Labor Market Information and Parental Attitudes toward the Labor Force Participation of their Daughters: Experimental Evidence from Rural Pakistan[†]

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Abstract

Female labor force participation (FLFP) remains low in South Asian countries even though it is considered to be crucial for development and for the alleviation of poverty. There seems to be a strong stigma in the region against women working outside the home. Previous qualitative interviews reveal the general lack of knowledge with regard to labor market opportunities for female workers. This study aims to investigate whether providing parents with information on income earning opportunities for young women is effective in changing parental attitudes toward FLFP. We conducted a randomized controlled trial (RCT) within commuting distance of formal export-oriented garment factories in rural Pakistan. The estimation results show that the provision of information with regard to working conditions and environments is effective in influencing positive changes in parental attitudes toward FLFP in garment factories in rural Pakistan. Given the strong stigma that exists against FLFP, especially in factories, we believe that the observed positive transformations in the attitudes toward FLFP in factories is a prerequisite to FLFP and that it forms an encouraging first step toward achieving the actual enhancement of FLFP.

Keywords: Dowry, Female labor force participation, Marriage market, Assortative matching, Pakistan

JEL classification: J12, J16, N35, Z13

1   Introduction

The enhancement of female labor force participation (FLFP) is often argued to be pivotal for nations with regard to achieving development and in alleviating poverty (World Bank, 2011). FLFP is also considered crucial to the enhancement of women's empowerment (Duflo, 2012) in various aspects including delay in marriage (Baird et al., 2011; Jensen, 2012; Heath and Mushfiq, 2015), higher education (Luke and Munshi, 2011; Jensen, 2012), and higher bargaining position within the household (Qian, 2008; Anderson and Eswaran, 2009; Majlesi, 2016). The FLFP rate[1] is low in South Asian countries; it is the lowest in Pakistan, and has even been declining in India since 1990 (Andres et al., 2017; De Haan, 2018). Cultural and religious norms such as purdah (i.e., the practice of gender segregation and the seclusion of women in public, observed in South Asian countries), patriarchy, and Islam are often cited as reasons for the low rate of FLFP in these countries. However, these cultural and religious norms cannot systematically explain the low rate of FLFP in these countries, given the regional variation noted within South Asia. For example, while Bangladesh and Pakistan share similar cultural and religious norms, the majority of sewing operators in the Pakistan garment industry are male and most of the sewing operators in Bangladesh are female as is typically observed in other parts of the world. Generally speaking, Hindu women in rural India exhibit stronger stigma against working outside the home than do Muslim women in rural Bangladesh (Alvi and Das, 2016).

The low rate of FLFP can be attributed to both supply and demand factors. A demand-side factor can be the lack of income earning opportunities for rural women. For example, teaching is often regarded the only available and acceptable job for educated women in rural areas in developing countries. Young women in developing countries are increasingly educated in recent years; thus, there is often an oversupply of young qualified women for teaching jobs available in rural areas (Makino, 2018). Although demand-side factors cannot be ignored, this study focuses on supply-side factors. Attending to the supply-side is not irrelevant in the context of rural Pakistan because female labor supply is very inelastic. The situation is similar to the circumstances of the early-twentieth century in the US where labor demand did not play an important role in FLFP (Goldin, 2006). Further, our previous qualitative interviews reveal that demand-side factors are not the main reasons preventing FLFP in a region with many garment factories (Figure 1). This study considers it realistic to assume a situation in which there are plenty of job opportunities for women.

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[1]The labor force participation rate in this study follows the definition given by ILO, a measure of the proportion of a country's working-age population that engages actively in the labor market, either by working or looking for work. It may underestimate the number of persons who (a) are in labor force less than 30 days over the year preceding the survey, (b) are in unpaid employment, or (c) work near or in their home, thus mixing work and personal activities during the day.

Among supply-side factors, the analysis is further centered on the barriers that prevent young unmarried women from working outside the home. Apart from the universal burden of household chores, certain South Asian specific factors that discourage FLFP can be extracted by concentrating attention on young unmarried women.[2] One distinguished South Asian feature is the stigma against women working outside the home, and this aspect is related to the primary reason exhibited in Figure 1: patriarchal males are against their female household members working outside the home. In rural Pakistan, young women stay within their natal household until marriage after completing their education without taking on the primary responsibility for household chores. The average age of Pakistani women at marriage was 23 in 2013, while girls of school entrance age were expected to obtain seven years of schooling on average in 2014.[3] Hence, young women aged above 13 in Pakistan are neither students nor primary caretakers of household chores; instead, they seem to stay at home unproductively for an average of 10 years. We believe that it is important to encourage the FLFP of such young women to financially assist their own households, and to make the best use of human capital at the national level. Besides, maintaining a narrow focus on unmarried women makes it simpler to analyze the decision-making process about whether or not women should work outside the home. Decisions concerning young unmarried women are almost always taken by parents, especially fathers, in South Asian countries while those concerning married women are more complex (these may involve their husbands, in-laws, or parents).

Our qualitative interviews further reveal that many people are not aware of working opportunities for young women within commuting distance; the stigma against women working outside the home may discourage those people from obtaining proper information. Typically, people dislike the idea letting their daughters work in factories. Some say that women working in factories are morally degraded. Others fear that women may be raped in factories. These beliefs are based mostly on mere rumors. Most people do not have even the most basic information about working in factories such as how much workers are paid. They know still less about the fact that some factories offer suitable working environments for women. This lack of knowledge is understandable given the low educational levels of the parental generation. Contrary to the typical belief, some factories hire many women as production workers, and women who work in these environments seem to be satisfied with their working conditions (Makino, 2018). This contentment is not surprising because formal sectors pay at least minimum wage[4] and abide by the minimum regulations, while the remunerations and working conditions of alternative jobs available to women in the informal

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[2]Married women are universally considered to be primary caretakers of the household, and especially of the children. In developing countries where formal institutions such as childcare centers are not widely available, the burden of the household chores for married women with children is likely to be heavier.

[3]Data sources for the age of marriage and years of schooling are the United Nations Marriage Data 2017, and the Human Development Report 2015, respectively.

[4]The minimum wage was PKR 14,000 in the year 2016–2017.

sector as housekeepers or as agricultural labors are much worse. Also, some factories offer suitable working environments for women (e.g., gender segregated work areas, many female colleagues, attractive payment compared to alternatives).

This study aims to investigate whether providing parents with information on income earning opportunities for young women is effective in changing parental attitudes toward FLFP. In particular, the income earning opportunity is specified as working in export-oriented garment factories. With this objective, a randomized controlled trial (RCT) was conducted within commuting distance of formal export-oriented garment factories in rural Pakistan. The intervention was effected to provide parents of young women with the same information that is given by those garment factories when they recruit female workers. FLFP in Pakistan is the lowest among all the South Asian countries, and people usually express negative opinions about women who work in factories. In the formal export-oriented garment factories, human resource managers asserted that they would like to increase the numbers of female workers because they are more punctual, docile, and easily trained (Makino, 2014). Given the results obtained from the qualitative interviews, there appear to be plenty of job offers for women in the survey area and, thus, the study's focus on the supply-side barriers is not misplaced.

