

# Provision of Religious Information about Female Labor Force Participation to College Students in Pakistan

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## Abstract

Despite the widespread belief that Islam discourages women's labor force participation, existing micro-level empirical studies offer mixed conclusions. This study focuses on Pakistan, where the population is predominantly Muslim and the female labor force participation rate, at 24.5%, is substantially below the global average. We conduct a laboratory experiment targeting male university students. Participants are provided with two different types of information, both of which are reviewed and verified by a religious scholar. One type of information encourages female employment, while the other potentially acts as a deterrent. By isolating the impact of religious framing on attitudes toward women's employment, this study aims to provide clear causal evidence of the effect of religious information on attitudes toward women working outside the home. The findings will offer critical insights for researchers and policymakers seeking to enhance women's labor force participation in South Asia and Middle East and North Africa regions, ultimately contributing to household financial stability and broader economic development.

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## 1. Introduction

Female labor force participation (FLFP) rates remain low in the South Asia and the Middle East, North African (MENA) regions. These regions consist largely of Muslim-majority countries, and consistent with the public perception that Islam restricts women's behavior, many believe that Islam discourages FLFP or women working outside the home. Despite the apparent association between the low FLFP rates and Islam, the causal relationship remains unclear. Contrary to the public image that Islam restricts women's behavior, macro-level evidence on the association between Islam and FLFP yields mixed conclusions (Ross 2008; Guiso, Sapienza, and Zingales 2003). Micro-level empirical studies on this topic are also scarce. One notable study by Dildar (2015), based on evidence from Turkey, reports a significant correlation between religiosity and FLFP among urban residents and an insignificant correlation among rural residents.

We consider the effect of religious norms on FLFP as an empirical question, as these norms may exert either positive or negative influence. On one hand, certain Quranic passages, teachings of the Prophet Muhammad, and interpretations by religious scholars are understood as encouraging FLFP. On the other hand, the strict guidelines governing women's work outside the home may act as a deterrent to FLFP (Biberman, Gul, and Ocakli 2016). Moreover, some Islamic teachings may be misinterpreted or misused to discourage FLFP (Ali et al. 2022).

This study aims to systematically examine the causal influence of Islam on attitudes toward FLFP among male university students through laboratory experiments conducted in Pakistan. Pakistan is an appropriate setting for this study because its FLFP rate, at 24.5%, is substantially lower than the global average of 48.7%,<sup>1</sup> and it has a predominantly Muslim population, with approximately 64% of the population under the age of 30. These features make Pakistan an ideal context for examining how Islam teachings may shape attitudes toward FLFP. We focus on

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<sup>1</sup> <https://genderdata.worldbank.org/en/indicator/sl-tlf-acti-zs>

attitudes because they ultimately influence actual labor market decisions. We target university students because, compared to older men, their attitudes toward women-related issues are more malleable and responsive to interventions (Dhar, Jain, and Jayachandran 2022). Although these students may not yet be directly involved in household decision-making, they are likely to become primary decision-makers within their future households in a patriarchal society. As such, influencing the attitudes of the younger generation carries important policy implications.

This study contributes to the literature on social norms and FLFP by providing novel causal evidence on the relationship between religiosity and FLFP attitudes. The findings offer important policy implications for South Asia and the MENA regions. This study is expected to be of interest to academic researchers and policymakers seeking to promote FLFP and, ultimately, to improve household financial stability and broader economic development.

## 2. Experimental Design

### 2.1. Intervention

We will use laboratory experiments to conduct this research. The controlled laboratory environment enables us to identify the precise impact of Islam on FLFP attitudes, which can be difficult in field settings where numerous confounding factors may dilute this relationship.

We will use two types of Islamic teachings to establish the causal impact of Islam on FLFP attitudes. These teachings have been reviewed and verified by an Islamic scholar. One type encourages FLFP, while the other potentially discourages it. Although most scholars agree that Islam permits FLFP within an Islamic framework, these teachings are often not highlighted in society and therefore remain largely unknown to the public.

