# **EFFECTS OF WOMEN'S EMPLOYMENT**

The intra-household opposition intervention produced large increases in women's employment<sup>1</sup> and is unlikely to have affected outcomes of interest through channels aside from women's employment; I will therefore use this experiment to conduct an additional study on the effects of women's employment. For this study, I will limit the sample to the control group of the generalized efficacy intervention and study effects of the intra-household opposition intervention within that sample. The outcomes I will consider are detailed in this document under primary outcomes.

I will also use data from surveys with separate sample family members to investigate how the intervention affected family member opinions. The outcomes I will consider for these analyses are detailed below under secondary outcomes.

## PRIMARY OUTCOMES.

### 1. Household decision-making.

- 1.1. *Woman's involvement in household decision-making*. Woman part of decisions on: (a) spending on food, (b) spending on clothing, (c) spending on education, (d) whether to purchase large household items, (e) how much to save, (f) what to do if child falls sick, and (g) how money husband earns is spent.
  - *Data sources:* reports from woman at Endline 4, woman at Endline 5, and husband at Endline 4.
  - *Aggregation:* aggregate the seven items from a particular respondent on a particular endline by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents or endlines.
- 1.2. *Woman's involvement in household decisions regarding her work*. Woman part of decisions on: (a) whether she works outside home, and (b) how money she earns is spent.
  - *Data sources:* reports from woman at Endline 4, woman at Endline 5, and husband at Endline 4.
  - *Aggregation:* aggregate the two items from a particular respondent on a particular endline by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents or endlines.
- 1.3. *Spending on women's goods*. Amount of lottery prize allotted to women's goods by (a) woman, and (b) husband.
  - *Data sources:* woman's decisions in Endline 4 lottery, husband's decisions in Endline 4 lottery.
  - Aggregation: none.

<sup>&</sup>lt;sup>1</sup> I find large effects of the intra-household opposition intervention on enrollment and employment in the weeks and months immediately after the intervention, but no effect on employment many months later.

- 1.4. *Woman's willingness to negotiate with husband*. (a) Woman's decision to discuss lottery prize with husband, and (b) woman would attempt to persuade husband to give permission for something she wants to do.
  - *Data sources:* (a) comes from woman's decision in Endline 4 lottery, and (b) comes from report from woman at Endline 5.
  - Aggregation: none.

## 2. Woman's time use.

- 2.1. *Household chores*. (a) Hours woman spent on household chores yesterday, and (b) hours family member spent on household chores yesterday.
  - *Data sources:* (a) comes from reports from woman at Endline 4 and Endline 5, and (b) comes from report from family member at Endline 4.
  - Aggregation: none.
- 2.2. Leisure time. Hours woman spent on leisure activities yesterday.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.
- 2.3. *Sleep time*. Woman's hours of nighttime sleep yesterday.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.

## 3. Woman's mobility.

- 3.1. *Total time outside home*. Hours woman spent outside home yesterday.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.
- 3.2. *Total time outside home, excluding employment*. Hours woman spent outside home yesterday, excluding employment hours.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.
- 4. *Woman's risk taking.* Risk task decision.
  - Data source: woman's decision in Endline 5 risk task.
  - *Aggregation:* n/a.

## 5. Woman's psychology.

- 5.1. *Generalized self-efficacy*. (a) Index of responses to generalized self-efficacy questionnaire, and (b) effort task decisions.
  - *Data sources:* (a) comes from reports from woman at Endline 4 and Endline 5, and (b) comes from woman's decisions in Endline 4 and Endline 5 effort tasks.
  - Aggregation: none.
- 5.2. *Happiness*. Overall level of happiness.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.

- 6. *Household Gender Attitudes.* A concern with outcomes proposed to measure gender attitudes is that they could be subject to strong social desirability bias and may not reflect true opinions. To address this, I will not consider any of the outcomes proposed in this section for which over 75% of control group responses are the same.<sup>2</sup>
  - 6.1. Women's employment. (a) Ok if women go out for work; (b) a woman's main role should be household chores (multiplied by -1); (c) both women and men should earn to contribute to household; (d) a husband should earn more than his wife (multiplied by -1); and appropriateness of women in household working as a: (e) construction laborer, (f) weaver, and (g) teacher.
    - *Data sources:* reports from woman at Endline 4 and husband at Endline 4.
    - *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
  - 6.2. *Women's involvement in household decision-making*. A woman should be part of decisions on: (a) spending on food, (b) spending on clothing, (c) spending on education, (d) whether to purchase large household items, (e) how much to save, (f) what to do if child falls sick, and (g) how money husband earns is spent.
    - *Data sources:* reports from woman at Endline 4 and husband at Endline 4.
    - *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
  - 6.3. *Women's involvement in household decisions regarding their work.* A woman should be part of decisions on: (a) whether she works outside home, and (b) how money she earns is spent.
    - *Data sources:* reports from woman at Endline 4 and husband at Endline 4.
    - *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
  - 6.4. *Women's ideas*. (a) Husbands should support their wives' ideas, and (b) wrong for women to disagree with their husbands (multiplied by -1).
    - *Data sources:* reports from woman at Endline 4 and husband at Endline 4.
    - *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
  - 6.5. *Domestic violence*. Husband justified in hitting/beating wife if she: (a) leaves home without telling him, (b) neglects the children, (c) argues with him, and (d) doesn't cook properly.
    - *Data sources:* reports from woman at Endline 4 and husband at Endline 4.