The estimation results demonstrate that provision of information is effective in changing parental attitudes toward FLFP in garment factories in rural Pakistan. Parents of unmarried daughters are more likely to positively alter their opinion about FLFP—in general as well as in relation to garment factories—when they are made aware of the working conditions and environment that would be available. Hence, parents who receive information are more likely to be prepared to send their daughters to work in garment factories, in comparison to those in the control group. The observed change was still effective one year after the information was provided. The effects do not seem to differ whether the information was disseminated in sessions to groups of people or whether it was provided individually. There is also no notable gender disparity in the opinion changes: it is immaterial whether the information was provided through the father or the mother. However, when the attitude toward FLFP in garment factories is measured by the negative change in the reservation wage (i.e., the minimum wage at which the parents are ready to send their daughters to work in factories), the positive effects (i.e., the negative change in reservation wages) are only observed when the person provided with the information was the mother.

These results are consistent with those obtained by Jensen (2012), who demonstrate that the provision of information pertaining to new income earning opportunities encouraged young women to work outside the home for pay. However, our findings are different from Jensen (2012) in two respects: first, the current study does not expect the outcome of actual change in FLFP in garment factories because one year is not a realistic time frame within which to observe genuine change in

conservative areas such as rural Pakistan; second, sewing operator jobs in export-oriented garment factories are considered to be the new income earning opportunities for young women in the current study, while Jensen's (2012) research concerns white-collar work in the business processing outsourcing (BPO) sector. Traditionally, social stigma is attached to women who work outside the home in jobs that require manual labor, and not to white-collar jobs (Goldin, 2006). The BPO sector provides office-based job opportunities for educated young women, and there is much less shame or dishonor attached to women working in this sector. We focus on working opportunities in factories that are available for young women of poor households in rural Pakistan. Given the strong existing stigma against women who work in factories, we believe that a positive change in the attitudes toward FLFP in factories is a prerequisite of social transformation. It is thus an important outcome and represents an encouraging first step in the accomplishment of the actual enhancement of FLFP.

The remainder of this paper is constructed as follows: section 2 presents the research framework; section 3 describes our RCT and household survey as well as the datasets; section 4 presents the empirical results; and section 5 concludes the study.

2 Research Framework

Potentially, three factors may influence the stigma against unmarried young women working outside the home in rural areas of South Asia: (1) lack of information, (2) strong and sticky personal attitudes against FLFP, and (3) external social pressure. The first attribute preventing young rural women from working outside the home may be the lack of information. The poor are often uneducated in developing countries and are disadvantaged in terms of access to information pertaining to newly available, lucrative, and suitable working opportunities for women. Jensen (2012) elucidates that the provision of information about the availability of new income earning opportunities effectively enhances the participation of young women in the work force. The deficiency of information may include both aspects of a mere absence of awareness as in the case of the BPO sector in Jensen (2012) and the inaccuracy of the image of the working conditions and environments generated through rumor or social prejudice. The Pakistani garment sector has traditionally hired male workers including sewing operators, and most factories have not offered suitable working environments for women. Only a few factories in the Pakistani garment sector have initiated the drive to promote the hiring of female workers by providing working environments that are apposite for women (Makino 2014, 2018). It is thus not surprising that the rural poor adhere to traditional beliefs about factory environments and that they do not know about the few progressive factories that have initiated such a movement.

The second factor can be the stickiness of the preference or attitude toward FLFP. If the personal internal stigma against FLFP is very strong and sticky, a person's attitude toward FLFP would rarely change even after the correct information on new lucrative income earning opportunities for women is obtained. In rural areas of South Asian countries, decisions about young women joining the labor force are usually taken by parents, especially fathers. It is thus necessary to positively transform parental attitudes toward FLFP if young women are to be encouraged to work outside the home. However, it is more difficult to amend the long-standing opinions of the parental generation, in comparison to the beliefs of young women.

External social pressure against FLFP may form the third reason for the prevalent stigma against young women going out of the home to work. According to Burke and Young (2011), social norms include both external pressure and self-imposed proper conduct. In reality, it may be difficult to distinguish external pressure from the self-imposed one because the latter can be a consequence of the internalization of external social pressure. The important distinction between the second and third factors is that the third factor is related to what others think. Even though it is the internalized proper conduct, if it is related to what others think, we consider it because of the third factor, i.e., external social pressure. At the observational level, external social pressure can be considered separately from personal preference irrespective of what others think (the second factor). It is possible, for example, to examine the difference in the effect of information provision through the extent to which an individual's neighbors are also informed in the same manner. Alternatively, the existence of social pressure could simply be inferred by observing the gap between actual FLFP and parental attitudes toward the FLFP of their daughters. Parents may not be willing to permit their daughters to work outside the home if they feel the negative pressure from their social network even if they themselves believe that it is good for women to work outside the home and to financially contribute toward the family expenses. Letting their daughters work outside the home may incur costs such as social ostracism or the decrease of opportunities for appropriate marriage offers for their daughters. The social network is a type of informal institution that plays an important role in the economies of developing countries (Anderson et al., 2015; Munshi and Rosenzweig, 2006; Heath, 2018; Morten, 2019).

The three potential factors outlined above as forming the context of the stigma against women working in factories seem to be analogous to the reasons why parents decide on early marriages for their daughters, a norm that is also prevalent in South Asian countries. The dissemination of information about the negative aspects of child marriage, such as health risks of early pregnancy for both a young mother and her child, does not seem to be sufficient in discouraging the institution of child marriage in South Asian countries. Often, parents know the negative aspects of child marriage, and even agonize over the decision of marrying their daughters off at an inappropriately

young age. Social pressure appears to be one of the major reasons for the decision of early marriage for their daughters (Field et al., 2018). Applying this logic to FLFP, it is possible that parents may be aware that female-friendly working environments and conditions are available in their neighborhood and that they also believe that letting their daughters work outside the home is beneficial and financially helpful, but they just cannot take this decision because of the social pressure against this course of action.

3   Survey Design

3.1   Household Survey

An RCT was conducted in rural Punjab in Pakistan to examine whether or not the provision of information affects people's attitude toward FLFP. Working opportunities for women, especially in factories, are generally limited in Pakistan. For the purpose of this study, it was necessary to implement the RCT in an area where it was at least realistic for women to work in factories. Such a rural area that is within commuting distance of export-oriented garment factories that actively hire women was first identified in the districts of Faisalabad, Hafizabad, Nankana Sahib, and Chiniot (see Figure 2).[5] Using the census data of these districts, 40 villages in a commutable rural area were randomly selected.

Next, all households in each village were profiled. Households that were eligible for the current study were defined as follows: either landless or with no more than three acres of land; the presence of both husband and wife; and the family comprising at least one unmarried daughter aged between 15 and 30.[6] Landless or nearly landless households were targeted because only impoverished households would realistically need women to work in factories. The presence of both husband and wife in the household was a condition because the survey was designed to randomly determine at the village level either a husband or a wife as a respondent in the selected households. The target households for the study were also restricted to families with unmarried daughters aged 15 to 30 because realistically, this range encompasses the age when women would remain in their natal household after school and before marriage without taking on the primary responsibility for household chores.

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[5]Karachi in Sindh province also hosts export-oriented garment factories that actively hire women, but because of the deteriorating law and order situation in Sindh, our study focuses on Punjab province.

[6]The minimum age for work is respectively mandated to be 14 and 16 as per the Employment of Children Act and the Constitution. Under the legislation of the state of Punjab, it is 15. This contradiction in the laws is not a problem for the determination of the range of the age of the daughters in eligible households because, for the purpose of this study, it is not essential for the daughters to work. They were merely required to fall within the age range in which their parents could think of the possibility of their daughters working outside the home.

