolescent lived had a washing machine (washer), refrigerator (fridge), and a stove using non-solid fuel (simply referred to as stove hereafter), all constructed from the household questionnaire. Washer and fridge ownership was established from a multipart question: *"Does your household have: [A] A television? [B] A refrigerator? [C] Country Specific Items That Run On Electricity."* We only included countries that added a washing machine as a country specific item.

Ownership of a stove was established from a question—*"In your household, what type of cookstove is mainly used for cooking?"*—in the household energy use module. Those answering that their household used "*manufactured solid fuel stove," "traditional solid fuel stove," "three stone stove/open fire," "no food cooked in household,"* or specified a stove using other types of solid fuel, were defined as not having a stove and coded as zero on a binary variable. Those using electricity, liquid fuel, gas, LPG, and solar cooking stoves were defined as having a stove and coded as one on a binary variable. In addition to being cleaner and less detrimental to health,

non-solid fuels also tend to be much quicker way of cooking food. (Although many solar cookers take time to heat up there were only # observations in our complete sample using solar cookers.)

Variables for decomposition

The number of hours spent on household work (linear and squared terms) and seven binary variable indicating specific chores—cooking, shopping, laundry, cleaning, childcare, care for sick or elderly, and other chores—were used to decompose the association of sex and appliance ownership with school attendance and learning skills. (See description of variable definition in the section *Outcomes* above). When decomposing the sex differences, all the decomposition variables were also interacted with being female, to allow for differences in the role of household work for school attendance and learning skills across sex.

Control variables

Control variables were added to the models to control for potential confounders. The most obvious confounders relate to living standards, since households that own appliances have higher living standards than those that do not, which may improve school attendance irrespective of appliance ownership. Therefore, we controlled for a household wealth index provided with the MICS data, constructed using principal component analysis on the household's ownership of multiple assets and amenities. The factor scores for the first component were transformed into a survey-specific household wealth index z-score for each surveyed household. The wealth index z-scores were entered as linear and squared terms to the models, to allow for diminishing effect at higher level of wealth.

Including the wealth index as an independent variable might plausibly control away some of the effect of appliance ownership on the outcomes (since these variables were also used to construct the index). Washer, fridge, and stove ownership were, however, only few of many variables used to construct the index, and single items generally do not contribute much to the index (Howe et al., 2012). Nevertheless, we addressed this concern in a sensitivity analysis where we excluded wealth index from our models.

Other variables relating to living standards and socioeconomic status were mother's (or caretaker's) education and education of the household head (both dummy coded as no education, primary, secondary, and more than secondary education). We controlled for a dummy coded variable indicating the location of water source (inside dwelling, inside yard, or elsewhere) since it reflects living standards but is also important when using a washing machine. We controlled for the number of household members and number of household members that are under the age of five. Finally, we controlled for all unobserved neighborhood level factors by adding neighborhood specific means for all valid observations as independent variables in the model. This approach is sometimes referred to as correlated random effects models (Schunck and Perales, 2017; Wooldridge, 2019). This approach gives identical estimates as traditional fixed effects models when estimated using linear models (see *Supplementary and sensitivity analyses*).

Additionally, the models included a binary indicator for having a television (TV) when studying ownership of appliances (for comparison, as TV ownership is not time saving, but still relates strongly to socioeconomic status).

Analyses

Modified Poisson regression models were used to obtain rate ratios, adjusting for all control variables, including neighborhood (Zou, 2004; Zou and Donner, 2013).

First, we estimated the association of number of hours spent on household work with school attendance, numeracy, and reading comprehension to establish a relationship between household work and school attendance and learning skills, separately for boys and girls.

Second, we estimated the relative difference (rate ratio) in school attendance and learning skills between girls and boys: Then, to another (full) regression, we added the number of hours spent on household work the week before the surveys (both linear and squared terms), and seven binary variables indicating whether the adolescent did specific chores the week before the survey, all interacted with sex, as independent variables, to estimate the extent to which doing household work explains the sex differences in the outcomes observed in the previous (basic) regression, using postestimation comparing the estimates from the two models using Stata's *suest* (Seemingly unrelated estimation) command followed by *nlcom* (Nonlinear combinations of estimators).

Third, we estimated the association between ownership of household appliances with number of hours spent on household work, school attendance, numeracy, and reading comprehension. Finally, we estimated another (full) regression for school attendance and learning skills on appliance ownership, adding the hours spent on household work (both linear and squared terms), and seven binary variables indicating whether the adolescent did specific chores, to estimate the extent to which it explains the association of appliance ownership with school attendance and learning skills observed in the previous (basic) regression, using the same postestimation as before.

P-values (two sided) and 95% confidence intervals were based on robust standard errors adjusted for clustering at the level of primary sampling units. We refer to 5% significance level (not adjusted for multiple comparisons) as statistically significant. Estimates were unweighted: Estimates from the pooled sample are an exception where estimates were weighted such that each sample contributed equally to the estimates (ie, larger samples or population did not contribute more to the estimates).

Supplementary and sensitivity analyses

In a Supplement, we first show additional descriptive statistics (Supplement 1), showing the proportion of adolescents doing specific household chores (Supplementary Tables S1.2–1.3) and the average number hours spent on economic activity, gathering firewood, and fetching water in the week before the survey (Supplementary Table S1.4). We also show descriptive statistics for alternative definition of our outcome variable: level of schooling (coding none as 0, primary as 1, secondary as 2, and higher as 3), and the proportions making no mistakes on the numeracy and reading comprehension tests (Supplementary Table S1.5).

We do three sets of sensitivity analyses. First, we redo our results using linear regressions (Supplement 5). Using linear models with terms for neighborhood level means of all independent variables gives identical estimates to standard fixed effect models (where neighborhood levels means are subtracted from all independent variables instead of being added as independent variables). The extent of the difference between standard fixed effects models and Poisson correlated random effects models may be due to the neighborhood level error being non-linearly correlated with the independent variables (Schunck and Perales, 2017). Using linear regression also allows us to use Gelbach (2016) decompositions, where the observed associations can be

decomposed into components attributable to several different variables separately (ie, hours of household work and the seven specific chores).

Second, we excluded the wealth index z-scores from the independent variables (Supplement 2.2) as it may control away some of the effect of appliance ownership on school attendance and learning skills (Supplement 6).

Third, we studied alternative definition of our outcome variables: level of schooling and the proportions making no mistakes on the numeracy and reading comprehension tests, as well as using specific chores (cooking, cleaning, shopping, and laundry) as outcome variables instead of hours spent on household work (Supplement 7).

Finally, we show decomposition showing the impact of hours spent on all work (household work, economic activity, gathering firewood, and fetching water) on the association of sex with school attendance and learning skills, both using Gelbach decomposition from linear regressions, which show the impact of the work variables separately (Supplement 9), and Poisson models, which show the impact of all the work variables together (Supplement 10).

We note when sensitivity analyses differ from our main results.

RESULTS

Descriptive statistics

In the pooled sample, boys spend 3.24 hours per week on household work while girls spend 6.93 hours (Table 1). Except for Samoa, girls spent more of time on household work in all samples. Girls in Mongolia spent the most time on household work, 8.6 hours, followed by Punjab (7.6), Sindh (8.46), and Khyber Pakhtunkhwa (7.29) in Pakistan. Girls in Suriname spent

the least amount of time on household work, 3 hours, followed by Dominican Republic, 3.3 hours. As for girls, boys also spent the most hours on household work in Mongolia (5.9), which was however followed by Lao (5.48) and Viet Nam (5.09). As for girls, boys in Dominican Republic (1.6) and Suriname (1.8) also spend the least hours on household work.

Looking at specific chores, girls did more cooking, laundry, cleaning, childcare, sick or elderly care, in all samples (except for cooking in Samoa), while boys did more shopping in all samples except Dominican Republic, Viet Nam, Lao, and Mongolia (Supplementary Table S1.2–1.3). Overall, laundry was done by .63 of girls and .22 of boys, cleaning was done by .8 of girls and .3 of boys, cooking was done by .54 of girls and .18 of boys, and shopping was done by .33 of girls and .51 of boys. Boys spent more time on economic activity per week in all countries (except Viet Nam where girls and boys were similar): or 4.6 hours on average while girls spent 2.4 hours. Relatively little time was spent collecting firwood and fetching water.

The proportion attending school among boys was .74 and .66 for girls in the pooled sample. The highest school attendance among girls was in Fiji (.96) and Mongolia (.96) followed by the Dominican Republic (.94) and Suriname (.94). Lowest school attendance for girls was in Pakistan, ranging from .23 in Balochistan to .67 in Punjab. As for girls, the three countries with the highest school attendance among boys were Fiji (.93), Dominican Republic (.92), and Mongolia (.91). Also, the lowest school attendance among boys was observed in Balochistan (.37), which was followed by, Sindh (.59), Punjab (.73), and Khyber Pakhtunkhwa (.75), all in Pakistan.

Among girls, .5 lived in a household with a washer, .59 had a fridge, and .43 had a stove (which used clean cooking fuel). Among girls, washer ownership was the highest in the Dominican Republic (.84) followed by Suriname (.8) and lowest in Mongolia (.07) followed by

Lao (.21); fridge ownership was also the greatest in Dominican Republic (.86) and Suriname (.83) and lowest in Balochistan (.39) and Sindh (.41) in Pakistan; and stove ownership was the also greatest in Suriname (.93) and the Dominican Republic (.91) and lowest in Lao (.05) and Khyber Pakhtunkhwa in Pakistan (.28). The ranking of samples of countries according to appliance ownership was similar for boys.

For the subsample of adolescents 10–14 in 5 out of the 11 samples which were tested for learning skills, girls had on average 2.02 mistakes (ie, wrong or missed answers) on a numeracy test while boys had 2.13 (out of 11 questions). For girls, the lowest average number of mistakes were in Viet Nam (.18) followed by Mongolia (.42) while the highest number of mistakes was in Sindh (4) and Khyber Pakhtunkhwa (3.5) in Pakistan. As for girls, the lowest average number of mistakes was observed in Vietnam (.151), followed by Mongolia (.524), and highest in Sindh (4.23) and Khyber Pakhtunkhwa (3.4) in Pakistan

Overall, the average number of mistakes on a reading comprehension test was 0.72 for boys and 0.6 for girls (out of 5 questions). As for the numeracy test, for girls, the number of mistakes for reading comprehension was the lowest in Viet Nam (0.15) and Mongolia (.4) and the highest in Khyber Pakhtunkhwa (1.5) and Sindh (.8) in Pakistan. As for girls, the lowest number of mistakes on the reading comprehension test among boys was observed in Vietnam (.16), followed by Mongolia (.42), while it was the highest in Khyber Pakhtunkhwa (1.5) and Sindh (.89) in Pakistan.

The association of hours spent on household work per week with school attendance and learning skills

In the pooled sample, girls had a 1% (RR .99) lower probability of attending school for each additional hour of household work per week while no association was found for boys (RR 1) (Figure 1). A statistically significant association between school attendance and the number of hours spent on household work was observed for girls in Viet Nam (RR .99) and Sindh (RR .98), Punjab (RR .97), and Khyber Pakhtunkhwa in Pakistan (RR .99), while for boys, a statistically significant association was only observed in Punjab in Pakistan (RR .99). Additionally, girls in Fiji had an RR of .99 which was however not statistically significant.

In the pooled sample, girls had a 1% lower number of mistakes on the numeracy test for an additional hour spend on household work, although not statistically significant at a 5% level (RR .995; 95% CI .993, 1), while no association was found for boys (RR 1). In Viet Nam, boys had 6% fewer mistakes on a numeracy test for each additional hour of household work, while girls had a non-statistically significant 7% fewer mistakes. Further, girls in Khyber Pakhtunkhwa in Pakistan had 1% fewer mistakes on the numeracy test for an additional hour of household work. Other estimates for numeracy were not statistically significant and indicated at most 1% difference.

In the pooled sample, there was no association between hours of housework and the number of mistakes made on a reading comprehensions test. Further, the association was not statistically significant in any of the samples, although the rates ratios indicated 3% fewer mistakes for boys and girls in Viet Nam and 2% fewer for girls in Punjab in Pakistan, for each additional hour of household work. A non-statistically significant RR of 1.02 was observed for boys and 1.03 for girls in Sind in Pakistan.

Sex differences in school attendance and the role of household work

In the pooled sample, in the basic models (that were not adjusted for household work), girls had on average 6% (RR .94) lower school attendance than boys (Table 2). After adjusting for the number of hours spent on household work, girls had 5% lower school attendance than boys in the pooled sample, and the added covariates explained a non-statistically significant 22% from the basic model.

Girls had a statistically significantly lower school attendance than boys in Lao (RR .97) and Balochistan (RR .58), Khyber Pakhtunkhwa (RR .62), Punjab (RR .93), and Sindh (RR .73) in Pakistan. In other sample, girls had a statistically significantly greater school attendance. After adjusting for the number of hours of spent on household work, the sex difference was no longer statistically significant in Lao (although the RR indicated a larger difference than in the basic model). All adjusted estimates were statistically significant in the full model in Pakistan indicating a lower school attendance for girls, except in Punjab in Pakistan (RR 1.1), where girl had greater school attendance independent of household work. Household work explained the sex difference in school attendance in Pakistan: 28% in Balochistan, 26% in Khyber Pakhtunkhwa, 221% in Punjab, and 51% in Sindh.

Only Punjab in Pakistan had a statistically significant difference in reading comprehension by sex, where female had an advantage (RR .86): Adjusting for household work increased the female advantage by 76%, although the not statistically significantly (Supplement 3).

The relationship between appliance ownership, household work, and school attendance

In the pooled sample, there was no statistically significant relationship between washer, fridge, or stove ownership and the number of hours spent on household work (Figure 2). Only in

Khyber Pakhtunkhwa in Pakistan was there a statistically significant association between hours of household work and washer ownership, where girls with a washer at home spent 24% more hours on household work than girls without a washer at home, and boys with a washer spent 16% more hours than boys without a washer at home. While not statistically significant, a few other samples indicated a considerable association.

Girls in Dominican Republic did statistically significantly more hours of household work (RR 1.27) when residing in households with a fridge, while the association was rather small and not statistically significant for boys (.95). Although a few other samples showed a considerable association between fridge ownership and household work for girls, none was statistically significant.

Boys in Fiji did a statistically significantly more hours of household work when residing in households with a cooking stove (RR 1.68). The association between stove ownership and hours of household work was not statistically significant in other samples.

In the pooled sample, there was no difference in school attendance by washer ownership, neither for boys nor girls. However, boys in households with a washer had a statistically significant 7% greater school attendance in Viet Nam. In Fiji, girls had a 6% lower school attendance when living in households with a washer. The association was not statistically significant in other samples.

In the pooled sample, boys in households with a fridge were 6% more likely to attend school than boys in households without a fridge, and girls with a fridge were 4% more likely to attend school. The positive association between fridge ownership and school attendance for boys was positive and statistically significant in Balochistan in Pakistan (RR 1.21).

In the pooled sample, stove ownership was associated was small and not statistically significant. The association was only statistically significant for boys in Khyber Pakhtunkhwa (RR .94) and for girls in Balochistan (.75) in Pakistan.

No statistically signiciant association was observed for the number of mistakes made on a numeracy test by appliance ownership, neither overall nor in any of the samples (Figure 3). However, girls with a fridge at home made statistically significantly fewer mistakes on the reading comprehension test in Vietnam (RR 0.27) and more mistakes in Mongolia (RR 1.51). Further, girls with a stove at home had statistically significant fewer mistakes on reading comprehension (RR .6) in Punjab in Pakistan.

As expected, given the general absence of a clear relationship of household appliance ownership with school attendance and foundational learning skills, adjusting the estimates for the household work variables did not yield any clear results (Supplement 4). Even where a relationship was observed, the explanatory power of household work was mostly small and never statistically significant.

Results from sensitivity and supplementary analyses

When the wealth index z-scores were not included as independent variables in the models, the relationship of household appliances ownership, particularly washer and fridge, with school attendance, becomes somewhat stronger, especially in Punjab and Balochistan in Pakistan (Supplementary Figure S6.2). There was, however, no major changes overall for number of hours spent on housework, when excluding the wealth index (Supplementary Figure S6.1).

The number of hours spent on economic activity appears to suppress the female-disadvantage in school attendance statistically significantly in the pooled sample (ie, independent

of economic activity, girls have a 42% greater disadvantages than when not adjusting for economic activity) and in Punjab (102%), Khyber Pakhtunkhwa (5%), and Sindh (10%) in Pakistan, while it explains a part of the female advantage, particularly in Dominican Republic (ie, economic activity explains 41% of the female advantage in school attendance), Mongolia (69%), and Suriname (42%) (Supplementary Table 9.1). Time spent gathering firewood and fetching water did not have much impact on the sex differences in school attendance, in the pooled sample.

DISCUSSION

This study examined the relationship between sex, household work, appliance ownership, and schooling among 73 thousand adolescents aged 10 to 18 years in 7 middle-income countries and four provinces of Pakistan using representative survey data. Girls did more household work in the week before the survey in all samples—for example, 6.9 hours compared to 3.2 hours for boys in the pooled sample. A negative association of 1–3% lower school attendance for an additional hour spent on housework was observed for girls in Viet Nam and all Pakistani provinces, while an association (1%) was only observed for boys in Punjab in Pakistan. Further, girls were 3% less likely to attend school in Lao and 7–42% less likely in the Pakistani provinces while girls were 3–5% more likely to attend school in the other samples. The greater burden from household work explained 26–221% of the female disadvantage in school attendance in Pakistan (in Punjab, school attendance was higher among girls after adjusting for household work and therefore the percentage exceeds 100). No clear relationship was found between ownership of appliances with household work and school attendance, although a few samples had a statistically significant association: For example, in the pooled sample, school attendance

was 6% greater among boys and 4% greater among girls with a fridge at home compared to those without. No clear results were found for numeracy and reading comprehension.

As income and economic growth increases, households have begun to acquire household appliances and technology to make household work more efficient, allowing for more time to be spent on other activities. Since women and girls are often the primary caretakers of households, these improvements in efficiency may also increase their opportunities outside the home in terms of employment and education. However, while appliances can boost efficiency, they do not always reduce the time spent on household tasks, and the freed-up time may be used to enhance household hygiene and childcare.

According to the International Labour Organization (ILO), globally, 7.9% of children between the ages of 5 and 17 are involved in some form of economic activity. When household work is included, that increases to 9.5%. However, the ILO defines child labor as only including a minimum of one hour of economic activity for children between 5 and 11 years old, 14 hours for children between 12 and 14 years old, and 43 hours for children between 15 and 17 years old. For household chores, the ILO considers a minimum of 21 hours for children between 5 and 14 years old to be child labor, but not for those between 15 and 17 years old. This means that the actual number of children whose educational development is impacted by working, including household chores, may be higher than the ILO child labor statistics indicate.

Boys tend to participate more in child labor, such as family work and work outside the home, while girls do more household chores: This was corroborated by our supplementary analyses, where boys were found to engage in more economic activity in all samples except Viet Nam, and that economic activity appeared to suppress the male advantage in school attendance

in Pakistan and explain some of the female advantage in school attendance in some of the other samples.

Lack of modern appliances and utilities can consume over 50 hours per week of household work, and even more if there is an infant to care for. In low- and middle-income countries, many households do not have washing machines and basic services like piped water and electricity, leading to manual laundry and time spent on chores during school hours. Refrigeration means that food can be purchased in bulk and stored from longer periods of time. Cooking with electricity, gas, or liquid cooking fuel can reduce the time needed for preparing food. However, we do not find any clear relationship between neither number of hours spent on household work nor school attendance and ownership of household appliances.

Limitations

Our study has limitations. First, the correlation between appliance ownership and school attendance might not be accurate due to the confounding effect. A link between appliance ownership and living standards and socioeconomic status is evident, which in turn enhances school attendance. Although we control for various measures of living standards and socioeconomic status, some residual confounding might still exist. Additionally, parents who want their child to attend school are more likely to prioritize getting a washing machine to reduce child labor, which might also impact the child's school attendance and thus increase the correlation between washing machine ownership and school attendance. These confounders would most likely bias the observed effect of appliance ownership on school attendance upwards: however, this casts further doubt that a consistent link exists between appliance

ownership and school attendance since we do not observe any clear association despite not relying on a quasi-experimental design.

However, our estimates of an effect of appliance ownership on school attendance may be biased downwards: To control for living standards, we used a household wealth index—constructed from household ownership of various assets (including fridge, washer, and stoves), utilities, and housing quality. Stove, washer, and fridge ownership only explains a minor part of the wealth index, but since appliance ownership is very strongly linked to living standards, the wealth index may control away some of the effects of appliance ownership on school attendance. However, the exclusion of the wealth index from out models did not change the overall results much.

Second, the signal of living standards provided by appliance ownership and school attendance varies depending on the context. In places where ownership is close to universal, non-ownership is more likely to indicate dire socioeconomic circumstances. We restricted our analysis to countries with 5% to 95% washing machine ownership and school attendance to ensure sufficient variance. However, it is important to keep in mind the level of saturation of appliance ownership and school attendance.

Finally, the learning skills variables had many missing observations.

Table 1. Descriptive statistics

	Girls	Hours spent on housework		Attended school		Washer ownership		Fridge ownership		Stove ownership	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Pooled	.476	3.24	6.93	.735	.657	.503	.498	.576	.586	.423	.433
(N=73,456)	[.473, .48]	[3.15, 3.32]	[6.79, 7.06]	[.729, .741]	[.65, .665]	[.495, .511]	[.49, .507]	[.568, .584]	[.578, .594]	[.414, .433]	[.424, .443]
Dominican Republic	.475	1.56	3.32	.919	.946	.816	.835	.847	.861	.884	.905
(N=7,221)	[.463, .486]	[1.44, 1.69]	[3.14, 3.5]	[.91, .928]	[.938, .954]	[.801, .83]	[.822, .849]	[.834, .861]	[.847, .874]	[.871, .897]	[.893, .917]
Fiji	.482	2.58	3.45	.929	.962	.627	.653	.691	.728	.729	.751
(N=1,586)	[.456, .508]	[2.28, 2.87]	[3.09, 3.8]	[.911, .947]	[.949, .975]	[.583, .67]	[.612, .695]	[.647, .735]	[.687, .769]	[.687, .77]	[.709, .794]
Lao	.496	5.48	7.34	.835	.811	.212	.21	.596	.603	.0537	.0532
(N=8,870)	[.485, .507]	[5.22, 5.74]	[7.02, 7.65]	[.822, .848]	[.796, .825]	[.193, .231]	[.191, .228]	[.571, .62]	[.578, .627]	[.0454, .062]	[.0448, .0616]
Mongolia	.484	5.86	8.64	.912	.961	.0667	.0639	.511	.543	.342	.357
(N=3,688)	[.467, .5]	[5.43, 6.28]	[8.07, 9.21]	[.899, .926]	[.952, .97]	[.052, .0814]	[.0494, .0784]	[.477, .544]	[.509, .577]	[.308, .377]	[.322, .393]
Pakistan: Balochistan	.471	3.66	5.23	.372	.225	.389	.379	.389	.387	.3	.312
(N=7,990)	[.459, .484]	[3.33, 3.98]	[4.79, 5.67]	[.351, .394]	[.206, .245]	[.365, .413]	[.354, .403]	[.364, .414]	[.361, .412]	[.273, .328]	[.285, .34]
Pakistan: Khyber Pakhtunkhwa	.467	2.94	7.29	.751	.472	.509	.509	.502	.506	.259	.276
(N=10,483)	[.457, .477]	[2.78, 3.1]	[6.97, 7.61]	[.736, .766]	[.451, .493]	[.487, .531]	[.486, .532]	[.48, .524]	[.484, .528]	[.238, .281]	[.254, .298]
Pakistan: Punjab	.473	2.28	8.52	.725	.674	.629	.619	.599	.605	.408	.423
(N=19,494)	[.466, .48]	[2.16, 2.4]	[8.22, 8.81]	[.715, .735]	[.662, .686]	[.615, .642]	[.605, .633]	[.587, .612]	[.592, .618]	[.39, .426]	[.404, .441]
Pakistan: Sindh	.474	3.07	8.46	.585	.424	.439	.425	.413	.409	.473	.477

	Girls	Hours spent on housework		Attended school		Washer ownership		Fridge ownership		Stove ownership	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
(N=7,460)	[.463, .485]	[2.79, 3.35]	[7.93, 8.98]	[.566, .604]	[.401, .447]	[.414, .464]	[.399, .451]	[.388, .438]	[.383, .435]	[.442, .503]	[.445, .508]
Samoa	.47	3.46	3.41	.886	.926	.35	.371	.511	.558	.547	.592
(N=1,174)	[.442, .499]	[3.09, 3.83]	[3.04, 3.78]	[.861, .911]	[.9, .952]	[.309, .392]	[.324, .419]	[.472, .551]	[.51, .606]	[.498, .596]	[.541, .644]
Suriname	.486	1.8	2.97	.892	.942	.802	.831	.775	.811	.923	.931
(N=1,902)	[.462, .509]	[1.54, 2.06]	[2.59, 3.35]	[.872, .911]	[.926, .957]	[.768, .835]	[.801, .861]	[.739, .811]	[.778, .843]	[.904, .942]	[.913, .949]
Viet Nam	.479	5.09	7.11	.859	.867	.53	.545	.77	.786	.766	.766
(N=3,588)	[.463, .495]	[4.71, 5.47]	[6.66, 7.57]	[.841, .878]	[.846, .888]	[.495, .564]	[.509, .58]	[.74, .801]	[.755, .817]	[.734, .797]	[.734, .798]

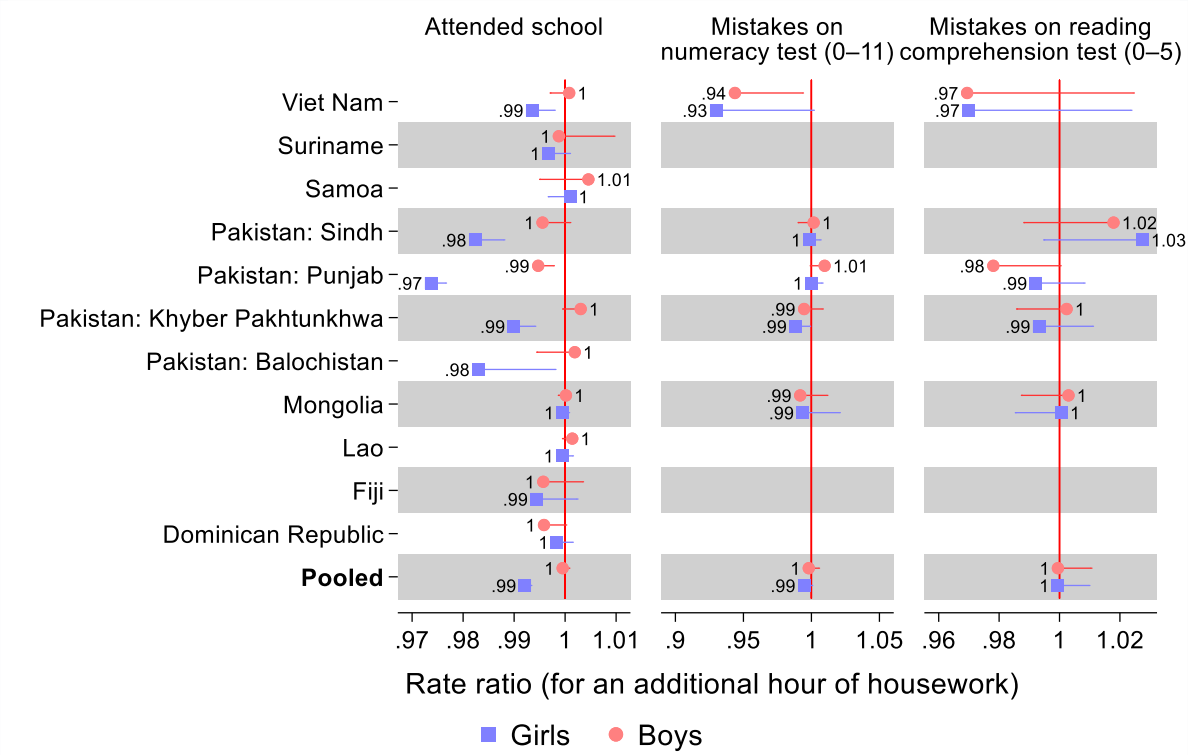
Notes: Means are shown. Samples were equally weighted for the pooled estimates. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units.

Table 2. Descriptive statistics for the numeracy and reading comprehension tests

	Number of mistakes on the numeracy test (0–11)		Number of mistakes on the reading comprehension test (0–5)	
	Boys	Girls	Boys	Girls
Pooled	2.13	2.02	.719	.601
(N=15,027)	[2.05, 2.22]	[1.94, 2.11]	[.685, .753]	[.57, .633]
Mongolia	.524	.418	.416	.398
(N=2,428)	[.446, .601]	[.356, .481]	[.367, .465]	[.348, .447]
Pakistan: Khyber Pakhtunkhwa	3.4	3.5	1.5	1.47
(N=2,612)	[3.19, 3.62]	[3.27, 3.73]	[1.4, 1.61]	[1.36, 1.59]
Pakistan: Punjab	2.13	2.3	.584	.484
(N=6,326)	[2.01, 2.26]	[2.18, 2.42]	[.542, .626]	[.447, .522]
Pakistan: Sindh	4.28	3.96	.888	.799
(N=1,640)	[4.01, 4.55]	[3.67, 4.24]	[.781, .996]	[.693, .905]
Viet Nam	.151	.181	.154	.157
(N=2,021)	[.113, .19]	[.119, .243]	[.118, .19]	[.119, .194]

Notes: Means are shown. Samples were equally weighted for the pooled estimates. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units.