The experiment will consist of one control and two treatment arms (T1 and T2). Participants in the control arm will not be exposed to any religious information. In treatment arm T1,

participants will receive Islamic teachings emphasizing women's right to work (positive framing). In treatment arm T2, participants will receive Islamic teachings outlining the rules and regulations women should follow when participating in the labor force (potentially negative framing). While both T1 and T2 contain religious information related to FLFP, they differ in emphasis: T1 highlights women's right to participate in the labor force, whereas T2 emphasizes the religious rules that must be observed by women participating in the labor force. Consequently, T1 is inherently supportive of FLFP, while T2 may be perceived as discouraging FLFP due to the strict conditions imposed. These two framings reflect the divided public perceptions of FLFP in Pakistan and therefore essential elements of the study.

The control arm will not be exposed to any religious information. The exact experimental instructions for the T1 and T2 arms are provided in the Appendix and will be distributed to participants in the respective treatment arms.

## 2.2. Sample size and minimum detectable effects

We plan to recruit 100 participants ( $m = 100$ ) for each of the three groups, yielding a total sample size of 300 observations.

Because the information provided in the T1 arm is positively framed, we hypothesize that the T1 treatment will increase support for FLFP. However, it remains an empirical question whether the T2 treatment encourages or discourages FLFP, as it emphasizes the strict rules and regulations governing women's work participation. Evidence from our previous survey conducted in Lahore suggests that the T2 treatment may encourage FLFP, possibly because many individuals prefer occupations and work arrangements that conform to Islamic rules and regulations, and the treatment may simply remind participants of these rules (Makino and Umer 2025). Accordingly, the calculation of minimum detectable effects below treats the T1 arm as

the treatment group of interest.

We calculate the minimum detectable effects size to ensure 80% statistical power ( $\beta = 0.8$ ). We specify the null hypothesis ( $H_0: \mu = 0$ ) and the alternative hypothesis ( $H_A: \mu > 0$ ) for the T1 arm:

$$Pr(\text{reject } \mu = 0 | H_A) \geq 0.8,$$

Although the World Value Survey includes questions related to the attitudes toward women working outside the home, no statistics on these attitudes are reported for Pakistan. Therefore, we use the FLFP rate as a proxy for these attitudes. According to the latest ILOSTAT data and the most recent Pakistan Labour Force Survey (2024–25), approximately 25% of women with a college degree work outside the home (compared with an overall FLFP rate of 22%). We calculate the minimum detectable effects, using the STATA command *power*, with a control mean of  $\mu_1 = 0.25$ , a common standard deviation of  $sd = 0.25$  for both the control and treatment groups, and a type I error at 5% level ( $\alpha = 0.05$ ). This yields a minimum detectable effects size of 10 % point, corresponding to a treatment mean of  $\mu_2 = 0.35$ .

### 2.3. Procedure

The laboratory experiments will be conducted with students at the National University of Sciences and Technology (NUST) in Islamabad, Pakistan, in February 2026. Within NUST, the study will be implemented at the NUST Business School (NBS). A full-time faculty member at NBS has made the necessary organizational arrangements for implementing the experiments.

Besides the study aims to examine the impact of religious information on attitudes toward FLFP among young men, the participant pool will consist exclusively of male undergraduate and

graduate students. Female students will be excluded, as they fall outside the scope and objectives of the current study.

We will obtain the schedules of NBS classes after which classrooms are available exclusively for at least one hour to conduct the experiments. At the end of the selected classes, the Co-PI (Hamza Umer) will enter the classroom, announce the experiment, and explain that participation is entirely voluntary and that the decision to participate or leave will have no effect on students' academic grades. Interested male students will remain in the classroom to participate in the experiment.

On average, each NBS class contains 50 students, about half of whom are male. Based on our prior experiences conducting experiments at NBS, an average of three to five students per class choose not to participate and leave. To achieve the target sample of 300 male participants, we will randomly select 13 classes from the list of eligible classes and aim to recruit participants from these classes. If the target sample size is not reached, we will randomly select additional classes and repeat the procedure until the required sample is obtained. If we are unable to recruit sufficient participants from NBS, we will extend recruitment to male students in other departments at NUST after obtaining the necessary permissions. As an additional contingency, faculty members at the NUST School of Social Sciences and Humanities (S3H) have agreed to accommodate the implementation of the experiment if needed.

The unit of randomization is the individual participant, and there is no clustering. Random assignment of the 300 participants to the three arms—100 to T1, 100 to T2, and 100 to the control group—will be conducted via a public lottery in the classroom.