Ten households were randomly picked from the list of all eligible households in each of the 40 villages. In 20 villages randomly chosen out of the 40 villages, wives became respondents, while husbands became respondents for the other half. The questionnaire was uniquely designed to collect the requisite information to capture the change in attitudes toward FLFP. The questionnaire consists of a household roster concerning age, enrollment status, work status, and education level of all household members; typical socioeconomic questions; and unique questions specific to this survey including those asking for personal and general opinions pertaining to FLFP and to reservation wages for their daughters to work in factories. The questionnaire also contains questions about gender relations, such as who possessed the authority of decision-making, the degree of mobility, and the level of son preference. The same questionnaire was utilized for the base-line survey conducted before the intervention and the follow-up survey conducted one year after the intervention.

3.2 Experiment

The RCT intervention provided either the husband or the wife with pertinent information on working conditions and environments in the export-oriented garment factories. In qualitative interviews held prior to the survey, we realized that many households in neighboring villages did not even know the start-up wage offered by these factories. It was less surprising to learn that they were not aware of the suitable working conditions and environments offered by these factories for their women employees despite the fact that many working women informed us that they were satisfied with their working conditions and workplace environment. Therefore, it was assumed that the provision of information with regard to the female-friendly working conditions and environments of these factories may affect people's opinions with regard to FLFP. The actual intervention was very simple. In households randomly selected into the treatment group, either the husband or the wife received a lecture on the working conditions and environments of these factories. Whether the husband or the wife received the lecture depended on the random choice of the gender of the respondent at the village level as described above.

There were three randomizations at the village level: first, the one where either husband or wife became the respondent of the survey; second, the one that concerned the number of treated; and third, the one concerning whether the lecture was offered in the group session or individually. The number of treated households was randomized as zero, four, six, or ten households at the village level (Table 1). In villages that received interventions with four or six households, the treated households were randomized at the household level. In villages that had ten treated households, all ten households were given information.

The lecture provided to the treatment group imitated the workshops organized by the actual factories when they recruited female workers from villages. When a village was randomly assigned to the treatment group that was slated to receive a personal session, the lecture was provided to individuals rather than through a collective workshop, but the information provided was equivalent to the group session. According to the human resource manager of one of the biggest garment factories in Faisalabad, the standard recruitment workshop explains the female-friendly working environment, especially the security that is provided and the level of segregation from male workers, the salaries that are offered, and the training process (Makino, 2014). The same information was provided by the lecturer in this recruitment workshop to the treatment group, either through individual or group sessions. The single intervention took around two hours, which included a friendly chat between the treated individual or group and the lecturer.

4 Data

No significant difference is first demonstrated in either the household socioeconomic characteristics or the outcomes of interest between the treatment and control groups prior to the intervention (Tables 2 and 3). It may thus be asserted that the households were randomly allocated into treatment or control groups.

Table 2 presents the results of the balance test conducted on household characteristics prior to the intervention. The education level of respondents is quite low: the husbands average below primary completion level of schooling, and the wives average close to null formal learning. This result is not surprising as this study focuses on impoverished households in rural areas. Also, the respondents are relatively older, being parents of unmarried daughters aged between 15 and 30. The average age of the husbands is 49 years, and that of the wives is 46 years. The mean number of household members is around six. The proportion of *kammees*[7] or functionally lower castes is 45–47%. The agricultural land owned by the households is 1.2–1.3 acres on average, the mean of livestock value per household amounts to PKR 300,000, and the mean value of the residential home and land is approximately PKR 530,000–545,000. The wealth index and living conditions index are constructed based on the principal component analysis, allowing for correlations across factors. The index variable is the only factor having an eigenvalue greater than one. Variables used in constructing the index are shown in Appendix as Table A1. How to construct the variables

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[7]In traditional rural Punjab economy, a person's occupation is determined by birth (Eglar, 1960). Those who provide various services to landowning households (*zamindars*) are collectively called *kammees*. Islam denies the caste system, and those born in *kammee* households do not engage in traditional services now, but social stratification by birth stubbornly exists. For descriptive purposes in the current study, the *zamindar-kammee* distinction is referred to as the caste system.

of myopia, time inconsistency, and risk preference is also explained in Appendix.

Table 3 presents the balance test on the outcome variables. The questions and answers that construct these variables are explained in Appendix. The variable "knowledge of factories" is an ordinal variable that takes the value 0 if the respondent has no idea what they are, 1 if s/he has at least heard of them, and 2 if s/he knows how women work in these factories. The mean value is found to be 1.1 to 1.2, which is consistent with the results of the qualitative interviews conducted during the present research. Hence, the findings reveal that the poor within commuting distance of factories do not know much about the working conditions and workplace environments offered by these factories. The variable "attitude toward daughter working in factories" is an ordinal variable that takes the value 0 if the respondent is negative about women working in factories, 1 if the respondent is positive about general FLFP but is against their own daughter working in such a place, and 2 if the respondent is positive about their own daughter working in such an environment. The mean value is found to be 0.17 to 0.18, and this finding also supports our view that people are strongly negative about FLFP in general and about letting their daughters work in factories. The variable "knowledge of/attitude toward women working in factories" takes Likert-scale values of 1 to 5, combining the above two variables. The four measures that follow represent the respondents' attitude toward FLFP in general; it does not reveal their attitude toward the issue concerning the female members of their own households. The intention behind asking respondent's about their general attitudes toward FLFP is to possibly capture a type of observer-expectancy effect: the respondents' answers could conform to our expectations with regard to the outcomes of this study. The variable "attitude toward women working before marriage (general)" takes Likert-scale values of 1 to 10 on whether or not an individual respondent agrees with the overall idea that it is good for women to work for pay before marriage. The variable "attitude toward women working after marriage (general)" is a similar variable, but refers to married women before having children. The variable "attitude toward women working for pay (general)" is another similar variable, but it relates to the idea that it is good for women to work for pay in any sector. The variable "attitude toward women working as teachers (general)" is yet another like variable, but it only pertains to women working as teachers. The variable "attitude toward FLFP index" is constructed based on the principal component analysis using the above four variables that inquire into FLFP in general. The variable "minimum wage (subjective)" denotes the respondents' beliefs regarding the minimum wage. The variable "reservation wage for daughter to work in factories" is the minimum amount that a respondent would be willing to accept to allow her/his daughter to work in a factory. The variable "reservation wage−(subjective) minimum wage" is the difference between the above two variables. Given that the target households are relatively uneducated and are not necessarily familiar with legalities, the subjective minimum wage is queried because their

belief about the minimum wage affects their reservation wage, whereas the actual legal minimum wage does not. It is also necessary to consider the subjective minimum wage because the treated were given precise information about the legal minimum wage while the controlled were not. This fact probably affected the answers given in the follow-up survey so that only the treated adjusted the reservation wages based on the legal minimum wage irrespective of their readiness to let their daughters work in factories. What matters to them in deciding whether or not to permit their daughters to work in factories is the amount of money that they could expect above what they believe is the minimum wage. This final reservation wage−(subjective) minimum wage is referred to as the (adjusted) reservation wage in the following estimation.

5 Estimation Results

5.1 Difference-in-Differences (DID) with Household Fixed Effects

The DID estimation equation is expressed as follows:

$$FLFP_{ij} = \alpha T_{ij} \times Y2_{ij} + \beta Y2_{ij} + \eta_i + \varepsilon_{ij}, \tag{1}$$

where T_{ij} is an indicator variable taking the value 1 if household i in the village j is treated, and 0 otherwise, $Y2_{ij}$ is an indicator variable taking the value 1 if the survey was in the follow-up year, i.e., one year after the intervention or the base-line survey, and η_i is the household fixed effects. $FLFP_{ij}$ is various outcome variables presented in Table 3 such as knowledge of factories, attitudes toward their daughter/general women working in factories, and reservation wages. We are interested in the estimated coefficient α, the effect of providing young women's parents with information about working conditions and environments offered by garment factories that hire a substantial number of female workers.