Figure 1. Rate ratios for outcomes according to the number of hours spent on household work in the week before the survey



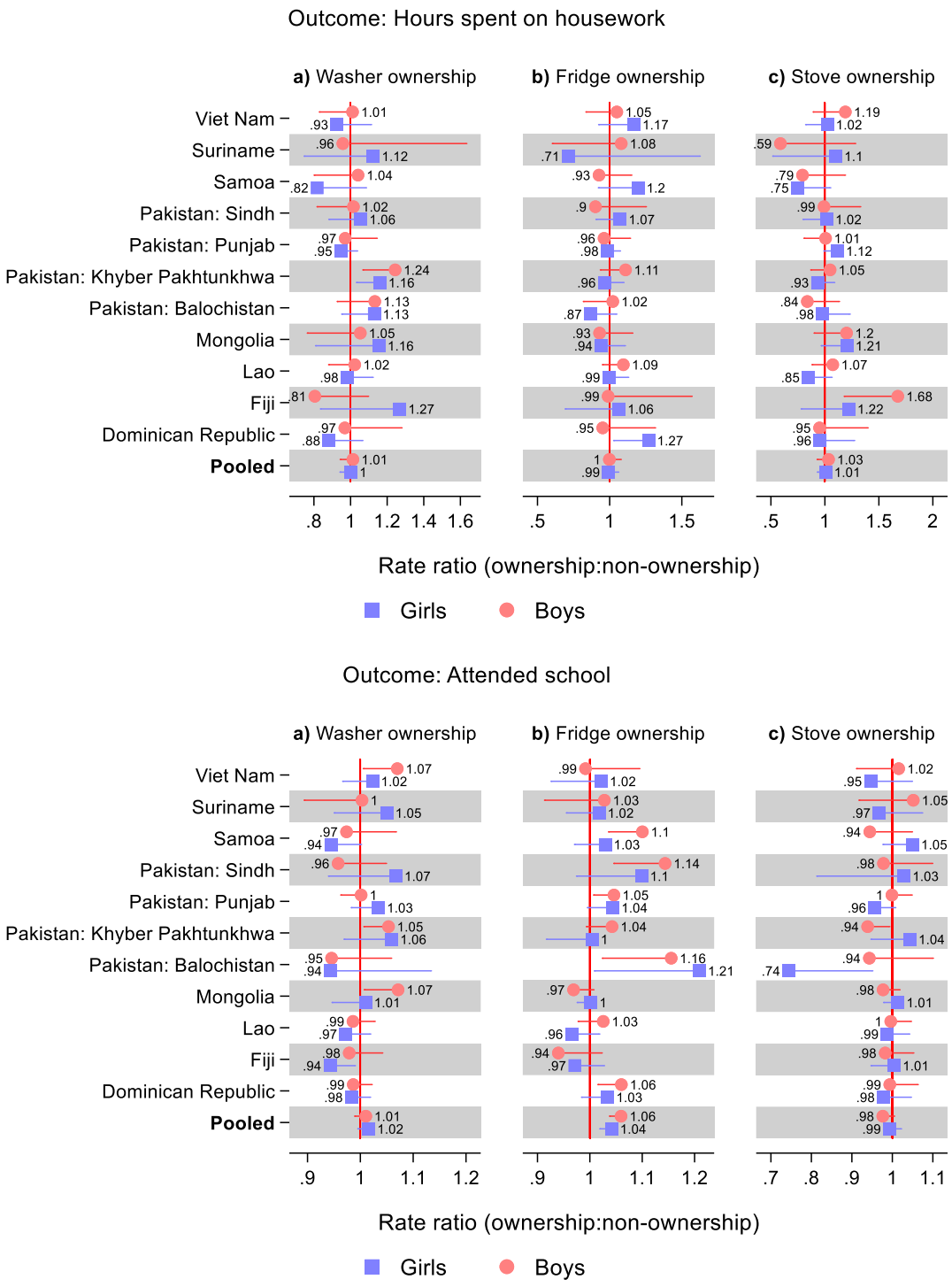
Notes: Rate ratios from Poisson regression models are shown. Results for were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Table 3. Rate ratio of school attendance for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey

	Difference for being female		Difference explained by added covariates (%)
	Basic model	Full Model	
Pooled	.94***	.95***	22.2
(n=73,456)	[.93, .95]	[.93, .97]	[-5.3, 49.7]
Dominican Republic	1.03***	1.02	17.6
(n=7,221)	[1.01, 1.04]	[.99, 1.05]	[-89.4, 124.6]
Fiji	1.04***	.93	291.9
(n=1,586)	[1.01, 1.07]	[.82, 1.04]	[-65.3, 649.0]
Lao	.97***	.94	-115.2
(n=8,870)	[.95, .99]	[.87, 1.02]	[-392.3, 161.9]
Mongolia	1.05***	1.08***	-75.8
(n=3,688)	[1.03, 1.06]	[1.02, 1.14]	[-178.4, 26.9]
Pakistan: Balochistan	.58***	.67***	28.1***
(n=7,990)	[.53, .62]	[.6, .75]	[11.4, 44.8]
Pakistan: Khyber Pakhtunkhwa	.62***	.7***	25.7***
(n=10,483)	[.6, .65]	[.67, .74]	[16.2, 35.3]
Pakistan: Punjab	.93***	1.1***	221.1***
(n=19,494)	[.91, .94]	[1.07, 1.13]	[166.1, 276.2]
Pakistan: Sindh	.73***	.86***	51.5***
(n=7,460)	[.7, .76]	[.8, .92]	[33.4, 69.6]
Samoa	1.05***	1.07	-35.9
(n=1,174)	[1.02, 1.09]	[.97, 1.18]	[-229.1, 157.3]
Suriname	1.05***	1.06	-8.1
(n=1,902)	[1.02, 1.09]	[.99, 1.13]	[-127.2, 110.9]
Viet Nam	1.03**	1.03	-0.9
(n=3,588)	[1, 1.05]	[.96, 1.1]	[-235.9, 234.2]

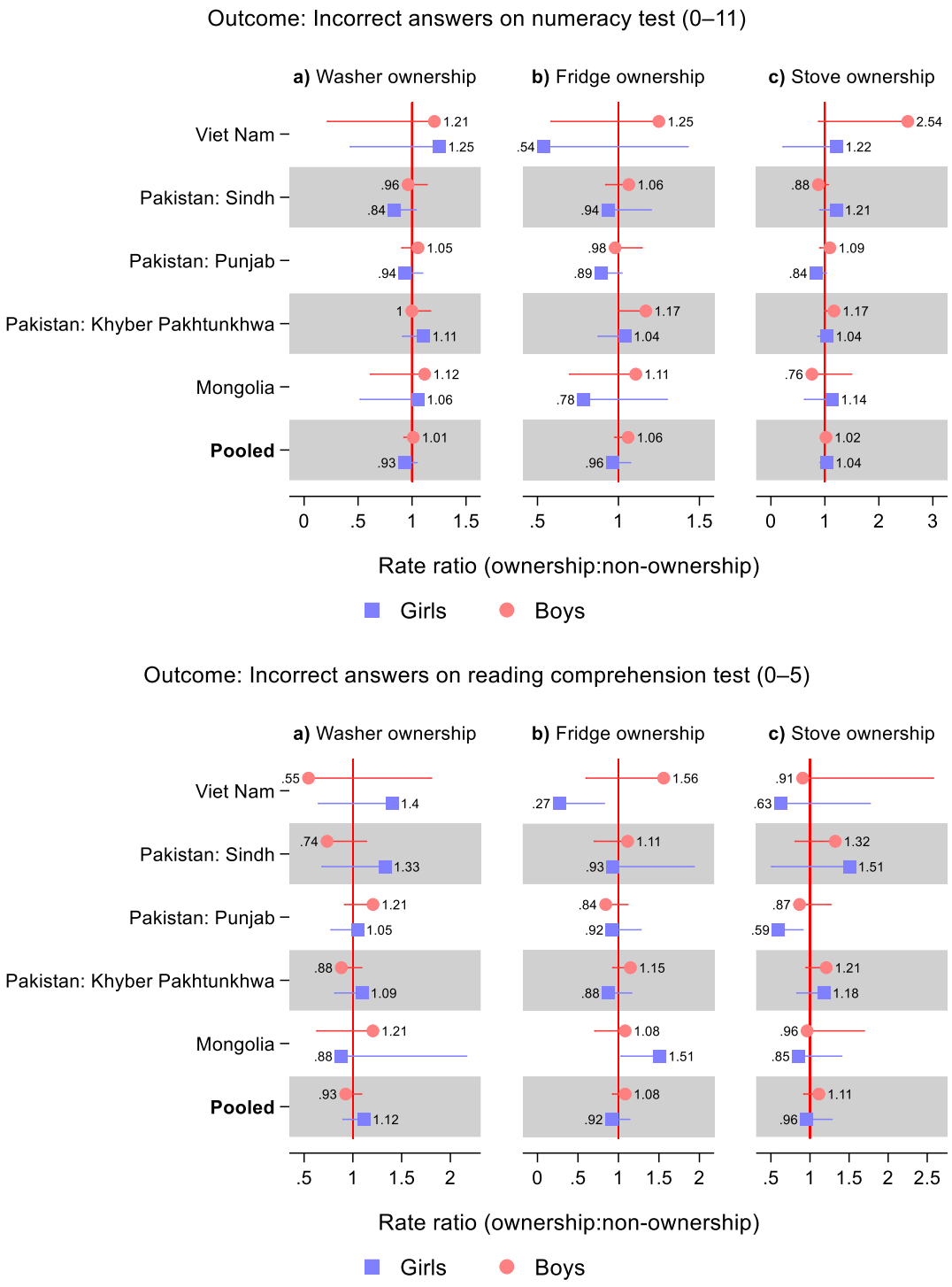
Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Figure 2. Rate ratios for outcomes according to appliance ownership



Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Figure 3. Rate ratios for outcomes according to appliance ownership



Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Supplement

1: Information on data and descriptive statistics 4

Table S1.1. Sample sizes and missing information 5

Table S1.2. Descriptive statistics on specific chores 6

Table S1.3. Descriptive statistics on specific chores 7

Table S1.4. Descriptive statistics on hours spent on economic activity, collecting firewood, and fetching water in the week before the survey 8

Table S1.5. Descriptive statistics for education level and no mistakes on the numeracy and reading comprehension tests 9

2: Tabulated estimates from Figures in main paper 10

Table S2.1. Rate ratios for the number of hours spent housework in the week before the survey according to appliance ownership 11

Table S2.2. Rate ratios for school attendance according to appliance ownership and the number of hours spent on household work in the week before the survey 12

Table S2.3. Rate ratios for the number of incorrect answers on a numeracy test (0–11) according to appliance ownership and the number of hours spent on household work in the week before the survey 13

Table S2.4. Rate ratios for the number of incorrect answers on a reading comprehension test (0–5) according to appliance ownership and the number of hours spent on household work in the week before the survey 14

3: Results omitted from the main paper: Decomposition of the impact of household work on the association of sex with learning skills 15

Table S3.1. Rate ratio of the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey 16

Table S3.2. Rate ratio of the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey 17

4: Results omitted from the main paper: Decomposition of the impact of household work on the association of appliance ownership (washer, fridge, stove) with school attendance and learning skills 18

Table S4.1. Rate ratio of school attendance for having a washer and decomposition of that difference into components explained by Household 19

Table S4.2. Rate ratio of school attendance for having a fridge and decomposition of that difference into components explained by Household 20

Table S4.3. Rate ratio of school attendance for having a stove and decomposition of that difference into components explained by Household 21

Table S4.4. Rate ratio of the number of mistakes on a numeracy test (0–11) for having a washer and decomposition of that difference into components explained by Household 22

Table S4.5. Rate ratio of the number of mistakes on a numeracy test (0–11) for having a fridge and decomposition of that difference into components explained by Household 23

Table S4.6. Rate ratio of the number of mistakes on a numeracy test (0–11) for having a stove and decomposition of that difference into components explained by Household 24

Table S4.7. Rate ratio of the number of mistakes on reading comprehension test (0–5) for having a washer and decomposition of that difference into components explained by Household 25

Table S4.8. Rate ratio of the number of mistakes on reading comprehension test (0–5) for having a fridge and decomposition of that difference into components explained by Household 26

Table S4.9. Rate ratio of the number of mistakes on reading comprehension test (0–5) for having a stove and decomposition of that difference into components explained by Household 27

5: Sensitivity analyses: Results from linear regression models 28

Figure S5.1. Difference in outcomes according to the number of hours spent on household work in the week before the survey 29

Table S5.1. Difference in school attendance for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey 30

Table S5.2. Difference in the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey 32

Table S5.3. Difference in the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey 33

Figure S5.2. Difference in outcomes according to appliance ownership 34

Figure S5.3. Difference in outcomes according to appliance ownership 35

Table S5.4. Difference in school attendance for having a washer and decomposition of that difference into components explained by Household 36

Table S5.5. Difference in school attendance for having a fridge and decomposition of that difference into components explained by Household 39

Table S5.6. Difference in school attendance for having a stove and decomposition of that difference into components explained by Household 42

Table S5.7. Difference in the number of mistakes on a numeracy test (0–11) for having a washer and decomposition of that difference into components explained by Household 45

Table S5.8. Difference in the number of mistakes on a numeracy test (0–11) for having a fridge and decomposition of that difference into components explained by Household 47

Table S5.9. Difference in the number of mistakes on a numeracy test (0–11) for having a stove and decomposition of that difference into components explained by Household 49

Table S5.10. Difference in the number of mistakes on reading comprehension test (0–5) for having a washer and decomposition of that difference into components explained by Household 51

Table S5.11. Difference in the number of mistakes on reading comprehension test (0–5) for having a fridge and decomposition of that difference into components explained by Household 53

Table 5.12. Difference in the number of mistakes on reading comprehension test (0–5) for having a stove and decomposition of that difference into components explained by Household 55

6: Sensitivity analyses: Results excluding the wealth index z-scores from regression equations 57

Figure S6.1. Rate ratios for outcomes according to the number of hours spent on household work in the week before the survey: excluding the wealth index from independent variables 58

Figure S6.2. Rate ratios for outcomes according to appliance ownership: excluding the wealth index from independent variables 59

Figure S6.3. Rate ratios for outcomes according to appliance ownership: excluding the wealth index from independent variables 60

7: Sensitivity analyses: Results using alternative outcomes 61

Figure S7.1. Rate ratios for outcomes according to the number of hours spent on household work in the week before the survey: Alternative outcomes 62

Figure S7.2. Rate ratios for outcomes according to appliance ownership: Specific chores as outcomes 63

Figure S7.3. Rate ratios for outcomes according to appliance ownership: Specific chores as outcomes 64

Figure S7.4. Rate ratios for outcomes according to appliance ownership: Alternative outcomes 65

Figure S7.5. Rate ratios for outcomes according to appliance ownership 66

8: Tabulated estimates from Figures in the sensitivity analyses 67

Table S8.1. Difference in the number of hours spent housework in the week before the survey according to appliance ownership 68

Table S8.2. Difference in school attendance according to appliance ownership and the number of hours spent on household work in the week before the survey 69

Table S8.3. Difference in the number of incorrect answers on a numeracy test (0–11) according to appliance ownership and the number of hours spent on household work in the week before the survey 71

Table S8.4. Difference in the number of incorrect answers on a reading comprehension test (0–5) according to appliance ownership and the number of hours spent on household work in the week before the survey 72

Table S8.5. Rate ratios for the number of hours spent housework in the week before the survey according to appliance ownership: excluding the wealth index from independent variables 73

Table S8.6. Rate ratios for education level according to appliance ownership and the number of hours spent on household work in the week before the survey 74

Table S8.7. Rate ratios for the probability of having a perfect score for numeracy according to appliance ownership and the number of hours spent on household work in the week before the survey 75

Table S8.8. Rate ratios for the probability of having a perfect score for reading comprehension according to appliance ownership and the number of hours spent on household work in the week before the survey 76

Table S8.9. Rate ratios for the probability doing shopping according to appliance ownership 77

Table S8.10. Rate ratios for the probability doing cooking according to appliance ownership 78

Table S8.11. Rate ratios for the probability doing cleaning according to appliance ownership 79

Table S8.12. Rate ratios for the probability doing laundry according to appliance ownership 80

9: Gelback decomposition from linear models of the impact of hours spent on all work (household work, economic activity, gathering firewood, and fetching water) on the association of sex with school attendance and performance 81

Table S9.1. Difference in school attendance for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey 82

Table S9.2. Difference in the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey 83

Table S9.3. Difference in the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey 84

10: Decomposition from Poisson models of the impact of hours spent on all work (household work, economic activity, gathering firewood, and fetching water) on the association of sex with school attendance and performance 85

Table S10.1. Rate ratio of school attendance for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey 86

Table S10.2. Rate ratio of the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey 87

Table S10.3. Rate ratio of the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey 88

1: Information on data and descriptive statistics

Table S1.1. Sample sizes and missing information

	Full sample	Missing school attendance	Missing chores	Missing appliances	Missing covariates	Observations<2 in neighborhood	Main sample	Older than 14 years	Missing learning skills	Observations<2 in neighborhood	Learning skill sample
Pooled	75,736	75	917	155	994	236	73,456	16,433	12,147	1,106	15,027
Dominican Republic	7,700	1	42	7	319	115	7,221	.	.	.	.
Fiji	1,618	2	5	0	22	4	1,586	.	.	.	.
Lao	8,970	1	15	4	77	3	8,870	.	.	.	.
Mongolia	3,774	0	32	5	46	7	3,688	1,130	102	28	2,428
Pakistan: Balochistan	8,663	41	507	100	77	15	7,990	.	.	.	.
Pakistan: Khyber Pakhtunkhwa	10,668	18	117	11	48	0	10,483	3,780	3,842	249	2,612
Pakistan: Punjab	19,693	8	85	12	89	9	19,494	7,576	5,095	497	6,326
Pakistan: Sindh	7,602	2	80	15	41	7	7,460	2,737	2,844	239	1,640
Samoa	1,244	0	12	1	55	3	1,174	.	.	.	.
Suriname	2,119	2	12	0	164	41	1,902	.	.	.	.
Viet Nam	3,685	0	10	0	56	32	3,588	1,210	264	93	2,021

Notes: Full sample refers to all adolescents 10–18 years.

Table S1.2. Descriptive statistics on specific chores

	Shopping		Cooking		Cleaning		Laundry	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Pooled	.495	.291	.165	.54	.263	.787	.206	.627
(N=73,456)	[.488, .501]	[.285, .298]	[.16, .171]	[.534, .547]	[.256, .271]	[.781, .792]	[.2, .213]	[.621, .633]
Dominican Republic	.45	.467	.151	.447	.445	.866	.226	.558
(N=7,221)	[.431, .468]	[.448, .486]	[.139, .163]	[.429, .465]	[.427, .463]	[.854, .879]	[.212, .239]	[.54, .576]
Fiji	.59	.531	.4	.686	.695	.936	.426	.766
(N=1,586)	[.551, .629]	[.488, .575]	[.363, .438]	[.65, .722]	[.659, .73]	[.918, .954]	[.392, .46]	[.734, .797]
Lao	.485	.621	.467	.76	.702	.948	.736	.891
(N=8,870)	[.465, .504]	[.6, .641]	[.45, .484]	[.747, .774]	[.686, .718]	[.941, .955]	[.722, .751]	[.881, .902]
Mongolia	.609	.67	.444	.687	.658	.88	.351	.594
(N=3,688)	[.581, .636]	[.645, .696]	[.421, .468]	[.664, .709]	[.633, .682]	[.864, .896]	[.328, .374]	[.57, .618]
Pakistan: Balochistan	.478	.209	.0772	.46	.0935	.673	.119	.57
(N=7,990)	[.457, .499]	[.191, .226]	[.0662, .0882]	[.44, .479]	[.0817, .105]	[.654, .692]	[.106, .133]	[.55, .591]
Pakistan: Khyber Pakhtunkhwa	.581	.118	.0165	.47	.024	.737	.0242	.565
(N=10,483)	[.565, .597]	[.107, .128]	[.0128, .0202]	[.455, .485]	[.0196, .0283]	[.725, .75]	[.0198, .0286]	[.551, .579]
Pakistan: Punjab	.518	.132	.0417	.502	.0466	.713	.0705	.61
(N=19,494)	[.507, .529]	[.124, .139]	[.0376, .0459]	[.491, .513]	[.0423, .0509]	[.703, .723]	[.0652, .0759]	[.599, .62]
Pakistan: Sindh	.443	.152	.0273	.504	.0375	.734	.0441	.566
(N=7,460)	[.424, .463]	[.138, .167]	[.0223, .0323]	[.485, .522]	[.0312, .0438]	[.717, .751]	[.0371, .0511]	[.548, .585]
Samoa	.704	.596	.693	.473	.664	.889	.241	.565
(N=1,174)	[.665, .744]	[.553, .639]	[.656, .73]	[.431, .514]	[.623, .705]	[.864, .915]	[.204, .279]	[.521, .609]
Suriname	.443	.391	.249	.489	.615	.864	.334	.592
(N=1,902)	[.409, .476]	[.358, .424]	[.221, .278]	[.454, .524]	[.581, .648]	[.841, .887]	[.305, .364]	[.557, .627]
Viet Nam	.169	.264	.48	.659	.703	.867	.404	.616
(N=3,588)	[.151, .186]	[.241, .287]	[.453, .507]	[.633, .684]	[.68, .726]	[.851, .883]	[.379, .43]	[.59, .642]

Notes: Means are shown. Samples were equally weighted for the pooled estimates. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units.

Table S1.3. Descriptive statistics on specific chores

	Child care*		Care for elderly or sick*		Other chores*	
	Boys	Girls	Boys	Girls	Boys	Girls
Pooled	.183	.421	.164	.292	.261	.421
	[.178, .188]	[.415, .427]	[.159, .168]	[.286, .299]	[.255, .267]	[.414, .428]
Dominican Republic	.122	.252	.0282	.0417	.178	.254
	[.111, .132]	[.237, .267]	[.0226, .0338]	[.0349, .0486]	[.164, .193]	[.236, .271]
Fiji	.291	.416	.165	.263	.242	.306
	[.259, .322]	[.379, .454]	[.142, .189]	[.23, .296]	[.211, .274]	[.269, .344]
Lao	.299	.431	.121	.156	.359	.444
	[.284, .315]	[.414, .447]	[.11, .131]	[.144, .169]	[.342, .376]	[.425, .463]
Mongolia	.305	.408	.084	.102	.0646	.0902
	[.283, .327]	[.383, .432]	[.0717, .0964]	[.0874, .117]	[.0533, .0759]	[.0762, .104]
Pakistan: Balochistan	.288	.565	.328	.47	.475	.627
	[.269, .307]	[.545, .586]	[.308, .348]	[.448, .491]	[.454, .496]	[.607, .647]
Pakistan: Khyber Pakhtunkhwa	.168	.496	.208	.384	.235	.479
	[.156, .179]	[.48, .511]	[.195, .221]	[.369, .4]	[.222, .248]	[.462, .495]
Pakistan: Punjab	.0983	.388	.179	.39	.22	.453
	[.092, .105]	[.377, .398]	[.17, .188]	[.379, .401]	[.21, .229]	[.44, .465]
Pakistan: Sindh	.165	.503	.179	.406	.311	.557
	[.15, .18]	[.483, .523]	[.164, .195]	[.386, .426]	[.293, .33]	[.538, .576]
Samoa	.318	.482	.206	.246	.217	.223
	[.28, .357]	[.438, .526]	[.172, .24]	[.208, .284]	[.182, .252]	[.184, .262]
Suriname	.128	.286	.0481	.0898	.328	.381
	[.105, .15]	[.256, .316]	[.0342, .0619]	[.071, .109]	[.297, .359]	[.348, .414]
Viet Nam	.149	.279	.0487	.0692	.101	.108
	[.133, .166]	[.256, .301]	[.0382, .0592]	[.057, .0815]	[.0848, .116]	[.0896, .126]

Notes: Means are shown. Samples were equally weighted for the pooled estimates. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. *A few observations with missing values were excluded.

Table S1.4. Descriptive statistics on hours spent on economic activity, collecting firewood, and fetching water in the week before the survey

	Hours spent on economic activity*		Hours spent on collecting wood*		Hours spent on fetching water*	
	Boys	Girls	Boys	Girls	Boys	Girls
Pooled	4.57	2.39	.68	.524	.661	.742
	[4.42, 4.72]	[2.28, 2.49]	[.643, .717]	[.489, .559]	[.62, .702]	[.693, .792]
Dominican Republic	1.59	.566	.0907	.0322	.219	.165
	[1.39, 1.79]	[.453, .68]	[.0649, .116]	[.0102, .0542]	[.163, .275]	[.105, .226]
Fiji	2.07	.878	.876	.204	.433	.315
	[1.7, 2.44]	[.623, 1.13]	[.659, 1.09]	[.141, .268]	[.309, .557]	[.193, .438]
Lao	8.25	7.53	.717	.749	.581	.949
	[7.72, 8.77]	[7.07, 7.99]	[.612, .822]	[.644, .855]	[.486, .675]	[.816, 1.08]
Mongolia	4.56	2.06	2.02	.834	3.04	2
	[3.92, 5.2]	[1.67, 2.45]	[1.72, 2.32]	[.664, 1]	[2.65, 3.43]	[1.66, 2.34]
Pakistan: Balochistan	2.23	1.04	1.31	.843	1.2	1.06
	[1.98, 2.48]	[.89, 1.2]	[1.13, 1.49]	[.707, .98]	[1.03, 1.36]	[.886, 1.23]
Pakistan: Khyber Pakhtunkhwa	2.58	.733	.766	.727	.435	1.11
	[2.33, 2.83]	[.621, .845]	[.682, .851]	[.609, .845]	[.357, .513]	[.943, 1.27]
Pakistan: Punjab	6.96	2.25	.307	.267	.477	.241
	[6.6, 7.31]	[2.06, 2.43]	[.269, .344]	[.223, .311]	[.408, .547]	[.195, .288]
Pakistan: Sindh	4.15	1.98	.913	.883	.68	1.44
	[3.73, 4.56]	[1.7, 2.25]	[.778, 1.05]	[.73, 1.04]	[.55, .811]	[1.19, 1.69]
Samoa	1.49	.821	1.25	.136	.382	.245
	[1.17, 1.8]	[.561, 1.08]	[1.03, 1.47]	[.0826, .19]	[.246, .517]	[.102, .388]
Suriname	1.23	.448	.092	.0824	.266	.254
	[.887, 1.57]	[.249, .646]	[.0548, .129]	[.0286, .136]	[.165, .368]	[.17, .338]
Viet Nam	4.54	4.56	.354	.467	.168	.2
	[3.92, 5.16]	[3.84, 5.28]	[.254, .454]	[.309, .624]	[.0835, .252]	[.0804, .32]

Notes: Means are shown. Samples were equally weighted for the pooled estimates. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. *A few observations with missing values were excluded.

Table S1.5. Descriptive statistics for education level and no mistakes on the numeracy and reading comprehension tests

	Education level		No mistakes on the numeracy test		No mistakes on the reading comprehension test	
	Boys	Girls	Boys	Girls	Boys	Girls
Pooled	1.47	1.32	.515	.524	.689	.725
	[1.46, 1.48]	[1.3, 1.34]	[.501, .529]	[.509, .538]	[.678, .701]	[.714, .737]
Dominican Republic	1.39	1.46				
	[1.37, 1.4]	[1.44, 1.48]				
Fiji	1.49	1.52				
	[1.46, 1.53]	[1.48, 1.57]				
Lao	1.78	1.78				
	[1.75, 1.81]	[1.75, 1.81]				
Mongolia	.294	.137	.751	.77	.743	.74
	[.254, .334]	[.106, .167]	[.727, .776]	[.746, .794]	[.717, .769]	[.714, .766]
Pakistan: Balochistan	.879	.573				
	[.833, .926]	[.527, .62]				
Pakistan: Khyber Pakhtunkhwa	1.63	1.12	.316	.263	.47	.494
	[1.59, 1.67]	[1.07, 1.17]	[.287, .345]	[.232, .294]	[.441, .499]	[.461, .527]
Pakistan: Punjab	1.71	1.62	.474	.449	.725	.757
	[1.69, 1.73]	[1.59, 1.65]	[.454, .494]	[.429, .469]	[.709, .741]	[.741, .772]
Pakistan: Sindh	1.27	1.02	.236	.27	.627	.657
	[1.23, 1.32]	[.961, 1.07]	[.202, .27]	[.229, .31]	[.592, .663]	[.618, .695]
Samoa	1.46	1.48				
	[1.41, 1.5]	[1.44, 1.53]				
Suriname	1.5	1.57				
	[1.46, 1.54]	[1.53, 1.61]				
Viet Nam	2.04	2.06	.921	.914	.904	.902
	[2.01, 2.08]	[2.03, 2.1]	[.903, .939]	[.893, .934]	[.884, .923]	[.882, .923]

Notes: Means are shown. Samples were equally weighted for the pooled estimates. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units.

2: Tabulated estimates from Figures in main paper

Table S2.1. Rate ratios for the number of hours spent housework in the week before the survey according to appliance ownership

	Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	.969	.882	.952	1.27**	.95	.956	.801	.971
	[.735, 1.28]	[.732, 1.06]	[.69, 1.31]	[1.03, 1.57]	[.648, 1.39]	[.721, 1.27]	[.554, 1.16]	[.773, 1.22]
Fiji	.805	1.27	.989	1.06	1.68***	1.22	1.21	1.11
	[.593, 1.09]	[.835, 1.93]	[.625, 1.57]	[.691, 1.64]	[1.18, 2.38]	[.78, 1.91]	[.836, 1.75]	[.745, 1.66]
Lao	1.02	.982	1.09	.994	1.07	.847	1.1	.962
	[.88, 1.19]	[.861, 1.12]	[.949, 1.26]	[.878, 1.13]	[.88, 1.31]	[.678, 1.06]	[.948, 1.27]	[.836, 1.11]
Mongolia	1.05	1.16	.93	.943	1.2	1.2*	1.17	1.07
	[.763, 1.45]	[.808, 1.65]	[.749, 1.15]	[.806, 1.1]	[.899, 1.61]	[.965, 1.5]	[.862, 1.6]	[.775, 1.49]
Pakistan: Balochistan	1.13	1.13	1.02	.868	.837	.98	1.01	1.11
	[.926, 1.39]	[.951, 1.34]	[.817, 1.28]	[.721, 1.04]	[.622, 1.13]	[.783, 1.23]	[.831, 1.22]	[.952, 1.3]
Pakistan: Khyber Pakhtunkhwa	1.24***	1.16**	1.11	.965	1.05	.933	.97	.866**
	[1.07, 1.45]	[1.03, 1.3]	[.935, 1.32]	[.851, 1.09]	[.868, 1.26]	[.803, 1.08]	[.824, 1.14]	[.762, .986]
Pakistan: Punjab	.971	.948	.961	.984	1.01	1.12*	.966	1.08**
	[.826, 1.14]	[.868, 1.03]	[.811, 1.14]	[.906, 1.07]	[.805, 1.26]	[.99, 1.26]	[.837, 1.11]	[1, 1.17]
Pakistan: Sindh	1.02	1.06	.901	1.07	.992	1.02	.957	.926
	[.817, 1.26]	[.881, 1.27]	[.651, 1.25]	[.905, 1.27]	[.742, 1.32]	[.797, 1.3]	[.75, 1.22]	[.806, 1.06]
Pooled	1.01	1	.998	.993	1.03	1.01	1.05	.999
	[.943, 1.09]	[.942, 1.07]	[.927, 1.07]	[.932, 1.06]	[.927, 1.15]	[.93, 1.09]	[.974, 1.14]	[.941, 1.06]
Samoa	1.04	.818	.926	1.2	.793	.746*	1.05	1.01
	[.801, 1.35]	[.618, 1.08]	[.747, 1.15]	[.921, 1.55]	[.531, 1.18]	[.532, 1.05]	[.76, 1.45]	[.695, 1.45]
Suriname	.958	1.12	1.08	.713	.588	1.1	.877	.894
	[.563, 1.63]	[.746, 1.69]	[.602, 1.94]	[.313, 1.62]	[.271, 1.28]	[.517, 2.35]	[.515, 1.49]	[.473, 1.69]
Viet Nam	1.01	.926	1.05	1.17	1.19	1.02	1.26**	.999
	[.829, 1.23]	[.772, 1.11]	[.835, 1.32]	[.923, 1.48]	[.89, 1.59]	[.821, 1.28]	[1.02, 1.56]	[.81, 1.23]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each sample and sex. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S2.2. Rate ratios for school attendance according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work Hours		Appliances Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	.996*	.998	.987	.983	1.06***	1.03	.994	.978	1.03	1
	[.992, 1]	[.995, 1]	[.953, 1.02]	[.95, 1.02]	[1.02, 1.11]	[.984, 1.09]	[.93, 1.06]	[.916, 1.05]	[.986, 1.07]	[.963, 1.05]
Fiji	.996	.994	.979	.943**	.94	.971	.982	1	.974	.978
	[.988, 1]	[.987, 1]	[.921, 1.04]	[.899, .989]	[.864, 1.02]	[.919, 1.03]	[.918, 1.05]	[.947, 1.07]	[.91, 1.04]	[.913, 1.05]
Lao	1	.999	.986	.973	1.03	.965	.996	.987	.989	1.01
	[.999, 1]	[.997, 1]	[.947, 1.03]	[.929, 1.02]	[.977, 1.08]	[.916, 1.02]	[.949, 1.05]	[.937, 1.04]	[.933, 1.05]	[.951, 1.08]
Mongolia	1	.999	1.07**	1.01	.969	1	.977	1.01	.993	1.02
	[.999, 1]	[.998, 1]	[1.01, 1.14]	[.946, 1.08]	[.933, 1.01]	[.976, 1.03]	[.939, 1.02]	[.978, 1.05]	[.915, 1.08]	[.971, 1.08]
Pakistan: Balochistan	1	.983**	.946	.944	1.16**	1.21**	.943	.745**	.947	1.05
	[.994, 1.01]	[.968, .998]	[.845, 1.06]	[.786, 1.13]	[1.02, 1.3]	[1.01, 1.45]	[.809, 1.1]	[.584, .95]	[.839, 1.07]	[.864, 1.27]
Pakistan: Khyber Pakhtunkhwa	1*	.99***	1.05**	1.06	1.04*	1	.939**	1.04	1.02	1.08**
	[1, 1.01]	[.986, .994]	[1.01, 1.1]	[.969, 1.16]	[.993, 1.09]	[.917, 1.1]	[.889, .992]	[.947, 1.15]	[.978, 1.07]	[1.01, 1.16]
Pakistan: Punjab	.995***	.974***	1	1.03	1.05**	1.04*	.999	.957*	.994	.986
	[.992, .998]	[.971, .977]	[.963, 1.04]	[.983, 1.09]	[1.01, 1.09]	[.995, 1.1]	[.953, 1.05]	[.91, 1.01]	[.957, 1.03]	[.943, 1.03]
Pakistan: Sindh	.996	.982***	.958	1.07	1.14***	1.1	.978	1.03	1.09*	1.15**
	[.99, 1]	[.977, .988]	[.876, 1.05]	[.94, 1.21]	[1.05, 1.25]	[.974, 1.24]	[.871, 1.1]	[.813, 1.3]	[.992, 1.19]	[1, 1.31]
Pooled	1	.992***	1.01	1.02	1.06***	1.04***	.976*	.993	1.01	1.03**
	[.998, 1]	[.991, .993]	[.989, 1.03]	[.995, 1.04]	[1.04, 1.08]	[1.02, 1.06]	[.95, 1]	[.966, 1.02]	[.984, 1.03]	[1.01, 1.06]
Samoa	1	1	.974	.944*	1.1***	1.03	.944	1.05	.854***	.988
	[.995, 1.01]	[.997, 1.01]	[.889, 1.07]	[.891, 1]	[1.04, 1.17]	[.97, 1.09]	[.851, 1.05]	[.977, 1.13]	[.783, .931]	[.9, 1.08]
Suriname	.999	.997	1	1.05	1.03	1.02	1.05	.968	1.07	.998
	[.988, 1.01]	[.993, 1]	[.893, 1.13]	[.95, 1.16]	[.913, 1.16]	[.955, 1.08]	[.917, 1.21]	[.873, 1.07]	[.95, 1.2]	[.929, 1.07]
Viet Nam	1	.994***	1.07**	1.02	.992	1.02	1.02	.946	1.05	1.11*
	[.997, 1]	[.989, .998]	[1.01, 1.14]	[.966, 1.08]	[.899, 1.09]	[.926, 1.13]	[.911, 1.13]	[.855, 1.05]	[.949, 1.15]	[.995, 1.25]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S2.3. Rate ratios for the number of incorrect answers on a numeracy test (0–11) according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work		Appliances							
	Hours		Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Mongolia	.992	.994	1.12	1.06	1.11	.784	.76	1.14	1.5	.419*
	[.973, 1.01]	[.967, 1.02]	[.612, 2.04]	[.517, 2.16]	[.696, 1.76]	[.474, 1.3]	[.389, 1.48]	[.617, 2.1]	[.677, 3.34]	[.152, 1.15]
Pakistan: Khyber Pakhtunkhwa	.995	.988**	.999	1.11	1.17**	1.04	1.17*	1.04	.961	.921
	[.981, 1.01]	[.978, .999]	[.856, 1.17]	[.911, 1.35]	[1, 1.37]	[.873, 1.24]	[.989, 1.38]	[.864, 1.26]	[.851, 1.09]	[.79, 1.07]
Pakistan: Punjab	1.01*	1	1.06	.936	.979	.892*	1.09	.839*	1.01	.942
	[.999, 1.02]	[.992, 1.01]	[.903, 1.23]	[.803, 1.09]	[.84, 1.14]	[.782, 1.02]	[.902, 1.32]	[.693, 1.01]	[.875, 1.17]	[.825, 1.08]
Pakistan: Sindh	1	.999	.964	.837*	1.06	.935	.88	1.21	.984	.99
	[.99, 1.01]	[.991, 1.01]	[.82, 1.13]	[.68, 1.03]	[.92, 1.23]	[.73, 1.2]	[.736, 1.05]	[.902, 1.63]	[.876, 1.11]	[.798, 1.23]
Pooled	.998	.995*	1.01	.932	1.06	.963	1.02	1.04	.981	.945
	[.991, 1.01]	[.989, 1]	[.923, 1.11]	[.834, 1.04]	[.976, 1.15]	[.867, 1.07]	[.915, 1.14]	[.909, 1.19]	[.907, 1.06]	[.853, 1.05]
Viet Nam	.944**	.93*	1.21	1.25	1.25	.539	2.54*	1.22	1.02	.748
	[.897, .993]	[.863, 1]	[.214, 6.82]	[.426, 3.69]	[.583, 2.68]	[.204, 1.43]	[.879, 7.32]	[.219, 6.79]	[.426, 2.45]	[.251, 2.23]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S2.4. Rate ratios for the number of incorrect answers on a reading comprehension test (0–5) according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work		Appliances							
	Hours		Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Mongolia	1	1	1.21	.881	1.08	1.51**	.963	.853	1.42	1.52
	[.987, 1.02]	[.985, 1.02]	[.628, 2.32]	[.359, 2.16]	[.705, 1.66]	[1.03, 2.22]	[.55, 1.69]	[.52, 1.4]	[.645, 3.11]	[.717, 3.24]
Pakistan: Khyber Pakhtunkhwa	1	.993	.882	1.09	1.15	.875	1.21	1.18	1.1	.721**
	[.986, 1.02]	[.976, 1.01]	[.718, 1.08]	[.813, 1.47]	[.928, 1.42]	[.664, 1.15]	[.945, 1.54]	[.831, 1.68]	[.91, 1.33]	[.562, .926]
Pakistan: Punjab	.978*	.992	1.21	1.05	.843	.923	.866	.595**	.947	1.13
	[.956, 1]	[.976, 1.01]	[.913, 1.59]	[.775, 1.42]	[.641, 1.11]	[.67, 1.27]	[.594, 1.26]	[.392, .902]	[.718, 1.25]	[.824, 1.54]
Pakistan: Sindh	1.02	1.03	.736	1.33	1.11	.932	1.32	1.51	1.25	.866
	[.988, 1.05]	[.995, 1.06]	[.478, 1.13]	[.683, 2.59]	[.698, 1.77]	[.451, 1.93]	[.808, 2.17]	[.506, 4.49]	[.875, 1.79]	[.507, 1.48]
Pooled	.999	.999	.927	1.12	1.08	.915	1.11	.956	1.07	.787**
	[.989, 1.01]	[.989, 1.01]	[.793, 1.08]	[.896, 1.39]	[.924, 1.27]	[.741, 1.13]	[.918, 1.35]	[.718, 1.27]	[.915, 1.25]	[.645, .959]
Viet Nam	.969	.97	.546	1.4	1.56	.268**	.906	.625	.736	.48
	[.917, 1.02]	[.919, 1.02]	[.165, 1.8]	[.645, 3.05]	[.597, 4.07]	[.0882, .817]	[.319, 2.57]	[.221, 1.76]	[.244, 2.22]	[.187, 1.23]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