In the designated experimental classroom, the Co-PI (Hamza Umer) will begin by reiterating the purpose of the experiment and instructing participants to sit in an examination-style

arrangement to ensure privacy in decision-making. Informed consent forms (see Appendix) will then be distributed. After participants read and sign the consent forms, the experimental instruction sheets (Items 1–3; see Appendix) will be distributed. Once all participants have read the instructions, the decision sheets (Items 4–6; see Appendix) will be distributed sequentially in the same order. This will be followed by the post-experiment survey (Items 7–8; see Appendix). At the conclusion of the experiment, participants will be paid privately, receiving a fixed participation fee and any additional earnings based on their decisions in the dictator game (DG). A signed payment receipt (Item 9; see Appendix) will be collected.

Experimental materials Items 1–2, and 4, 6–9 are identical across the treatment and control groups. The intervention component (Item 3) differs between T1 and T2 arms and is absent in the control arm. The list experiments (LE) component (Item 4) differs between the LE treatment and LE control groups.

### 3. Data

#### 3.1. Primary outcomes

Our primary interest is to measure male students' attitudes toward FLFP or women working outside the home (Bursztyn, Gonzalez, and Yanagizawa-Drott 2020). Immediately following the intervention, we will elicit monetary donations to a foundation that promotes FLFP in Pakistan (see Appendix for the DG). The amount donated (DG donations) constitutes our first incentive-compatible outcome variable.

Decisions elicited through the DG, as well as responses to explicit survey questions, may be affected by social desirability bias, whereby respondents tend to express more favorable views toward FLFP. To mitigate this bias, we incorporate an LE, which asks participants to report the total number of statements with which they agree from a list, without revealing agreement or

disagreement with any individual statement. This serves as the second outcome measure of attitudes toward FLFP. Within each experimental arm (T1, T2, and control), participants will be randomly assigned, via a public lottery, to either the LE treatment group or the LE control group, with approximately half of the participants in each experimental arm assigned to each LE condition. The exact LE statements are provided in the Appendix. Both the LE treatment and control lists contain the same three statements, while the LE treatment list includes one additional statement related to attitudes toward FLFP. The order of the statement related to FLFP attitudes will be randomized so that it appears in a random position within each of the four LE arms.

We will also elicit attitudes towards FLFP using direct, self-reported questions (see Appendix, questionnaire Part A). These stated attitudes constitute the third set of outcome variables. They include questions assessing attitudes toward FLFP in general, as well as attitudes toward a future wife or one's own sister working outside the home. In addition, they include questions measuring respondents' willingness to hire women and to work with women in the future.

### 3.2. Post-experiment survey

Following the outcome measures described in Section 3.1, we will administer a post-experiment survey to elicit broader gender attitudes and religiosity measures (see Appendix, questionnaire, Part B). Gender attitudes include views on household responsibilities, decision-making authority, autonomy, mobility, women's rights (e.g., voting and education), FLFP, marriage, and related norms. Religiosity measures include the frequency of prayers, mosque attendance, Quran recitation, and self-assessed Islamic knowledge and understanding.

Gender attitudes are measured using questions GA1-GA15 in the questionnaire (Appendix).

Respondents indicate their agreement with each of the 15 statements using a 5- point Likert scale (1=strongly disagree; 5=strongly agree). We pre-specify the construction of several thematic sub-indices as simple unweighted sums of relevant items. In particular, the women's mobility attitudes variable will be constructed as the sum of GA2 and GA3. The patriarchy attitudes variable will be constructed as the sum of GA5 and GA6. The women's education rights attitudes variable will be constructed as the sum of GA7-GA9. The attitudes toward women working outside the home will be constructed as the sum of GA10 and GA11. The marriage market attitudes toward working brides variable will be constructed as the sum of GA14 and GA15. In addition, we will construct an overall gender attitudes index defined as the sum of GA1-GA15, with higher values indicating more progressive attitudes.

Religiosity is measured using items R1-R15 in the questionnaire (Appendix). R1 (frequency of prayers) serves as the primary measure of ritual-based religiosity. We will assess robustness using R2 (frequency of mosque visits) and R12 (frequency of Quran recitation). Supplementary religiosity measures include R5 (belief-based religiosity) and R6 (knowledge-based religiosity). R5 and R6 are measured on 5-point Likert scale: self-declared religiosity (1 =very religious; 5 =not at all religious, reverse-coded so that higher values indicate greater religiosity) and self-assessed Islamic (1 =expert; 5 =never studied, reverse-coded). Although these variables are not primary outcomes, R8 and R11, which measures correct knowledge regarding FLFP in Islam, may be analyzed outcomes of the intervention if sufficient variation exists. We will also construct a religiosity index defined as the sum of the three religiosity measures (ritual-based, belief-based, and knowledge-based), with higher values indicating greater religiosity.