The DID estimation results are presented in Table 4. Column 1 shows that the intervention was effective in disseminating the information pertaining to working conditions and environments of export-oriented garment factories that hired many women. The treated households are more likely to know about them by 0.27 standard deviation of the base-line mean. This effect seems considerable because the intervention was implemented on relatively uneducated people, and was given via a singular session a year ago. Column 2 presents the effect on a parent's personal attitude toward her/his daughter working in the factories. The positive change of attitudes pertaining to allowing daughters to work in factories is even larger: it is an increase by 0.44 standard deviation of the base-line mean or by more than 100 percent of the size of the base-line mean. This outcome suggests that it is less difficult to motivate parents to permit their daughters to work outside the

home as long as they are provided with accurate and pertinent information. This finding supports the idea that a lack of information is the key to preventing FLFP. Compared to personal attitudes, general attitudes have less significant and weaker effects. Column 4 presents the effect on the parent's general attitude toward women working outside the home for pay before marriage, or the parental attitude toward the idea of women who do not usually have primary responsibility for household chores working for pay outside the household. The magnitude of the effect is an increase by 0.12 standard deviation. The barely significant effect on the index of the parent's attitude toward FLFP (Column 7) seems primarily derived from the effect presented in Column 4. In comparison to the strongly significant effect with regard to their own daughter's working for pay as presented in Column 2, the outcome concerning FLFP in general presented in Column 4 is weak and is barely significant; in fact, it becomes insignificant depending on the specifications. This result may suggest that parents do not necessarily answer to conform to the experimenters' expectations about the outcome of this study. No significant effect is found to exist with regard to the reservation wage for a parent to allow a daughter to work in a factory.

To examine whether or not the treatment effect is different by gender, the triple difference estimation equation is given by:

$$FLFP_{ij} = \alpha T_{ij} \times Y2_{ij} \times Hb_j + \beta T_{ij} \times Y2_{ij} + \gamma Hb_j \times Y2_{ij} + \delta Y2_{ij} + \eta_i + \varepsilon_{ij}, \tag{2}$$

where Hb_j is an indicator variable that takes the value 1 if the husbands are assigned respondents at the village-level j and 0 if the wives are assigned. Other variables remain the same as equation (1). The triple difference estimation results are presented in Table 5. Overall, the treatment effects are not significantly different by whether the treated was the husband or the wife. The only exception pertains to the effect on the reservation wage, i.e., the premium that the respondent expects in order to send a daughter to work in a factory above what is believed to be the minimum wage. When the wife is treated, the reservation wage is significantly lower than that answered by the control group. Interestingly, when the husband is treated, the reservation wage tends to increase. The reason is beyond the realm of this study, but perhaps the husband tends to expect higher wages after getting to know the reality of the wages offered by formal factories as these figures are likely to be higher than their original uninformed estimates. The results also suggest that wives are more easily convinced to let their daughters work in factories. However, the actual outcomes may depend on which adult, the mother or the father, commands the larger share of the decision-making power with regard to the FLFP of the daughters.

Section 2 has conceptually differentiated external social pressure from personal preference with regard to daughters working outside the home or in factories. This segment attempts to empirically

separate external social pressure from personal preference by estimating the difference in the effect through the extent to which neighbors were also treated. Remember that the number of households being treated was randomly determined at the village level, either zero, four, six or 10. Therefore, treated households would have three, five, or nine neighbor-households that were being treated in an equivalent manner. Concretely, the estimation equation is given by the following:

$$FLFP_{ij} = \alpha T_{ij} \times Vpct_j \times Y2_{ij} + \beta T_{ij} \times Y2_{ij} + \gamma Vpct_j \times Y2_{ij} + \delta Y2_{ij} + \eta_i + \varepsilon_{ij}, \qquad (3)$$

where $Vpct_j$ is the village-level variable, indicating how many percentage of households are treated out of ten households in the village j. Thus, $T_{ij} \times Vpct_j$ takes the value of 0, 0.4, 0.6, or 1. For example, taking $T_{ij} \times Vpct_j = 0.6$ means that six neighbor-households are treated including the own household i. The coefficient α is expected to capture any difference in the treatment effects through the extent to which the neighbors are also treated, and this outcome is considered as the peer effect. Table 6 presents the estimation results: there is no peer effect. The treatment effects are not significantly affected by the number of neighbors who are also treated. One possible interpretation of these results is that personal preference or attitude toward FLFP matters more than social external pressure in determining the stigma against FLFP. However, a caveat must be applied because the above interpretation does not hold if external pressure matters only to a shared social network and if the randomly treated neighbor-households do not belong to the same social network. The fact that the actual FLFP is negligible even though some parents are positive about letting their daughters work in factories may infer the existence of social pressure. Further study is certainly needed to explore the effects of social pressure in a manner that is differentiated from personal preference/attitude.

The spillover effects are often indicated when conducting RCTs. We examine whether or not there are any spillover effects by utilizing the above variations among villages with regard to the number of households being treated. Because of these variations, some controlled households have four or six neighbor-households being treated.[8] The coefficient estimate γ in the estimation equation (3) can be interpreted as the spillover effect. It seems that spillover effects are present and large (Columns 1 to 3 of Table 6). Even if a household is not treated, the more households are

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[8]Alternatively, the spillover effects are estimated by replacing $Vpct_j$ with the variable indicating the percentage of households that are treated out of all the eligible households in the village. It is noteworthy that in comparison to $Vpct_j$, this alternative variable probably attenuates the spillover effects as the village size gets larger. Also, spillover effect may be even more weakened in larger villages because a negative association is observed between the village size and parental attitudes toward daughters working in factories, when the estimation is conducted by replacing household fixed effects with household and village characteristics (Section 5.2). As expected, the spillover effects including knowledge dissemination disappear with this alternative variable. These estimation results are available upon request.

treated in their neighborhood, the more knowledgeable and positive the household becomes about factories, and about letting their daughters work in them. Interestingly, there is no significant effect on attitudes toward FLFP in general (Columns 4 to 8 of Table 6), and even negative effects are observed. The positive spillover effects with regard to their own daughters working in factories without any effect with regard to FLFP in general may suggest that people did not answer questions to conform to the experimenters' expectations of ideal answers. Instead, respondents simply responded according to their own interests.

Another twist incorporated into the RCT design was the personal or group treatment of the respondents. However, the personal or group treatment yields no difference in effects except with regard to the reservation wage.[9] The group-treated households significantly decrease the reservation wage for reasons beyond the realm of this study and this issue awaits further research. A possible explanation may be the peer effect: individuals are more likely to become positive about FLFP when they observe their neighbors also contemporaneously becoming positive.