3: Results omitted from the main paper: Decomposition of the impact of household work on the association of sex with learning skills

Table S3.1. Rate ratio of the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey

	Difference for being female		Difference explained by added covariates (%)
	Basic model	Full Model	
Pooled	1	.99	-172.4
(n=15,027)	[.96, 1.04]	[.92, 1.05]	[-2001.6, 1656.9]
Mongolia	.82*	.64*	-128.2
(n=2,428)	[.66, 1.03]	[.38, 1.08]	[-423.9, 167.5]
Pakistan: Khyber Pakhtunkhwa	1	1.01	-664.5
(n=2,612)	[.93, 1.07]	[.9, 1.13]	[-39060.6, 37731.7]
Pakistan: Punjab	1.03	1.03	-23.1
(n=6,326)	[.97, 1.09]	[.94, 1.14]	[-292.2, 245.9]
Pakistan: Sindh	.99	.98	-149.0
(n=1,640)	[.92, 1.07]	[.86, 1.1]	[-1507.3, 1209.4]
Viet Nam	1.13	.47	739.5
(n=2,021)	[.79, 1.61]	[.18, 1.2]	[-1438.2, 2917.3]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S3.2. Rate ratio of the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey

	Difference for being female		Difference explained by added covariates (%)
	Basic model	Full Model	
Pooled	.97	.93	-142.5
(n=15,027)	[.9, 1.04]	[.83, 1.05]	[-650.7, 365.6]
Mongolia	.95	.79	-346.5
(n=2,428)	[.79, 1.14]	[.48, 1.31]	[-1775.3, 1082.2]
Pakistan: Khyber Pakhtunkhwa	1.02	1.04	-53.4
(n=2,612)	[.92, 1.15]	[.88, 1.23]	[-651.7, 545.0]
Pakistan: Punjab	.86**	.76***	-77.8
(n=6,326)	[.76, .97]	[.62, .94]	[-199.2, 43.5]
Pakistan: Sindh	.99	.92	-585.2
(n=1,640)	[.83, 1.18]	[.69, 1.21]	[-9272.1, 8101.7]
Viet Nam	.9	.95	47.8
(n=2,021)	[.67, 1.22]	[.49, 1.82]	[-554.3, 649.9]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

4: Results omitted from the main paper: Decomposition of the impact of household work on the association of appliance ownership (washer, fridge, stove) with school attendance and learning skills

Table S4.1. Rate ratio of school attendance for having a washer and decomposition of that difference into components explained by Household

	Rate ratio for having a washer		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	1.01	1.01	-18.8
(n=37,277)	[.99, 1.03]	[.99, 1.03]	[-66.0, 28.5]
Dominican Republic	.99	.99	-0.9
(n=3,414)	[.95, 1.02]	[.95, 1.02]	[-31.6, 29.7]
Fiji	.98	.98	-7.8
(n=764)	[.92, 1.04]	[.92, 1.04]	[-73.4, 57.8]
Lao	.99	.98	-15.8
(n=4,399)	[.95, 1.03]	[.94, 1.02]	[-82.3, 50.8]
Mongolia	1.07**	1.07**	5.5
(n=1,839)	[1.01, 1.14]	[1, 1.14]	[-13.0, 24.0]
Pakistan: Balochistan	.95	.94	-11.3
(n=4,140)	[.85, 1.06]	[.84, 1.05]	[-43.9, 21.3]
Pakistan: Khyber Pakhtunkhwa	1.05**	1.05**	9.9
(n=5,542)	[1.01, 1.1]	[1, 1.1]	[-3.0, 22.8]
Pakistan: Punjab	1	1	-42.7
(n=10,075)	[.96, 1.04]	[.96, 1.04]	[-1248.6, 1163.3]
Pakistan: Sindh	.96	.96	-0.9
(n=3,854)	[.88, 1.05]	[.88, 1.05]	[-19.9, 18.1]
Samoa	.97	.97	-9.1
(n=598)	[.89, 1.07]	[.89, 1.06]	[-98.9, 80.7]
Suriname	1	1.01	-97.4
(n=884)	[.89, 1.13]	[.9, 1.13]	[-3867.6, 3672.7]
Viet Nam	1.07**	1.07**	4.9
(n=1,768)	[1.01, 1.14]	[1, 1.13]	[-12.5, 22.3]
Girls			
Pooled	1.02	1.02*	-13.0
(n=33,473)	[1, 1.04]	[1, 1.04]	[-43.8, 17.8]
Dominican Republic	.98	.98	-7.1
(n=3,028)	[.95, 1.02]	[.95, 1.02]	[-37.2, 23.0]
Fiji	.94**	.94***	-8.1
(n=706)	[.9, .99]	[.89, .98]	[-44.3, 28.2]
Lao	.97	.98	11.3
(n=4,304)	[.93, 1.02]	[.93, 1.02]	[-14.6, 37.3]
Mongolia	1.01	1.02	-50.1
(n=1,691)	[.95, 1.08]	[.95, 1.08]	[-401.5, 301.4]
Pakistan: Balochistan	.94	.96	35.0
(n=3,629)	[.79, 1.13]	[.8, 1.16]	[-87.6, 157.6]
Pakistan: Khyber Pakhtunkhwa	1.06	1.07	-15.8
(n=4,830)	[.97, 1.16]	[.98, 1.17]	[-51.2, 19.6]
Pakistan: Punjab	1.03	1.03	20.4
(n=8,945)	[.98, 1.09]	[.98, 1.08]	[-25.5, 66.3]
Pakistan: Sindh	1.07	1.1	-39.3
(n=3,431)	[.94, 1.21]	[.97, 1.24]	[-135.9, 57.3]
Samoa	.94*	.93**	-28.8
(n=513)	[.89, 1]	[.87, .99]	[-77.5, 19.9]
Suriname	1.05	1.06	-15.4
(n=807)	[.95, 1.16]	[.96, 1.17]	[-60.1, 29.2]
Viet Nam	1.02	1.01	60.2
(n=1,589)	[.97, 1.08]	[.95, 1.07]	[-99.6, 220.0]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S4.2. Rate ratio of school attendance for having a fridge and decomposition of that difference into components explained by Household

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	1.06***	1.06***	1.3
(n=37,277)	[1.04, 1.08]	[1.04, 1.08]	[-2.6, 5.2]
Dominican Republic	1.06***	1.06***	0.5
(n=3,414)	[1.02, 1.11]	[1.02, 1.11]	[-8.3, 9.2]
Fiji	.94	.94	8.6
(n=764)	[.86, 1.02]	[.87, 1.03]	[-20.1, 37.3]
Lao	1.03	1.02	5.8
(n=4,399)	[.98, 1.08]	[.98, 1.07]	[-18.2, 29.8]
Mongolia	.97	.97*	-6.2
(n=1,839)	[.93, 1.01]	[.93, 1]	[-30.1, 17.7]
Pakistan: Balochistan	1.16**	1.15**	4.6
(n=4,140)	[1.02, 1.3]	[1.02, 1.3]	[-6.4, 15.5]
Pakistan: Khyber Pakhtunkhwa	1.04*	1.04*	-4.8
(n=5,542)	[.99, 1.09]	[1, 1.1]	[-18.5, 8.9]
Pakistan: Punjab	1.05**	1.05**	-2.2
(n=10,075)	[1.01, 1.09]	[1.01, 1.09]	[-13.7, 9.3]
Pakistan: Sindh	1.14***	1.14***	-0.5
(n=3,854)	[1.05, 1.25]	[1.05, 1.25]	[-8.2, 7.1]
Samoa	1.1***	1.11***	-4.9
(n=598)	[1.04, 1.17]	[1.04, 1.18]	[-24.7, 14.9]
Suriname	1.03	1.02	36.0
(n=884)	[.91, 1.16]	[.9, 1.14]	[-126.3, 198.3]
Viet Nam	.99	1	82.6
(n=1,768)	[.9, 1.09]	[.91, 1.1]	[-890.8, 1056.0]
Girls			
Pooled	1.04***	1.04***	-2.8
(n=33,473)	[1.02, 1.06]	[1.02, 1.07]	[-13.4, 7.8]
Dominican Republic	1.03	1.03	1.4
(n=3,028)	[.98, 1.09]	[.98, 1.09]	[-14.3, 17.1]
Fiji	.97	.98	17.9
(n=706)	[.92, 1.03]	[.92, 1.03]	[-41.4, 77.2]
Lao	.97	.97	0.3
(n=4,304)	[.92, 1.02]	[.92, 1.02]	[-10.9, 11.5]
Mongolia	1	1	-51.3
(n=1,691)	[.98, 1.03]	[.98, 1.03]	[-745.5, 642.9]
Pakistan: Balochistan	1.21**	1.21**	-2.1
(n=3,629)	[1.01, 1.45]	[1.01, 1.45]	[-19.2, 14.9]
Pakistan: Khyber Pakhtunkhwa	1	1.01	-129.8
(n=4,830)	[.92, 1.1]	[.92, 1.11]	[-2814.0, 2554.4]
Pakistan: Punjab	1.04*	1.04*	8.6
(n=8,945)	[1, 1.1]	[.99, 1.09]	[-22.2, 39.5]
Pakistan: Sindh	1.1	1.09	12.6
(n=3,431)	[.97, 1.24]	[.96, 1.22]	[-18.0, 43.2]
Samoa	1.03	1.03	2.4
(n=513)	[.97, 1.09]	[.97, 1.09]	[-60.2, 65.0]
Suriname	1.02	1.01	17.6
(n=807)	[.96, 1.08]	[.95, 1.08]	[-86.1, 121.3]
Viet Nam	1.02	1.04	-64.9
(n=1,589)	[.93, 1.13]	[.94, 1.14]	[-393.0, 263.3]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S4.3. Rate ratio of school attendance for having a stove and decomposition of that difference into components explained by Household

	Rate ratio for having a stove		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	.98*	.98*	4.1
(n=37,277)	[.95, 1]	[.95, 1]	[-8.4, 16.6]
Dominican Republic	.99	.99	-49.0
(n=3,414)	[.93, 1.06]	[.93, 1.06]	[-584.8, 486.7]
Fiji	.98	.98	12.2
(n=764)	[.92, 1.05]	[.92, 1.05]	[-72.2, 96.5]
Lao	1	1	68.5
(n=4,399)	[.95, 1.05]	[.95, 1.05]	[-780.1, 917.0]
Mongolia	.98	.97	-39.0
(n=1,839)	[.94, 1.02]	[.93, 1.01]	[-118.6, 40.6]
Pakistan: Balochistan	.94	.94	-11.4
(n=4,140)	[.81, 1.1]	[.8, 1.09]	[-57.6, 34.7]
Pakistan: Khyber Pakhtunkhwa	.94**	.94**	9.8
(n=5,542)	[.89, .99]	[.89, 1]	[-3.2, 22.8]
Pakistan: Punjab	1	1	166.3
(n=10,075)	[.95, 1.05]	[.95, 1.05]	[-7710.1, 8042.7]
Pakistan: Sindh	.98	.97	-22.8
(n=3,854)	[.87, 1.1]	[.87, 1.09]	[-150.7, 105.0]
Samoa	.94	.98	57.2
(n=598)	[.85, 1.05]	[.88, 1.09]	[-59.5, 173.8]
Suriname	1.05	1.04	23.0
(n=884)	[.92, 1.21]	[.91, 1.19]	[-66.2, 112.2]
Viet Nam	1.02	1.01	51.9
(n=1,768)	[.91, 1.13]	[.91, 1.12]	[-299.3, 403.1]
Girls			
Pooled	.99	.99	-24.5
(n=33,473)	[.97, 1.02]	[.96, 1.02]	[-150.7, 101.7]
Dominican Republic	.98	.98	19.9
(n=3,028)	[.92, 1.05]	[.92, 1.05]	[-44.6, 84.4]
Fiji	1	1.01	-20.3
(n=706)	[.95, 1.07]	[.95, 1.06]	[-541.7, 501.0]
Lao	.99	.99	-16.8
(n=4,304)	[.94, 1.04]	[.93, 1.04]	[-108.6, 74.9]
Mongolia	1.01	1.02	-36.6
(n=1,691)	[.98, 1.05]	[.98, 1.06]	[-143.3, 70.1]
Pakistan: Balochistan	.74**	.78**	17.7*
(n=3,629)	[.58, .95]	[.62, 1]	[-1.2, 36.7]
Pakistan: Khyber Pakhtunkhwa	1.04	1.04	8.6
(n=4,830)	[.95, 1.15]	[.94, 1.15]	[-31.1, 48.2]
Pakistan: Punjab	.96*	.97	32.2
(n=8,945)	[.91, 1.01]	[.93, 1.02]	[-13.1, 77.5]
Pakistan: Sindh	1.03	1.05	-78.6
(n=3,431)	[.81, 1.3]	[.83, 1.33]	[-762.5, 605.2]
Samoa	1.05	1.05	-1.5
(n=513)	[.98, 1.13]	[.97, 1.13]	[-42.2, 39.1]
Suriname	.97	.97	0.5
(n=807)	[.87, 1.07]	[.87, 1.07]	[-52.5, 53.5]
Viet Nam	.95	.94	-2.7
(n=1,589)	[.85, 1.05]	[.85, 1.04]	[-34.5, 29.1]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S4.4. Rate ratio of the number of mistakes on a numeracy test (0–11) for having a washer and decomposition of that difference into components explained by Household

	Rate ratio for having a washer		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	1.01	1.01	15.7
(n=6,696)	[.92, 1.11]	[.92, 1.11]	[-135.1, 166.6]
Mongolia	1.12	1.14	-15.2
(n=1,102)	[.61, 2.04]	[.59, 2.18]	[-202.6, 172.2]
Pakistan: Khyber Pakhtunkhwa	1	.99	-534.2
(n=1,391)	[.86, 1.17]	[.85, 1.16]	[-74168.8, 73100.4]
Pakistan: Punjab	1.06	1.04	19.9
(n=2,565)	[.9, 1.23]	[.89, 1.22]	[-44.7, 84.5]
Pakistan: Sindh	.96	.97	18.5
(n=772)	[.82, 1.13]	[.82, 1.14]	[-78.1, 115.2]
Viet Nam	1.21	.99	105.5
(n=866)	[.21, 6.82]	[.18, 5.57]	[-857.1, 1068.1]
Girls			
Pooled	.93	.95	31.3
(n=5,620)	[.83, 1.04]	[.85, 1.06]	[-23.2, 85.7]
Mongolia	1.06	1.08	-31.5
(n=1,076)	[.52, 2.16]	[.54, 2.13]	[-584.2, 521.1]
Pakistan: Khyber Pakhtunkhwa	1.11	1.15	-39.7
(n=789)	[.91, 1.35]	[.95, 1.41]	[-145.3, 65.9]
Pakistan: Punjab	.94	.93	-12.4
(n=2,457)	[.8, 1.09]	[.8, 1.08]	[-59.0, 34.2]
Pakistan: Sindh	.84*	.86	13.0
(n=479)	[.68, 1.03]	[.7, 1.05]	[-21.4, 47.4]
Viet Nam	1.25	.83	183.1
(n=819)	[.43, 3.69]	[.25, 2.71]	[-709.6, 1075.7]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S4.5. Rate ratio of the number of mistakes on a numeracy test (0–11) for having a fridge and decomposition of that difference into components explained by Household

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	1.06	1.06	-0.4
(n=6,696)	[.98, 1.15]	[.97, 1.15]	[-16.3, 15.5]
Mongolia	1.11	1.13	-20.6
(n=1,102)	[.7, 1.76]	[.71, 1.81]	[-152.0, 110.7]
Pakistan: Khyber Pakhtunkhwa	1.17**	1.17*	0.8
(n=1,391)	[1, 1.37]	[1, 1.36]	[-16.0, 17.6]
Pakistan: Punjab	.98	.98	-6.6
(n=2,565)	[.84, 1.14]	[.84, 1.14]	[-102.0, 88.8]
Pakistan: Sindh	1.06	1.06	2.1
(n=772)	[.92, 1.23]	[.92, 1.23]	[-37.3, 41.6]
Viet Nam	1.25	1.02	92.9
(n=866)	[.58, 2.68]	[.5, 2.07]	[-204.9, 390.7]
Girls			
Pooled	.96	.96	-7.6
(n=5,620)	[.87, 1.07]	[.86, 1.07]	[-54.9, 39.6]
Mongolia	.78	.76	-10.2
(n=1,076)	[.47, 1.3]	[.45, 1.3]	[-57.0, 36.6]
Pakistan: Khyber Pakhtunkhwa	1.04	1.03	34.2
(n=789)	[.87, 1.24]	[.87, 1.22]	[-142.6, 211.1]
Pakistan: Punjab	.89*	.89*	1.5
(n=2,457)	[.78, 1.02]	[.78, 1.02]	[-16.6, 19.5]
Pakistan: Sindh	.94	.94	2.5
(n=479)	[.73, 1.2]	[.73, 1.2]	[-77.2, 82.2]
Viet Nam	.54	.71	44.0
(n=819)	[.2, 1.43]	[.21, 2.4]	[-80.1, 168.1]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S4.6. Rate ratio of the number of mistakes on a numeracy test (0–11) for having a stove and decomposition of that difference into components explained by Household

	Rate ratio for having a stove		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	1.02	1.02	-9.6
(n=6,696)	[.91, 1.14]	[.91, 1.15]	[-83.7, 64.5]
Mongolia	.76	.73	-14.8
(n=1,102)	[.39, 1.48]	[.37, 1.43]	[-77.0, 47.4]
Pakistan: Khyber Pakhtunkhwa	1.17*	1.18**	-7.7
(n=1,391)	[.99, 1.38]	[1, 1.4]	[-33.0, 17.5]
Pakistan: Punjab	1.09	1.09	5.2
(n=2,565)	[.9, 1.32]	[.9, 1.32]	[-27.4, 37.8]
Pakistan: Sindh	.88	.89	6.6
(n=772)	[.74, 1.05]	[.74, 1.06]	[-23.2, 36.3]
Viet Nam	2.54*	2.47*	2.8
(n=866)	[.88, 7.32]	[.94, 6.51]	[-39.0, 44.6]
Girls			
Pooled	1.04	1.05	-22.6
(n=5,620)	[.91, 1.19]	[.92, 1.2]	[-119.5, 74.3]
Mongolia	1.14	1.15	-7.0
(n=1,076)	[.62, 2.1]	[.62, 2.14]	[-108.4, 94.4]
Pakistan: Khyber Pakhtunkhwa	1.04	1.07	-67.8
(n=789)	[.86, 1.26]	[.9, 1.28]	[-440.8, 305.2]
Pakistan: Punjab	.84*	.85*	7.2
(n=2,457)	[.69, 1.01]	[.7, 1.02]	[-5.5, 19.9]
Pakistan: Sindh	1.21	1.2	4.5
(n=479)	[.9, 1.63]	[.89, 1.62]	[-30.1, 39.1]
Viet Nam	1.22	1.77	-187.2
(n=819)	[.22, 6.79]	[.58, 5.42]	[-2265.5, 1891.2]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S4.7. Rate ratio of the number of mistakes on reading comprehension test (0–5) for having a washer and decomposition of that difference into components explained by Household

	Rate ratio for having a washer		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	.93	.93	0.2
(n=6,696)	[.79, 1.08]	[.79, 1.08]	[-24.2, 24.6]
Mongolia	1.21	1.16	21.3
(n=1,102)	[.63, 2.32]	[.6, 2.25]	[-81.2, 123.9]
Pakistan: Khyber Pakhtunkhwa	.88	.9	14.7
(n=1,391)	[.72, 1.08]	[.73, 1.1]	[-18.5, 47.9]
Pakistan: Punjab	1.21	1.21	-0.1
(n=2,565)	[.91, 1.59]	[.92, 1.59]	[-24.0, 23.9]
Pakistan: Sindh	.74	.74	0.9
(n=772)	[.48, 1.13]	[.49, 1.12]	[-34.9, 36.8]
Viet Nam	.55	.5	-13.1
(n=866)	[.17, 1.8]	[.17, 1.46]	[-75.9, 49.7]
Girls			
Pooled	1.12	1.12	-3.3
(n=5,620)	[.9, 1.39]	[.9, 1.39]	[-38.7, 32.1]
Mongolia	.88	.82	-55.2
(n=1,076)	[.36, 2.16]	[.34, 2]	[-469.8, 359.4]
Pakistan: Khyber Pakhtunkhwa	1.09	1.09	4.1
(n=789)	[.81, 1.47]	[.8, 1.49]	[-91.6, 99.8]
Pakistan: Punjab	1.05	1.04	19.9
(n=2,457)	[.77, 1.42]	[.77, 1.41]	[-137.7, 177.6]
Pakistan: Sindh	1.33	1.23	28.1
(n=479)	[.68, 2.59]	[.67, 2.25]	[-71.9, 128.2]
Viet Nam	1.4	.96	110.7
(n=819)	[.64, 3.05]	[.44, 2.12]	[-142.5, 363.8]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S4.8. Rate ratio of the number of mistakes on reading comprehension test (0–5) for having a fridge and decomposition of that difference into components explained by Household

	Difference for having a fridge		Difference explained by added covariates (%)
	Basic model	Full Model	
Boys			
Pooled	1.08	1.09	-8.7
(n=6,696)	[.92, 1.27]	[.93, 1.28]	[-37.2, 19.8]
Mongolia	1.08	1.08	7.2
(n=1,102)	[.7, 1.66]	[.71, 1.64]	[-75.3, 89.8]
Pakistan: Khyber Pakhtunkhwa	1.15	1.16	-6.9
(n=1,391)	[.93, 1.42]	[.93, 1.44]	[-30.9, 17.1]
Pakistan: Punjab	.84	.85	6.8
(n=2,565)	[.64, 1.11]	[.65, 1.12]	[-19.7, 33.4]
Pakistan: Sindh	1.11	1.12	-8.7
(n=772)	[.7, 1.77]	[.7, 1.8]	[-102.4, 85.0]
Viet Nam	1.56	1.45	16.3
(n=866)	[.6, 4.07]	[.55, 3.85]	[-64.9, 97.4]
Girls			
Pooled	.92	.92	3.0
(n=5,620)	[.74, 1.13]	[.75, 1.13]	[-22.0, 28.0]
Mongolia	1.51**	1.54**	-4.1
(n=1,076)	[1.03, 2.22]	[1.03, 2.29]	[-23.1, 15.0]
Pakistan: Khyber Pakhtunkhwa	.88	.9	24.9
(n=789)	[.66, 1.15]	[.68, 1.2]	[-45.4, 95.3]
Pakistan: Punjab	.92	.92	0.6
(n=2,457)	[.67, 1.27]	[.67, 1.27]	[-47.9, 49.0]
Pakistan: Sindh	.93	.78	-259.3
(n=479)	[.45, 1.93]	[.39, 1.54]	[-3091.4, 2572.7]
Viet Nam	.27**	.29**	6.5
(n=819)	[.088, .82]	[.098, .88]	[-22.1, 35.2]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

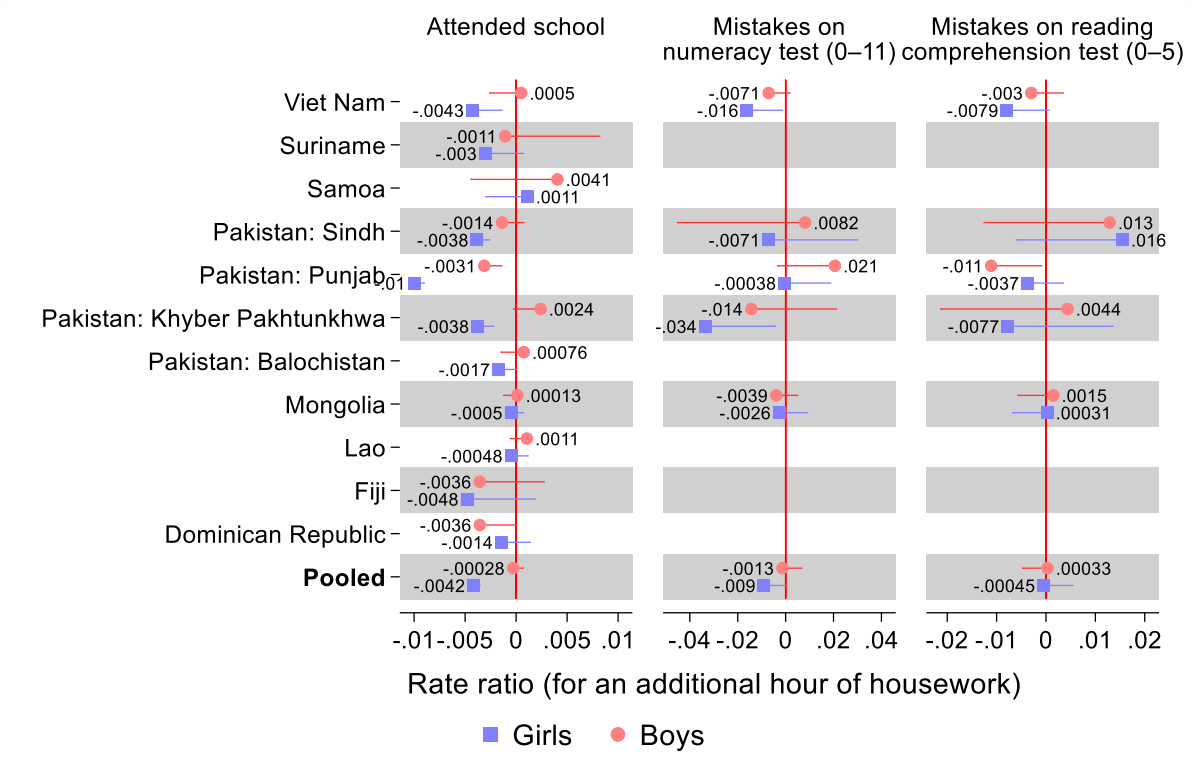
Table S4.9. Rate ratio of the number of mistakes on reading comprehension test (0–5) for having a stove and decomposition of that difference into components explained by Household

	Rate ratio for having a stove		Rate ratio explained by added covariates, %
	Basic model	Full Model	
Boys			
Pooled	1.11	1.1	8.3
(n=6,696)	[.92, 1.35]	[.91, 1.34]	[-18.3, 34.9]
Mongolia	.96	.99	70.8
(n=1,102)	[.55, 1.69]	[.57, 1.71]	[-951.0, 1092.7]
Pakistan: Khyber Pakhtunkhwa	1.21	1.18	13.4
(n=1,391)	[.95, 1.54]	[.93, 1.5]	[-12.9, 39.8]
Pakistan: Punjab	.87	.89	19.3
(n=2,565)	[.59, 1.26]	[.61, 1.3]	[-49.8, 88.4]
Pakistan: Sindh	1.32	1.16	48.2
(n=772)	[.81, 2.17]	[.69, 1.93]	[-50.1, 146.6]
Viet Nam	.91	.89	-23.9
(n=866)	[.32, 2.57]	[.31, 2.53]	[-437.9, 390.1]
Girls			
Pooled	.96	.95	-18.5
(n=5,620)	[.72, 1.27]	[.71, 1.27]	[-154.6, 117.6]
Mongolia	.85	.84	-6.7
(n=1,076)	[.52, 1.4]	[.52, 1.37]	[-70.3, 57.0]
Pakistan: Khyber Pakhtunkhwa	1.18	1.14	20.1
(n=789)	[.83, 1.68]	[.8, 1.62]	[-38.4, 78.6]
Pakistan: Punjab	.59**	.61**	3.8
(n=2,457)	[.39, .9]	[.4, .91]	[-7.0, 14.5]
Pakistan: Sindh	1.51	1.44	10.7
(n=479)	[.51, 4.49]	[.53, 3.92]	[-82.0, 103.4]
Viet Nam	.62	.63	2.3
(n=819)	[.22, 1.76]	[.22, 1.83]	[-84.7, 89.2]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

5: Sensitivity analyses: Results from linear regression models

Figure S5.1. Difference in outcomes according to the number of hours spent on household work in the week before the survey



Notes: Coefficients from linear regressions are shown. Results for were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 0 and lower confidence limits were omitted for estimates below 0, for improved readability. See Supplementary Table S# for tabulated estimates.