These variables will serve as control variables if they are balanced across treatment and control arms. Given that the experiment is conducted in a patriarchal context, controlling for patriarchal attitudes is important. In addition, because the intervention is based on religious

teachings, we will control for individual-level religiosity. In heterogeneity analyses, we will examine whether responsiveness to intervention varies by religiosity (e.g., whether more religious participants are more sensitive to Islamic information).

Finally, the last section of the post-experiment survey collects demographic and socioeconomic characteristics that will be used as control variables in the statistical analysis.

#### 4. Estimation

Because the treatment arms (T1 and T2) and the control arm are randomly assigned in a laboratory experimental setting, the estimation equation is straightforward:

$$FLFP_i = \alpha + \beta_1 T1_i + \beta_2 T2_i + \mathbf{x}'_i \boldsymbol{\gamma} + \varepsilon_i,$$

where  $FLFP_i$  denotes participant  $i$ 's attitudes toward FLFP, measured using DG donations, the LE, or self-reported survey responses (see Section 3.1).  $T1_i$  ( $T2_i$ ) is an indicator variable equal to 1 if participant  $i$  is assigned to treatment arm T1 (T2), and 0 otherwise. The vector  $\mathbf{x}_i$  contains participant  $i$ 's socioeconomic and demographic characteristics. Conditional on balance between treatment and control arms, gender attitudes and religiosity measures will also be included as components of  $\mathbf{x}_i$ .

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## Appendix

### A. Experimental Instructions

#### 1. Introduction

Thank you for participating in the experiment. Your decisions during the experiment will not be shared with others and shall only be used for research purposes.

Please do not talk to other participants, or else, you will be disqualified from the experiment. In case you are disqualified due to non-compliance with experimental protocols, or in case you decide to leave the experiment before completion, the documents collected from you in both cases will be shredded and destroyed today to protect all your details. They will not be used for further analysis. If you have any questions during any stage of the experiment, please raise your hand and wait for the experimenter. Only relevant questions will be answered. Use of mobile phones is prohibited. When you finish reading the instructions, wait for the next announcement from the experimenter.

#### 2. Procedure

The experiment will take approximately 45 minutes. You will receive a participation fee of 500 rupees. In addition, you can earn more money, up to 1000 rupees, during the experiment based on your decisions. The amount of money you earn based on your decisions, and your participation fee will be paid at the end of the experiment to you in an envelope.

#### 3. Task

(Different passages will be read for T1 and T2 treatment arms, respectively. See the Intervention for specific passages. There is no task for the control arm.)

##### 3.1 Instruction given to T1 arm (positive frame):

Before moving to the experimental tasks, please carefully read the following Islamic teachings and evidence that supports participation of women in Halal income generating activities. We would like to start off with Quranic teachings because they are a guiding source for all Muslims. These guidelines have been checked and agreed by a religious scholar (Mufti).

1) In Surah Al-Mu'minun (surah 23, verse 1 – 4) it is mentioned that:

*“Believers will attain what they hope for. They are reverent in their prayers. They turn away from idle talk. They work for zakat.”*

The word ‘believers’ contains both male and female Muslims. ‘They work for zakat’ can have two

meanings as per religious scholars. The first meaning is that both male and female Muslims work to give zakat. The second meaning is that both male and female Muslims work for having zakat delivered to its recipients.

The scholars refer to this verse of Quran and suggest that female participation in the labor force is allowed in Islam. It is also important to mention that even though a female Muslim does not require money for herself (family is taking care of her financial requirements), she can still earn with a goal of paying zakat and helping the poor people.

2) In Surah Al-Qasas (surah 28, verse 22 - 23) it is mentioned:

*“And when he arrived at the waters of Madyan, he found a large number of people watering (their animals) and found, aloof from them, two women keeping (their animals) back. He said, “What is the matter with you?” They said, “We cannot water (our animals) until these shepherds take (their animals) back after watering them, and our father is very old man.”*

The above verses of Quran refer to the scenario where Prophet Musa (AS) went near the well and saw two females waiting for their turn to provide water to their animals. This passage shows that women have historically departed from their houses to perform necessary chores such as grazing animals if required by the circumstances.