5.2 Difference in Difference Estimation (DID) with a Set of Covariates

Although DID with household fixed effects is preferred for the estimation of pure treatment effects, we are also interested in the associations between the socioeconomic characteristics of the households and the outcome variables. The manner in which the outcome is associated with various socioeconomic characteristics of households is examined through the following estimation equation:

$$FLFP_{ij} = \alpha T_{ij} \times Y2_{ij} + \beta Y2_{ij} + \boldsymbol{x}'_{ij}\theta + \boldsymbol{\nu}'_{j}\phi + \varepsilon_{ij}, \tag{4}$$

and

$$FLFP_{ij} = \alpha T_{ij} \times Y2_{ij} \times Hb_{j} + \beta T_{ij} \times Y2_{ij} + \gamma Hb_{j} \times Y2_{ij} + \delta Y2_{ij} + \boldsymbol{x}'_{ij}\theta + \boldsymbol{\nu}'_{j}\phi + \varepsilon_{ij}, \tag{5}$$

where the major variables are equivalent to those in equations (1) and (2), $\boldsymbol{x}_{ij}$ is a vector of socioeconomic characteristics of households: the age and education levels of the husband and the wife, the household size, the caste, the size of agricultural land held, the value of livestock, the value of the residence, the wealth index, the living condition index, the number of female relatives and friends working outside for pay, and the measures of the respondent's type (myopic, time inconsistency, risk preference). $\boldsymbol{\nu}_{j}$ is a vector of village characteristics, namely, the number of households, the sex ratio at the marriageable age range,[10] the number of minutes of travel time

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[9]The estimation results are available upon request.

[10]The sex ratio at the marriageable age range is included in the study because the qualitative interviews reveal

to factories offering suitable working environments for women, the minutes of travel time to the nearest town, the land ownership Herfindahl index, and the wages set for various occupations available in the village.

The DID estimation results obtained by replacing household fixed effects with a set of household and village characteristics are presented in Table 7. The treatment effects are not substantially different from those of the DID estimation with household fixed effects (Tables 4 and 5); hence, Table 7 only reports the coefficient estimates of the household characteristics of the selected outcomes.[11] A significantly positive association is observed between reservation wages and the wife's level of education. Understandably, when the wife is more educated, she expects higher wages for her daughter to work in factory. A significantly positive association is also found between household size and parental attitudes toward FLFP in general, and a negative association is found between household size and reservation wages. When the number of household members is larger, it is natural to desire an increase in the number of working members in the household, including women. A positive association is observed between attitudes toward one's daughter working in garment factories and lower caste, and a negative association is observed between attitudes toward one's daughter working in garment factories and the value of livestock. These effects are also expected as FLFP in factories is observed more in households that are economically worse-off and of socially lower-status in South Asia (Andres et al., 2017). In this sense, the significantly positive association between parental attitudes toward their daughters working in garment factories and the value of the residence is counter-intuitive. This outcome may have occurred because in rural Punjab, the practice of extended family[12] is still observed in which brothers live together after being married, and such households tend to have a larger residences to accommodate two or more core households. The estimation is repeated by replacing the size of the household and the value of the residence with the per-capita value of residence. As expected, the coefficient estimate of the per-capita value of the residence becomes negative. Interestingly, the sign of the coefficient estimate between the size of agricultural land and parental attitudes toward their daughters working outside the home and the sign of the coefficient estimate between the size of agricultural land and parental attitudes

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that one of the factors behind the stigma against women working outside for pay pertains to the reduction of opportunities for them in the marriage market. The sex ratio at the marriageable age range is the measure of marriage market competitiveness in the village, following literature testing the price and bequest models of dowry (Rao, 1993; Arunachalam and Logan, 2016). Taking the marriageable age range in the current Pakistani context into account, Rao's (1993) methodology of calculating the sex ratio is applied but adjusted so that the ratio is calculated by the number of unmarried males aged 20 to 35 divided by the number of unmarried women aged 15 to 30.

[11]The full estimation results are available upon request.

[12]We consider the members to belong to the same household if they share the kitchen and the expenditures. For example, two married brothers are regarded to be members of the same household comprising an extended family if they share the same kitchen and the household expenditures. Just the fact that two married brothers reside in the same premises does not necessarily imply that they belong to the same household.

toward FLFP in general are opposite to each other. This result supports the view that factors affecting parental attitudes toward their own daughters working for pay and FLFP in general are different, and that the respondents do not answer to conform to the experimenters' expectations of the outcome of this study.

Except for lower caste, the strongest association is observed between the number of female relatives and friends working outside for pay and parental attitudes toward their own daughters working for pay and FLFP in general. This outcome may reflect the fact that some unobserved household characteristics shared by households of friends and relatives affect parental attitudes toward their own daughters working for pay and toward FLFP in general. Other possibilities include that having some female role models within the community may encourage women to work outside for pay. The impact of the existence of a role model on FLFP is certainly an interesting research topic that should be explored in the future.

6 Conclusion

The poor in rural Punjab are not very aware of the available income earning opportunities that are also suitable for women and within commuting distance from their locations. This lack of knowledge is not surprising given the deficiency of education within this group and, in particular, the prevalence of strong stigma against women working outside the home for pay. This study conducted an RCT in which parents in the treated households were provided with information about the female-friendly working conditions and environments of factories within commuting distance that hired many women. The information that was provided imitated the recruitment workshops provided by those garment factories that hired young women preferentially. Parents of young women were targeted for treatment because the decision-making with regard to whether or not women in the family work outside for pay is almost exclusively accomplished by parents in rural Punjab in Pakistan.

Even though only a single intervention session of information was provided, the assimilation of the content was found to be effective when measured a year later, and parents in the treated households became more knowledgeable about working conditions and environments of factories that preferred to hire women. The DID estimation with household fixed effects reveals that the provision of information is effective in changing parental attitudes toward their daughters working in the factories. This change does not appear to emanate from their intentions to conform to the experimenters' expectations, but from their own interests. The reservation wages in order to allow daughters to work in factories decrease significantly when wives are treated, suggesting that mothers are more likely to agree to their daughter's FLFP than fathers. Overall, the results

indicate that poor rural households are likely to change their attitudes positively toward daughters working for pay outside the home as long as parents are informed about suitable income earning opportunities for young women. The paucity of information seems to be an important factor that prevents young unmarried women in poor households in rural Pakistan from working outside the home. This result is encouraging because information provision may be one of the cheapest among the range of measures that promote FLFP.

It must be noted that the results of the current study do not necessarily imply that disseminating information will be effective in actually enhancing FLFP in rural Punjab. In particular, the extent to which social pressure prevents parents from permitting their daughters to work outside the home still remains unascertained. However, given the strong stigma that exists against FLFP, especially in factories, we believe the positive change in the attitude toward daughters working in factories to be encouraging. This change is a prerequisite to the actual enhancement of FLFP and forms an encouraging first step toward its achievement.

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Table 1: Table 1: Village-level Randomization (Number of Villages)

Who is respondent/treated?	Husband		Wife		Total
Control	2		2		4
Number of treated HHs	Group	Individual	Group	Individual	
10 HHs	2	2	2	2	8
6 HHs	4	4	4	4	16
4 HHs	3	3	3	3	12
Subtotal	9	9	9	9	36
Total		20		20	40

Table 2: Balance Test on Household Characteristics

	Treated (=236)		Controlled (=164)		
	Mean	Std.dev	Mean	Std.dev	T-test: p-value
Husband's education	1.98	1.58	2.07	1.61	0.59
Wife's education	1.20	0.74	1.19	0.72	0.85
Husband's age	49.41	6.00	49.49	5.77	0.89
Wife's age	46.07	6.48	46.13	6.00	0.92
Number of household members	6.42	1.92	6.44	6.38	0.77
Kammee (lower caste)	0.45	0.50	0.47	0.50	0.69
Land (acre)	1.29	1.32	1.24	1.34	0.69
Livestock (PKR)	306,759	324,480	290,188	347,872	0.63
Value of residence (PKR)	531,377	210,609	545,677	225,084	0.52
Wealth index	0.06	0.79	-0.08	0.82	0.08
Living condition index	0.01	0.77	-0.01	0.78	0.77
Number of female relatives and friends working outside the home for pay	2.50	1.82	2.31	2.32	0.36
Myopic	81.40	82.65	71.80	100.47	0.30
Time inconsistency	0.28	0.45	0.25	0.43	0.51
Risk preference	0.09	0.29	0.07	0.26	0.48