Table S5.1. Difference in school attendance for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey

	Rate ratio for being female		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Pooled	-.047***	-.034***	-.013** (27)	-.0087*** (18)	.04*** (-85)	-.0079** (17)	-.028*** (60)	.019*** (-40)	-.016*** (33)	-.01*** (21)	-.0011 (2)
(n=73,456)	[-.054, -.04]	[-.048, -.021]	[-.024, -.00081]	[-.014, -.0037]	[.028, .053]	[-.015, -.0011]	[-.034, -.022]	[.011, .027]	[-.021, -.011]	[-.014, -.0064]	[-.0071, .0049]
Dominican Republic	.024***	.02	.0042 (17)	-.0056 (-23)	.0022 (9)	-.00012 (-0)	-.0018 (-8)	.018*** (74)	-.00073 (-3)	.0018 (7)	-.0093 (-39)
(n=7,221)	[.012, .036]	[-.0082, .048]	[-.022, .03]	[-.012, .0011]	[-.023, .027]	[-.01, .01]	[-.014, .01]	[.0049, .031]	[-.0075, .006]	[-.00061, .0041]	[-.021, .0024]
Fiji	.037***	-.07	.11** (289)	-.0037 (-10)	.095* (255)	-.0015 (-4)	.0081 (22)	.04** (108)	-.015* (-41)	-.0052 (-14)	-.0097 (-26)
(n=1,586)	[.014, .061]	[-.18, .035]	[.0069, .21]	[-.022, .014]	[-.0029, .19]	[-.03, .027]	[-.021, .037]	[.0086, .072]	[-.03, .000034]	[-.017, .0066]	[-.038, .019]
Lao	-.023***	-.052*	.029 (-123)	-.01* (44)	.048 (-207)	-.014 (58)	-.0018 (8)	-.0023 (10)	-.00082 (4)	.0049* (-21)	.0042 (-18)
(n=8,870)	[-.038, -.0081]	[-.11, .0053]	[-.027, .084]	[-.022, .0018]	[-.011, .11]	[-.037, .0098]	[-.021, .017]	[-.042, .038]	[-.013, .012]	[-.00086, .011]	[-.013, .022]
Mongolia	.042***	.07***	-.028 (-67)	-.0042 (-10)	-.011 (-27)	-.0036 (-9)	.01 (25)	.026*** (62)	-.0014 (-3)	.00066 (2)	-.045*** (-107)
(n=3,688)	[.025, .058]	[.02, .12]	[-.071, .015]	[-.016, .0079]	[-.056, .034]	[-.025, .018]	[-.0079, .029]	[.009, .043]	[-.0063, .0036]	[-.0041, .0054]	[-.069, -.02]
Pakistan: Balochistan	-.16***	-.12***	-.048*** (29)	-.0045 (3)	.019 (-11)	-.015** (9)	-.027*** (17)	-.013 (8)	-.013 (8)	.0075 (-5)	-.0009 (1)
(n=7,990)	[-.18, -.14]	[-.15, -.083]	[-.074, -.023]	[-.027, .018]	[-.0092, .047]	[-.031, -.00014]	[-.042, -.013]	[-.037, .01]	[-.04, .014]	[-.013, .028]	[-.017, .015]
Pakistan: Khyber Pakhtunkhwa	-.28***	-.23***	-.055*** (19)	.0065 (-2)	.017 (-6)	-.026*** (9)	-.043*** (15)	-.014 (5)	.021*** (-7)	.0017 (-1)	-.017** (6)
(n=10,483)	[-.3, -.26]	[-.26, -.2]	[-.081, -.028]	[-.0086, .022]	[-.01, .044]	[-.042, -.011]	[-.063, -.024]	[-.035, .0071]	[.0055, .036]	[-.012, .015]	[-.033, -6.2e-06]
Pakistan: Punjab	-.055***	.075***	-.13*** (238)	-.012*** (22)	.02** (-36)	-.026*** (47)	-.089*** (163)	.014* (-26)	.00023 (-0)	-.00046 (1)	-.037*** (68)
(n=19,494)	[-.068, -.041]	[.056, .095]	[-.15, -.11]	[-.021, -.0038]	[.0022, .037]	[-.037, -.014]	[-.1, -.076]	[-.00066, .03]	[-.01, .011]	[-.0099, .009]	[-.047, -.027]
Pakistan: Sindh	-.16***	-.086***	-.072*** (45)	-.014 (9)	.0075 (-5)	-.05*** (32)	-.038*** (24)	.0088 (-6)	.0072 (-5)	-.012 (7)	.019** (-12)
(n=7,460)	[-.18, -.14]	[-.12, -.05]	[-.1, -.042]	[-.033, .005]	[-.027, .042]	[-.071, -.029]	[-.057, -.019]	[-.015, .032]	[-.016, .031]	[-.03, .0065]	[.003, .034]

	Rate ratio for being female		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Samoa	.045***	.058	-.013 (-28)	.0034 (8)	.033 (73)	.0077 (17)	-.00089 (-2)	.015 (33)	-.0063 (-14)	-.00068 (-1)	-.064*** (-142)
(n=1,174)	[.014, .077]	[-.03, .15]	[-.098, .072]	[-.026, .033]	[-.042, .11]	[-.033, .049]	[-.047, .045]	[-.013, .043]	[-.03, .017]	[-.019, .018]	[-.11, -.017]
Suriname	.048***	.052	-.0037 (-8)	-.0043 (-9)	.012 (26)	-.0097 (-20)	.0015 (3)	.025 (52)	-.0072 (-15)	-.0081* (-17)	-.013 (-28)
(n=1,902)	[.021, .075]	[-.012, .11]	[-.061, .053]	[-.02, .011]	[-.047, .071]	[-.034, .014]	[-.022, .025]	[-.0055, .056]	[-.027, .012]	[-.017, .001]	[-.038, .012]
Viet Nam	.022**	.018	.0035 (16)	.0056 (26)	-.002 (-9)	.0054 (25)	-.019 (-87)	.0061 (28)	.0071* (33)	-.00039 (-2)	.00071 (3)
(n=3,588)	[.002, .041]	[-.037, .074]	[-.047, .054]	[-.0052, .016]	[-.061, .056]	[-.023, .034]	[-.053, .016]	[-.02, .032]	[-.00015, .014]	[-.0059, .0051]	[-.011, .012]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.2. Difference in the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey

	Rate ratio for being female		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Pooled	-.0093	-.02	.011 (-116)	.0037 (-39)	-.021 (231)	.062* (-667)	-.067* (714)	-.056* (599)	.025 (-265)	-.0091 (98)	.073** (-786)
(n=15,027)	[-.089, .07]	[-.18, .14]	[-.12, .14]	[-.048, .055]	[-.14, .098]	[-.0026, .13]	[-.14, .0081]	[-.12, .0072]	[-.028, .077]	[-.051, .033]	[.0041, .14]
Mongolia	-.089*	-.23*	.14 (-155)	-.00031 (0)	.089 (-100)	-.084 (94)	-.028 (32)	.0035 (-4)	-.0044 (5)	.013 (-14)	.15* (-168)
(n=2,428)	[-.19, .016]	[-.48, .023]	[-.092, .37]	[-.092, .091]	[-.15, .33]	[-.23, .06]	[-.14, .08]	[-.1, .11]	[-.037, .028]	[-.015, .04]	[-.013, .31]
Pakistan: Khyber Pakhtunkhwa	.0031	.032	-.029 (-929)	.00017 (5)	.28* (9121)	.14** (4463)	-.34*** (-10958)	-.22** (-6894)	-.02 (-633)	.061 (1966)	.062 (2000)
(n=2,612)	[-.24, .25]	[-.38, .45]	[-.36, .3]	[-.18, .18]	[-.013, .58]	[.015, .26]	[-.59, -.095]	[-.42, -.014]	[-.19, .15]	[-.091, .21]	[-.17, .3]
Pakistan: Punjab	.063	.079	-.016 (-26)	.0039 (6)	-.076 (-121)	.064 (101)	-.035 (-55)	-.019 (-30)	-.023 (-37)	-.047 (-75)	.12* (184)
(n=6,326)	[-.064, .19]	[-.14, .3]	[-.19, .16]	[-.076, .083]	[-.25, .093]	[-.017, .15]	[-.15, .08]	[-.14, .098]	[-.12, .069]	[-.13, .035]	[-.0074, .24]
Pakistan: Sindh	-.032	-.11	.081 (-251)	.1 (-312)	-.1 (312)	.054 (-167)	-.056 (175)	-.085 (264)	.24 (-748)	-.065 (200)	-.0083 (26)
(n=1,640)	[-.33, .26]	[-.59, .37]	[-.28, .44]	[-.14, .34]	[-.44, .24]	[-.14, .25]	[-.3, .19]	[-.32, .15]	[-.077, .56]	[-.26, .13]	[-.25, .23]
Viet Nam	.025	-.14*	.16** (651)	.011 (45)	.059 (239)	.079 (318)	-.069 (-279)	.046 (184)	.016 (66)	-.004 (-16)	.023 (93)
(n=2,021)	[-.032, .081]	[-.28, .0092]	[.0012, .32]	[-.022, .044]	[-.092, .21]	[-.037, .19]	[-.19, .056]	[-.016, .11]	[-.024, .056]	[-.017, .0092]	[-.0082, .054]

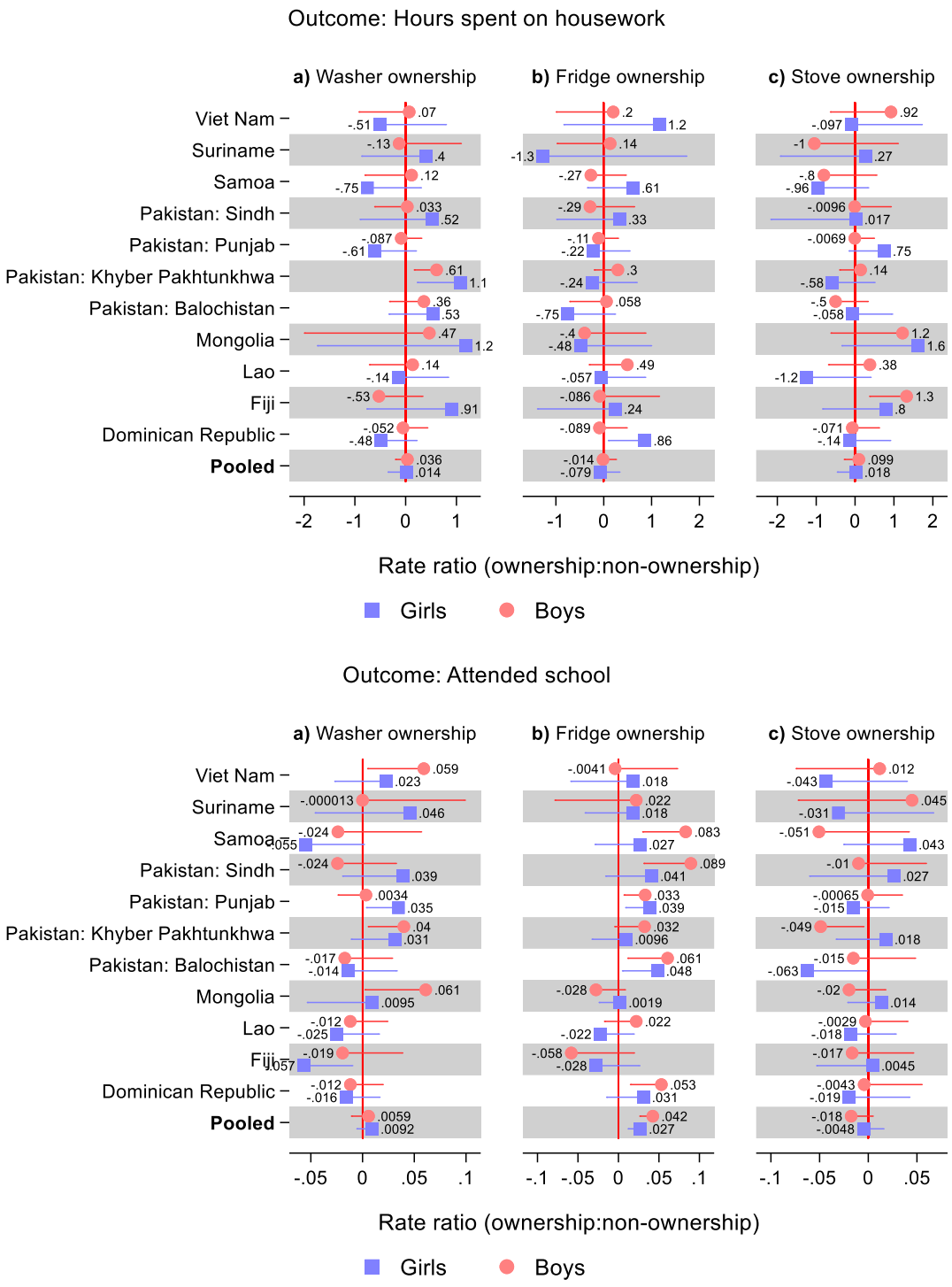
Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.3. Difference in the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on housework in the week before the survey

	Rate ratio for being female		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Pooled	-.018	-.049	.032 (-179)	-.0075 (42)	.05 (-283)	-.0033 (19)	.026 (-149)	-.058*** (328)	-.02 (111)	.003 (-17)	.041* (-231)
(n=15,027)	[-.065, .03]	[-.14, .042]	[-.043, .11]	[-.04, .025]	[-.03, .13]	[-.042, .035]	[-.019, .072]	[-.098, -.018]	[-.049, .0097]	[-.021, .027]	[-.000014, .082]
Mongolia	-.021	-.098	.076 (-359)	-.022 (102)	.11 (-538)	-.025 (115)	-.034 (159)	-.023 (108)	.0084 (-39)	.011 (-53)	.045 (-213)
(n=2,428)	[-.095, .052]	[-.29, .095]	[-.095, .25]	[-.08, .036]	[-.049, .28]	[-.12, .069]	[-.11, .043]	[-.089, .043]	[-.011, .028]	[-.012, .035]	[-.066, .16]
Pakistan: Khyber Pakhtunkhwa	.037	.049	-.012 (-31)	.032 (85)	-.0075 (-20)	-.036 (-97)	.081 (218)	-.082 (-220)	-.092 (-247)	.0033 (9)	.09 (242)
(n=2,612)	[-.13, .2]	[-.23, .32]	[-.22, .2]	[-.1, .16]	[-.24, .22]	[-.12, .047]	[-.076, .24]	[-.22, .059]	[-.21, .021]	[-.099, .11]	[-.053, .23]
Pakistan: Punjab	-.078**	-.14***	.064 (-82)	-.0035 (5)	.062 (-79)	-.0026 (3)	-.034 (44)	.0024 (-3)	.047* (-61)	-.019 (24)	.011 (-15)
(n=6,326)	[-.14, -.013]	[-.25, -.038]	[-.017, .14]	[-.045, .038]	[-.013, .14]	[-.041, .036]	[-.091, .023]	[-.053, .058]	[-.0025, .097]	[-.057, .02]	[-.05, .073]
Pakistan: Sindh	-.012	-.051	.039 (-323)	.00042 (-4)	.11 (-898)	.096* (-800)	.15** (-1211)	-.22*** (1800)	-.14 (1207)	.022 (-179)	.029 (-238)
(n=1,640)	[-.16, .13]	[-.27, .17]	[-.15, .23]	[-.13, .14]	[-.11, .33]	[-.011, .2]	[.012, .28]	[-.35, -.079]	[-.32, .03]	[-.078, .12]	[-.11, .16]
Viet Nam	-.0064	-.00058	-.0058 (91)	-.0051 (79)	.042 (-652)	-.033 (513)	-.018 (276)	.0021 (-32)	-.0062 (96)	-.0043 (67)	.017 (-257)
(n=2,021)	[-.053, .04]	[-.11, .11]	[-.12, .11]	[-.039, .029]	[-.097, .18]	[-.1, .036]	[-.094, .058]	[-.053, .057]	[-.021, .0083]	[-.017, .0087]	[-.0083, .041]

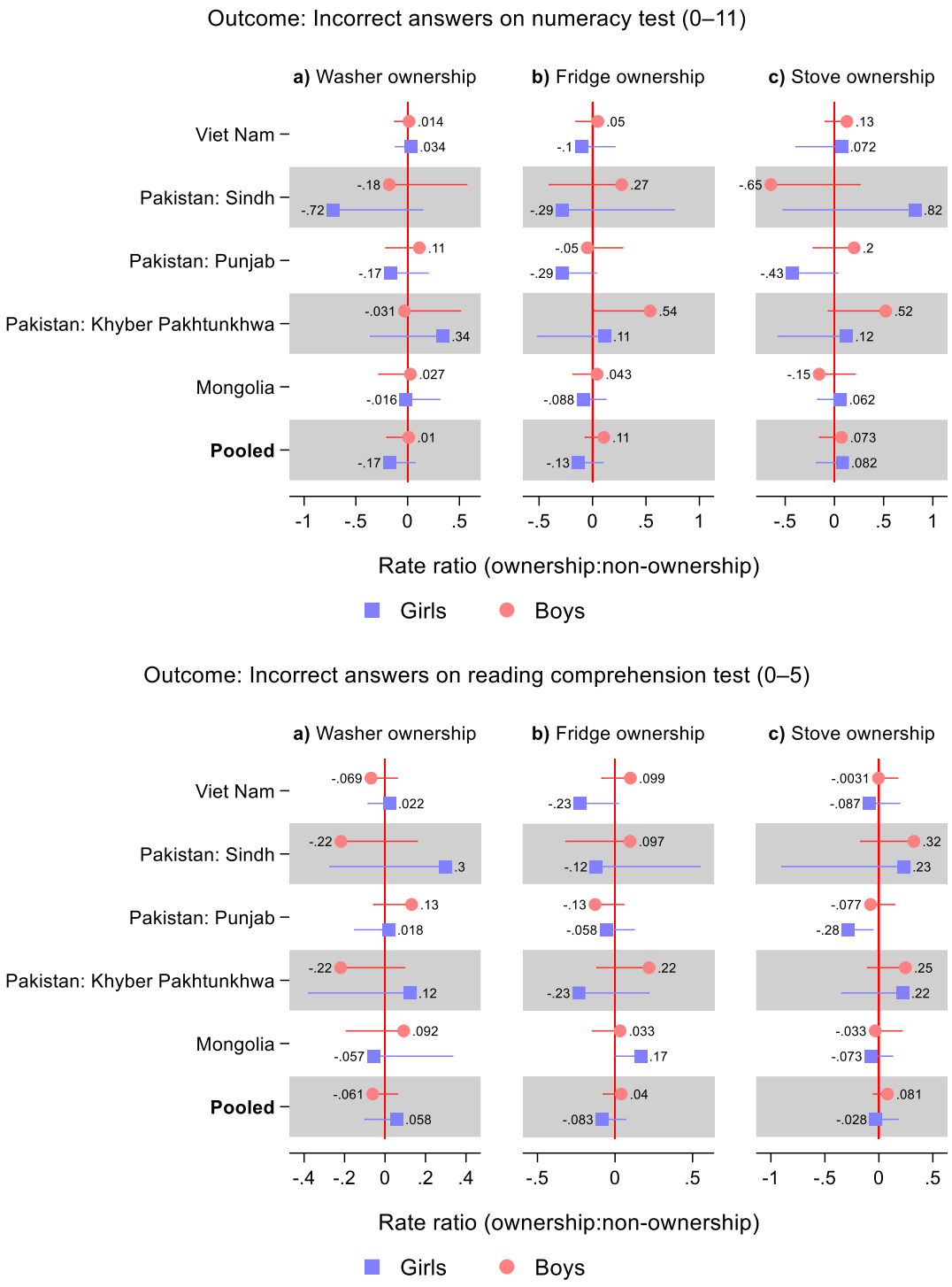
Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Figure S5.2. Difference in outcomes according to appliance ownership



Notes: Coefficients from linear regressions are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 0 and lower confidence limits were omitted for estimates below 0, for improved readability. See Supplementary Table S# for tabulated estimates.

Figure S5.3. Difference in outcomes according to appliance ownership



Notes: Coefficients from linear regressions are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 0 and lower confidence limits were omitted for estimates below 0, for improved readability. See Supplementary Table S# for tabulated estimates.

Table S5.4. Difference in school attendance for having a washer and decomposition of that difference into components explained by Household

	Difference for having a washer		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	.0059	.0072	-.0013* (-22)	-.000055 (-1)	-.00013 (-2)	-.000095 (-2)	-.000053 (-1)	-.00013 (-2)	.000024 (0)	.0001 (2)	-.00099* (-17)
(n=37,277)	[-.011, .022]	[-.0093, .024]	[-.0029, .00025]	[-.00032, .00021]	[-.00081, .00056]	[-.00043, .00024]	[-.00036, .00026]	[-.00053, .00028]	[-.000095, .00014]	[-.00014, .00034]	[-.0021, .000088]
Dominican Republic	-.012	-.012	.00026 (-2)	-.000021 (0)	.0006 (-5)	-6.3e-06 (0)	-.00013 (1)	.0002 (-2)	-.000043 (0)	.00017 (-1)	-.00052 (4)
(n=3,414)	[-.043, .019]	[-.043, .019]	[-.0035, .004]	[-.0015, .0015]	[-.001, .0022]	[-.00026, .00025]	[-.0026, .0024]	[-.00075, .0012]	[-.00099, .0009]	[-.00098, .0013]	[-.0018, .00072]
Fiji	-.019	-.021	.0016 (-8)	-.00017 (1)	-.00073 (4)	.00063 (-3)	.0014 (-7)	-.00091 (5)	.00038 (-2)	-.000069 (0)	.0011 (-6)
(n=764)	[-.077, .038]	[-.079, .037]	[-.0093, .013]	[-.0028, .0025]	[-.0045, .003]	[-.0027, .004]	[-.0046, .0074]	[-.0073, .0054]	[-.0023, .0031]	[-.0021, .0019]	[-.0027, .0048]
Lao	-.012	-.014	.0018 (-15)	-.00047 (4)	.002 (-17)	.00027 (-2)	.00018 (-2)	.000041 (-0)	-.000061 (1)	.00014 (-1)	-.00039 (3)
(n=4,399)	[-.047, .024]	[-.049, .022]	[-.0034, .0069]	[-.0019, .00096]	[-.0025, .0066]	[-.001, .0016]	[-.0006, .00096]	[-.0009, .00098]	[-.0011, .001]	[-.00064, .00092]	[-.0016, .00082]
Mongolia	.061**	.058*	.0032 (5)	.00022 (0)	-.00066 (-1)	.0017 (3)	-.00014 (-0)	.0002 (0)	.00037 (1)	.0019 (3)	-.00038 (-1)
(n=1,839)	[.0024, .12]	[-.00061, .12]	[-.008, .014]	[-.0032, .0037]	[-.003, .0016]	[-.0027, .0061]	[-.0035, .0032]	[-.0047, .0051]	[-.0016, .0024]	[-.0018, .0055]	[-.0059, .0052]
Pakistan: Balochistan	-.017	-.02	.0026 (-15)	.000054 (-0)	.00077 (-4)	1.2e-06 (-0)	.00019 (-1)	.0011 (-6)	.00058 (-3)	.000016 (-0)	-.000057 (0)
(n=4,140)	[-.063, .028]	[-.065, .026]	[-.00097, .0063]	[-.00054, .00065]	[-.00096, .0025]	[-.000099, .0001]	[-.0016, .002]	[-.0012, .0033]	[-.00091, .0021]	[-.00025, .00028]	[-.00051, .0004]
Pakistan: Khyber Pakhtunkhwa	.04**	.036**	.0037* (9)	-.00017 (-0)	.00089 (2)	-.0011 (-3)	.00099 (2)	.00048 (1)	-.0014 (-4)	-.000014 (-0)	.0041** (10)
(n=5,542)	[.0055, .074]	[.0019, .071]	[-.0003, .0078]	[-.00095, .00061]	[-.00065, .0024]	[-.0031, .00081]	[-.0012, .0032]	[-.0008, .0018]	[-.0033, .00042]	[-.00033, .0003]	[.00074, .0075]
Pakistan: Punjab	.0034	.0034	-.000022 (-1)	.0002 (6)	-.00053 (-16)	.000063 (2)	.00073 (22)	.00022 (7)	1.5e-06 (0)	.000069 (2)	-.00078 (-23)
(n=10,075)	[-.024, .03]	[-.024, .03]	[-.0034, .0034]	[-.00043, .00084]	[-.0014, .00034]	[-.00054, .00067]	[-.0014, .0029]	[-.00043, .00087]	[-.00039, .0004]	[-.00026, .0004]	[-.0038, .0022]
Pakistan: Sindh	-.024	-.023	-.00096 (4)	-.00016 (1)	.0013 (-6)	.0018 (-8)	-.00026 (1)	-.0023 (9)	-.0001 (0)	-.00096 (4)	-.00035 (1)
(n=3,854)	[-.08, .032]	[-.079, .033]	[-.0056, .0037]	[-.0021, .0018]	[-.0018, .0045]	[-.0013, .0049]	[-.0014, .0009]	[-.0059, .0013]	[-.00078, .00058]	[-.0035, .0016]	[-.0017, .00099]
Samoa	-.024	-.024	.00027 (-1)	-.0012 (5)	.001 (-4)	-.000067 (0)	.00066 (-3)	.004 (-17)	8.6e-06 (-0)	.0021 (-9)	-.0062 (26)
(n=598)	[-.1, .056]	[-.1, .054]	[-.019, .019]	[-.0055, .003]	[-.0043, .0064]	[-.00099, .00086]	[-.003, .0043]	[-.0047, .013]	[-.0013, .0014]	[-.0051, .0093]	[-.02, .0079]
Suriname	-.000013	.0037	-.0037 (27726)	-.0012 (8926)	-.00023 (1742)	.00027 (-1989)	.0039 (-28742)	-.0019 (14340)	-.0012 (8777)	.00023 (-1684)	-.0035 (26357)

	Difference for having a washer		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
(n=884)	[-.099, .099]	[-.094, .1]	[-.024, .016]	[-.0057, .0033]	[-.0059, .0055]	[-.0017, .0023]	[-.0084, .016]	[-.0094, .0056]	[-.0056, .0032]	[-.0069, .0074]	[-.011, .004]
Viet Nam	.059**	.058**	.0017 (3)	.0017 (3)	.0012 (2)	.00082 (1)	.00006 (0)	-.002 (-3)	.00048 (1)	.000084 (0)	-.00068 (-1)
(n=1,768)	[.0049, .11]	[.0037, .11]	[-.0077, .011]	[-.0013, .0047]	[-.0043, .0066]	[-.0026, .0043]	[-.0046, .0048]	[-.0056, .0016]	[-.0022, .0032]	[-.0014, .0016]	[-.0033, .0019]
Girls											
Pooled	.0092	.01	-.00086 (-9)	-.00002 (-0)	.00039 (4)	-.0002 (-2)	-.000084 (-1)	-.00013 (-1)	.00015 (2)	-.00032 (-3)	-.00065 (-7)
(n=33,473)	[-.0055, .024]	[-.0045, .025]	[-.0029, .0012]	[-.00043, .00039]	[-.00012, .00089]	[-.00095, .00056]	[-.0015, .0014]	[-.00057, .00031]	[-.00059, .00089]	[-.0008, .00016]	[-.0015, .00017]
Dominican Republic	-.016	-.017	.0012 (-8)	.000053 (-0)	-.00036 (2)	.00014 (-1)	.0015 (-10)	-.0003 (2)	.000022 (-0)	.000043 (-0)	.000084 (-1)
(n=3,028)	[-.048, .016]	[-.049, .014]	[-.0026, .005]	[-.00047, .00058]	[-.0014, .00066]	[-.00053, .00082]	[-.0011, .0042]	[-.0027, .0021]	[-.0004, .00045]	[-.0013, .0014]	[-.00043, .0006]
Fiji	-.057**	-.061**	.0043 (-8)	.0036 (-6)	.0032 (-6)	-.00039 (1)	-.0055 (10)	.00022 (-0)	.0023 (-4)	-.0007 (1)	.0016 (-3)
(n=706)	[-.1, -.01]	[-.11, -.014]	[-.015, .024]	[-.0033, .011]	[-.0057, .012]	[-.0023, .0015]	[-.02, .0089]	[-.0018, .0022]	[-.0028, .0074]	[-.0041, .0027]	[-.0028, .0059]
Lao	-.025	-.022	-.0025 (10)	-.000083 (0)	-.0019 (8)	.00024 (-1)	-.00075 (3)	.000017 (-0)	.0002 (-1)	-6.1e-06 (0)	-.00024 (1)
(n=4,304)	[-.065, .016]	[-.063, .018]	[-.0062, .0012]	[-.0012, .0011]	[-.0048, .001]	[-.0011, .0016]	[-.0026, .0011]	[-.0019, .0019]	[-.00061, .001]	[-.0005, .00049]	[-.0012, .00069]
Mongolia	.0095	.014	-.0046 (-49)	-.00047 (-5)	.00017 (2)	.00056 (6)	-.0019 (-20)	-.0019 (-20)	-.00021 (-2)	-.000034 (-0)	-.0009 (-9)
(n=1,691)	[-.053, .072]	[-.048, .076]	[-.012, .0031]	[-.0022, .0013]	[-.0013, .0017]	[-.0015, .0026]	[-.0059, .0021]	[-.0068, .0031]	[-.0019, .0015]	[-.00043, .00036]	[-.004, .0022]
Pakistan: Balochistan	-.014	-.012	-.0024 (18)	.00028 (-2)	.0026 (-19)	-.0034* (24)	-.00039 (3)	-.0014 (10)	-.0025 (18)	.00015 (-1)	.0022 (-15)
(n=3,629)	[-.061, .033]	[-.058, .035]	[-.0082, .0033]	[-.0017, .0023]	[-.0014, .0066]	[-.007, .00031]	[-.0016, .00078]	[-.0041, .0012]	[-.0062, .0012]	[-.00063, .00092]	[-.00085, .0052]
Pakistan: Khyber Pakhtunkhwa	.031	.037*	-.0055* (-18)	.00012 (0)	.0022 (7)	-.0031** (-10)	-.0042* (-13)	-.0011 (-3)	-.000074 (-0)	-1.8e-06 (-0)	.00058 (2)
(n=4,830)	[-.011, .073]	[-.0049, .078]	[-.011, .000097]	[-.0018, .0021]	[-.0005, .0049]	[-.0061, -.000034]	[-.0085, .000045]	[-.003, .0009]	[-.00052, .00037]	[-.00039, .00039]	[-.0013, .0024]
Pakistan: Punjab	.035**	.03**	.0049 (14)	-.00041 (-1)	.00024 (1)	-.0003 (-1)	.0053 (15)	.00011 (0)	-.00054 (-2)	.000042 (0)	.00048 (1)
(n=8,945)	[.0038, .066]	[.00046, .059]	[-.0037, .014]	[-.0018, .00098]	[-.00093, .0014]	[-.0022, .0016]	[-.0024, .013]	[-.00034, .00057]	[-.0018, .00068]	[-.00051, .00059]	[-.00079, .0017]
Pakistan: Sindh	.039	.046	-.0077* (-20)	-.000048 (-0)	.00085 (2)	-.0036 (-9)	-.0043 (-11)	-.00032 (-1)	6.1e-06 (0)	-.00054 (-1)	.00021 (1)
(n=3,431)	[-.019, .097]	[-.0098, .1]	[-.017, .0012]	[-.00058, .00048]	[-.0026, .0043]	[-.0086, .0014]	[-.01, .0018]	[-.0016, .00097]	[-.00095, .00096]	[-.0022, .0011]	[-.0014, .0019]
Samoa	-.055*	-.069**	.015 (-27)	.0036 (-7)	.000099 (-0)	.0073 (-13)	-.0014 (3)	.0011 (-2)	.0023 (-4)	.0013 (-2)	.00045 (-1)
(n=513)	[-.11, .001]	[-.13, -.0088]	[-.0063, .036]	[-.0082, .015]	[-.0067, .0069]	[-.0046, .019]	[-.0052, .0024]	[-.0029, .0051]	[-.0075, .012]	[-.0061, .0088]	[-.0024, .0033]

	Difference for having a washer		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Suriname	.046	.053	-.0073 (-16)	-.0021 (-5)	-.000092 (-0)	-.0041 (-9)	-.001 (-2)	.001 (2)	.0002 (0)	.00032 (1)	-.0015 (-3)
(n=807)	[-.046, .14]	[-.036, .14]	[-.019, .0046]	[-.0082, .004]	[-.0044, .0042]	[-.012, .0036]	[-.0055, .0035]	[-.0026, .0047]	[-.0013, .0017]	[-.005, .0056]	[-.0059, .003]
Viet Nam	.023	.013	.0099 (44)	.00086 (4)	.0035 (15)	.0023 (10)	.003 (13)	.00027 (1)	.000018 (0)	.000024 (0)	-.000025 (-0)
(n=1,589)	[-.027, .072]	[-.037, .063]	[-.0033, .023]	[-.0045, .0062]	[-.0024, .0094]	[-.0018, .0064]	[-.0052, .011]	[-.0052, .0057]	[-.0009, .00094]	[-.00047, .00052]	[-.0017, .0017]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.5. Difference in school attendance for having a fridge and decomposition of that difference into components explained by Household

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	.042***	.042***	.00054 (1)	.000063 (0)	-.00009 (-0)	.000015 (0)	-9.4e-06 (-0)	.000054 (0)	.000027 (0)	.00011 (0)	.00036 (1)
(n=37,277)	[.026, .059]	[.026, .058]	[-.001, .0021]	[-.00024, .00036]	[-.00081, .00063]	[-.00011, .00014]	[-.00038, .00036]	[-.00016, .00026]	[-.0001, .00016]	[-.00016, .00038]	[-.0007, .0014]
Dominican Republic	.053***	.053***	.00015 (0)	-.0011 (-2)	.00083 (2)	-.000041 (-0)	.0016 (3)	-.00092 (-2)	4.5e-06 (0)	.00026 (0)	-.00047 (-1)
(n=3,414)	[.015, .091]	[.015, .091]	[-.0045, .0048]	[-.0031, .00092]	[-.0012, .0028]	[-.00042, .00034]	[-.0015, .0046]	[-.0029, .001]	[-.00011, .00012]	[-.0015, .002]	[-.0017, .0008]
Fiji	-.058	-.055	-.0037 (6)	-.0011 (2)	-.0023 (4)	.0012 (-2)	.00072 (-1)	-.00013 (0)	-.00038 (1)	.00013 (-0)	-.0019 (3)
(n=764)	[-.14, .019]	[-.13, .024]	[-.018, .011]	[-.0048, .0027]	[-.0083, .0036]	[-.0052, .0076]	[-.0052, .0067]	[-.0016, .0013]	[-.003, .0022]	[-.0036, .0038]	[-.0073, .0035]
Lao	.022	.02	.0017 (8)	-.000042 (-0)	.0025 (11)	.00014 (1)	-4.3e-07 (-0)	.000084 (0)	-.00048 (-2)	-.00057 (-3)	.000091 (0)
(n=4,399)	[-.017, .061]	[-.019, .059]	[-.0028, .0061]	[-.0005, .00042]	[-.0016, .0065]	[-.00099, .0013]	[-.0015, .0015]	[-.00076, .00093]	[-.0017, .00071]	[-.0019, .00081]	[-.00044, .00062]
Mongolia	-.028	-.03*	.0021 (-8)	.0015 (-5)	.00047 (-2)	.00042 (-2)	.0016 (-6)	-.00087 (3)	.00022 (-1)	-.000083 (0)	-.0011 (4)
(n=1,839)	[-.063, .0076]	[-.065, .0053]	[-.004, .0083]	[-.0011, .0041]	[-.0012, .0022]	[-.0017, .0026]	[-.00093, .0042]	[-.0037, .0019]	[-.00078, .0012]	[-.0014, .0013]	[-.0044, .0021]
Pakistan: Balochistan	.061**	.061**	-.00034 (-1)	-.00045 (-1)	-.00055 (-1)	.00002 (0)	.000025 (0)	-.000063 (-0)	.00014 (0)	.000066 (0)	.00047 (1)
(n=4,140)	[.012, .11]	[.012, .11]	[-.0045, .0039]	[-.0022, .0013]	[-.0021, .00096]	[-.0016, .0017]	[-.00058, .00063]	[-.0013, .0011]	[-.00084, .0011]	[-.0006, .00073]	[-.0018, .0028]
Pakistan: Khyber Pakhtunkhwa	.032*	.034*	-.0012 (-4)	-.000067 (-0)	.00018 (1)	-.00046 (-1)	-.00013 (-0)	-.00011 (-0)	-.00024 (-1)	-.00021 (-1)	-.00019 (-1)
(n=5,542)	[-.0046, .069]	[-.0032, .07]	[-.0049, .0025]	[-.00046, .00033]	[-.00068, .001]	[-.0018, .00091]	[-.0019, .0016]	[-.00058, .00035]	[-.0018, .0013]	[-.0012, .00077]	[-.0028, .0024]
Pakistan: Punjab	.033**	.034**	-.0011 (-3)	-.00016 (-0)	.00093* (3)	.000085 (0)	.00071 (2)	-.00087 (-3)	-4.0e-07 (-0)	3.2e-06 (0)	-.0017 (-5)
(n=10,075)	[.0068, .059]	[.0081, .06]	[-.0046, .0025]	[-.00074, .00042]	[-.00012, .002]	[-.00049, .00066]	[-.0015, .0029]	[-.002, .00024]	[-.00011, .00011]	[-.00027, .00028]	[-.0047, .0012]
Pakistan: Sindh	.089***	.09***	-.00047 (-1)	.000039 (0)	-.00023 (-0)	-.0013 (-1)	-.00038 (-0)	.00053 (1)	.00045 (1)	.00025 (0)	.00021 (0)
(n=3,854)	[.031, .15]	[.032, .15]	[-.0062, .0052]	[-.00046, .00054]	[-.0014, .00089]	[-.004, .0014]	[-.0034, .0026]	[-.0027, .0037]	[-.0019, .0028]	[-.0011, .0016]	[-.00073, .0011]
Samoa	.083***	.087***	-.0035 (-4)	.0015 (2)	-.0005 (-1)	-.00014 (-0)	-.000063 (-0)	-.0037 (-4)	.00001 (0)	.000073 (0)	-.00071 (-1)
(n=598)	[.03, .14]	[.033, .14]	[-.019, .012]	[-.0031, .006]	[-.0046, .0036]	[-.0017, .0014]	[-.0051, .005]	[-.011, .0034]	[-.0016, .0016]	[-.0018, .0019]	[-.012, .01]
Suriname	.022	.013	.0094 (43)	-.000033 (-0)	.0011 (5)	.00035 (2)	-.0023 (-10)	-.00049 (-2)	-.00098 (-4)	.0078 (35)	.0039 (18)
(n=884)	[-.078, .12]	[-.088, .11]	[-.0069, .026]	[-.0034, .0034]	[-.0047, .0069]	[-.0021, .0028]	[-.0086, .004]	[-.0033, .0023]	[-.0047, .0027]	[-.002, .018]	[-.0036, .011]