3) Examples from the life of Holy Prophet Muhammad (Peace be upon him)

The life of Prophet Muhammad (PBUH) also serves as a role model for Muslims. A closer look at the life of Prophet Muhammad (PBUH) also reveals following interesting elements regarding participation of women in the income generating and other important activities.

- a) The first wife of Prophet Muhammad (PBUH) Hazrat Khadija (RA) was a very successful and well-known business woman. This example provides us clear evidence that women can take up Halal professions.
- b) Jabir Ibn 'Abdullah (Allah be pleased with them) reported: My maternal aunt was divorced, and she intended to pluck her dates [from palm trees]. A person scolded her for having come out (during her waiting period). She came to the Prophet (PBUH) and he told her: "Certainly you can pluck (dates) from your palm trees, for perhaps you may give out charity or do an act of kindness." (Muslim, Sahih).
- c) Women during the period of Prophet Muhammad (PBUH) used to help armies during wars by supplying water.

The teachings and events mentioned earlier indicate that women can work if required. A majority of religious scholars and sharia experts (mufti) also approve women's work. However, there are important Islamic guidelines for women that should be followed if they decide to work. However, for detailed instructions, please contact a religious scholar (Mufti).

We hope this discussion provides you some knowledge about the positive Islamic perspective on female labor force participation. In case you need further information on this topic, you can always read the translation and tafsir of Quran, read the life of the Holy Prophet Muhammad (PBUH) or contact your nearest religious scholars.

### 3.2 Instruction given to T2 arm (negative frame):

Before moving to the experimental tasks, as a source of knowledge, I would like to share the following Islamic guidelines for the participation of women in Halal income generating activities. These guidelines have been checked and agreed by a religious scholar (Mufti).

- 1) The work should be out of a need. For example, the female is not having any resource or bread earning member in the family. Similarly, women can also work if they want to support their family or oldparents.
- 2) Women can also work even if she is not in need, provided her work does not hinder her other responsibilities as a wife and mother.
- 3) Women should seek permission of their guardian (husband or father) to work. If circumstances allow only one of them to work, then men will take precedence.
- 4) Islam has guided women about their dress code which they must follow all times, including work.
- 5) The work should not lead women to travel without a mahram or Muslim woman.
- 6) It is preferable that the societal environment must be either Islamic or friendly towards Muslims.

### 4. Dictator Game (DG, Outcome)

In this section, you will make one decision that involves real money. Please carefully read the instructions before making the decision. The money you earn in this section will be paid at the end of the experiment. In case you have any questions, please raise your hand and wait for the experimenter.

You have been provided 1000 rupees by the experimenter. Please indicate if any out of these 1000 rupees you would like to donate to a foundation in Pakistan that has been working specifically with women on several programs, such as, providing vocation and financial trainings to help women enter

the labor market and become an earning member of the society. If you do not donate, you will obtain all 1000 rupees at the end of the experiment.

Donation (if any): \_\_\_\_\_ PKR

At the end of the experiments, the experimenter will transfer money donated in all experimental sessions together at once to the foundation. In case you donated and need a proof of cumulative donations, please provide your details below.

Name:

Email Address:

Telephone Number:

Student ID:

#### 5. List experiments

Instruction to experimenter: Randomize list experiment (hereafter LE) treatment and control within the arms above (positive T1, negative T2 or neutral/control arms) so that we have both LE treatment and LE control in T1, T2, and control arms, respectively. Please randomize the order of the statement about the wife working outside the home so that it appears in a random position within each of the four LE arms.

##### 5.1 LE Treatment questions:

How many of the following statements do you agree with? You do not need to respond to each statement individually; simply provide the total number of statements you agree with.

In my opinion, Pakistani nationals should receive privileged access to job vacancies before non Pakistani workers.

In my opinion, the current pension system in the public sector is good.

In my opinion, the monthly minimum wage should be kept at its current level.

In my opinion, my future wife or wife (if married) will work outside the home for pay.

##### 5.2 LE Control questions:

How many of the following statements do you agree with? You do not need to respond to each statement individually; simply provide the total number of statements you agree with.