Note: Education is a categorical variable: 1= No education; 2= Below primary (less than 5 yrs.); 3= Primary completed (5 yrs.); 4= Middle completed (8 yrs.); 5= Matric completed (10 yrs.): 6= Intermediate completed (12yrs.); 7= Graduate or Post-graduate degree

Table 3: Balance Test on Outcome Variables

	Treated (=236)		Controlled (=164)		
	Mean	Std.dev	Mean	Std.dev	T-test: p-value
Knowledge of factories	1.10	0.64	1.19	0.69	0.17
Attitude toward daughter working in factories (personal)	0.17	0.49	0.18	0.43	0.95
Knowledge of/attitude toward women working in factories	2.27	0.98	2.37	0.97	0.34
Attitude toward women working before marriage (general)	6.35	1.90	6.16	2.08	0.34
Attitude toward women working after marriage (general)	5.77	2.11	5.41	2.28	0.11
Attitude toward women working for pay (general)	5.42	2.35	5.20	2.43	0.36
Attitude toward women working as teachers (general)	6.69	1.90	6.37	2.07	0.11
Attitude toward FLFP index	0.04	0.88	-0.06	0.93	0.25
Minimum wage (subjective)	12,836	1,183	12,771	1,156	0.70
Reservation wage for daughter to work in factories	13,658	1,509	13,915	1,549	0.16
Reservation wage − (subjective) minimum wage	934	972	1,084	1,134	0.16

Table 4: Treatment Effects on Knowledge of/Attitude toward FLFP with Household Fixed Effects

	(1) Knowledge of factories	(2) Attitude toward daughter working in factories (personal)	(3) Knowledge of/attitude toward women working in factories	(4) Attitude toward women working before marriage (general)	(5) Attitude toward women working after marriage (general)	(6) Attitude toward women working for pay (general)	(7) Attitude toward women working as teachers (general)	(8) Attitude toward FLFP index	(9) Reservation wage
Treated × Year2	0.179***	0.206***	0.388***	0.237*	0.114	0.269	0.0826	0.104*	-34.85
	(0.0562)	(0.0429)	(0.0902)	(0.134)	(0.127)	(0.164)	(0.113)	(0.0604)	(208.4)
Year2	0.177***	0.104***	0.280***	0.348***	0.348***	0.646***	0.0488	-0.0615	2,411***
	(0.0396)	(0.0239)	(0.0583)	(0.104)	(0.100)	(0.123)	(0.0828)	(0.0461)	(160.3)
Base-line mean	1.135	0.175	2.310	6.273	5.623	5.333	6.563	0.000	995
Observations	800	800	799	800	800	800	800	800	800
R-squared	0.212	0.221	0.251	0.129	0.105	0.200	0.009	0.007	0.578
Number of HHID	400	400	400	400	400	400	400	400	400

Note: Cluster-robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 5: Treatment Effects on Knowledge of/Attitude toward FLFP with Household Fixed Effects (By Who was Treated)

	(1) Knowledge of factories	(2) Attitude toward daughter working in factories (personal)	(3) Knowledge of/attitude toward women working in factories	(4) Attitude toward women working before marriage (general)	(5) Attitude toward women working after marriage (general)	(6) Attitude toward women working for pay (general)	(7) Attitude toward women working as teachers (general)	(8) Attitude toward FLFP index	(9) Reservation wage
Treated × Year2 × Husband	-0.0217	-0.0124	-0.0291	-0.370	-0.216	-0.207	-0.380*	-0.0802	1,291***
	(0.112)	(0.0858)	(0.180)	(0.269)	(0.255)	(0.329)	(0.228)	(0.121)	(410.5)
Treated × Year2	0.191**	0.214***	0.405***	0.423**	0.227	0.378	0.272*	0.146*	-692.7***
	(0.0882)	(0.0662)	(0.139)	(0.190)	(0.165)	(0.241)	(0.155)	(0.0872)	(261.3)
Husband × Year2	-0.0194	-0.0510	-0.0704	0.144	-0.0271	-0.0590	0.176	-0.0060	-233.8
	(0.0783)	(0.0472)	(0.115)	(0.210)	(0.204)	(0.246)	(0.167)	(0.0925)	(321.9)
Year2	0.186***	0.128***	0.314***	0.279**	0.360***	0.674***	-0.0349	-0.0586	2,522***
	(0.0607)	(0.0362)	(0.0893)	(0.134)	(0.120)	(0.175)	(0.0997)	(0.0632)	(214.2)
Observations	800	800	799	800	800	800	800	800	800
R-squared	0.213	0.224	0.253	0.134	0.110	0.204	0.016	0.010	0.595
Number of HHID	400	400	400	400	400	400	400	400	400

Note: Cluster-robust standard errors are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 6: Treatment Effects on Knowledge of/Attitude toward FLFP with Household Fixed Effects (Peer and Spillover Effects)

	(1) Knowledge of factories	(2) Attitude toward daughter working in factories (personal)	(3) Knowledge of/attitude toward women working in factories	(4) Attitude toward women working before marriage (general)	(5) Attitude toward women working after marriage (general)	(6) Attitude toward women working for pay (general)	(7) Attitude toward women working as teachers (general)	(8) Attitude toward FLFP index	(9) Reservation wage
Treated × percentage treated in the village × Year2	-0.325	-0.161	-0.502	-0.212	-0.232	-0.0677	-0.376	-0.0415	-495.8
	(0.211)	(0.166)	(0.341)	(0.683)	(0.634)	(0.789)	(0.593)	(0.291)	(1,033)
Treated × Year2	0.277**	0.263**	0.553**	0.598	0.246	0.449	0.396	0.171	98.26
	(0.131)	(0.109)	(0.218)	(0.403)	(0.370)	(0.470)	(0.356)	(0.173)	(595.1)
Percentage treated in the village × Year2	0.442***	0.191***	0.633***	-0.687	0.112	-0.431	-0.144	-0.123	725.2
	(0.127)	(0.0683)	(0.178)	(0.585)	(0.516)	(0.619)	(0.486)	(0.233)	(867.0)
Year2	-0.0043	0.0254	0.0211	0.629**	0.301	0.823***	0.108	-0.0011	2,114***
	(0.0451)	(0.0222)	(0.0599)	(0.282)	(0.263)	(0.296)	(0.241)	(0.112)	(432.4)
Observations	800	800	799	800	800	800	800	800	800
R-squared	0.222	0.224	0.258	0.147	0.105	0.204	0.016	0.011	0.579
Number of HHID	400	400	400	400	400	400	400	400	400

Note: Cluster-robust standard errors are in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 7: Association between Change in Knowledge of/Attitudes toward FLFP and Household Characteristics