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Viet Nam	-.0041	.002	-.0061 (148)	-.001 (24)	-.0037 (91)	.00057 (-14)	.0006 (-15)	-.0021 (52)	-.000094 (2)	-.00014 (3)	-.00013 (3)
(n=1,768)	[-.08, .072]	[-.074, .078]	[-.017, .0048]	[-.0042, .0022]	[-.011, .0032]	[-.0032, .0044]	[-.005, .0063]	[-.0064, .0021]	[-.003, .0028]	[-.0027, .0024]	[-.0012, .00094]
Girls											
Pooled	.027***	.027***	-.0006 (-2)	.000015 (0)	-.00059** (-2)	.0002 (1)	.00032 (1)	-.000067 (-0)	-.00015 (-1)	.000015 (0)	-.00035 (-1)
(n=33,473)	[.012, .042]	[.013, .042]	[-.0027, .0016]	[-.0003, .00033]	[-.0012, -.000011]	[-.0006, .001]	[-.0013, .0019]	[-.00049, .00036]	[-.00089, .00059]	[-.00034, .00038]	[-.0011, .00044]
Dominican Republic	.031	.03	.00053 (2)	-.00005 (-0)	.00056 (2)	-.00015 (-0)	-.0015 (-5)	.00015 (0)	-7.8e-06 (-0)	.0015 (5)	7.5e-06 (0)
(n=3,028)	[-.015, .076]	[-.015, .075]	[-.0043, .0054]	[-.00068, .00058]	[-.00075, .0019]	[-.00084, .00055]	[-.0051, .0021]	[-.0023, .0026]	[-.00018, .00017]	[-.00055, .0035]	[-.00028, .0003]
Fiji	-.028	-.022	-.0056 (20)	.0003 (-1)	-.0034 (12)	-.00028 (1)	-.0011 (4)	.0017 (-6)	-.0024 (8)	-.00052 (2)	9.6e-06 (-0)
(n=706)	[-.081, .025]	[-.076, .031]	[-.02, .0091]	[-.0032, .0038]	[-.012, .005]	[-.002, .0014]	[-.011, .0089]	[-.0023, .0056]	[-.008, .0033]	[-.0042, .0032]	[-.0022, .0022]
Lao	-.022	-.022	-.00011 (1)	.000037 (-0)	.00047 (-2)	-.0004 (2)	-.00015 (1)	8.1e-07 (-0)	.000033 (-0)	3.1e-06 (-0)	-.0001 (0)
(n=4,304)	[-.063, .018]	[-.063, .019]	[-.0033, .003]	[-.00048, .00056]	[-.0023, .0033]	[-.0017, .00091]	[-.0013, .00098]	[-.000092, .000093]	[-.00035, .00041]	[-.00042, .00043]	[-.00063, .00042]
Mongolia	.0019	.0029	-.00099 (-52)	.0003 (16)	.000034 (2)	-.000034 (-2)	-.00004 (-2)	-.001 (-53)	-.00087 (-46)	-.000048 (-3)	.00066 (35)
(n=1,691)	[-.024, .028]	[-.023, .029]	[-.0049, .0029]	[-.00089, .0015]	[-.00032, .00039]	[-.00098, .00091]	[-.0018, .0017]	[-.0034, .0014]	[-.0028, .0011]	[-.00051, .00042]	[-.001, .0024]
Pakistan: Balochistan	.048**	.046**	.0017 (4)	-3.7e-06 (-0)	-.0011 (-2)	-.00046 (-1)	.00045 (1)	-.0003 (-1)	.00022 (0)	.000066 (0)	.0029 (6)
(n=3,629)	[.0049, .091]	[.0034, .089]	[-.0042, .0076]	[-.00029, .00028]	[-.0034, .0012]	[-.0034, .0025]	[-.0014, .0023]	[-.0018, .0012]	[-.0015, .002]	[-.00046, .0006]	[-.00089, .0067]
Pakistan: Khyber Pakhtunkhwa	.0096	.012	-.002 (-21)	-.00055 (-6)	-.00023 (-2)	-.0018 (-19)	.00091 (9)	-.00043 (-4)	.000039 (0)	.000028 (0)	.000052 (1)
(n=4,830)	[-.033, .052]	[-.03, .053]	[-.0073, .0033]	[-.0026, .0015]	[-.0023, .0018]	[-.0043, .00066]	[-.0026, .0044]	[-.0018, .00097]	[-.00032, .0004]	[-.00039, .00044]	[-.0016, .0017]
Pakistan: Punjab	.039**	.036**	.0031 (8)	.00021 (1)	-.00079 (-2)	.0019* (5)	.003 (8)	-.00026 (-1)	-4.7e-06 (-0)	.0002 (1)	-.0011* (-3)
(n=8,945)	[.0089, .069]	[.0072, .064]	[-.0049, .011]	[-.00052, .00094]	[-.002, .00046]	[-.0001, .0039]	[-.0042, .01]	[-.00097, .00045]	[-.00035, .00034]	[-.00041, .00081]	[-.0024, .00017]
Pakistan: Sindh	.041	.037	.0042 (10)	.00048 (1)	-.0011 (-3)	.0054* (13)	.00072 (2)	-.00086 (-2)	-.000015 (-0)	.00083 (2)	-.0012 (-3)
(n=3,431)	[-.016, .098]	[-.019, .093]	[-.0044, .013]	[-.0021, .003]	[-.0057, .0034]	[-.00036, .011]	[-.0041, .0056]	[-.0035, .0018]	[-.0023, .0023]	[-.0012, .0029]	[-.0034, .00097]
Samoa	.027	.026	.00091 (3)	.0027 (10)	-.0055 (-21)	-.000044 (-0)	.0011 (4)	-.00011 (-0)	.0017 (6)	.00011 (0)	.00093 (3)
(n=513)	[-.029, .083]	[-.032, .083]	[-.016, .018]	[-.0064, .012]	[-.014, .0026]	[-.0037, .0036]	[-.0021, .0044]	[-.0019, .0016]	[-.0067, .01]	[-.0012, .0014]	[-.0042, .0061]

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Suriname	.018	.015	.0029 (16)	-.0024 (-13)	.0014 (8)	.0043 (23)	.0025 (14)	-.0011 (-6)	-.00021 (-1)	-.0021 (-12)	.00049 (3)
(n=807)	[-.041, .077]	[-.044, .074]	[-.012, .018]	[-.0089, .0042]	[-.0036, .0064]	[-.0036, .012]	[-.0047, .0097]	[-.0047, .0025]	[-.0017, .0013]	[-.0086, .0044]	[-.0025, .0035]
Viet Nam	.018	.029	-.01 (-55)	-.000073 (-0)	-.0024 (-13)	-.0012 (-7)	-.0067 (-37)	.000071 (0)	2.5e-06 (0)	.00024 (1)	.000016 (0)
(n=1,589)	[-.059, .096]	[-.046, .1]	[-.025, .0052]	[-.00086, .00071]	[-.01, .0057]	[-.0053, .0028]	[-.021, .0071]	[-.0014, .0016]	[-.00016, .00017]	[-.0042, .0047]	[-.0011, .0011]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.6. Difference in school attendance for having a stove and decomposition of that difference into components explained by Household

	Difference for having a stove		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	-.018	-.016	-.0011 (6)	-.00013 (1)	.00061 (-3)	-6.7e-06 (0)	-.00017 (1)	.00015 (-1)	-6.5e-06 (0)	.000052 (-0)	-.0016** (9)
(n=37,277)	[-.039, .0042]	[-.038, .0052]	[-.0031, .00096]	[-.00073, .00048]	[-.00037, .0016]	[-.00016, .00014]	[-.00067, .00032]	[-.00032, .00062]	[-.00013, .00012]	[-.0002, .0003]	[-.0029, -.00023]
Dominican Republic	-.0043	-.0063	.0021 (-49)	.00021 (-5)	.0023 (-55)	-.00021 (5)	.00059 (-14)	-.00035 (8)	-.000033 (1)	.00014 (-3)	-.00059 (14)
(n=3,414)	[-.063, .054]	[-.065, .052]	[-.0036, .0078]	[-.0021, .0025]	[-.0011, .0058]	[-.0015, .0011]	[-.0035, .0047]	[-.0019, .0012]	[-.00077, .00071]	[-.00087, .0012]	[-.0023, .0011]
Fiji	-.017	-.014	-.0023 (14)	.0028 (-17)	.0011 (-7)	-.00058 (3)	-.0059 (35)	.00018 (-1)	.00018 (-1)	.00019 (-1)	-.00029 (2)
(n=764)	[-.079, .046]	[-.078, .049]	[-.014, .0089]	[-.0029, .0084]	[-.0025, .0048]	[-.004, .0029]	[-.015, .0031]	[-.0015, .0018]	[-.0012, .0015]	[-.0051, .0054]	[-.0029, .0024]
Lao	-.0029	-.00082	-.0021 (72)	-.00052 (18)	-.00058 (20)	-.0013 (44)	.00016 (-5)	.000029 (-1)	.00071 (-25)	-.00026 (9)	-.00034 (12)
(n=4,399)	[-.046, .04]	[-.043, .042]	[-.0085, .0044]	[-.0022, .0011]	[-.0062, .0051]	[-.0035, .00095]	[-.00063, .00095]	[-.0013, .0014]	[-.00096, .0024]	[-.0014, .00091]	[-.0016, .00088]
Mongolia	-.02	-.027	.0077* (-39)	-.00087 (4)	-.0006 (3)	.0025 (-13)	.0011 (-6)	.0011 (-5)	.00019 (-1)	.0021 (-11)	.0022 (-11)
(n=1,839)	[-.057, .017]	[-.065, .0097]	[-.0003, .016]	[-.0036, .0018]	[-.0026, .0014]	[-.0016, .0066]	[-.0019, .004]	[-.0022, .0043]	[-.00084, .0012]	[-.0013, .0055]	[-.0023, .0068]
Pakistan: Balochistan	-.015	-.019	.004 (-26)	.000043 (-0)	.0018 (-12)	.000029 (-0)	-.00032 (2)	.0021 (-14)	.00069 (-5)	-.00031 (2)	-.000076 (0)
(n=4,140)	[-.078, .048]	[-.083, .044]	[-.002, .01]	[-.0008, .00088]	[-.0019, .0056]	[-.0023, .0024]	[-.0019, .0013]	[-.002, .0062]	[-.0012, .0026]	[-.0032, .0026]	[-.00073, .00058]
Pakistan: Khyber Pakhtunkhwa	-.049**	-.044**	-.0046* (10)	-.00031 (1)	.00074 (-2)	-.00091 (2)	-.00015 (0)	.0003 (-1)	-.0025* (5)	.000071 (-0)	-.0019 (4)
(n=5,542)	[-.092, -.0053]	[-.088, -.00089]	[-.0097, .00042]	[-.0017, .0011]	[-.00081, .0023]	[-.0027, .0009]	[-.0016, .0013]	[-.00065, .0012]	[-.0053, .00033]	[-.00041, .00055]	[-.0054, .0016]
Pakistan: Punjab	-.00065	.000048	-.00069 (107)	-.00013 (20)	-.001 (162)	.00052 (-81)	.00013 (-20)	-.0003 (46)	3.4e-06 (-1)	.00014 (-22)	-9.9e-06 (2)
(n=10,075)	[-.036, .034]	[-.034, .035]	[-.0055, .0041]	[-.00094, .00068]	[-.0025, .00036]	[-.00049, .0015]	[-.0026, .0028]	[-.0012, .00062]	[-.00091, .00092]	[-.00039, .00067]	[-.0039, .0039]
Pakistan: Sindh	-.01	-.013	.0027 (-28)	.000023 (-0)	.0012 (-12)	.0011 (-11)	.0004 (-4)	.00077 (-8)	-.00037 (4)	-.00067 (7)	.00025 (-3)
(n=3,854)	[-.079, .059]	[-.082, .056]	[-.0026, .0081]	[-.00035, .00039]	[-.0018, .0043]	[-.0013, .0035]	[-.0011, .0019]	[-.0028, .0044]	[-.0023, .0015]	[-.0027, .0014]	[-.001, .0015]
Samoa	-.051	-.021	-.029** (58)	-.0014 (3)	-.00067 (1)	.00042 (-1)	-.0042 (8)	-.0037 (7)	-.00002 (0)	-.0015 (3)	-.018** (36)
(n=598)	[-.14, .041]	[-.12, .075]	[-.054, -.0043]	[-.0062, .0034]	[-.0065, .0052]	[-.004, .0049]	[-.015, .0063]	[-.014, .0068]	[-.0031, .0031]	[-.007, .0041]	[-.035, -.0018]
Suriname	.045	.035	.01 (22)	-.0018 (-4)	.0044 (10)	-.00036 (-1)	.013 (28)	-.0018 (-4)	.00067 (1)	-.0022 (-5)	-.0015 (-3)
(n=884)	[-.072, .16]	[-.079, .15]	[-.029, .049]	[-.0069, .0033]	[-.0053, .014]	[-.0028, .002]	[-.021, .047]	[-.0083, .0048]	[-.0031, .0045]	[-.015, .011]	[-.0072, .0041]
Viet Nam	.012	.0022	.0096 (81)	.00086 (7)	.0041 (35)	.0026 (22)	-.0027 (-23)	.0031 (27)	.0014 (12)	.000038 (0)	.00012 (1)

	Difference for having a stove		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
(n=1,768)	[-.074, .098]	[-.082, .086]	[-.0024, .022]	[-.0026, .0043]	[-.0041, .012]	[-.0024, .0076]	[-.01, .0049]	[-.0019, .0082]	[-.0018, .0046]	[-.00063, .0007]	[-.0011, .0013]
Girls											
Pooled	-.0048	-.0057	.00088 (-18)	5.3e-06 (-0)	.00033 (-7)	-.00046 (10)	-.0001 (2)	.000088 (-2)	.00033 (-7)	.00043 (-9)	.00027 (-6)
(n=33,473)	[-.025, .015]	[-.026, .014]	[-.0017, .0035]	[-.0001, .00011]	[-.00026, .00092]	[-.0015, .00055]	[-.002, .0018]	[-.00046, .00063]	[-.00063, .0013]	[-.00021, .0011]	[-.00069, .0012]
Dominican Republic	-.019	-.015	-.0045 (23)	.000065 (-0)	-.00093 (5)	-.00051 (3)	.0012 (-6)	-.0038 (20)	-.000038 (0)	-.00015 (1)	-.00034 (2)
(n=3,028)	[-.081, .042]	[-.076, .046]	[-.011, .0022]	[-.00079, .00092]	[-.0031, .0012]	[-.002, .001]	[-.0027, .0051]	[-.0085, .00078]	[-.00077, .00069]	[-.0029, .0026]	[-.0022, .0015]
Fiji	.0045	.0055	-.00098 (-22)	-.00092 (-20)	-.00013 (-3)	-.00066 (-14)	-.0045 (-99)	.001 (22)	.004 (88)	.0009 (20)	-.00067 (-15)
(n=706)	[-.053, .062]	[-.05, .061]	[-.018, .016]	[-.0041, .0023]	[-.0067, .0064]	[-.0039, .0026]	[-.016, .0072]	[-.0019, .0039]	[-.0037, .012]	[-.0025, .0043]	[-.0034, .0021]
Lao	-.018	-.02	.0019 (-11)	.00011 (-1)	.00014 (-1)	.00088 (-5)	.00046 (-3)	-.000011 (0)	.000043 (-0)	-.00022 (1)	.0005 (-3)
(n=4,304)	[-.064, .028]	[-.066, .026]	[-.004, .0078]	[-.0014, .0017]	[-.0042, .0044]	[-.0015, .0033]	[-.0022, .0032]	[-.0012, .0012]	[-.00056, .00064]	[-.0012, .00074]	[-.0013, .0023]
Mongolia	.014	.018	-.0048* (-35)	.00013 (1)	-.000038 (-0)	-.0003 (-2)	-.0013 (-10)	-.0027 (-20)	.00059 (4)	-.00012 (-1)	-.001 (-7)
(n=1,691)	[-.021, .048]	[-.016, .053]	[-.01, .00076]	[-.00062, .00088]	[-.00048, .0004]	[-.0017, .0011]	[-.0045, .0018]	[-.0064, .00088]	[-.0011, .0023]	[-.0012, .001]	[-.0032, .0012]
Pakistan: Balochistan	-.063**	-.063**	.00063 (-1)	-.00016 (0)	.00054 (-1)	-.0016 (3)	.00017 (-0)	-.00029 (0)	.00066 (-1)	-.00019 (0)	.0015 (-2)
(n=3,629)	[-.12, -.0021]	[-.12, -.0027]	[-.0055, .0068]	[-.0013, .001]	[-.0019, .0029]	[-.0056, .0024]	[-.0012, .0016]	[-.0023, .0017]	[-.0017, .003]	[-.0012, .00081]	[-.0024, .0054]
Pakistan: Khyber Pakhtunkhwa	.018	.016	.0025 (14)	-.000063 (-0)	.000049 (0)	.0013 (7)	.0022 (12)	-.000044 (-0)	-.00025 (-1)	-.0001 (-1)	-.00054 (-3)
(n=4,830)	[-.033, .069]	[-.035, .067]	[-.0037, .0087]	[-.0024, .0023]	[-.0024, .0025]	[-.0014, .0039]	[-.002, .0064]	[-.0016, .0015]	[-.0015, .00097]	[-.00072, .00051]	[-.0026, .0015]
Pakistan: Punjab	-.015	-.0063	-.009* (59)	-.00016 (1)	.0018* (-12)	-.0021 (14)	-.008* (53)	-.000016 (0)	.000018 (-0)	-.000082 (1)	-.00043 (3)
(n=8,945)	[-.051, .021]	[-.041, .028]	[-.019, .0015]	[-.00079, .00047]	[-.00016, .0038]	[-.0048, .00054]	[-.017, .0013]	[-.00051, .00048]	[-.00046, .0005]	[-.0008, .00063]	[-.002, .0012]
Pakistan: Sindh	.027	.032	-.0052 (-20)	.00034 (1)	.0002 (1)	-.0039 (-14)	-.0011 (-4)	.00052 (2)	-5.7e-06 (-0)	-.0014 (-5)	.00016 (1)
(n=3,431)	[-.06, .11]	[-.052, .12]	[-.017, .0069]	[-.0015, .0022]	[-.0011, .0015]	[-.011, .003]	[-.0086, .0064]	[-.0014, .0024]	[-.00089, .00088]	[-.0047, .0018]	[-.0018, .0021]
Samoa	.043	.044	-.00089 (-2)	.000028 (0)	.0032 (7)	.0012 (3)	-.0017 (-4)	.00042 (1)	-.0027 (-6)	-.0014 (-3)	.000069 (0)
(n=513)	[-.025, .11]	[-.026, .11]	[-.018, .016]	[-.003, .003]	[-.0067, .013]	[-.0035, .0058]	[-.0079, .0045]	[-.0019, .0027]	[-.012, .0069]	[-.009, .0063]	[-.0012, .0014]
Suriname	-.031	-.031	.00015 (-0)	-.0008 (3)	.0029 (-9)	-.0032 (10)	-.0029 (9)	.0021 (-7)	-.0003 (1)	.0033 (-11)	-.001 (3)

	Difference for having a stove		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
(n=807)	[-.13, .066]	[-.13, .065]	[-.016, .016]	[-.0045, .0029]	[-.0035, .0093]	[-.011, .0043]	[-.012, .0064]	[-.0037, .0079]	[-.0023, .0017]	[-.0054, .012]	[-.005, .0029]
Viet Nam	-.043	-.044	.0012 (-3)	-.00003 (0)	.0012 (-3)	-.000018 (0)	.00005 (-0)	-.000028 (0)	-9.3e-07 (0)	-.00004 (0)	.000036 (-0)
(n=1,589)	[-.13, .039]	[-.13, .037]	[-.013, .015]	[-.00074, .00068]	[-.0058, .0082]	[-.0037, .0037]	[-.013, .013]	[-.00065, .0006]	[-.0001, .000099]	[-.0008, .00072]	[-.0024, .0024]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.7. Difference in the number of mistakes on a numeracy test (0–11) for having a washer and decomposition of that difference into components explained by Household

	Difference for having a washer		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	.01	-.0025	.013* (124)	.0012 (12)	.00057 (6)	.00041 (4)	.003 (29)	.00025 (2)	.0011 (11)	.0039 (38)	.0022 (21)
(n=6,696)	[-.2, .22]	[-.22, .21]	[-.0012, .027]	[-.0033, .0057]	[-.0028, .0039]	[-.0018, .0026]	[-.0026, .0086]	[-.0014, .0019]	[-.0033, .0056]	[-.0042, .012]	[-.0033, .0077]
Mongolia	.027	.043	-.016 (-59)	.016 (60)	-.01 (-37)	.0018 (7)	-.0055 (-21)	-.0078 (-29)	-.0089 (-33)	-.0039 (-14)	.0021 (8)
(n=1,102)	[-.28, .33]	[-.27, .36]	[-.089, .058]	[-.023, .056]	[-.037, .017]	[-.017, .02]	[-.043, .032]	[-.039, .024]	[-.044, .026]	[-.018, .011]	[-.015, .019]
Pakistan: Khyber Pakhtunkhwa	-.031	-.036	.0056 (-18)	.014 (-47)	-.017 (54)	.012 (-38)	-.044 (142)	.015 (-49)	.000083 (-0)	.015 (-49)	.0093 (-30)
(n=1,391)	[-.57, .5]	[-.58, .5]	[-.071, .082]	[-.021, .05]	[-.09, .056]	[-.021, .044]	[-.1, .016]	[-.032, .062]	[-.034, .034]	[-.024, .054]	[-.025, .043]
Pakistan: Punjab	.11	.1	.01 (9)	.0011 (1)	.000042 (0)	.0017 (2)	-.0046 (-4)	-.0012 (-1)	.006 (5)	.0064 (6)	.00065 (1)
(n=2,565)	[-.21, .44]	[-.22, .43]	[-.018, .039]	[-.0056, .0078]	[-.013, .013]	[-.013, .016]	[-.015, .0057]	[-.0083, .0059]	[-.012, .024]	[-.011, .024]	[-.0076, .0089]
Pakistan: Sindh	-.18	-.15	-.031 (17)	.0023 (-1)	-.011 (6)	.0021 (-1)	-.016 (9)	-.0053 (3)	-.000062 (0)	-.0028 (2)	.00068 (-0)
(n=772)	[-.92, .56]	[-.9, .6]	[-.12, .055]	[-.014, .019]	[-.042, .019]	[-.012, .016]	[-.076, .043]	[-.039, .029]	[-.044, .044]	[-.048, .042]	[-.034, .036]
Viet Nam	.014	.0021	.012 (84)	.00022 (2)	.0002 (1)	-4.7e-07 (-0)	.0079 (58)	.007 (51)	.0016 (12)	-.0022 (-16)	-.0033 (-24)
(n=866)	[-.13, .15]	[-.14, .14]	[-.022, .045]	[-.0068, .0072]	[-.0021, .0025]	[-.00028, .00028]	[-.015, .031]	[-.01, .024]	[-.0089, .012]	[-.011, .0068]	[-.013, .0068]
Girls											
Pooled	-.17	-.16	-.017 (10)	.00037 (-0)	-.017 (10)	.013 (-8)	-.011 (7)	-.0012 (1)	.0029 (-2)	-.0025 (1)	-.0023 (1)
(n=5,620)	[-.41, .066]	[-.39, .082]	[-.049, .015]	[-.0065, .0072]	[-.038, .0046]	[-.0035, .03]	[-.026, .0031]	[-.0075, .0051]	[-.012, .018]	[-.01, .0053]	[-.015, .01]
Mongolia	-.016	-.015	-.00043 (3)	.01 (-64)	-.00067 (4)	.00036 (-2)	-.0054 (35)	.0053 (-34)	.0012 (-7)	-.0011 (7)	-.01 (64)
(n=1,076)	[-.34, .3]	[-.35, .32]	[-.062, .061]	[-.027, .047]	[-.014, .013]	[-.018, .019]	[-.021, .01]	[-.016, .026]	[-.011, .013]	[-.0083, .0061]	[-.034, .014]
Pakistan: Khyber Pakhtunkhwa	.34	.45	-.11 (-32)	.0029 (1)	.023 (7)	.0079 (2)	-.16** (-46)	.0027 (1)	.0025 (1)	-.023 (-7)	.033 (10)
(n=789)	[-.36, 1]	[-.25, 1.2]	[-.32, .097]	[-.037, .043]	[-.05, .095]	[-.055, .071]	[-.31, -.0063]	[-.038, .043]	[-.016, .021]	[-.075, .029]	[-.053, .12]
Pakistan: Punjab	-.17	-.18	.013 (-8)	.0012 (-1)	-.0046 (3)	.011 (-6)	.0063 (-4)	-.00053 (0)	-.0012 (1)	.00066 (-0)	.00097 (-1)
(n=2,457)	[-.52, .19]	[-.54, .18]	[-.039, .065]	[-.022, .025]	[-.026, .016]	[-.011, .032]	[-.033, .046]	[-.017, .016]	[-.025, .022]	[-.0062, .0075]	[-.014, .016]
Pakistan: Sindh	-.72	-.62	-.095 (13)	.019 (-3)	-.15 (20)	.041 (-6)	.032 (-4)	-.004 (1)	-.018 (2)	.0025 (-0)	-.021 (3)

	Difference for having a washer		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
(n=479)	[-1.6, .14]	[-1.5, .23]	[-.3, .11]	[-.058, .095]	[-.34, .043]	[-.061, .14]	[-.12, .18]	[-.077, .069]	[-.13, .096]	[-.029, .034]	[-.096, .055]
Viet Nam	.034	-.039	.073 (214)	.0028 (8)	.019 (56)	.01 (30)	.015 (45)	.001 (3)	.015 (43)	.0025 (7)	.0073 (21)
(n=819)	[-.12, .19]	[-.23, .15]	[-.038, .18]	[-.0094, .015]	[-.0078, .046]	[-.028, .048]	[-.029, .059]	[-.011, .013]	[-.024, .053]	[-.0084, .013]	[-.019, .033]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.8. Difference in the number of mistakes on a numeracy test (0–11) for having a fridge and decomposition of that difference into components explained by Household

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	.11	.094	.011 (10)	.00057 (1)	-.0012 (-1)	.002 (2)	.0018 (2)	.000013 (0)	-.00025 (-0)	.0051 (5)	.003 (3)
(n=6,696)	[-.07, .28]	[-.081, .27]	[-.0038, .026]	[-.002, .0031]	[-.0052, .0027]	[-.0032, .0072]	[-.0041, .0077]	[-.0011, .0011]	[-.0029, .0024]	[-.0034, .014]	[-.0037, .0096]
Mongolia	.043	.049	-.0064 (-15)	.0027 (6)	-.001 (-2)	.00095 (2)	-.0059 (-14)	.0037 (9)	-.0053 (-12)	-.0026 (-6)	.001 (2)
(n=1,102)	[-.18, .27]	[-.18, .28]	[-.045, .032]	[-.018, .023]	[-.017, .015]	[-.0086, .01]	[-.02, .0079]	[-.01, .018]	[-.024, .014]	[-.012, .0066]	[-.0075, .0095]
Pakistan: Khyber Pakhtunkhwa	.54**	.53**	.005 (1)	.018 (3)	-.0028 (-1)	-.014 (-3)	.0049 (1)	-.0075 (-1)	-.000046 (-0)	.012 (2)	-.0052 (-1)
(n=1,391)	[.011, 1.1]	[.0076, 1.1]	[-.079, .089]	[-.018, .053]	[-.066, .06]	[-.045, .017]	[-.042, .051]	[-.053, .038]	[-.019, .019]	[-.02, .043]	[-.027, .017]
Pakistan: Punjab	-.05	-.047	-.0023 (5)	.0023 (-5)	9.8e-06 (-0)	.0022 (-5)	-.0091 (18)	.000095 (-0)	-.0019 (4)	.0036 (-7)	.00039 (-1)
(n=2,565)	[-.38, .28]	[-.38, .28]	[-.034, .03]	[-.0086, .013]	[-.0031, .0031]	[-.017, .021]	[-.024, .0058]	[-.0032, .0034]	[-.018, .014]	[-.0082, .015]	[-.0075, .0083]
Pakistan: Sindh	.27	.26	.016 (6)	.0015 (1)	.021 (8)	.0033 (1)	-.00039 (-0)	-.0024 (-1)	-.033 (-12)	.0064 (2)	.02 (7)
(n=772)	[-.41, .95]	[-.43, .94]	[-.092, .12]	[-.014, .017]	[-.041, .084]	[-.016, .022]	[-.035, .035]	[-.045, .041]	[-.11, .046]	[-.044, .057]	[-.038, .077]
Viet Nam	.05	.058	-.0079 (-16)	-.00016 (-0)	-.000012 (-0)	.00024 (0)	-.0036 (-7)	.0011 (2)	-.002 (-4)	-.0017 (-3)	-.0017 (-3)
(n=866)	[-.16, .26]	[-.14, .26]	[-.045, .029]	[-.0052, .0049]	[-.0013, .0013]	[-.016, .016]	[-.029, .022]	[-.014, .016]	[-.014, .0095]	[-.01, .0068]	[-.0094, .006]
Girls											
Pooled	-.13	-.13	.000078 (-0)	.000036 (-0)	.004 (-3)	-.00023 (0)	-.00065 (0)	.00078 (-1)	-.00043 (0)	-.00039 (0)	-.0031 (2)
(n=5,620)	[-.35, .091]	[-.35, .089]	[-.021, .021]	[-.00078, .00085]	[-.0061, .014]	[-.012, .012]	[-.012, .01]	[-.0045, .0061]	[-.0033, .0024]	[-.0043, .0036]	[-.014, .008]
Mongolia	-.088	-.091	.0032 (-4)	-.0048 (5)	.00031 (-0)	-.0049 (6)	.0021 (-2)	.0018 (-2)	.003 (-3)	.0034 (-4)	.0023 (-3)
(n=1,076)	[-.3, .12]	[-.31, .12]	[-.033, .039]	[-.023, .013]	[-.0058, .0064]	[-.019, .0088]	[-.0042, .0085]	[-.0063, .0098]	[-.0058, .012]	[-.0064, .013]	[-.011, .016]
Pakistan: Khyber Pakhtunkhwa	.11	.049	.063 (56)	-.02 (-18)	.017 (15)	.068 (61)	.0068 (6)	-.026 (-23)	.0067 (6)	.014 (13)	-.0036 (-3)
(n=789)	[-.52, .74]	[-.56, .66]	[-.12, .24]	[-.069, .029]	[-.042, .075]	[-.023, .16]	[-.12, .13]	[-.086, .034]	[-.027, .041]	[-.028, .056]	[-.077, .069]
Pakistan: Punjab	-.29*	-.28*	-.0078 (3)	-.00082 (0)	.0048 (-2)	-.0068 (2)	-.0019 (1)	.00016 (-0)	.00026 (-0)	.0017 (-1)	-.0052 (2)
(n=2,457)	[-.6, .029]	[-.59, .038]	[-.051, .035]	[-.017, .015]	[-.014, .024]	[-.023, .0096]	[-.033, .03]	[-.0047, .005]	[-.0048, .0053]	[-.015, .018]	[-.021, .01]

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Pakistan: Sindh	-.29	-.33	.044 (-16)	-.006 (2)	.054 (-19)	-.0041 (1)	-.016 (6)	.0029 (-1)	.018 (-6)	-.0098 (3)	.005 (-2)
(n=479)	[-1.3, .76]	[-1.4, .7]	[-.14, .23]	[-.08, .068]	[-.087, .2]	[-.072, .064]	[-.077, .044]	[-.051, .057]	[-.1, .14]	[-.065, .045]	[-.036, .046]
Viet Nam	-.1	-.041	-.061 (60)	-.00015 (0)	-.016 (16)	-.007 (7)	-.0064 (6)	.00075 (-1)	-.0088 (9)	-.0088 (9)	-.014 (14)
(n=819)	[-.41, .2]	[-.37, .28]	[-.14, .018]	[-.0043, .004]	[-.049, .017]	[-.034, .02]	[-.057, .044]	[-.0084, .0099]	[-.041, .023]	[-.028, .01]	[-.04, .012]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.9. Difference in the number of mistakes on a numeracy test (0–11) for having a stove and decomposition of that difference into components explained by Household

	Difference for having a stove		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	.073	.069	.0034 (5)	.0018 (3)	-.001 (-1)	.002 (3)	-.00057 (-1)	-.00035 (-0)	.001 (1)	.0021 (3)	-.0017 (-2)
(n=6,696)	[-.15, .3]	[-.16, .29]	[-.01, .017]	[-.0047, .0084]	[-.0056, .0036]	[-.0033, .0073]	[-.0061, .005]	[-.0025, .0018]	[-.0033, .0053]	[-.0057, .01]	[-.0076, .0041]
Mongolia	-.15	-.15	-.0016 (1)	.012 (-8)	.00026 (-0)	.0011 (-1)	-.0053 (3)	-.0034 (2)	.0013 (-1)	-.0059 (4)	-.0013 (1)
(n=1,102)	[-.51, .2]	[-.51, .2]	[-.052, .048]	[-.016, .039]	[-.019, .02]	[-.0095, .012]	[-.02, .0091]	[-.02, .013]	[-.019, .022]	[-.023, .011]	[-.013, .01]
Pakistan: Khyber Pakhtunkhwa	.52*	.56*	-.04 (-8)	.015 (3)	-.043 (-8)	.014 (3)	-.018 (-3)	.0085 (2)	.000046 (0)	-.015 (-3)	-.0023 (-0)
(n=1,391)	[-.064, 1.1]	[-.011, 1.1]	[-.16, .075]	[-.028, .059]	[-.12, .038]	[-.02, .047]	[-.075, .039]	[-.042, .059]	[-.019, .019]	[-.058, .028]	[-.02, .015]
Pakistan: Punjab	.2	.19	.012 (6)	.0042 (2)	.000024 (0)	.000076 (0)	-.002 (-1)	.0031 (2)	-.013 (-7)	.018 (9)	.0021 (1)
(n=2,565)	[-.22, .61]	[-.23, .6]	[-.04, .065]	[-.014, .023]	[-.0076, .0076]	[-.0023, .0025]	[-.019, .015]	[-.013, .019]	[-.036, .0091]	[-.024, .06]	[-.0091, .013]
Pakistan: Sindh	-.65	-.6	-.043 (7)	.014 (-2)	-.0046 (1)	-.00028 (0)	.045 (-7)	-.0089 (1)	-.053 (8)	-.0088 (1)	-.027 (4)
(n=772)	[-1.5, .25]	[-1.5, .29]	[-.22, .13]	[-.062, .09]	[-.048, .039]	[-.011, .011]	[-.075, .16]	[-.049, .031]	[-.18, .073]	[-.073, .056]	[-.1, .05]
Viet Nam	.13	.14	-.013 (-10)	-.00005 (-0)	.000037 (0)	.0003 (0)	.0052 (4)	-.011 (-9)	-.0089 (-7)	.0021 (2)	-.00022 (-0)
(n=866)	[-.094, .35]	[-.09, .37]	[-.057, .031]	[-.0017, .0016]	[-.0015, .0015]	[-.02, .021]	[-.023, .033]	[-.035, .012]	[-.029, .011]	[-.0079, .012]	[-.0085, .0081]
Girls											
Pooled	.082	.096	-.014 (-17)	.000039 (0)	-.0034 (-4)	-.00056 (-1)	-.011 (-13)	.0024 (3)	-.00032 (-0)	-.0016 (-2)	.00081 (1)
(n=5,620)	[-.18, .35]	[-.17, .36]	[-.042, .015]	[-.00092, .00099]	[-.015, .0083]	[-.016, .015]	[-.029, .007]	[-.0053, .01]	[-.0034, .0028]	[-.0083, .005]	[-.014, .015]
Mongolia	.062	.066	-.0043 (-7)	-.002 (-3)	-.00026 (-0)	-.0047 (-8)	.00056 (1)	.0083 (13)	.0016 (3)	-.0018 (-3)	-.0061 (-10)
(n=1,076)	[-.17, .3]	[-.17, .31]	[-.047, .038]	[-.012, .0077]	[-.0052, .0047]	[-.02, .01]	[-.024, .025]	[-.02, .037]	[-.0086, .012]	[-.011, .0069]	[-.024, .012]
Pakistan: Khyber Pakhtunkhwa	.12	.2	-.077 (-62)	.0077 (6)	-.0091 (-7)	-.072 (-58)	.075 (61)	-.013 (-10)	-.013 (-10)	-.02 (-16)	-.033 (-27)
(n=789)	[-.57, .82]	[-.48, .89]	[-.27, .11]	[-.034, .05]	[-.049, .031]	[-.17, .027]	[-.048, .2]	[-.062, .037]	[-.07, .045]	[-.078, .037]	[-.13, .059]
Pakistan: Punjab	-.43*	-.4*	-.023 (5)	.00039 (-0)	-.0079 (2)	-.0084 (2)	.0025 (-1)	.00042 (-0)	-.000019 (0)	-.00026 (0)	-.01 (2)
(n=2,457)	[-.88, .028]	[-.86, .051]	[-.066, .02]	[-.0071, .0079]	[-.032, .016]	[-.03, .013]	[-.013, .018]	[-.013, .013]	[-.0015, .0014]	[-.0041, .0035]	[-.033, .013]
Pakistan: Sindh	.82	.87	-.046 (-6)	-.04 (-5)	-.0099 (-1)	.042 (5)	-.019 (-2)	.00063 (0)	-.015 (-2)	.0051 (1)	-.0095 (-1)