In my opinion, Pakistani nationals should receive privileged access to job vacancies before non-Pakistani workers.

In my opinion, the current pension system in the public sector is good.

In my opinion, the monthly minimum wage should be kept at its current level.

6. FLFP related attitudes(Outcomes)

We ask participants to answer the questions in a structured questionnaire. The questionnaire is provided in Appendix. The questions F1-F8 are outcomes measuring both attitudes toward women working outside the home, and their willingness to hire/work with women in the future.

7. Post-experimental survey (Gender Attitudes and Religiosity)

The questions GA1-GA15 measure the respondent's attitudes toward gender. The questions R1-R15 measure the respondent's religiosity. The structured questionnaire is provided in Appendix.

8. Post-experimental survey (Demographic and Socioeconomic Variables)

We ask participants to answer the demographic and socioeconomic questions in a structured post-experiment questionnaire. The questionnaire is provided in Appendix.

9. Payment slip

At the end, participants are paid in private their earned money and fixed participation fee. A signed payment slip is also obtained. The payment slip is provided in Appendix.

Note (this information is not a part of the experimental instructions):

At the end of all experiments, the cumulative amount of money donated by all students will be transferred to the recipient charity organization, either via bank transfer or by visiting the organization's office in Lahore. In either case, a formal payment receipt will be obtained and retained as proof. An electronic copy of the receipt will be shared via email with participants who wish to verify the payment made to the charity organization.

**B. Questionnaire**

**Part A. Questionnaire (outcome)**

**\* Note: Part A will be attached at the end of experiments (LE)**

Please answer the following questions F1-F8. There are no monetary incentives associated to any of these questions.

F1.	Do you think it a good idea for women in general to work outside the home?	1= Yes 2= Yes, only if it is white collar job 3= No
F2.	If no, why? (Multiple answers)	1= The family would not approve 2= The neighbors/society would not approve 3= Women should focus on housework 4= Women don't have the skills/education 5= It usually damage family honor 6= Other (specify specify) _____
F3.	Would you allow your future wife (or wife if you are married)/sister (if you have one) to work outside the home?	1= Yes 2= Yes, only if it is white collar job 3= No
F4.	If no, why? (Multiple answers)	1= The family would not approve 2= The neighbors/society would not approve 3= No woman in the family has worked 4= She should focus on housework 5= She doesn't have the skills/education 6= She will not be able to get a good groom 7= It is against the family honor 8= Women of this house don't need to work to earn money 9= Other (specify specify) _____
F5.	Imagine you oversee hiring in your future full-time job. How willing are you to hire a relevantly qualified man?	1. Not willing at all 2. Not willing 3. Neither willing nor unwilling 4. Willing 5. Extremely willing

F6.	Imagine you oversee hiring in your future full-time job. How willing are you to hire a relevantly qualified woman?	<ol style="list-style-type: none"> <li>1. Not willing at all</li> <li>2. Not willing</li> <li>3. Neither willing nor unwilling</li> <li>4. Willing</li> <li>5. Extremely willing</li> </ol>
F7.	How willing are you to work with men at job?	<ol style="list-style-type: none"> <li>1. Not willing at all</li> <li>2. Not willing</li> <li>3. Neither willing nor unwilling</li> <li>4. Willing</li> <li>5. Extremely willing</li> </ol>
F8.	How willing are you to work with women at job?	<ol style="list-style-type: none"> <li>1. Not willing at all</li> <li>2. Not willing</li> <li>3. Neither willing nor unwilling</li> <li>4. Willing</li> <li>5. Extremely willing</li> </ol>

**Part B. Post-Experiment Survey Questionnaire**

**\* Note: Part B will be distributed once the experiment and Part A are completed.**

Please answer the following questions GA1-GA15. There are no monetary incentives associated to any of these questions.