 $<sup>^{2}</sup>$  If this leaves only one item in a group that I would otherwise aggregate, I will consider the item in isolation.

- *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
- 6.6. *Children*. (a) Better to have a son than a daughter (multiplied by -1), and (b) girls should get as much education as boys.
  - *Data sources:* reports from woman at Endline 4 and husband at Endline 4.
  - *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
- 7. Husbands' work. In last 2 weeks: (a) days worked, and (b) income earned.
  - *Data source:* report from family member at Endline 4.
  - *Aggregation:* aggregate the two items by creating a summary index and by jointly testing effects on individual items.

### 8. Household saving.

- 8.1. *Contributions to household savings*. Household member contributed to savings in last 2 weeks.
  - *Data sources:* reports from woman at Endline 4, woman at Endline 5, and family member at Endline 4.
  - Aggregation: none.
- 8.2. *Woman's self-help group participation*. Woman participated in self-help group in last month.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.
- 8.3. Woman has savings goal. Woman is saving up for something.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.
- 9. *Fertility.* Number of successful pregnancies since baseline.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - Aggregation: none.
- Children's education. Note that all child education outcomes are at the child level.
  10.1. Children's education. (a) Days child attended school in last week, and (b) days child studied outside of school in last week.
  - *Heterogeneity*: estimate heterogeneity in treatment effects by child gender.
  - *Data sources:* reports from woman at Endline 4 and Endline 5.
  - *Aggregation:* aggregate the two items from a particular endline by creating a summary index and by jointly testing effects on individual items. No aggregation across endlines.
  - 10.2. *Woman's aspirations for children's education.* Desired educational attainment for child: (a) is class 12, (b) is beyond class 12, and (c) don't know.

- *Heterogeneity*: estimate heterogeneity in treatment effects by child gender.
- *Data source:* report from woman at Endline 4.
- Aggregation: none.

## SECONDARY OUTCOMES.

#### 1. Opinions on partner firm opportunity.

- 1.1. Overall. How good opportunity is overall.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.2. *What program entails.* Program is primarily: (a) training opportunity, (b) employment opportunity, and (c) both.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.3. *Basic program details*. (a) Favorable opinion of pay, (b) favorable opinion of hours, (c) stability of work, (d) how good facilities in loom center would be, (e) favorable opinion of distance to loom center from house, (f) extent to which participants would get along with each other, (g) extent to which participants would be respected by supervisors, and (h) safety of participants.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - *Aggregation*: aggregate the eight items from a particular respondent by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.

#### 1.4. Interest in woman enrolling.

- *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
- Aggregation: none.
- 1.5. *Financial value to household.* Extent to which woman's participation would improve household's financial status.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.6. Household decision-making. (a) Woman will be part of enrollment decision, (b) if woman enrolled, she would be part of decisions on how money she earns is spent, and (c) extent to which participation would lead woman to make more important household decisions.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - *Aggregation*: aggregate the three items from a particular respondent by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.

- 1.7. *Household chores.* If woman enrolled: (a) would expect her to do the same amount of household chores (multiplied by -1), and (b) would plan to do more household chores.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - *Aggregation*: aggregate the two items from a particular respondent by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
- 1.8. Care for children. Woman could properly care for children if she enrolled.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.9. *Change to family member's life.* Extent to which own life would change if woman enrolled.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.10. *Social acceptability.* Extent to which households that would enroll follow societal customs.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.

## 1.11. Status/prestige of opportunity.

- *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
- Aggregation: none.
- 1.12. *Financial need of participants.* Households that will enroll currently worse off financially than normal household.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.13. *Exposure to new people.* Frequency of participants being around people they had not met before enrolling.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.14. *Exposure to men.* Frequency of participants being around men that are not in their households.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.15. *Rarity of opportunity*. How often households get opportunities like this (multiplied by -1).
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.

- Aggregation: none.
- 1.16. *External involvement and pressure.* (a) How involved partner firm will be in implementing program, (b) extent to which partner firm wants women to enroll, (c) how involved survey team will be in implementing program, and (d) extent to which survey team wants women to enroll.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - *Aggregation*: none.
- 1.17. Respect for partner firm.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 1.18. Weaving occupation. How good weaving is as an occupation.
  - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
  - Aggregation: none.
- 2. *Gender attitudes*. Outcomes proposed in this section are subject to the same social desirability concern as those in primary outcomes section 6. As in section 6 above, I will not consider any of the proposed outcomes in this section for which over 75% of control group responses are the same.<sup>3</sup>
  - 2.1. Women's employment. (a) Ok if women go out for work, (b) a woman's main role should be household chores (multiplied by -1), (c) both women and men should earn to contribute to household, and (d) a husband should earn more than his wife (multiplied by -1).
    - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
    - *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.
  - 2.2. *Women's ideas.* (a) Husbands should support their wives' ideas, and (b) wrong for women to disagree with their husbands (multiplied by -1).
    - *Data sources:* reports from husbands, mothers/mothers-in-law, and fathers/fathers-in-law in separate sample.
    - *Aggregation:* aggregate items from a particular respondent for which less than 75% of responses in the control group are the same by creating a summary index and by jointly testing effects on individual items. No aggregation across respondents.

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