	Difference for having a stove		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
(n=479)	[-.52, 2.2]	[-.5, 2.2]	[-.3, .21]	[-.19, .11]	[-.22, .2]	[-.12, .21]	[-.08, .043]	[-.016, .017]	[-.11, .084]	[-.053, .063]	[-.075, .056]
Viet Nam	.072	.062	.0097 (14)	.00065 (1)	.0049 (7)	-.00039 (-1)	-.015 (-21)	-.00046 (-1)	-.0078 (-11)	-.0017 (-2)	.03 (42)
(n=819)	[-.39, .53]	[-.38, .5]	[-.072, .092]	[-.0045, .0058]	[-.022, .032]	[-.01, .0092]	[-.08, .049]	[-.0063, .0054]	[-.046, .031]	[-.014, .011]	[-.0076, .067]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.10. Difference in the number of mistakes on reading comprehension test (0–5) for having a washer and decomposition of that difference into components explained by Household

	Difference for having a washer		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	-.061	-.062	.00065 (-1)	.0016 (-3)	-.00036 (1)	-.00035 (1)	.0011 (-2)	.00016 (-0)	.0015 (-2)	-.0049 (8)	.002 (-3)
(n=6,696)	[-.18, .059]	[-.18, .059]	[-.01, .012]	[-.0019, .0051]	[-.0025, .0018]	[-.0022, .0015]	[-.0012, .0035]	[-.00085, .0012]	[-.0026, .0056]	[-.014, .0039]	[-.0022, .0062]
Mongolia	.092	.082	.0099 (11)	-.0054 (-6)	.0047 (5)	-.0088 (-10)	.0057 (6)	.0013 (1)	.0024 (3)	-.0021 (-2)	.012 (13)
(n=1,102)	[-.19, .38]	[-.21, .37]	[-.039, .059]	[-.021, .011]	[-.0088, .018]	[-.032, .015]	[-.019, .031]	[-.0077, .01]	[-.008, .013]	[-.013, .0084]	[-.017, .041]
Pakistan: Khyber Pakhtunkhwa	-.22	-.2	-.023 (10)	-.0035 (2)	.0016 (-1)	-.0024 (1)	.0056 (-3)	.0011 (-1)	-.0038 (2)	-.012 (5)	-.0097 (4)
(n=1,391)	[-.53, .093]	[-.51, .12]	[-.064, .018]	[-.018, .011]	[-.0068, .0099]	[-.018, .013]	[-.025, .036]	[-.0059, .0081]	[-.025, .017]	[-.037, .013]	[-.032, .013]
Pakistan: Punjab	.13	.14	-.005 (-4)	.0012 (1)	.0078 (6)	-.00071 (-1)	-.00094 (-1)	-.0024 (-2)	.00021 (0)	-.01 (-8)	.00011 (0)
(n=2,565)	[-.057, .32]	[-.05, .32]	[-.027, .017]	[-.004, .0064]	[-.0061, .022]	[-.0097, .0082]	[-.0081, .0063]	[-.011, .0058]	[-.0034, .0038]	[-.026, .006]	[-.0015, .0017]
Pakistan: Sindh	-.22	-.2	-.014 (7)	.00036 (-0)	-.0033 (2)	-.0056 (3)	-.0067 (3)	-.00081 (0)	.000083 (-0)	.0012 (-1)	.0003 (-0)
(n=772)	[-.59, .16]	[-.57, .17]	[-.08, .051]	[-.0076, .0083]	[-.02, .014]	[-.03, .019]	[-.033, .019]	[-.0076, .0059]	[-.058, .058]	[-.018, .021]	[-.015, .016]
Viet Nam	-.069	-.073	.0039 (-6)	-.0021 (3)	.00052 (-1)	-3.7e-06 (0)	.0021 (-3)	.0068 (-10)	.00026 (-0)	-.0025 (4)	-.0012 (2)
(n=866)	[-.2, .058]	[-.19, .048]	[-.018, .026]	[-.01, .0062]	[-.0031, .0041]	[-.0022, .0022]	[-.007, .011]	[-.0078, .021]	[-.0028, .0033]	[-.011, .0059]	[-.0078, .0054]
Girls											
Pooled	.058	.068	-.0094 (-16)	.00076 (1)	-.0011 (-2)	.0012 (2)	.0024 (4)	-.0013 (-2)	-.011* (-20)	.00092 (2)	-.00081 (-1)
(n=5,620)	[-.1, .22]	[-.09, .23]	[-.028, .0094]	[-.0037, .0052]	[-.014, .012]	[-.0048, .0073]	[-.0042, .0091]	[-.0079, .0052]	[-.024, .00084]	[-.0035, .0054]	[-.0053, .0037]
Mongolia	-.057	-.079	.022 (-39)	-.0056 (10)	.0056 (-10)	.0002 (-0)	.0091 (-16)	.0039 (-7)	.0018 (-3)	-.0012 (2)	.0083 (-15)
(n=1,076)	[-.45, .33]	[-.47, .31]	[-.026, .07]	[-.029, .017]	[-.0064, .018]	[-.01, .01]	[-.0092, .027]	[-.011, .019]	[-.017, .02]	[-.0091, .0066]	[-.011, .028]
Pakistan: Khyber Pakhtunkhwa	.12	.14	-.017 (-14)	.00027 (0)	-.035 (-28)	-.0015 (-1)	.022 (18)	-.000058 (-0)	-.0079 (-6)	-.0032 (-3)	.0085 (7)
(n=789)	[-.38, .62]	[-.38, .66]	[-.12, .09]	[-.0046, .0051]	[-.095, .025]	[-.014, .011]	[-.039, .082]	[-.0035, .0034]	[-.054, .038]	[-.036, .029]	[-.019, .036]
Pakistan: Punjab	.018	.0088	.0092 (51)	.0043 (24)	.0021 (11)	.0023 (13)	-.0069 (-38)	-.0041 (-23)	.0091 (50)	.0023 (13)	.00019 (1)
(n=2,457)	[-.15, .19]	[-.16, .18]	[-.013, .032]	[-.0072, .016]	[-.0072, .011]	[-.0058, .01]	[-.021, .0069]	[-.013, .005]	[-.0047, .023]	[-.0067, .011]	[-.0028, .0032]

	Difference for having a washer		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Pakistan: Sindh	.3	.25	.05 (17)	-.00067 (-0)	.0032 (1)	.027 (9)	.14* (47)	-.053 (-18)	-.079* (-27)	.00098 (0)	.012 (4)
(n=479)	[-.27, .87]	[-.3, .79]	[-.12, .22]	[-.022, .02]	[-.092, .098]	[-.037, .09]	[-.0054, .29]	[-.15, .046]	[-.17, .014]	[-.013, .014]	[-.032, .055]
Viet Nam	.022	.0035	.019 (84)	.0025 (11)	.014 (62)	.00042 (2)	.0072 (32)	.0024 (11)	-.0094 (-42)	-.00073 (-3)	.0026 (12)
(n=819)	[-.085, .13]	[-.097, .1]	[-.02, .058]	[-.0059, .011]	[-.0062, .034]	[-.021, .022]	[-.015, .03]	[-.0074, .012]	[-.029, .01]	[-.0059, .0045]	[-.0076, .013]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S5.11. Difference in the number of mistakes on reading comprehension test (0–5) for having a fridge and decomposition of that difference into components explained by Household

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	.04	.043	-.0036 (-9)	.00073 (2)	.00077 (2)	-.0017 (-4)	.00076 (2)	8.7e-06 (0)	-.00032 (-1)	-.0064 (-16)	.0026 (7)
(n=6,696)	[-.076, .16]	[-.073, .16]	[-.014, .0067]	[-.0019, .0034]	[-.0017, .0032]	[-.0054, .002]	[-.0015, .003]	[-.00069, .00071]	[-.0036, .003]	[-.014, .0015]	[-.0019, .0072]
Mongolia	.033	.033	-.00035 (-1)	-.00089 (-3)	.00047 (1)	-.0046 (-14)	-.00042 (-1)	-.00064 (-2)	.0014 (4)	-.0015 (-4)	.0057 (18)
(n=1,102)	[-.15, .21]	[-.14, .21]	[-.024, .023]	[-.0077, .006]	[-.0073, .0083]	[-.015, .0059]	[-.0082, .0073]	[-.005, .0037]	[-.0038, .0067]	[-.0082, .0053]	[-.0097, .021]
Pakistan: Khyber Pakhtunkhwa	.22	.22	-.0031 (-1)	-.0044 (-2)	.00027 (0)	.0029 (1)	.00043 (0)	-.00056 (-0)	.0021 (1)	-.0092 (-4)	.0054 (2)
(n=1,391)	[-.12, .56]	[-.12, .56]	[-.039, .033]	[-.022, .013]	[-.0056, .0061]	[-.013, .019]	[-.015, .016]	[-.0047, .0036]	[-.0098, .014]	[-.03, .012]	[-.01, .021]
Pakistan: Punjab	-.13	-.13	.00082 (-1)	.0024 (-2)	.0018 (-1)	-.00094 (1)	.0031 (-2)	.00019 (-0)	-.000067 (0)	-.0058 (5)	.000068 (-0)
(n=2,565)	[-.31, .053]	[-.31, .051]	[-.021, .023]	[-.0049, .0098]	[-.0084, .012]	[-.012, .011]	[-.0042, .01]	[-.0064, .0068]	[-.0014, .0012]	[-.02, .0086]	[-.0014, .0015]
Pakistan: Sindh	.097	.049	.048 (50)	.00024 (0)	.0062 (6)	-.0087 (-9)	.00058 (1)	-.00036 (-0)	.044 (46)	-.0028 (-3)	.0086 (9)
(n=772)	[-.32, .51]	[-.37, .46]	[-.021, .12]	[-.0054, .0059]	[-.028, .04]	[-.042, .025]	[-.01, .011]	[-.0078, .0071]	[-.024, .11]	[-.024, .019]	[-.017, .034]
Viet Nam	.099	.099	-.000032 (-0)	.0015 (2)	-.000032 (-0)	.0019 (2)	-.0015 (-2)	.0011 (1)	-.00032 (-0)	-.002 (-2)	-.00063 (-1)
(n=866)	[-.087, .28]	[-.087, .28]	[-.024, .024]	[-.0056, .0087]	[-.0034, .0033]	[-.011, .015]	[-.011, .0078]	[-.014, .016]	[-.0037, .003]	[-.0089, .005]	[-.0045, .0032]
Girls											
Pooled	-.083	-.085	.0023 (-3)	.000074 (-0)	.00027 (-0)	-.000022 (0)	.00031 (-0)	.00087 (-1)	.0017 (-2)	.00014 (-0)	-.0011 (1)
(n=5,620)	[-.23, .065]	[-.23, .061]	[-.0094, .014]	[-.001, .0012]	[-.0029, .0034]	[-.0011, .0011]	[-.0027, .0033]	[-.0049, .0066]	[-.0064, .0099]	[-.0013, .0016]	[-.0054, .0032]
Mongolia	.17**	.16*	.0028 (2)	.0027 (2)	-.0026 (-2)	-.0027 (-2)	-.0024 (-1)	.0013 (1)	.0047 (3)	.0037 (2)	-.0019 (-1)
(n=1,076)	[.0029, .33]	[-.0007, .33]	[-.024, .03]	[-.0086, .014]	[-.011, .0054]	[-.011, .006]	[-.011, .0058]	[-.0047, .0073]	[-.007, .016]	[-.0051, .013]	[-.013, .0091]
Pakistan: Khyber Pakhtunkhwa	-.23	-.17	-.059 (25)	-.0018 (1)	-.026 (11)	-.013 (5)	.0005 (-0)	.00056 (-0)	-.021 (9)	.0019 (-1)	-.00093 (0)
(n=789)	[-.68, .21]	[-.62, .28]	[-.15, .033]	[-.027, .024]	[-.08, .029]	[-.055, .03]	[-.018, .019]	[-.032, .033]	[-.075, .033]	[-.019, .023]	[-.02, .018]
Pakistan: Punjab	-.058	-.055	-.0025 (4)	-.0029 (5)	-.0022 (4)	-.0014 (3)	-.000046 (0)	.0012 (-2)	-.0019 (3)	.0058 (-10)	-.001 (2)

	Rate ratio for having a fridge		Rate ratio explained by added covariates, %								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
(n=2,457)	[-.23, .12]	[-.23, .12]	[-.02, .015]	[-.011, .0055]	[-.011, .0062]	[-.0069, .004]	[-.0097, .0096]	[-.0046, .007]	[-.0099, .0061]	[-.0044, .016]	[-.0055, .0034]
Pakistan: Sindh	-.12	-.22	.1 (-83)	.00021 (-0)	-.0012 (1)	-.0027 (2)	-.0093 (8)	.038 (-32)	.082 (-68)	-.0039 (3)	-.0029 (2)
(n=479)	[-.79, .54]	[-.87, .42]	[-.063, .27]	[-.0068, .0073]	[-.036, .034]	[-.048, .043]	[-.14, .13]	[-.073, .15]	[-.024, .19]	[-.03, .022]	[-.025, .02]
Viet Nam	-.23*	-.22*	-.0082 (4)	-.00013 (0)	-.012 (5)	-.00029 (0)	-.00084 (0)	.0018 (-1)	.0057 (-3)	.0025 (-1)	-.0052 (2)
(n=819)	[-.47, .017]	[-.45, .019]	[-.048, .032]	[-.0039, .0036]	[-.037, .014]	[-.015, .014]	[-.026, .024]	[-.006, .0097]	[-.012, .023]	[-.012, .017]	[-.017, .0064]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table 5.12. Difference in the number of mistakes on reading comprehension test (0–5) for having a stove and decomposition of that difference into components explained by Household

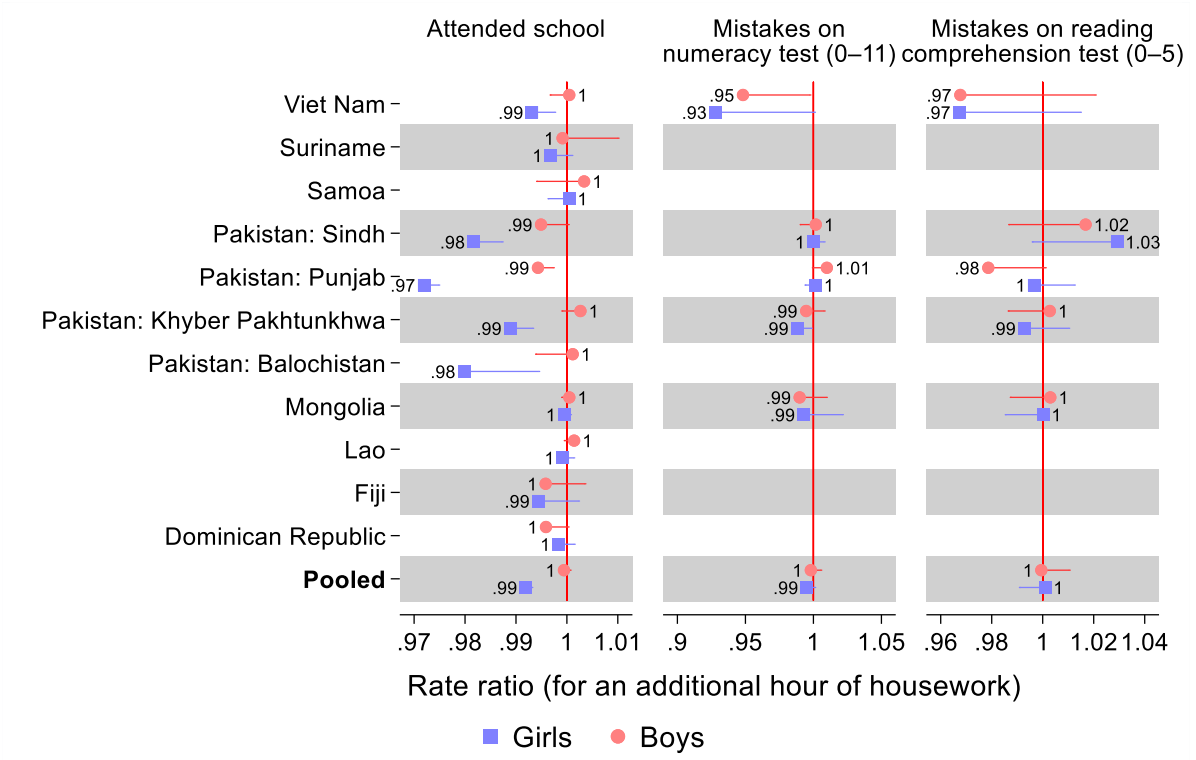
	Difference for having a stove		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
Boys											
Pooled	.081	.083	-.0019 (-2)	.0024 (3)	.00062 (1)	-.0017 (-2)	.000019 (0)	-.00023 (-0)	.0013 (2)	-.0027 (-3)	-.0015 (-2)
(n=6,696)	[-.053, .21]	[-.051, .22]	[-.014, .0097]	[-.0026, .0073]	[-.0022, .0034]	[-.0057, .0022]	[-.0018, .0018]	[-.0016, .0011]	[-.0028, .0054]	[-.012, .0068]	[-.0063, .0032]
Mongolia	-.033	-.012	-.021 (63)	-.0039 (12)	-.00012 (0)	-.0051 (15)	-.001 (3)	.00059 (-2)	-.00034 (1)	-.0032 (10)	-.0077 (23)
(n=1,102)	[-.28, .21]	[-.26, .23]	[-.049, .0075]	[-.016, .0078]	[-.0094, .0091]	[-.018, .0083]	[-.0095, .0074]	[-.0035, .0047]	[-.006, .0053]	[-.017, .011]	[-.028, .013]
Pakistan: Khyber Pakhtunkhwa	.25	.23	.017 (7)	-.0038 (-2)	.004 (2)	-.0028 (-1)	.0067 (3)	.00063 (0)	-.0021 (-1)	.012 (5)	.0024 (1)
(n=1,391)	[-.11, .6]	[-.12, .58]	[-.035, .069]	[-.02, .013]	[-.011, .019]	[-.018, .012]	[-.011, .024]	[-.0044, .0057]	[-.014, .0096]	[-.016, .04]	[-.014, .019]
Pakistan: Punjab	-.077	-.068	-.0093 (12)	.0045 (-6)	.0045 (-6)	-.000032 (0)	.0046 (-6)	.0062 (-8)	-.00046 (1)	-.029** (37)	.00037 (-0)
(n=2,565)	[-.3, .14]	[-.29, .15]	[-.043, .025]	[-.0069, .016]	[-.0086, .017]	[-.0011, .001]	[-.0055, .015]	[-.0062, .019]	[-.0083, .0073]	[-.056, -.002]	[-.0027, .0035]
Pakistan: Sindh	.32	.25	.076 (23)	.0021 (1)	-.0013 (-0)	.00072 (0)	.014 (4)	-.0014 (-0)	.07 (21)	.0039 (1)	-.012 (-4)
(n=772)	[-.17, .82]	[-.27, .77]	[-.025, .18]	[-.045, .049]	[-.016, .014]	[-.029, .03]	[-.045, .073]	[-.012, .0091]	[-.027, .17]	[-.024, .031]	[-.049, .026]
Viet Nam	-.0031	.0025	-.0056 (183)	.00047 (-15)	.000097 (-3)	.0023 (-77)	.0014 (-46)	-.011 (355)	-.0014 (46)	.0024 (-80)	-.000083 (3)
(n=866)	[-.17, .17]	[-.17, .17]	[-.037, .026]	[-.0047, .0056]	[-.0036, .0038]	[-.014, .018]	[-.0072, .01]	[-.031, .0091]	[-.015, .012]	[-.0067, .012]	[-.0032, .003]
Girls											
Pooled	-.028	-.035	.0073 (-26)	.00008 (-0)	-.00023 (1)	-.000052 (0)	.0027 (-10)	.0027 (-10)	.0013 (-5)	.0006 (-2)	.00029 (-1)
(n=5,620)	[-.23, .17]	[-.23, .16]	[-.0085, .023]	[-.0012, .0014]	[-.0029, .0024]	[-.0016, .0014]	[-.0034, .0087]	[-.0053, .011]	[-.009, .012]	[-.0026, .0038]	[-.0049, .0055]
Mongolia	-.073	-.078	.0056 (-8)	.0011 (-2)	.0022 (-3)	-.0026 (4)	-.0066 (9)	.006 (-8)	.0025 (-3)	-.002 (3)	.005 (-7)
(n=1,076)	[-.27, .12]	[-.28, .12]	[-.031, .042]	[-.0048, .007]	[-.0055, .0098]	[-.011, .0062]	[-.023, .0095]	[-.014, .026]	[-.012, .017]	[-.011, .0067]	[-.0092, .019]
Pakistan: Khyber Pakhtunkhwa	.22	.17	.052 (24)	.00071 (0)	.014 (6)	.013 (6)	-.0043 (-2)	.00027 (0)	.04 (18)	-.0028 (-1)	-.0087 (-4)
(n=789)	[-.34, .79]	[-.39, .72]	[-.052, .16]	[-.0098, .011]	[-.037, .065]	[-.032, .058]	[-.042, .033]	[-.016, .016]	[-.024, .1]	[-.032, .026]	[-.04, .022]
Pakistan: Punjab	-.28**	-.28**	-.001 (0)	.0014 (-0)	.0035 (-1)	-.0018 (1)	-.0047 (2)	.0033 (-1)	.00014 (-0)	-.00091 (0)	-.002 (1)

	Difference for having a stove		Difference explained by added covariates (%)								
	Basic model	Full Model	Total	Child care	Cleaning	Cooking	Hours spent on housework	Laundry	Other chore	Care for sick members	Shopping
(n=2,457)	[-.51, -.061]	[-.51, -.059]	[-.025, .022]	[-.0045, .0073]	[-.0068, .014]	[-.0086, .0051]	[-.017, .0078]	[-.0058, .012]	[-.01, .01]	[-.011, .0088]	[-.0092, .0053]
Pakistan: Sindh	.23	.28	-.047 (-20)	.0014 (1)	.00022 (0)	.027 (12)	-.024 (-11)	.0083 (4)	-.067 (-29)	.002 (1)	.0054 (2)
(n=479)	[-.9, 1.4]	[-.72, 1.3]	[-.34, .25]	[-.044, .046]	[-.0077, .0081]	[-.075, .13]	[-.33, .28]	[-.16, .18]	[-.23, .092]	[-.023, .027]	[-.028, .039]
Viet Nam	-.087	-.095	.0086 (-10)	.00058 (-1)	.0035 (-4)	-.000016 (0)	-.011 (12)	-.0011 (1)	.005 (-6)	.0005 (-1)	.011 (-12)
(n=819)	[-.36, .19]	[-.36, .17]	[-.034, .051]	[-.0036, .0048]	[-.016, .023]	[-.00089, .00086]	[-.042, .021]	[-.0079, .0057]	[-.017, .027]	[-.0041, .0051]	[-.0078, .029]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

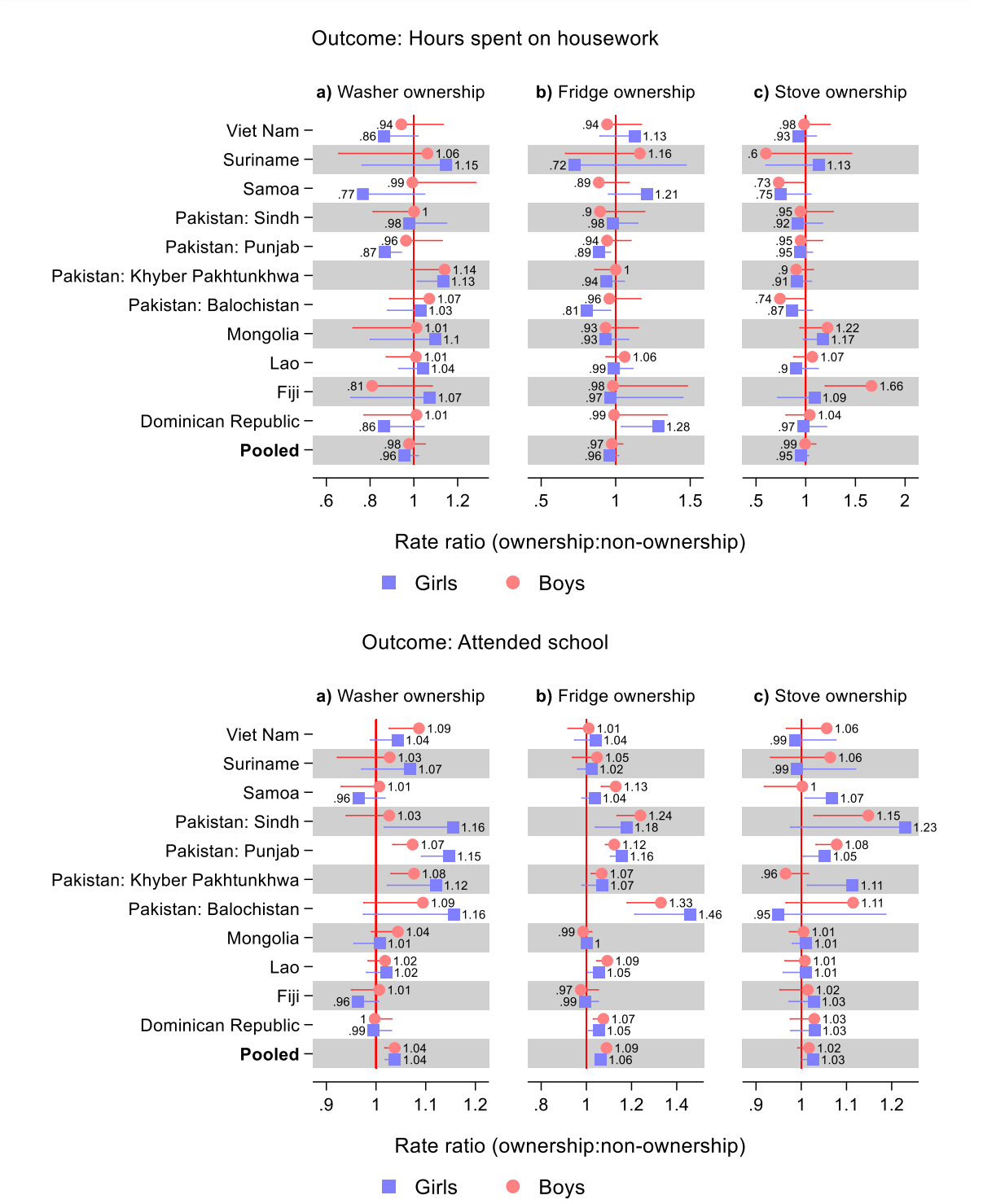
6: Sensitivity analyses: Results excluding the wealth index z-scores from regression equations

Figure S6.1. Rate ratios for outcomes according to the number of hours spent on household work in the week before the survey: excluding the wealth index from independent variables



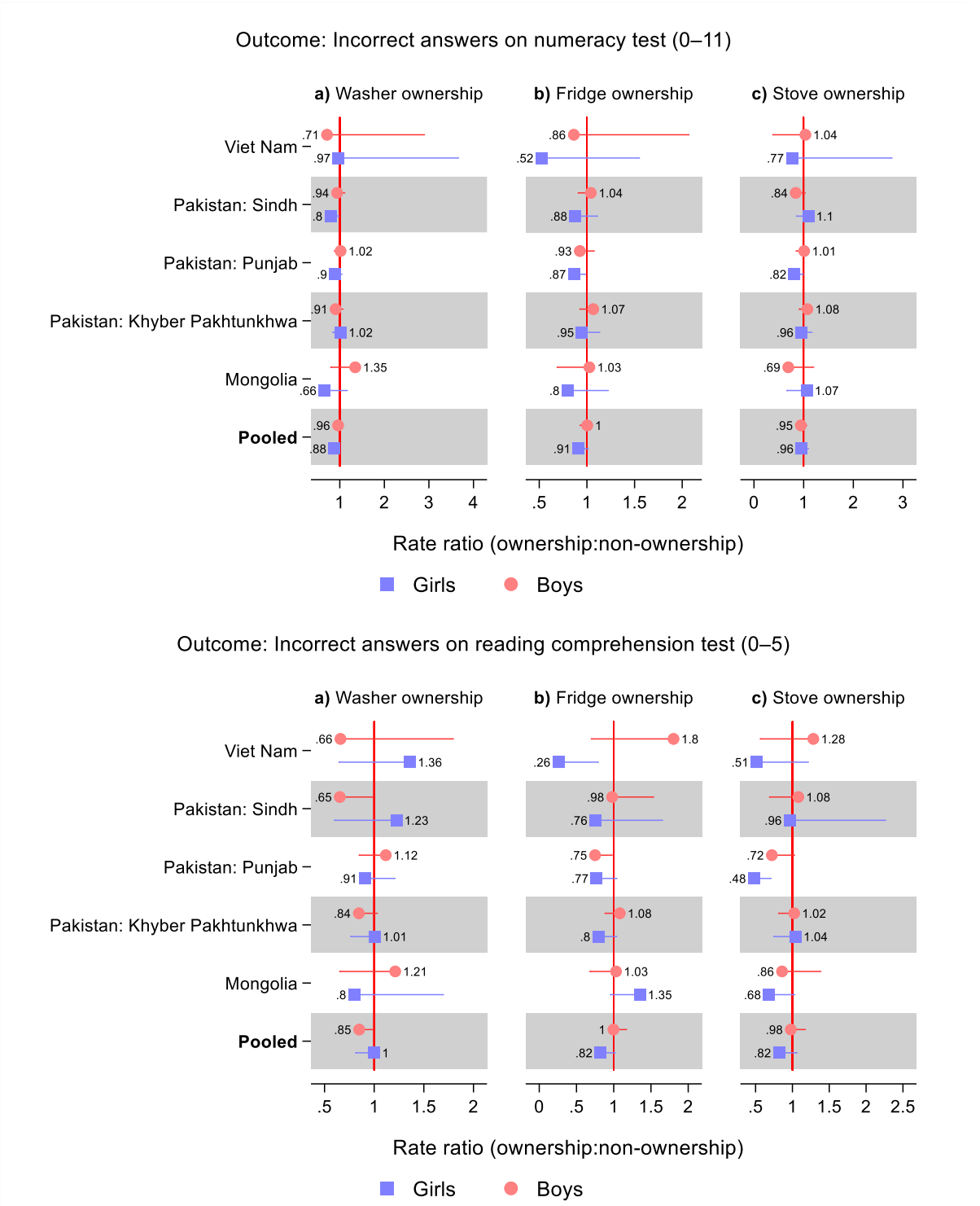
Notes: Rate ratios from Poisson regression models are shown. Results for were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Figure S6.2. Rate ratios for outcomes according to appliance ownership: excluding the wealth index from independent variables



Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

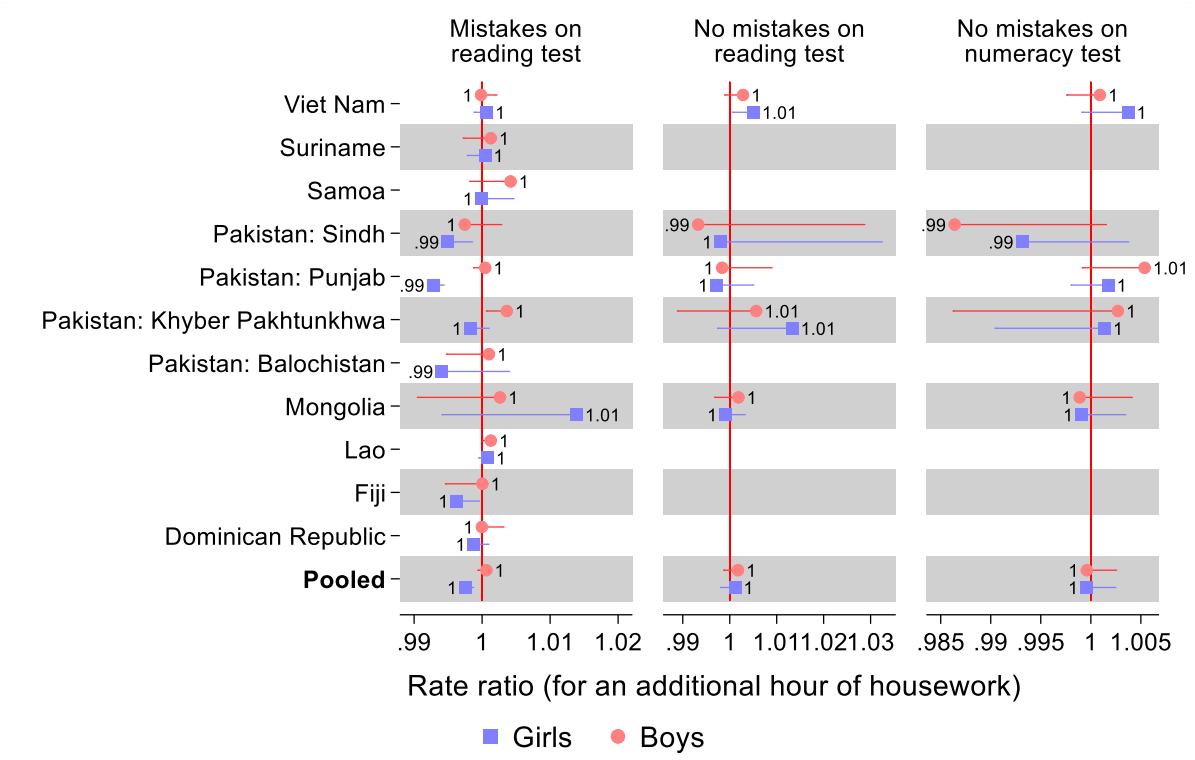
Figure S6.3. Rate ratios for outcomes according to appliance ownership: excluding the wealth index from independent variables



Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

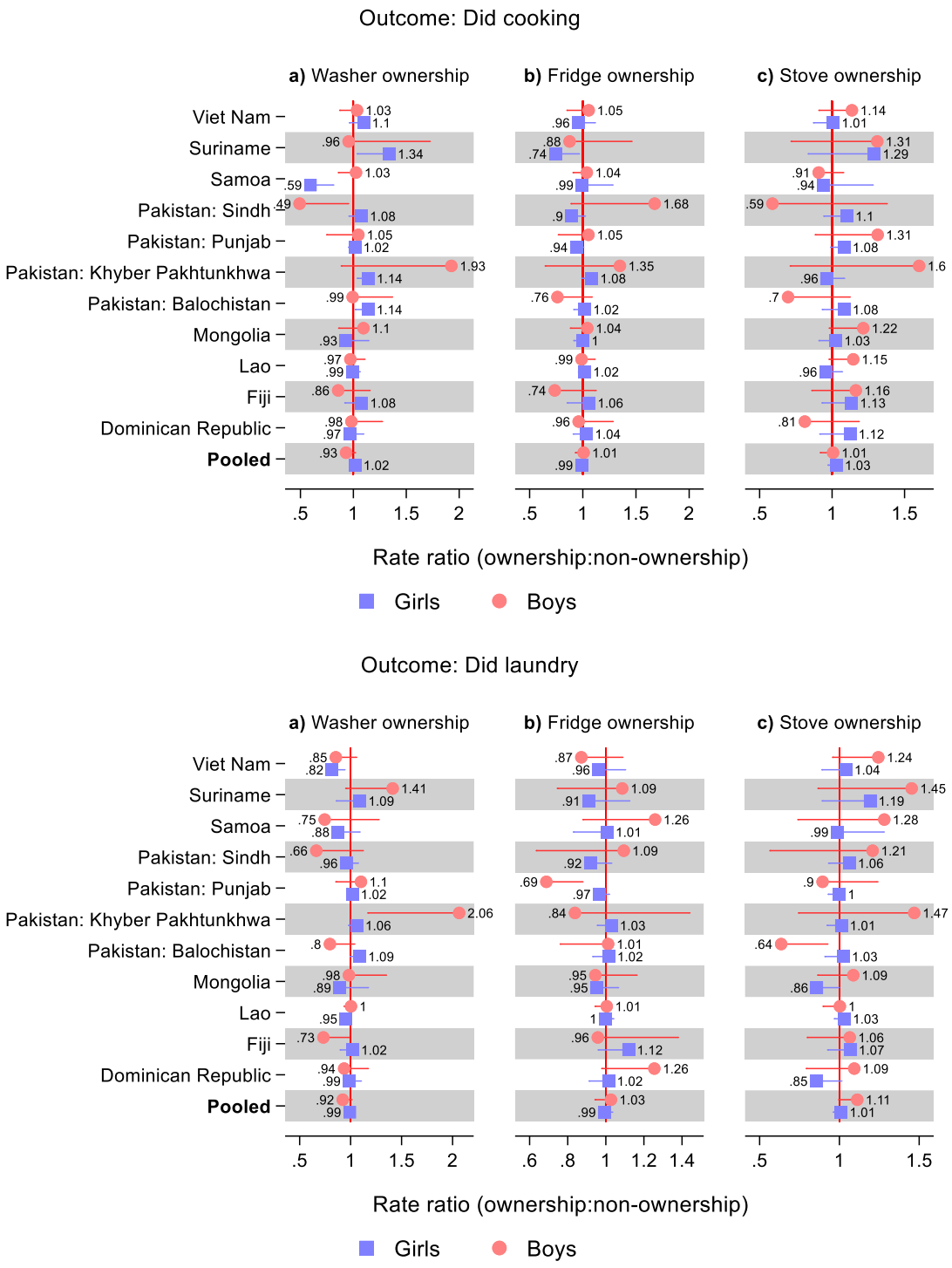
7: Sensitivity analyses: Results using alternative outcomes

Figure S7.1. Rate ratios for outcomes according to the number of hours spent on household work in the week before the survey: Alternative outcomes



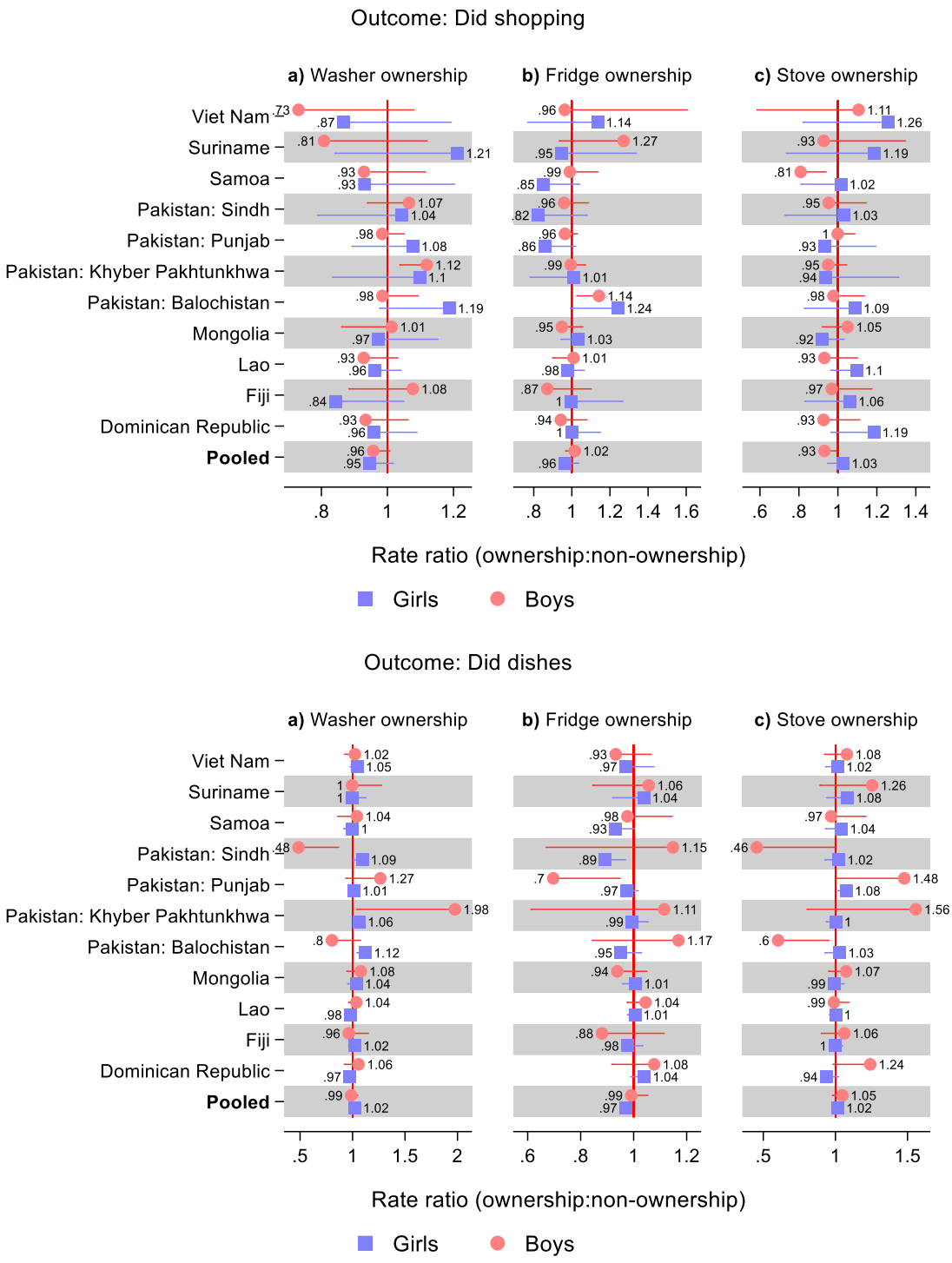
Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Figure S7.2. Rate ratios for outcomes according to appliance ownership: Specific chores as outcomes



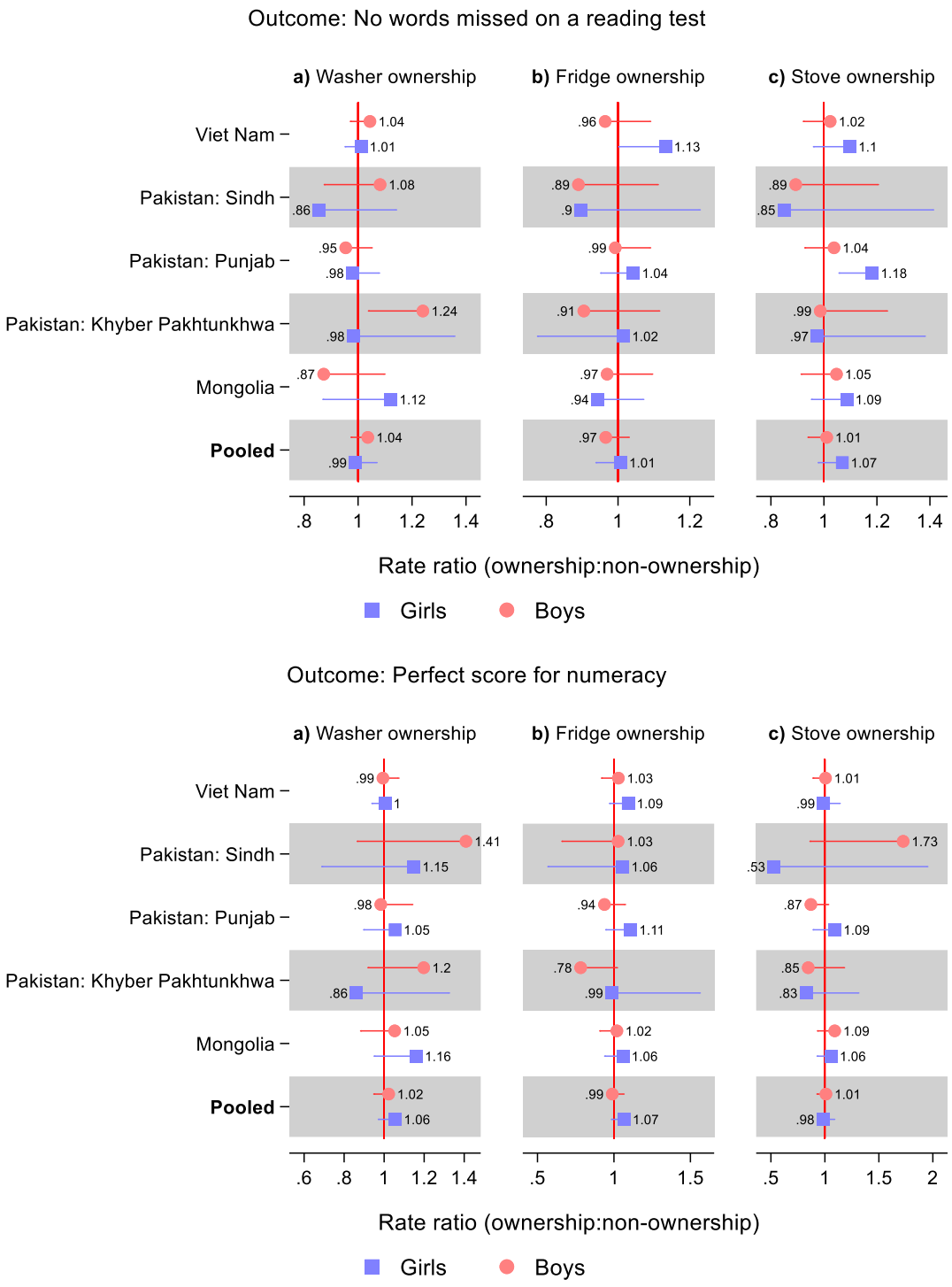
Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Figure S7.3. Rate ratios for outcomes according to appliance ownership: Specific chores as outcomes



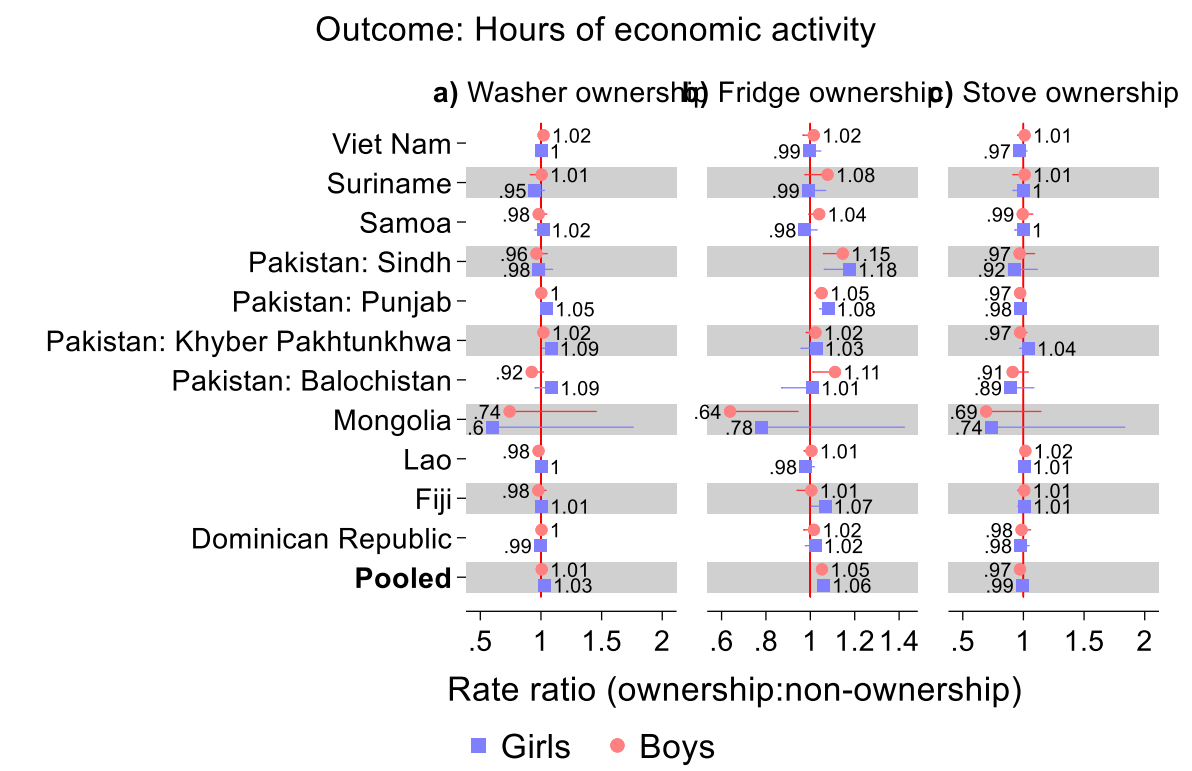
Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Figure S7.4. Rate ratios for outcomes according to appliance ownership: Alternative outcomes



Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

Figure S7.5. Rate ratios for outcomes according to appliance ownership



Notes: Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each outcome, sample, and sex. Samples were equally weighted for the pooled estimates. The models were adjusted for age, a wealth index z-scores, the education levels of the mother and household head, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals were adjusted for clustering at the level of primary sampling units. Upper confidence limits were omitted for estimates above 1 and lower confidence limits were omitted for estimates below 1, for improved readability. See Supplementary Table S# for tabulated estimates.

8: Tabulated estimates from Figures in the sensitivity analyses

Table S8.1. Difference in the number of hours spent housework in the week before the survey according to appliance ownership

	Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	-.0525	-.481	-.0892	.86**	-.0705	-.141	-.395	-.129
	[-.525, .42]	[-1.17, .208]	[-.651, .473]	[.0968, 1.62]	[-.748, .607]	[-1.18, .896]	[-1.12, .326]	[-.979, .722]
Fiji	-.526	.906	-.0862	.242	1.33***	.797	.499	.361
	[-1.38, .323]	[-.764, 2.58]	[-1.32, 1.15]	[-1.38, 1.87]	[.373, 2.28]	[-.835, 2.43]	[-.446, 1.44]	[-1.2, 1.92]
Lao	.138	-.144	.494	-.0567	.382	-1.24	.504	-.293
	[-.713, .99]	[-1.12, .831]	[-.305, 1.29]	[-.973, .86]	[-.684, 1.45]	[-2.87, .391]	[-.277, 1.29]	[-1.36, .778]
Mongolia	.467	1.19	-.4	-.484	1.22	1.62	.957	.682
	[-1.99, 2.93]	[-1.74, 4.11]	[-1.66, .864]	[-1.95, .983]	[-.621, 3.07]	[-.339, 3.58]	[-.899, 2.81]	[-2.41, 3.77]
Pakistan: Balochistan	.359	.535	.0584	-.748	-.501	-.0582	.0532	.527
	[-.317, 1.04]	[-.329, 1.4]	[-.71, .827]	[-1.73, .229]	[-1.32, .317]	[-1.06, .946]	[-.614, .721]	[-.32, 1.37]
Pakistan: Khyber Pakhtunkhwa	.61***	1.08**	.295	-.242	.143	-.581	-.0772	-1**
	[.169, 1.05]	[.23, 1.93]	[-.199, .789]	[-1.17, .682]	[-.397, .683]	[-1.66, .493]	[-.533, .379]	[-1.92, -.0803]
Pakistan: Punjab	-.0869	-.613	-.109	-.219	-.00688	.749	-.0782	.786**
	[-.475, .301]	[-1.42, .195]	[-.509, .291]	[-.97, .531]	[-.49, .477]	[-.155, 1.65]	[-.418, .262]	[.054, 1.52]
Pakistan: Sindh	.0328	.517	-.286	.331	-.00956	.0175	-.162	-.616
	[-.609, .675]	[-.898, 1.93]	[-1.2, .628]	[-.983, 1.65]	[-.928, .909]	[-2.16, 2.2]	[-.945, .622]	[-1.86, .627]
Pooled	.0356	.0143	-.0143	-.0786	.0985	.0183	.163	.0432
	[-.202, .273]	[-.346, .375]	[-.276, .248]	[-.478, .32]	[-.278, .475]	[-.456, .493]	[-.0961, .422]	[-.337, .423]
Samoa	.117	-.754	-.269	.612	-.802	-.958	.175	.126
	[-.802, 1.04]	[-1.8, .295]	[-.991, .453]	[-.341, 1.57]	[-2.14, .54]	[-2.24, .329]	[-1.02, 1.37]	[-1.35, 1.6]
Suriname	-.128	.395	.135	-1.27	-1.05	.266	-.391	-.217
	[-1.34, 1.08]	[-.865, 1.66]	[-.975, 1.25]	[-4.26, 1.72]	[-3.18, 1.09]	[-1.92, 2.45]	[-1.55, .771]	[-2.24, 1.8]
Viet Nam	.0701	-.508	.198	1.16	.925	-.0968	1.28**	.0265
	[-.918, 1.06]	[-1.8, .786]	[-.993, 1.39]	[-.833, 3.15]	[-.635, 2.48]	[-1.9, 1.71]	[.11, 2.45]	[-1.71, 1.76]

Notes: *P<0.1; **P<0.05; ***P<0.01. Coefficients from linear regressions are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each sample and sex. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.2. Difference in school attendance according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work Hours		Appliances Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	-.00355**	-.00144	-.0118	-.0159	.0531***	.0307	-.00426	-.0195	.0259	.00265
	[-.00708, -.0000243]	[-.0042, .00132]	[-.0427, .0192]	[-.048, .0161]	[.0148, .0913]	[-.0146, .0761]	[-.063, .0544]	[-.0808, .0418]	[-.012, .0638]	[-.0355, .0408]
Fiji	-.00356	-.00481	-.0193	-.0565**	-.0582	-.0279	-.0166	.00454	-.0253	-.0216
	[-.0098, .00267]	[-.0114, .00182]	[-.0767, .0381]	[-.103, -.0103]	[-.135, .0187]	[-.0813, .0254]	[-.0789, .0458]	[-.053, .0621]	[-.0874, .0367]	[-.0881, .0449]
Lao	.00106	-.000478	-.0119	-.0248	.022	-.0223	-.0029	-.0179	-.00892	.0108
	[-.000581, .0027]	[-.00205, .0011]	[-.0473, .0236]	[-.0651, .0155]	[-.0173, .0613]	[-.0631, .0185]	[-.0457, .0399]	[-.0637, .0278]	[-.0552, .0374]	[-.0357, .0573]
Mongolia	.000128	-.000499	.0611**	.0095	-.0278	.00189	-.0198	.0136	-.00702	.0209
	[-.00125, .00151]	[-.00165, .000652]	[.00239, .12]	[-.0534, .0724]	[-.0632, .00764]	[-.0239, .0277]	[-.0567, .0172]	[-.0211, .0483]	[-.0784, .0643]	[-.0275, .0693]
Pakistan: Balochistan	.000758	-.00171**	-.0172	-.014	.0607**	.0482**	-.0154	-.0625**	-.0162	.0101
	[-.00148, .003]	[-.00334, -.0000781]	[-.0625, .0282]	[-.0607, .0327]	[.0116, .11]	[.0049, .0915]	[-.0784, .0477]	[-.123, -.0021]	[-.0653, .0329]	[-.033, .0533]
Pakistan: Khyber Pakhtunkhwa	.0024*	-.00377***	.04**	.0312	.0323*	.0096	-.0489**	.0181	.017	.0392*
	[-.000257, .00506]	[-.00526, -.00229]	[.00549, .0745]	[-.011, .0734]	[-.0046, .0692]	[-.0327, .0519]	[-.0925, -.00529]	[-.033, .0692]	[-.018, .052]	[-.000218, .0787]
Pakistan: Punjab	-.00312***	-.01***	.00336	.0347**	.033**	.0388**	-.000646	-.0152	-.0029	-.00912
	[-.00477, -.00147]	[-.0109, -.00906]	[-.0237, .0304]	[.00376, .0656]	[.00684, .0592]	[.00888, .0687]	[-.0356, .0343]	[-.051, .0205]	[-.0289, .0231]	[-.0358, .0175]
Pakistan: Sindh	-.00137	-.00383***	-.0242	.0388	.0895***	.041	-.00999	.0267	.0468*	.0522**
	[-.00344, .000696]	[-.00501, -.00266]	[-.0803, .0319]	[-.0192, .0968]	[.0314, .147]	[-.0158, .0978]	[-.0788, .0589]	[-.0603, .114]	[-.00294, .0966]	[.00538, .099]
Pooled	-.000276	-.00416***	.00586	.00919	.0424***	.0269***	-.0175	-.00482	.00422	.0186**
	[-.00114, .000588]	[-.00473, -.00359]	[-.0107, .0225]	[-.00548, .0239]	[.0263, .0585]	[.012, .0418]	[-.0393, .00422]	[-.0249, .0152]	[-.0123, .0207]	[.00238, .0349]
Samoa	.00405	.00112	-.0238	-.0546*	.0831***	.0268	-.0507	.0428	-.139***	-.0149
	[-.00443, .0125]	[-.00299, .00524]	[-.104, .0563]	[-.11, .00101]	[.0299, .136]	[-.029, .0826]	[-.143, .0413]	[-.0253, .111]	[-.214, -.0639]	[-.101, .0709]
Suriname	-.00108	-.00303	-.0000134	.046	.022	.0182	.045	-.0306	.0585	-.00105
	[-.0103, .00812]	[-.0067, .000651]	[-.0986, .0986]	[-.0458, .138]	[-.0785, .122]	[-.0411, .0774]	[-.072, .162]	[-.128, .0663]	[-.0421, .159]	[-.0668, .0647]
Viet Nam	.000498	-.00427***	.0592**	.0228	-.0041	.0184	.0118	-.0431	.0313	.0821*
	[-.0026, .0036]	[-.00708, -.00146]	[.00492, .114]	[-.0269, .0725]	[-.0803, .0721]	[-.0589, .0958]	[-.0741, .0976]	[-.125, .0393]	[-.0407, .103]	[-.00141, .166]

Notes: *P<0.1; **P<0.05; ***P<0.01. Coefficients from linear regressions are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.3. Difference in the number of incorrect answers on a numeracy test (0–11) according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work		Appliances							
	Hours		Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Mongolia	-.00389	-.00263	.0269	-.0158	.0427	-.0879	-.154	.062	.18	-.319
	[-.0125, .00471]	[-.0141, .00887]	[-.279, .333]	[-.336, .304]	[-.184, .27]	[-.295, .119]	[-.511, .203]	[-.174, .298]	[-.178, .538]	[-.771, .133]
Pakistan: Khyber Pakhtunkhwa	-.0143	-.0336**	-.0307	.342	.54**	.112	.521*	.124	-.112	-.284
	[-.0496, .0209]	[-.0628, -.00447]	[-.566, .505]	[-.36, 1.04]	[.0111, 1.07]	[-.515, .74]	[-.0639, 1.11]	[-.573, .82]	[-.543, .32]	[-.825, .256]
Pakistan: Punjab	.0206*	-.000381	.113	-.165	-.0497	-.286*	.2	-.426*	.0251	-.151
	[-.00336, .0445]	[-.0192, .0184]	[-.212, .439]	[-.523, .192]	[-.377, .277]	[-.601, .0293]	[-.216, .615]	[-.88, .0277]	[-.286, .336]	[-.474, .172]
Pakistan: Sindh	.00815	-.00714	-.178	-.719	.273	-.285	-.645	.821	-.0651	-.055
	[-.0452, .0615]	[-.0441, .0298]	[-.919, .564]	[-1.58, .139]	[-.408, .954]	[-1.33, .761]	[-1.54, .254]	[-.521, 2.16]	[-.626, .496]	[-.969, .859]
Pooled	-.00131	-.00904*	.0102	-.173	.105	-.131	.0727	.0821	-.044	-.186
	[-.009, .00639]	[-.0183, .000239]	[-.202, .223]	[-.412, .0655]	[-.0697, .281]	[-.353, .0906]	[-.152, .298]	[-.183, .347]	[-.235, .147]	[-.436, .0644]
Viet Nam	-.00707	-.0162**	.0137	.0344	.0496	-.102	.127	.0716	-.0185	-.141
	[-.0157, .00152]	[-.0307, -.0016]	[-.127, .154]	[-.118, .186]	[-.157, .256]	[-.409, .205]	[-.0945, .349]	[-.392, .535]	[-.302, .265]	[-.587, .306]

Notes: *P<0.1; **P<0.05; ***P<0.01. Coefficients from linear regressions are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.4. Difference in the number of incorrect answers on a reading comprehension test (0–5) according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work		Appliances							
	Hours		Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Mongolia	.00149	.000305	.0922	-.0569	.0328	.165**	-.0331	-.0728	.135	.15
	[-.0057, .00868]	[-.00681, .00742]	[-.192, .376]	[-.445, .331]	[-.147, .213]	[.00293, .327]	[-.276, .21]	[-.268, .122]	[-.177, .447]	[-.12, .421]
Pakistan: Khyber Pakhtunkhwa	.00439	-.00771	-.219	.122	.219	-.233	.247	.221	.153	-.439**
	[-.0213, .0301]	[-.0289, .0135]	[-.532, .0935]	[-.378, .622]	[-.117, .556]	[-.679, .214]	[-.106, .599]	[-.344, .785]	[-.116, .422]	[-.808, -.0709]
Pakistan: Punjab	-.0111**	-.00369	.131	.018	-.129	-.0577	-.0774	-.284**	-.043	.0677
	[-.0212, -.00101]	[-.0108, .00341]	[-.0572, .32]	[-.151, .187]	[-.31, .0526]	[-.235, .119]	[-.296, .142]	[-.507, -.0609]	[-.23, .144]	[-.0915, .227]
Pakistan: Sindh	.0129	.0156	-.218	.299	.0966	-.121	.325	.232	.23	-.198
	[-.0126, .0384]	[-.00608, .0372]	[-.591, .156]	[-.273, .871]	[-.318, .511]	[-.786, .544]	[-.17, .819]	[-.9, 1.36]	[-.116, .576]	[-.79, .394]
Pooled	.000332	-.000448	-.0609	.0582	.0399	-.0831	.0807	-.0276	.0373	-.217***
	[-.00473, .00539]	[-.00614, .00524]	[-.181, .059]	[-.1, .217]	[-.076, .156]	[-.231, .0648]	[-.053, .215]	[-.226, .17]	[-.0891, .164]	[-.378, -.0555]
Viet Nam	-.00297	-.00792*	-.0692	.0223	.0987	-.225*	-.00306	-.0869	-.0442	-.21
	[-.0093, .00336]	[-.0163, .000442]	[-.196, .0577]	[-.0848, .129]	[-.0869, .284]	[-.467, .0167]	[-.174, .168]	[-.36, .186]	[-.346, .258]	[-.497, .077]

Notes: *P<0.1; **P<0.05; ***P<0.01. Coefficients from linear regressions are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.5. Rate ratios for the number of hours spent housework in the week before the survey according to appliance ownership: excluding the wealth index from independent variables

	Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	1.01	.863	.989	1.28**	1.04	.974	.829	.959
	[.771, 1.33]	[.713, 1.04]	[.729, 1.34]	[1.04, 1.59]	[.799, 1.35]	[.788, 1.21]	[.577, 1.19]	[.767, 1.2]
Fiji	.809	1.07	.981	.966	1.66***	1.09	1.2	.934
	[.605, 1.08]	[.711, 1.62]	[.651, 1.48]	[.644, 1.45]	[1.19, 2.31]	[.717, 1.65]	[.853, 1.67]	[.655, 1.33]
Lao	1.01	1.04	1.06	.989	1.07	.904	1.06	.927
	[.873, 1.17]	[.93, 1.17]	[.933, 1.2]	[.88, 1.11]	[.877, 1.3]	[.729, 1.12]	[.929, 1.22]	[.815, 1.05]
Mongolia	1.01	1.1	.932	.932	1.22	1.17*	1.28**	1.09
	[.721, 1.42]	[.799, 1.51]	[.757, 1.15]	[.802, 1.08]	[.94, 1.58]	[.974, 1.41]	[1.02, 1.62]	[.822, 1.46]
Pakistan: Balochistan	1.07	1.03	.957	.809**	.741**	.866	.986	1.04
	[.888, 1.29]	[.878, 1.21]	[.787, 1.16]	[.68, .961]	[.56, .98]	[.706, 1.06]	[.825, 1.18]	[.893, 1.21]
Pakistan: Khyber Pakhtunkhwa	1.14*	1.13**	1	.938	.904	.909	.892	.856**
	[.987, 1.32]	[1.01, 1.27]	[.858, 1.17]	[.833, 1.05]	[.764, 1.07]	[.784, 1.05]	[.762, 1.04]	[.756, .97]
Pakistan: Punjab	.964	.867***	.942	.889***	.949	.947	.977	1.03
	[.825, 1.13]	[.8, .94]	[.808, 1.1]	[.823, .961]	[.774, 1.16]	[.845, 1.06]	[.852, 1.12]	[.954, 1.11]
Pakistan: Sindh	1	.98	.895	.979	.947	.921	.91	.904
	[.812, 1.23]	[.837, 1.15]	[.672, 1.19]	[.838, 1.14]	[.706, 1.27]	[.729, 1.16]	[.73, 1.14]	[.791, 1.03]
Pooled	.978	.957	.974	.959	.994	.951	1.03	.969
	[.912, 1.05]	[.9, 1.02]	[.91, 1.04]	[.905, 1.02]	[.901, 1.1]	[.882, 1.02]	[.96, 1.11]	[.913, 1.03]
Samoa	.993	.767*	.887	1.21	.729**	.749*	.983	1.11
	[.77, 1.28]	[.562, 1.05]	[.724, 1.09]	[.95, 1.54]	[.536, .992]	[.536, 1.05]	[.734, 1.32]	[.792, 1.56]
Suriname	1.06	1.15	1.16	.723	.6	1.13	.991	.919
	[.656, 1.72]	[.762, 1.73]	[.662, 2.04]	[.356, 1.47]	[.247, 1.45]	[.597, 2.14]	[.577, 1.7]	[.487, 1.73]
Viet Nam	.942	.865*	.943	1.13	.983	.926	1.13	.959
	[.785, 1.13]	[.736, 1.02]	[.761, 1.17]	[.893, 1.42]	[.78, 1.24]	[.779, 1.1]	[.93, 1.37]	[.79, 1.16]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for washer, fridge, stove, and TV were obtained from a single regression for each sample and sex. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.6. Rate ratios for education level according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work		Appliances							
	Hours		Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	1	.999	1	.994	1.02	1.02	.985	.977	1.01	1.01
	[.997, 1]	[.997, 1]	[.968, 1.04]	[.959, 1.03]	[.969, 1.07]	[.976, 1.07]	[.923, 1.05]	[.919, 1.04]	[.965, 1.05]	[.972, 1.05]
Fiji	1	.996**	.979	1.01	1	1.07**	1.01	1.01	.954	.919***
	[.995, 1.01]	[.993, .999]	[.926, 1.03]	[.959, 1.06]	[.94, 1.07]	[1, 1.14]	[.953, 1.06]	[.953, 1.07]	[.894, 1.02]	[.864, .977]
Lao	1**	1	.98	1	1.01	.979	1.02	1.01	.976	1.01
	[1, 1]	[.999, 1]	[.951, 1.01]	[.976, 1.03]	[.971, 1.04]	[.945, 1.01]	[.977, 1.06]	[.966, 1.05]	[.939, 1.01]	[.965, 1.05]
Mongolia	1	1.01	.742	.602	.638**	.781	.693	.736	.931	1.02
	[.99, 1.01]	[.994, 1.03]	[.38, 1.45]	[.206, 1.75]	[.433, .94]	[.429, 1.42]	[.422, 1.14]	[.296, 1.83]	[.524, 1.65]	[.45, 2.31]
Pakistan: Balochistan	1	.994	.924*	1.09	1.11**	1.01	.912	.894	1.08	1.22**
	[.995, 1.01]	[.984, 1]	[.842, 1.01]	[.951, 1.25]	[1.01, 1.22]	[.87, 1.18]	[.805, 1.03]	[.74, 1.08]	[.968, 1.2]	[1.04, 1.43]
Pakistan: Khyber Pakhtunkhwa	1**	.998	1.02	1.09**	1.02	1.03	.973	1.04	.985	1.06*
	[1, 1.01]	[.996, 1]	[.977, 1.07]	[1.01, 1.16]	[.981, 1.07]	[.958, 1.1]	[.928, 1.02]	[.969, 1.12]	[.949, 1.02]	[1, 1.12]
Pakistan: Punjab	1	.993***	1	1.05**	1.05***	1.08***	.973	.977	.99	.992
	[.999, 1]	[.991, .994]	[.972, 1.04]	[1.01, 1.09]	[1.02, 1.08]	[1.04, 1.12]	[.938, 1.01]	[.94, 1.02]	[.963, 1.02]	[.959, 1.03]
Pakistan: Sindh	.997	.995***	.963	.984	1.15***	1.18***	.968	.923	1.02	1.05
	[.992, 1]	[.991, .998]	[.889, 1.04]	[.89, 1.09]	[1.06, 1.24]	[1.06, 1.3]	[.865, 1.08]	[.77, 1.11]	[.941, 1.1]	[.94, 1.17]
Pooled	1	.998***	1.01	1.03***	1.05***	1.06***	.972**	.99	1.01	1.04***
	[.999, 1]	[.996, .999]	[.988, 1.03]	[1.01, 1.05]	[1.03, 1.07]	[1.04, 1.09]	[.948, .996]	[.963, 1.02]	[.987, 1.03]	[1.02, 1.06]
Samoa	1	1	.981	1.02	1.04*	.976	.995	1	.978	.989
	[.998, 1.01]	[.995, 1]	[.925, 1.04]	[.948, 1.09]	[.993, 1.09]	[.927, 1.03]	[.924, 1.07]	[.927, 1.08]	[.919, 1.04]	[.934, 1.05]
Suriname	1	1	1.01	.951	1.08	.99	1.01	1	.956	.993
	[.997, 1.01]	[.998, 1]	[.912, 1.11]	[.886, 1.02]	[.975, 1.19]	[.921, 1.07]	[.913, 1.12]	[.913, 1.1]	[.861, 1.06]	[.918, 1.07]
Viet Nam	1	1	1.02	1	1.02	.995	1.01	.968	1.04	1.01
	[.998, 1]	[.999, 1]	[.986, 1.06]	[.966, 1.04]	[.966, 1.07]	[.949, 1.04]	[.951, 1.07]	[.916, 1.02]	[.988, 1.1]	[.956, 1.07]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.7. Rate ratios for the probability of having a perfect score for numeracy according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work		Appliances							
	Hours		Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Mongolia	1	.999	1.05	1.16	1.02	1.06	1.09	1.06	.828**	1.05
	[.997, 1.01]	[.995, 1]	[.882, 1.26]	[.95, 1.42]	[.907, 1.15]	[.939, 1.2]	[.931, 1.28]	[.928, 1.21]	[.688, .997]	[.859, 1.27]
Pakistan: Khyber Pakhtunkhwa	1.01	1.01	1.2	.862	.782*	.986	.846	.827	1.06	1.14
	[.989, 1.02]	[.997, 1.03]	[.919, 1.56]	[.562, 1.32]	[.601, 1.02]	[.624, 1.56]	[.609, 1.17]	[.523, 1.31]	[.846, 1.32]	[.78, 1.65]
Pakistan: Punjab	.998	.997	.983	1.06	.938	1.11	.87	1.09	1.05	1.1
	[.988, 1.01]	[.989, 1]	[.849, 1.14]	[.897, 1.24]	[.822, 1.07]	[.946, 1.3]	[.738, 1.03]	[.89, 1.34]	[.91, 1.2]	[.953, 1.27]
Pakistan: Sindh	.993	.998	1.41	1.15	1.03	1.06	1.73	.529	.824	.946
	[.959, 1.03]	[.965, 1.03]	[.865, 2.29]	[.688, 1.92]	[.659, 1.6]	[.567, 1.97]	[.861, 3.46]	[.144, 1.95]	[.539, 1.26]	[.533, 1.68]
Pooled	1	1	1.02	1.06	.989	1.07	1.01	.984	1.02	1.07
	[.999, 1]	[.998, 1]	[.948, 1.1]	[.971, 1.15]	[.922, 1.06]	[.983, 1.16]	[.927, 1.1]	[.894, 1.08]	[.94, 1.1]	[.972, 1.18]
Viet Nam	1	1.01**	.994	1	1.03	1.09	1.01	.989	1.06	1.08
	[.999, 1.01]	[1, 1.01]	[.923, 1.07]	[.939, 1.07]	[.918, 1.15]	[.971, 1.23]	[.889, 1.14]	[.863, 1.13]	[.921, 1.21]	[.941, 1.23]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.8. Rate ratios for the probability of having a perfect score for reading comprehension according to appliance ownership and the number of hours spent on household work in the week before the survey

	Household work		Appliances							
	Hours		Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Mongolia	.999	.999	.873	1.12	.97	.943	1.05	1.09	.952	.845*
	[.994, 1]	[.995, 1]	[.695, 1.1]	[.869, 1.45]	[.859, 1.09]	[.832, 1.07]	[.914, 1.2]	[.953, 1.24]	[.772, 1.17]	[.7, 1.02]
Pakistan: Khyber Pakhtunkhwa	1	1	1.24**	.983	.905	1.02	.986	.975	.967	1.16
	[.986, 1.02]	[.99, 1.01]	[1.04, 1.48]	[.712, 1.36]	[.735, 1.11]	[.776, 1.33]	[.786, 1.24]	[.69, 1.38]	[.829, 1.13]	[.929, 1.45]
Pakistan: Punjab	1.01*	1	.954	.98	.992	1.04	1.04	1.18***	.992	.961
	[.999, 1.01]	[.998, 1.01]	[.868, 1.05]	[.892, 1.08]	[.905, 1.09]	[.952, 1.14]	[.928, 1.16]	[1.06, 1.32]	[.901, 1.09]	[.882, 1.05]
Pakistan: Sindh	.986*	.993	1.08	.856	.89	.897	.894	.85	.879	1.09
	[.972, 1]	[.983, 1]	[.875, 1.34]	[.643, 1.14]	[.713, 1.11]	[.656, 1.23]	[.664, 1.2]	[.512, 1.41]	[.73, 1.06]	[.776, 1.54]
Pooled	1	1	1.04	.99	.966	1.01	1.01	1.07	.975	1.06
	[.997, 1]	[.997, 1]	[.974, 1.1]	[.919, 1.07]	[.907, 1.03]	[.939, 1.08]	[.94, 1.09]	[.978, 1.17]	[.911, 1.04]	[.98, 1.16]
Viet Nam	1	1	1.04	1.01	.964	1.13**	1.02	1.1	.98	1.13*
	[.998, 1]	[.999, 1.01]	[.971, 1.12]	[.952, 1.07]	[.854, 1.09]	[1, 1.28]	[.922, 1.14]	[.96, 1.26]	[.843, 1.14]	[.985, 1.29]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.9. Rate ratios for the probability doing shopping according to appliance ownership

	Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	.934	.96	.942	.999	.927	1.19	1.11	1.19**
	[.822, 1.06]	[.848, 1.09]	[.825, 1.08]	[.87, 1.15]	[.775, 1.11]	[.965, 1.46]	[.964, 1.27]	[1.03, 1.37]
Fiji	1.08	.843	.871	.996	.969	1.06	1.01	1.23
	[.883, 1.31]	[.678, 1.05]	[.691, 1.1]	[.785, 1.26]	[.802, 1.17]	[.831, 1.36]	[.828, 1.23]	[.951, 1.58]
Lao	.928	.963	1.01	.979	.931	1.1	1.01	.915**
	[.837, 1.03]	[.892, 1.04]	[.898, 1.13]	[.903, 1.06]	[.789, 1.1]	[.962, 1.25]	[.896, 1.15]	[.838, .998]
Mongolia	1.01	.973	.948	1.03	1.05	.919	1.65***	1.02
	[.861, 1.19]	[.823, 1.15]	[.852, 1.05]	[.943, 1.13]	[.921, 1.2]	[.823, 1.03]	[1.28, 2.14]	[.856, 1.21]
Pakistan: Balochistan	.985	1.19*	1.14**	1.24*	.977	1.09	.991	.929
	[.889, 1.09]	[.976, 1.45]	[1.03, 1.27]	[.991, 1.56]	[.842, 1.13]	[.828, 1.43]	[.894, 1.1]	[.74, 1.17]
Pakistan: Khyber Pakhtunkhwa	1.12***	1.1	.994	1.01	.95	.937	.977	1.17
	[1.04, 1.21]	[.833, 1.45]	[.926, 1.07]	[.78, 1.31]	[.867, 1.04]	[.671, 1.31]	[.91, 1.05]	[.915, 1.49]
Pakistan: Punjab	.984	1.08	.964	.858*	.999	.933	1.02	1.14
	[.923, 1.05]	[.893, 1.3]	[.906, 1.03]	[.725, 1.02]	[.921, 1.08]	[.731, 1.19]	[.959, 1.08]	[.968, 1.35]
Pakistan: Sindh	1.07	1.04	.96	.822	.953	1.03	1.04	1.08
	[.939, 1.21]	[.788, 1.38]	[.85, 1.08]	[.628, 1.08]	[.795, 1.14]	[.729, 1.46]	[.933, 1.17]	[.854, 1.37]
Pooled	.957*	.946	1.02	.964	.931**	1.03	1.06**	1.1**
	[.911, 1.01]	[.881, 1.02]	[.967, 1.07]	[.9, 1.03]	[.878, .989]	[.947, 1.12]	[1.01, 1.11]	[1.02, 1.18]
Samoa	.929	.931	.989	.85	.809***	1.02	1.01	1.13
	[.776, 1.11]	[.721, 1.2]	[.864, 1.13]	[.696, 1.04]	[.7, .936]	[.81, 1.28]	[.86, 1.18]	[.896, 1.42]
Suriname	.808	1.21	1.27	.945	.927	1.19	.989	.979
	[.584, 1.12]	[.841, 1.75]	[.934, 1.73]	[.669, 1.33]	[.64, 1.34]	[.735, 1.92]	[.685, 1.43]	[.696, 1.38]
Viet Nam	.731	.867	.963	1.14	1.11	1.26	1.09	.919
	[.496, 1.08]	[.631, 1.19]	[.579, 1.6]	[.768, 1.68]	[.584, 2.1]	[.82, 1.93]	[.637, 1.88]	[.644, 1.31]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.10. Rate ratios for the probability doing cooking according to appliance ownership

	Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	.982	.966	.961	1.04	.812	1.12	.827	.992
	[.76, 1.27]	[.855, 1.09]	[.723, 1.28]	[.909, 1.18]	[.558, 1.18]	[.915, 1.38]	[.618, 1.11]	[.869, 1.13]
Fiji	.857	1.08	.736	1.06	1.16	1.13	1.1	1.08
	[.638, 1.15]	[.918, 1.27]	[.485, 1.12]	[.852, 1.32]	[.86, 1.58]	[.93, 1.38]	[.764, 1.59]	[.904, 1.28]
Lao	.972	.99	.988	1.02	1.15*	.957	1.02	.969
	[.857, 1.1]	[.927, 1.06]	[.881, 1.11]	[.958, 1.08]	[.978, 1.34]	[.859, 1.07]	[.898, 1.15]	[.904, 1.04]
Mongolia	1.1	.931	1.04	1	1.22*	1.03	.943	.919
	[.861, 1.39]	[.761, 1.14]	[.883, 1.23]	[.914, 1.1]	[.98, 1.51]	[.908, 1.16]	[.712, 1.25]	[.784, 1.08]
Pakistan: Balochistan	.993	1.14**	.762	1.02	.696	1.08	.838	.975
	[.724, 1.36]	[1.02, 1.28]	[.537, 1.08]	[.914, 1.14]	[.433, 1.12]	[.931, 1.26]	[.61, 1.15]	[.871, 1.09]
Pakistan: Khyber Pakhtunkhwa	1.93*	1.14***	1.35	1.08*	1.6	.965	1.41	.954
	[.885, 4.19]	[1.04, 1.26]	[.645, 2.82]	[.989, 1.19]	[.711, 3.61]	[.861, 1.08]	[.683, 2.93]	[.868, 1.05]
Pakistan: Punjab	1.05	1.02	1.05	.94*	1.31	1.08*	.78	1.02
	[.747, 1.47]	[.953, 1.08]	[.769, 1.44]	[.883, 1]	[.883, 1.96]	[.989, 1.19]	[.572, 1.06]	[.968, 1.08]
Pakistan: Sindh	.492**	1.08	1.68	.896*	.588	1.1	.915	.938
	[.256, .948]	[.958, 1.21]	[.888, 3.16]	[.79, 1.02]	[.252, 1.38]	[.942, 1.29]	[.486, 1.72]	[.85, 1.04]
Pooled	.931*	1.02	1.01	.988	1.01	1.03	1.01	.977
	[.856, 1.01]	[.97, 1.06]	[.929, 1.09]	[.943, 1.04]	[.918, 1.11]	[.971, 1.09]	[.922, 1.11]	[.934, 1.02]
Samoa	1.03	.594***	1.04	.993	.908	.941	1.05	.748**
	[.857, 1.23]	[.438, .807]	[.907, 1.19]	[.773, 1.28]	[.766, 1.07]	[.693, 1.28]	[.878, 1.25]	[.57, .982]
Suriname	.955	1.34**	.876	.742**	1.31	1.29	1.13	1.16
	[.531, 1.72]	[1.04, 1.73]	[.527, 1.46]	[.574, .96]	[.717, 2.4]	[.834, 2]	[.617, 2.07]	[.86, 1.57]
Viet Nam	1.04	1.1	1.06	.959	1.14	1.01	1	.993
	[.87, 1.23]	[.961, 1.25]	[.85, 1.31]	[.828, 1.11]	[.909, 1.42]	[.871, 1.17]	[.831, 1.21]	[.869, 1.14]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.11. Rate ratios for the probability doing cleaning according to appliance ownership

	Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	1.06	.975	1.08	1.04	1.24*	.937	.94	1.01
	[.92, 1.22]	[.929, 1.02]	[.917, 1.27]	[.988, 1.1]	[.983, 1.57]	[.864, 1.02]	[.811, 1.09]	[.959, 1.05]
Fiji	.964	1.02	.881	.977	1.06	.999	1.04	1.02
	[.813, 1.14]	[.961, 1.09]	[.697, 1.11]	[.925, 1.03]	[.901, 1.25]	[.956, 1.04]	[.877, 1.24]	[.954, 1.1]
Lao	1.04	.981	1.05	1	.99	1	1.02	.978
	[.961, 1.12]	[.953, 1.01]	[.974, 1.12]	[.976, 1.03]	[.898, 1.09]	[.957, 1.05]	[.944, 1.11]	[.951, 1.01]
Mongolia	1.08	1.04	.938	1.01	1.07	.991	1.03	1.09
	[.945, 1.23]	[.952, 1.13]	[.841, 1.05]	[.958, 1.06]	[.952, 1.21]	[.931, 1.05]	[.847, 1.25]	[.984, 1.2]
Pakistan: Balochistan	.804	1.12***	1.17	.952	.603**	1.03	.864	1.05
	[.605, 1.07]	[1.04, 1.21]	[.843, 1.62]	[.882, 1.03]	[.382, .95]	[.927, 1.15]	[.636, 1.17]	[.976, 1.13]
Pakistan: Khyber Pakhtunkhwa	1.98**	1.06**	1.12	.994	1.56	1	1.19	.991
	[1.04, 3.76]	[1, 1.13]	[.612, 2.03]	[.94, 1.05]	[.802, 3.03]	[.935, 1.08]	[.642, 2.19]	[.934, 1.05]
Pakistan: Punjab	1.26	1.01	.697**	.975	1.48**	1.08**	.864	1.03*
	[.935, 1.71]	[.972, 1.06]	[.513, .946]	[.937, 1.01]	[1.01, 2.17]	[1.02, 1.14]	[.65, 1.15]	[.997, 1.07]
Pakistan: Sindh	.485**	1.09**	1.15	.893***	.455**	1.02	1.21	1.02
	[.274, .859]	[1.01, 1.18]	[.67, 1.97]	[.826, .966]	[.209, .99]	[.927, 1.13]	[.712, 2.07]	[.957, 1.08]
Pooled	.987	1.02*	.991	.971***	1.05	1.02	1.06*	1.03***
	[.933, 1.04]	[.998, 1.04]	[.934, 1.05]	[.951, .991]	[.978, 1.12]	[.99, 1.04]	[.995, 1.13]	[1.01, 1.05]
Samoa	1.04	1	.976	.932**	.971	1.04	1.11	1.1
	[.858, 1.27]	[.915, 1.09]	[.834, 1.14]	[.871, .998]	[.78, 1.21]	[.929, 1.17]	[.909, 1.37]	[.981, 1.23]
Suriname	.996	.997	1.06	1.04	1.26	1.08	1.16	.952
	[.782, 1.27]	[.887, 1.12]	[.845, 1.32]	[.92, 1.17]	[.892, 1.77]	[.94, 1.25]	[.854, 1.59]	[.828, 1.1]
Viet Nam	1.02	1.05	.932	.971	1.08	1.02	1.08	1.07*
	[.924, 1.13]	[.976, 1.12]	[.818, 1.06]	[.877, 1.07]	[.924, 1.26]	[.932, 1.11]	[.95, 1.22]	[.989, 1.16]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S8.12. Rate ratios for the probability doing laundry according to appliance ownership

	Washer		Fridge		Stove		TV	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Dominican Republic	.937	.987	1.25*	1.01	1.09	.855*	.923	.983
	[.752, 1.17]	[.887, 1.1]	[.978, 1.61]	[.912, 1.13]	[.792, 1.51]	[.723, 1.01]	[.73, 1.17]	[.887, 1.09]
Fiji	.733**	1.02	.958	1.12	1.07	1.07	1	1
	[.548, .981]	[.897, 1.16]	[.667, 1.38]	[.959, 1.31]	[.798, 1.42]	[.926, 1.23]	[.735, 1.37]	[.883, 1.14]
Lao	1	.954**	1.01	.998	1	1.03	.999	1.02
	[.935, 1.08]	[.913, .997]	[.943, 1.07]	[.959, 1.04]	[.897, 1.12]	[.968, 1.1]	[.93, 1.07]	[.973, 1.07]
Mongolia	.983	.893	.945	.952	1.09	.859**	1.1	1.03
	[.72, 1.34]	[.683, 1.17]	[.77, 1.16]	[.853, 1.06]	[.864, 1.37]	[.742, .995]	[.811, 1.5]	[.864, 1.22]
Pakistan: Balochistan	.797*	1.09*	1.01	1.02	.635**	1.03	.919	.987
	[.615, 1.03]	[.995, 1.19]	[.76, 1.35]	[.931, 1.11]	[.437, .923]	[.908, 1.16]	[.712, 1.19]	[.903, 1.08]
Pakistan: Khyber Pakhtunkhwa	2.06**	1.06	.838	1.03	1.47	1.01	1.02	1.03
	[1.17, 3.65]	[.978, 1.15]	[.488, 1.44]	[.954, 1.11]	[.743, 2.9]	[.922, 1.11]	[.574, 1.8]	[.95, 1.11]
Pakistan: Punjab	1.1	1.02	.688***	.966	.895	1	.977	1.03
	[.854, 1.42]	[.968, 1.07]	[.54, .876]	[.919, 1.02]	[.647, 1.24]	[.929, 1.08]	[.775, 1.23]	[.985, 1.08]
Pakistan: Sindh	.664	.958	1.09	.919	1.21	1.06	1.32	.987
	[.394, 1.12]	[.859, 1.07]	[.634, 1.89]	[.823, 1.03]	[.564, 2.59]	[.932, 1.21]	[.805, 2.15]	[.905, 1.08]
Pooled	.923*	.991	1.03	.993	1.11*	1.01	1.04	1.03
	[.846, 1.01]	[.953, 1.03]	[.943, 1.12]	[.955, 1.03]	[.995, 1.24]	[.961, 1.06]	[.956, 1.14]	[.99, 1.07]
Samoa	.746	.878	1.26	1.01	1.28	.986	1.24	1.08
	[.437, 1.27]	[.711, 1.08]	[.879, 1.8]	[.829, 1.22]	[.739, 2.22]	[.762, 1.28]	[.756, 2.03]	[.856, 1.36]
Suriname	1.41*	1.09	1.09	.91	1.45	1.19	1.02	1.25*
	[.951, 2.1]	[.858, 1.39]	[.745, 1.58]	[.739, 1.12]	[.865, 2.44]	[.891, 1.6]	[.638, 1.63]	[.987, 1.59]
Viet Nam	.855	.818***	.872	.963	1.24	1.04	1.11	.989
	[.695, 1.05]	[.715, .937]	[.7, 1.09]	[.843, 1.1]	[.957, 1.62]	[.89, 1.22]	[.905, 1.36]	[.868, 1.13]

Notes: *P<0.1; **P<0.05; ***P<0.01. Rate ratios from Poisson regression models are shown. Results for each sample and sex were obtained from two separate regressions: one using number of hours spent on household work as the main independent variable and the other using home appliances (washer, fridge, stove, and TV) as the main independent variables. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

9: Gelback decomposition from linear models of the impact of hours spent on all work (household work, economic activity, gathering firewood, and fetching water) on the association of sex with school attendance and performance

Table S9.1. Difference in school attendance for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey

	Rate ratio for being female		Rate ratio explained by added covariates, %				
	Basic model	Full Model	Total	Hours spent on economic activity	Hours spent on housework	Time spent on fetching water	Time spent on gathering wood
Pooled	-.047***	-.03***	-.017*** (37)	.019*** (-42)	-.035*** (74)	-.0011 (2)	-.0011 (2)
(n=72,738)	[-.054, -.04]	[-.038, -.021]	[-.023, -.011]	[.016, .023]	[-.04, -.029]	[-.0028, .00064]	[-.0033, .0012]
Dominican Republic	.025***	.019**	.0059 (24)	.01*** (41)	-.0046 (-19)	.0016 (7)	-.0012 (-5)
(n=7,146)	[.013, .037]	[.0041, .034]	[-.0057, .018]	[.005, .015]	[-.016, .0066]	[-.00095, .0042]	[-.0031, .00075]
Fiji	.038***	.0086	.029* (77)	.013 (34)	-.0047 (-12)	.0012 (3)	.02*** (52)
(n=1,582)	[.014, .061]	[-.025, .042]	[-.0011, .059]	[-.01, .036]	[-.036, .026]	[-.0086, .011]	[.005, .034]
Lao	-.023***	-.02*	-.0034 (15)	.011 (-50)	-.0043 (19)	-.0056** (24)	-.0049* (21)
(n=8,848)	[-.038, -.0078]	[-.043, .0037]	[-.023, .016]	[-.0031, .026]	[-.024, .015]	[-.011, -.00046]	[-.011, .0008]
Mongolia	.04***	.0063	.034*** (84)	.028*** (69)	.0032 (8)	-.005 (-12)	.0079** (20)
(n=3,646)	[.024, .057]	[-.018, .03]	[.013, .054]	[.017, .039]	[-.013, .02]	[-.013, .0026]	[.0014, .014]
Pakistan: Balochistan	-.16***	-.12***	-.037*** (23)	.0048 (-3)	-.046*** (28)	-.001 (1)	.005 (-3)
(n=7,707)	[-.18, -.14]	[-.15, -.1]	[-.051, -.023]	[-.003, .012]	[-.062, -.029]	[-.007, .005]	[-.0018, .012]
Pakistan: Khyber Pakhtunkhwa	-.28***	-.24***	-.043*** (15)	.013*** (-5)	-.052*** (18)	-.005** (2)	.0013 (-0)
(n=10,373)	[-.3, -.26]	[-.27, -.22]	[-.059, -.026]	[.0061, .019]	[-.069, -.035]	[-.01, -.000081]	[-.0044, .007]
Pakistan: Punjab	-.055***	.0013	-.056*** (102)	.056*** (-103)	-.11*** (197)	-.0021** (4)	-.0025** (5)
(n=19,402)	[-.068, -.042]	[-.013, .015]	[-.067, -.045]	[.049, .063]	[-.12, -.096]	[-.004, -.00017]	[-.0048, -.00016]
Pakistan: Sindh	-.16***	-.11***	-.045*** (28)	.016*** (-10)	-.054*** (34)	-.00021 (0)	-.0068** (4)
(n=7,399)	[-.18, -.14]	[-.14, -.086]	[-.062, -.028]	[.0074, .025]	[-.072, -.036]	[-.0068, .0063]	[-.013, -.00018]
Samoa	.047***	.061**	-.014 (-29)	-.0079 (-17)	.0028 (6)	-.00023 (-0)	-.0086 (-18)
(n=1,165)	[.015, .079]	[.014, .11]	[-.051, .024]	[-.03, .015]	[-.041, .047]	[-.0098, .0094]	[-.032, .015]
Suriname	.048***	.032*	.016 (34)	.02*** (42)	-.0027 (-6)	.0025 (5)	-.0035 (-7)
(n=1,891)	[.02, .075]	[-.00098, .064]	[-.0063, .039]	[.0086, .032]	[-.024, .019]	[-.0067, .012]	[-.01, .0033]
Viet Nam	.022**	.033**	-.011 (-53)	.0025 (12)	-.015 (-69)	-.00051 (-2)	.0016 (8)
(n=3,579)	[.0019, .041]	[.002, .064]	[-.04, .018]	[-.013, .018]	[-.043, .013]	[-.0046, .0036]	[-.0065, .0098]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S9.2. Difference in the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey

	Rate ratio for being female		Rate ratio explained by added covariates, %				
	Basic model	Full Model	Total	Hours spent on economic activity	Hours spent on housework	Time spent on fetching water	Time spent on gathering wood
Pooled	-.011	.029	-.04 (365)	-.012 (113)	-.039 (361)	-.0033 (31)	.015 (-140)
(n=14,918)	[-.091, .069]	[-.081, .14]	[-.11, .026]	[-.037, .012]	[-.1, .025]	[-.023, .016]	[-.0036, .034]
Mongolia	-.089*	-.094	.0043 (-5)	-.0083 (9)	.00083 (-1)	.00089 (-1)	.011 (-12)
(n=2,400)	[-.19, .016]	[-.24, .049]	[-.1, .11]	[-.056, .039]	[-.1, .1]	[-.062, .063]	[-.034, .056]
Pakistan: Khyber Pakhtunkhwa	.0022	.2	-.2* (-8794)	-.01 (-459)	-.31*** (-13837)	.033 (1490)	.09*** (4012)
(n=2,579)	[-.25, .25]	[-.14, .53]	[-.4, .0091]	[-.081, .06]	[-.51, -.11]	[-.017, .084]	[.024, .16]
Pakistan: Punjab	.056	.12	-.063 (-114)	-.028 (-51)	-.005 (-9)	-.026*** (-47)	-.0041 (-7)
(n=6,297)	[-.071, .18]	[-.047, .28]	[-.16, .032]	[-.063, .0064]	[-.098, .088]	[-.045, -.0071]	[-.023, .015]
Pakistan: Sindh	-.026	-.1	.073 (-280)	-.038 (144)	.072 (-276)	.0038 (-14)	.035 (-133)
(n=1,626)	[-.32, .27]	[-.46, .26]	[-.15, .3]	[-.15, .075]	[-.13, .28]	[-.076, .084]	[-.039, .11]
Viet Nam	.025	-.015	.04 (160)	.021 (85)	.0045 (18)	.0047 (19)	.0097 (39)
(n=2,016)	[-.032, .082]	[-.1, .073]	[-.04, .12]	[-.013, .055]	[-.077, .086]	[-.019, .028]	[-.02, .039]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S9.3. Difference in the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey

	Rate ratio for being female		Rate ratio explained by added covariates, %				
	Basic model	Full Model	Total	Hours spent on economic activity	Hours spent on housework	Time spent on fetching water	Time spent on gathering wood
Pooled	-.015	-.03	.015 (-98)	-.0014 (9)	.0099 (-66)	-.00078 (5)	.0069 (-46)
(n=14,918)	[-.063, .033]	[-.095, .036]	[-.026, .055]	[-.015, .012]	[-.03, .05]	[-.012, .01]	[-.006, .02]
Mongolia	-.014	.02	-.033 (240)	-.0013 (9)	-.037 (265)	.023 (-167)	-.018 (133)
(n=2,400)	[-.087, .06]	[-.085, .12]	[-.11, .046]	[-.031, .029]	[-.11, .039]	[-.0076, .054]	[-.051, .014]
Pakistan: Khyber Pakhtunkhwa	.039	.0078	.031 (80)	.0077 (20)	-.017 (-43)	.016 (42)	.024 (61)
(n=2,579)	[-.13, .21]	[-.22, .23]	[-.1, .17]	[-.032, .048]	[-.15, .12]	[-.024, .057]	[-.023, .07]
Pakistan: Punjab	-.078**	-.076*	-.002 (2)	-.0018 (2)	.0016 (-2)	-.008 (10)	.0063 (-8)
(n=6,297)	[-.14, -.013]	[-.16, .0056]	[-.049, .045]	[-.02, .017]	[-.044, .048]	[-.021, .0047]	[-.0036, .016]
Pakistan: Sindh	-.0093	-.1	.091 (-971)	.014 (-149)	.089 (-949)	-.03 (321)	.018 (-194)
(n=1,626)	[-.16, .14]	[-.28, .084]	[-.022, .2]	[-.033, .061]	[-.02, .2]	[-.074, .014]	[-.018, .054]
Viet Nam	-.0054	.009	-.014 (267)	-.022 (401)	-.012 (214)	.0039 (-72)	.015* (-277)
(n=2,016)	[-.052, .042]	[-.064, .082]	[-.076, .048]	[-.049, .0056]	[-.072, .049]	[-.0079, .016]	[-.00072, .031]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

10: Decomposition from Poisson models of the impact of hours spent on all work (household work, economic activity, gathering firewood, and fetching water) on the association of sex with school attendance and performance

Table S10.1. Rate ratio of school attendance for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey

	Difference for being female		Difference explained by added covariates (%)
	Basic model	Full Model	
Pooled	.94***	.97***	45.7***
(n=72,738)	[.93, .95]	[.96, .98]	[30.9, 60.4]
Dominican Republic	1.03***	1.02**	27.0
(n=7,146)	[1.01, 1.04]	[1, 1.04]	[-19.9, 73.9]
Fiji	1.04***	1.01	81.4*
(n=1,582)	[1.01, 1.07]	[.97, 1.05]	[-6.3, 169.0]
Lao	.97***	.98	22.8
(n=8,848)	[.96, .99]	[.95, 1.01]	[-65.6, 111.1]
Mongolia	1.04***	1.01	83.9***
(n=3,646)	[1.03, 1.06]	[.98, 1.03]	[27.8, 140.1]
Pakistan: Balochistan	.58***	.7***	35.3***
(n=7,707)	[.54, .63]	[.65, .77]	[24.5, 46.1]
Pakistan: Khyber Pakhtunkhwa	.62***	.71***	27.7***
(n=10,373)	[.6, .65]	[.68, .74]	[21.2, 34.3]
Pakistan: Punjab	.93***	1.01	118.1***
(n=19,402)	[.91, .94]	[.99, 1.03]	[90.4, 145.8]
Pakistan: Sindh	.73***	.85***	47.0***
(n=7,399)	[.69, .76]	[.8, .89]	[34.5, 59.4]
Samoa	1.05***	1.07***	-36.8
(n=1,165)	[1.02, 1.09]	[1.02, 1.13]	[-121.9, 48.3]
Suriname	1.05***	1.03*	37.7
(n=1,891)	[1.02, 1.09]	[1, 1.07]	[-12.6, 88.1]
Viet Nam	1.03**	1.03	0.2
(n=3,579)	[1, 1.05]	[.99, 1.07]	[-147.2, 147.5]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S10.2. Rate ratio of the number of mistakes on a numeracy test (0–11) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey

	Difference for being female		Difference explained by added covariates (%)
	Basic model	Full Model	
Pooled	.99	1.01	367.6
(n=14,918)	[.96, 1.04]	[.96, 1.07]	[-2438.7, 3173.9]
Mongolia	.82*	.8	-10.6
(n=2,400)	[.66, 1.03]	[.59, 1.09]	[-121.1, 100.0]
Pakistan: Khyber Pakhtunkhwa	1	1.06	-7158.6
(n=2,579)	[.93, 1.07]	[.97, 1.16]	[-648990.4, 634673.2]
Pakistan: Punjab	1.02	1.05	-113.1
(n=6,297)	[.97, 1.09]	[.98, 1.13]	[-415.2, 189.0]
Pakistan: Sindh	.99	.97	-252.2
(n=1,626)	[.92, 1.07]	[.88, 1.07]	[-2444.2, 1939.8]
Viet Nam	1.13	.84	239.5
(n=2,016)	[.79, 1.61]	[.48, 1.5]	[-553.5, 1032.5]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.

Table S10.3. Rate ratio of the number of mistakes on reading comprehension test (0–5) for being female and decomposition of that difference into components explained by hours spent on on economic activity, collecting firewood, and fetching water in the week before the survey

	Difference for being female		Difference explained by added covariates (%)
	Basic model	Full Model	
Pooled	.98	.96	-69.7
(n=14,918)	[.91, 1.05]	[.87, 1.06]	[-396.2, 256.9]
Mongolia	.97	1.03	178.0
(n=2,400)	[.81, 1.16]	[.8, 1.32]	[-908.5, 1264.5]
Pakistan: Khyber Pakhtunkhwa	1.03	1.02	39.5
(n=2,579)	[.92, 1.15]	[.88, 1.18]	[-354.3, 433.4]
Pakistan: Punjab	.86**	.87*	9.2
(n=6,297)	[.76, .97]	[.74, 1.02]	[-51.5, 69.9]
Pakistan: Sindh	.99	.87	-1212.3
(n=1,626)	[.83, 1.18]	[.69, 1.1]	[-21725.7, 19301.0]
Viet Nam	.91	.9	-3.3
(n=2,016)	[.67, 1.23]	[.57, 1.44]	[-398.6, 392.0]

Notes: *P<0.1; **P<0.05; ***P<0.01. The models were adjusted for age, wealth index z-scores, maternal and household head education, number of household members, number of household members less than five years, location of water source, and neighborhood. 95% confidence intervals shown in brackets were adjusted for clustering at the level of primary sampling units. Samples were equally weighted for the pooled estimates.