**Gender (we ask about general views, NOT about your personal family)**

Using the scale below, please indicate how much you agree with each statement:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

- GA1. Household work (like cooking, washing, and cleaning) is the responsibility of all members and not just of women\_\_\_\_\_
- GA2. A woman does not need her husband’s permission to visit her friends/relatives in the neighborhood \_\_\_\_\_
- GA3. A woman does not need her husband’s permission to visit outside the neighborhood\_\_\_\_\_
- GA4. Women should go to cast their own votes\_\_\_\_\_
- GA5. The important decisions in the family should be made only by men of the family \_\_\_\_\_
- GA6. A woman should not argue with her husband even though she disagrees with him\_\_\_\_\_
- GA7. Boys should be more educated than girls\_\_\_\_\_
- GA8. If a girl continues to study up to the Master’s level, that increases her chances of finding a better groom\_\_\_\_\_
- GA9. If a girl continues to study up to the Master’s level, that decreases the amount of dowry that the parents need to pay \_\_\_\_\_
- GA10. Women should not work outside but should rather take care of the family \_\_\_\_\_
- GA11. Women should not work outside even if other household members (e.g., sisters) can take care of the family\_\_\_\_\_
- GA12. Income earned by a women should be remitted to her husband\_\_\_\_\_
- GA13. A woman should ask her husband for permission if she wants to work outside\_\_\_\_\_
- GA14. If a girl works outside home, that increases her chances of finding a better groom\_\_\_\_\_
- GA15. If a girl works outside home, that decreases the amount of dowry that the parents need to pay\_\_\_\_\_

Please answer the following questions R1 – R15. There are no monetary incentives associated to any of these questions.

- R1. On average, how many of the five compulsory prayers you offer daily? Enter 0, if none.  
\_\_\_\_\_
- R2. On average, how many times a day you go to the mosque for praying? Enter 0 if none. \_\_\_\_\_
- R3. Kindly tell whether you are an active member, inactive member or not a member of any religious organization?  
\_\_\_\_\_  
1=Active member, 2=Inactive member, 3=Not a member
- R4. Please indicate how important Islam is in your life? \_\_\_\_\_  
1=Very important, 2=Important, 3=Neither important not unimportant, 4=Not important, 5=Not at all important
- R5. How would you describe yourself about your religiosity?  
1=Very religious, 2=Religious, 3=Neither religious nor non-religious, 4=Not religious, 5=Not at all religious
- R6. How would you rate your overall knowledge about Islam?  
1=Expert, 2=Good, 3=Neither good nor bad, 4=Bad, 5=Never studied
- R7. How would you rate your Islamic knowledge about female employment?  
1=Expert, 2=Good, 3=Neither good nor bad, 4=Bad, 5=Never studied
- R8. Do you think Islam allows female to participate in the *Halal* labour activities?  
1=Yes, 2=No, 3=Unsure
- R9. Did you hear any Islamic ruling from any Islamic scholar (*aalim*), your local mosque's *Imam* or other religious source that promotes females taking up *halal* work opportunities?  
1=Yes, 2=No, 3=Unsure
- R9.1 If Yes above (R9=1), how many rulings did you hear? \_\_\_\_\_
- R10. Did you hear any Islamic ruling from any Islamic scholar (*aalim*), your local mosque's *Imam* or other religious source that discourages females taking up *halal* work opportunities?  
1=Yes, 2=No, 3=Unsure
- R10.1 If Yes above (R10=1), how many rulings did you hear? \_\_\_\_\_
- R11. Do you know that the first wife of the Holy Prophet (peace be upon him) Hazrat Khadija (RA) was a very successful businesswoman?  
1=Yes, 2=No
- R12. How often do you recite the Quran?  
1=Daily, 2=More than once a week, 3= Once a week, 5= Once a month, 6=Only during Ramadan, 7= Once a year, 8=Don't recite
- R13. Do you study the translation and explanation (tafsir) of the Quran?  
1=Yes, 2 = No
- R14. Do you study the Hadith?  
1=Yes, 2 = No
- R15. Do you frequently interact with religious scholars (Mufti, Alim) to obtain religious guidance?  
1=Yes, 2 = No

Please answer the following questions. There are no monetary incentives associated to any of these questions.