	(1) Knowledge of factories	(2) Attitude toward daughter working in factories (personal)	(3) Attitude toward FLFP index	(4) Reservation wage
Husband's education	-0.0163	0.0189	0.0240	45.42
	(0.0202)	(0.0195)	(0.0269)	(36.25)
Wife's education	-0.0088	-0.0349	0.0217	236.6**
	(0.0368)	(0.0370)	(0.0560)	(103.2)
Husband's age	0.0114	-0.0031	0.0014	-9.858
	(0.0098)	(0.0106)	(0.0118)	(17.92)
Wife's age	-0.0137	-0.0045	-0.0131	10.13
	(0.0088)	(0.0100)	(0.0111)	(16.70)
Household size	0.0027	0.0085	0.0521***	-47.98*
	(0.0136)	(0.0107)	(0.0191)	(28.63)
Kammee	0.259***	0.304***	-0.161	-281.9
	(0.0941)	(0.0973)	(0.129)	(191.8)
Agricultural land	0.0580	0.0673*	-0.103**	-72.75
	(0.0371)	(0.0396)	(0.0520)	(79.48)
Value of livestock (PKR 10,000)	-0.0010	-0.0013*	-0.0027**	2.438
	(0.0009)	(0.0006)	(0.0011)	(2.168)
Value of residence (PKR 10,000)	0.00217	0.0034**	-0.0031	-2.004
	(0.0016)	(0.0016)	(0.0024)	(3.366)
Wealth index	0.133***	0.0173	-0.0220	-45.58
	(0.0422)	(0.0373)	(0.0519)	(82.88)
Living condition index	0.108***	0.0303	0.106*	93.93
	(0.0393)	(0.0393)	(0.0598)	(83.28)
Number of female relatives and friends working outside the home for pay	0.0270*	0.0380***	0.0905***	-37.65
	(0.0152)	(0.0134)	(0.0207)	(28.30)
Myopic	0.0001	0.0004	-0.0002	-1.991***
	(0.0003)	(0.0005)	(0.0004)	(0.592)
Time inconsistency	0.0169	-0.0207	0.0151	314.7**
	(0.0653)	(0.0528)	(0.0857)	(130.3)
Risk preference	0.178**	0.123	0.220*	-124.4
	(0.0854)	(0.0993)	(0.112)	(216.8)
Observations	786	786	786	786

 Note: Treatment effects are not found to be substantially different from those reported in Tables 4 and 5; thus, the estimated coefficients of a set of household characteristics are only reported. The estimation equation controls for various village characteristics such as the number of households, the sex ratio at the marriageable age range, the minutes of travel time to factories offering suitable working environments for women, the minutes of travel time to the nearest town, the land ownership Herfindahl index, and the wages established for various occupations available in the village. Cluster-robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$
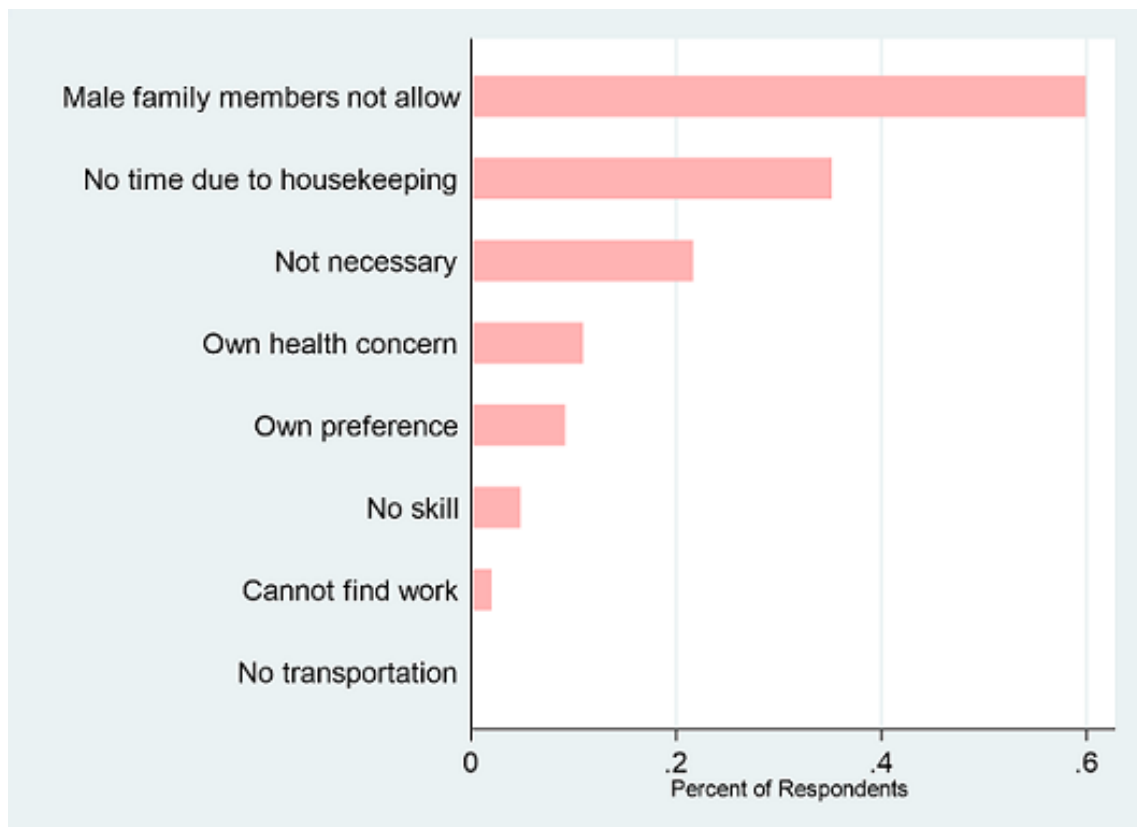
Figure 1: Why women do not work outside the home (N= 293, multiple answers)
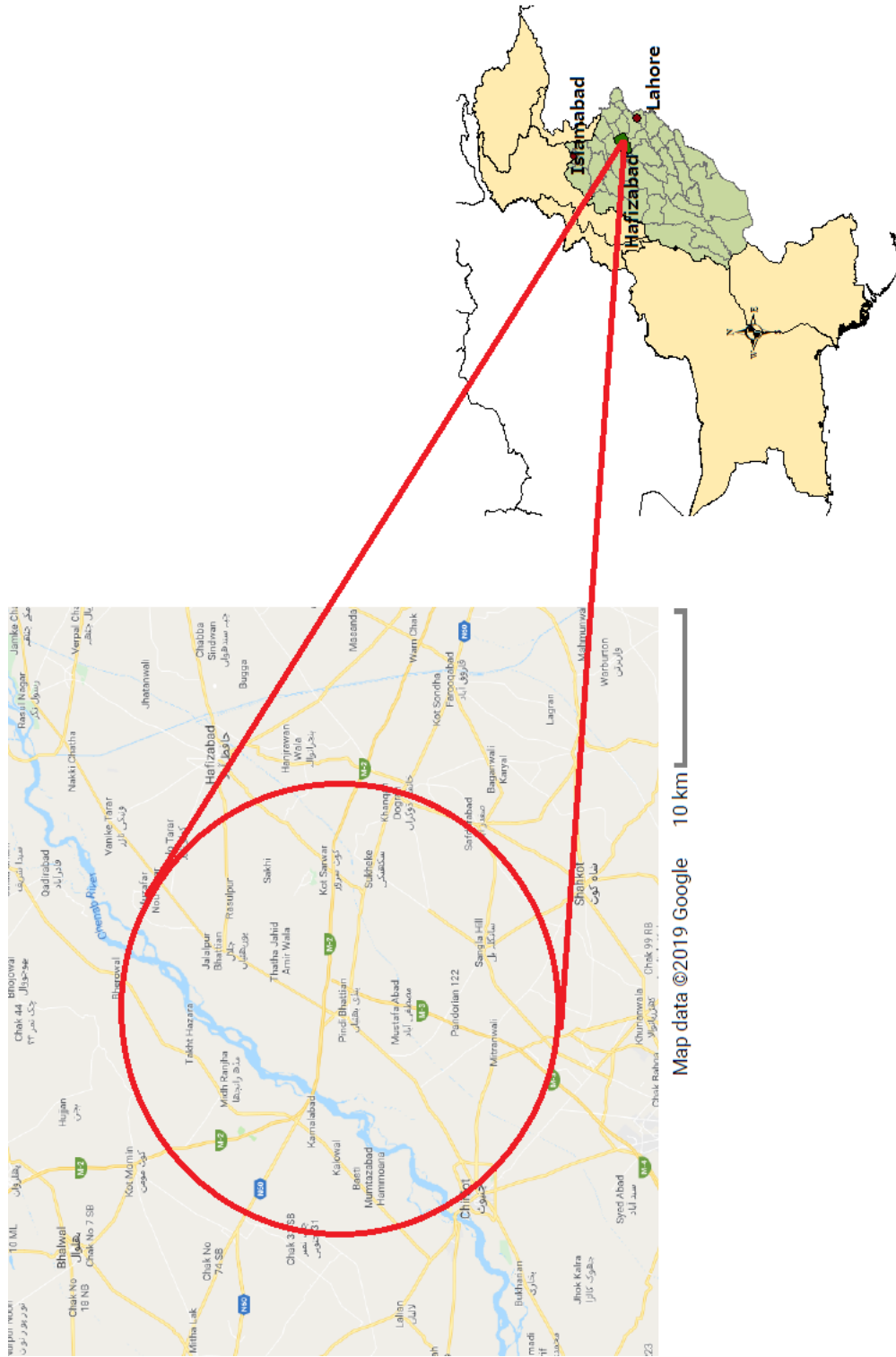
Source: Author's survey in 2012

Figure 2: The survey area was within commuting distances from export-oriented garment factories that were interested in hiring many young women

Appendix

A1   Description of variables

Myopic
This variable measures the amount a respondent, as recipient, is ready to forgo in exchange for advance payment and the additional amount the respondent, as payer, is prepared to disburse in exchange for a deferral of payment. Specifically, this variable sums up the differences from the principal amount, as revealed from answers tendered to the following two questions: (1) Assume that your semimonthly wage is PKR 5,000, and you decide to ask your employer for an advance payment one week before your payday. He agrees to an advance payment but at a rate lower than PKR 5,000. How much do you think is a reasonable or acceptable amount for you to have as an advance payment one week before the actual payday? (2) Assume that you buy some goods at a local shop. The total cost of goods is PKR 1,000. The shopkeeper agrees to defer your payment for one week but at a rate higher than PKR 1,000. How much do you think is reasonable or acceptable for you to have to pay for one week of deferred payment?

Time inconsistency
This binary variable takes the value 1 if a discrepancy is observed between the answers to the following two questions: (1) Which do you prefer (i) to be given PKR 500 today, or (ii) to be given PKR 505 a week later; and (2) Which do you prefer (i) to be given PKR 500 one year later, or (ii) PKR 505 one year and one week later.

Risk preference
This binary variable takes the value 1 if the respondent prefers (ii) to (i) in responding to the following question: Which do you choose between (i) a payment of PKR 100 with certainty or (ii) a lottery that pays out PKR 200 or PKR 0 with equal probability.

Knowledge of/attitude toward women working in factories
This ordinal variable is constructed on Likert-scale (1–5) answers to the following question: Have you ever heard of working opportunities, other than teaching, that seem suitable for unmarried women such as those at Crescent Bahuman Limited (CBL) or Masood Textile Mills (MTM)?; 1= No idea what they are; 2= Yes, heard of them, but have no idea how women work there; 3= Yes, but have a bad idea of women working there (e.g., lack of safety); 4= Yes, and know that the working environment is suitable for women (i.e., many women work there) at least in one of these factories, but am still against my daughter working there; 5= Yes, and know that the working environment is suitable for women at least in one of these factories, and am positive about my daughter working there.

Knowledge of factories

This ordinal variable takes the value 0 if a respondent answers "1" to the question about Knowledge of/attitude toward women working in factories above; 1 if a respondent answers "2;" and 2 if answer is "3," "4," or "5."

Attitude toward daughter working in factories (personal)

This ordinal variable, takes the value 0 if a respondent answers "1," "2," or "3" to the question about Knowledge of/attitude toward women working in factories above; 1 if a respondent answers "4," and 2 if the answer is "5."

Attitude toward FLFP index

This variable is constructed by the principal component analysis based on Likert-scale answers to the following four questions that query about FLFP in general: How strongly do you agree with the following statements? (1) It is good for women to work outside the home for payment (any job in general) before marriage; (2) It is good for women to work outside the home for payment (any job in general) after marriage but before having children; (3) It is good for women to work as teachers in private schools before marriage; (4) It is good for women to work as teachers in private schools after marriage but before having children. The corresponding Likert-scale answers are: 1= Strongly disagree; 2= Disagree; 3= Neutral: 4= Agree; 5= Strongly agree.

Attitude toward women working before marriage (general)

This ordinal variable is constructed on Likert-scale (1–10) answers to two out of the above four questions asking about FLFP in general. It is to be noted that while each question requires Likert-scale (1–5) answers, the answers to two questions comprise Likert-scale (1–10): How strongly do you agree with the following statements? (1) It is good for women to work outside the home for payment (any job in general) before marriage; and (2) It is good for women to work as teachers in private schools before marriage.

Attitude toward women working after marriage (general)

This ordinal variable is constructed on Likert-scale (1–10) answers to two of the above four questions asking about FLFP in general: How strongly do you agree with the following statements? (1) It is good for women to work outside the home for payment (any job in general) after marriage but before having children; and (2) It is good for women to work as teachers in private schools after marriage but before having children.

Attitude toward women working for pay (general)

This ordinal variable is constructed on Likert-scale (1–10) answers to two out of the above four questions asking about FLFP in general: How strongly do you agree with the following

statements? (1) It is good for women to work outside the home for payment (any job in general) before marriage; (2) It is good for women to work outside the home for payment (any job in general) after marriage but before having children.

Attitude toward women working as teachers (general)
This ordinal variable is constructed on Likert-scale (1–10) answers to two out of the above four questions asking about FLFP in general: How strongly do you agree with the following statements? (1) It is good for women to work as teachers in private schools before marriage; and (2) It is good for women to work as teachers in private schools after marriage but before having children.

Reservation wage for daughter to work in factories
The variable comprises the answer to the question: What is the minimum wage at which you are ready to send your daughter to work in a factory?

Table A1: Variables Making the Wealth Index: Household's Ownership of Durable Goods

	Mean	Std. Dev.
Bicycle	0.474	0.500
Motorbike	0.724	0.447
Car	0.003	0.050
Washing machine	0.554	0.497
Sewing machine	0.896	0.305
Generator	0.093	0.290
TV	0.894	0.308
Air conditioner	0.011	0.106
Mobile phone	0.979	0.144
Refrigerator	0.681	0.466

Table A2: Variables Making the Living Condition Index

	Mean	Std.Dev.	Percent
Wall type	2.169	0.584	
Mud, unburnt bricks, =1			0.038
Bunt bricks, =2			0.856
Stone, =3			0.081
Cement, concrete, =4			0.063
Roof type	2.090	0.849	
Wood, =1			0.295
Brick, =2			0.343
Tile, =3			0.338
Concrete, =4			0.024
Floor type	2.428	0.793	
Mud, =1			0.145
Brick, =2			0.320
Cement, =3			0.503
Stone, =4			0.024
Tile, =5			0.008