1. **How old are you?** \_\_\_\_\_ Years
  
2. **What is your marital status?**  
a) Unmarried                      b) Married
  
3. **What is your nationality?**  
a) Pakistani                      b) Other (please specify) \_\_\_\_\_
  
4. **How many brothers do you have?** \_\_\_\_\_
  
5. **How many sisters do you have?** \_\_\_\_\_
  
6. **What is your major / specialization?** Major \_\_\_\_\_
  
7. **What is your employment status now?**  
a) Not working                      b) Working part-time                      c) Working full-time
  
8. **Has your mother ever worked outside the home for pay?**  
a) Yes, b) No, c) Don't know
  
9. **Only if you have any sister, has she ever worked outside the home for pay?**  
b) Yes, b) No, c) Don't know
  
10. **Your current residence location is which of the following.**  
a) Urban  
b) Rural  
c) Semi-Urban
  
11. **Please select all that apply below about your previous work experience**  
a) Worked as a part-time employee  
b) Worked as a full-time employee  
c) Managed my own / family business  
d) Did not work
  
12. **If you have worked previously or managed business, what is your total experience in years?**  
Previous work experience \_\_\_\_\_ Years

## C. Informed Consent

### Informed Consent Form

**Organization:** Hitotsubashi University (Tokyo, Japan)

**Name of investigators:** Dr. Momoe Makino, Dr. Hamza Umer

#### **Purpose of the research**

The purpose of this study is to understand religion and economic decisions of Pakistani people. The research is funded by Institute of Economic Research (IER) at Hitotsubashi University in Japan.

If you decide to take part in the study, you will be asked to do the following activities: participate in economic experiments, answer a post-experimental survey, and submit the receipt of monetary payment at the end of the experiment.

#### **Risk**

There is no risk of physical or emotional harm if you participate in this study.

#### **Benefits**

If you decide to participate in the experiment by signing this informed consent form, you will be paid a fixed participation fee of 500 PKR, irrespective of whether you complete or partially complete the experimental activities. Moreover, based on your decisions during the experiment, you can expect up to 1000 PKR. The total money including participation fee and your earnings during the experiment, shall be paid in an envelope at the end of the experiment in private to you.

#### **Time required**

The experiment will take approximately 45 minutes.

#### **Privacy, anonymity and confidentiality**

Identifier information collected in this study will be coded with a number and will be kept confidential. All information will be saved in a different encrypted file where only authorized research staff will have access. Your name or any other privacy related information will never appear in any publication or results from the study.

#### **Future use of information**

If there is a need for future use of the information collected by the experimenter, we will provide only de-identified data so that privacy, anonymity and confidentiality of the participants are ensured. We plan to publish the findings from this study in a journal. The anonymized data (without any personal information) might also be made publicly available on the journal's website.

#### **Right not to participate and withdraw**

Participation in this research is voluntary. You have the right to know about the procedures, risks, and benefits of the study. Even if you decide to take part, you can change your mind later and can leave the study at any time. No matter what decision you make, there will be no problems for you, and will not affect your grades. Please note that once this experiment concludes today and you leave the room, you will not be able to withdraw from the experiment.

In case you are disqualified due to non-compliance with experimental protocols, or in case you decide to leave or withdraw from the experiment at any stage today, the documents collected from you in both cases will be shredded and destroyed today to protect all your details. They will not be used for

further analysis. You will still be paid participation fee of 500 PKR in case you are disqualified or if you leave or withdraw from the experiment. In case you decline to participate in the experiment and do not sign the informed consent form, you will not be paid any money.

**Answering your questions/ Contact persons**

If you have any questions about this study, or if you would like to know primary findings of this study, please contact Dr. Hamza Umer (investigator in this project) either via email ([hamza\\_chouhdary@yahoo.com](mailto:hamza_chouhdary@yahoo.com)) or via phone (+81 90 9808 1991).

We are very grateful for your participation.

**Do you agree to participate voluntarily in this experiment?**

Yes	No
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**(If you agree to take part in our study, please indicate that by putting your name and signature at the specified spaces below)**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**D. Payment Receipt**

Payment Receipt and Experiment Participation Report

Organization: Hitotsubashi University

Researchers: Dr. Hamza Umer, Dr. Momoe Makino

Funding Organization: Institute of Economic Research (IER), Hitotsubashi University

Please fill in the following information. Submit this receipt before you leave to the experimenter.

Name: \_\_\_\_\_

Affiliation/position: \_\_\_\_\_

Mobile Number: \_\_\_\_\_

Email: \_\_\_\_\_

I hereby confirm that I have participated in this experiment and received a total of 1,500 rupees. This amount consists of a fixed payment of 500 rupees and an additional 1,000 rupees, which I chose to keep all to myself, or donate partially or fully to an NGO at my discretion during the experiment. I confirm that all payments have been calculated correctly.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

No. \_\_\_\_\_