Pre-Analysis Plan

Social Norms around Women's Work in Male-Dominated Sectors in Mozambique

Claire Boxho* Sreelakshmi Papineni† Abhilasha Sahay‡

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Abstract

Occupational choices of women are often shaped by restrictive gender norms. We use a lab-in-the-field experimental approach to measure norm-based distortions in women's occupational choice into male-dominated sectors in Mozambique. We provide a novel revealed-preference measure of gender norms by quantifying the wage premium women require to enter male-dominated sectors. We elicit switching points in a discrete choice experiment to estimate an individual-level latent "social tax". We use the experiment to understand how much women "pay" (in foregone wages) to avoid male-dominated sectors and whether this pay changes in the presence of their husband. We also test the impact of a role model video intervention on women's interest in applying for vocational skills training or a job in a male-dominated field as part of a Government of Mozambique employment program. We randomly vary whether women make decisions alone or jointly with their husbands to identify the causal impact of spousal presence on occupational preferences.

Keywords: Gender, Norms, Occupational Choice, Youth, Mozambique

JEL codes: O12, O13, Q12, Q16

*World Bank, Africa Gender Innovation Lab: cboxho@worldbank.org
†World Bank, Africa Gender Innovation Lab: spapineni@worldbank.org
‡World Bank, Global Gender Department: asahay@worldbank.org

1 Introduction

Young women in low- and middle-income countries often lack the agency to freely make a choice around employment, with decisions shaped by social norms that determine acceptable roles for men and women. Occupational sex segregation is often cited as one of the key drivers of the gender gap in earnings (Goldin, 2014; Blau and Kahn, 2017; Wong and Charles, 2020).[1] Male-dominated sectors tend to have higher earnings, and research shows that women entrepreneurs in male-dominated sectors, on average, earn more than women in female-dominated sectors across several low- and middle-income country contexts (Goldstein, Gonzalez and Papineni, 2019; World Bank, 2022). Social pressure and disapproval is often highlighted as a barrier for women operating in sectors where men dominate (Pike, Pierotti and Mbaye, 2023; Pierotti et al., 2024).[2] In this paper we examine social pressure on women's occupational choice and assess how husbands influence the decision of young married women to enter male-dominated trades. Understanding what drives occupational choice is fundamental for designing interventions to improve employment outcomes for women, and to avoid a misallocation of talent that can be costly for economic growth (Hsieh et al., 2019).

In Mozambique, prevailing gender norms may discourage women from entering high-paying sectors, which are often male-dominated. One of the primary constraints appears to be the social stigma associated with women working in these fields, often perceived as unfeminine, less marriageable, or excessively independent. This study aims to examine whether exposure to video narratives — either individually or jointly with a husband — can alter stereotypes about women in these sectors and influence their vocational skills preferences. The underlying assumption is that both women and their husband's may hold misconceptions about women's participation in these sectors, leading to biased decision-making. Recent studies have emphasized the importance of perceived norms in decision-making (see, for example, Bicchieri, 2016; Tankard and Paluck, 2016; Field et al., 2021; Bursztyn et al., 2023). Norms around the acceptability of women's work outside the home, roles and responsibilities in the home, women's mobility, capacity to interact with men and/or the male breadwinner status could all be at play in women's occupational choice decisions.

Through a lab-in-the-field experimental design, we elicit young women's preferences for applying to a course in a male-dominated trade in Mozambique.[3] First, using a hypothetical choice methodology, we measure how much young (18-35 years) married women are willing

[1] Occupational sex segregation is the phenomenon that men tend to sort into specific occupations or sectors dominated by other men and women tend to concentrate in sectors dominated by other women. For example, globally, women are mainly employed in hairdressing and beauty, food preparation, and tailoring, and men in information, communication and technology (ICT), electricity, mechanics, and construction.

[2] Using data from a similar sample we find young Mozambican women perceive that 51% of the community would speak badly of a woman that works in an occupation dominated by men (World Bank, 2025).

[3] Recent research suggests that early exposure to technical skills relevant to work in male-dominated sectors increases women's willingness to pursue that type of work (Gassier, Rouanet and Traore, 2024).

to pay in terms of forgone wages to avoid a job in a male-dominated sector. Specifically, we give binary job choices between female- and male-dominated sectors. To begin with the wages in both types of sector are equal, and with each successive choice the wages in the male-dominated sector increases. Through this, we measure at what inflection point women are willing to pivot from a female- to a male-dominated sector. This wage differential gives us the "social tax" that women are willing to pay. In the experiment we analyze respondent's stated rankings of the hypothetical job offers, and are able to recover an unbiased measure of their preferences between occupations while experimentally manipulating their choice set (Calvi, Farooqi and Kandpal, 2024; Adams and Andrew, 2019; Wiswall and Zafar, 2018). We also examine whether the social tax is higher or lower when women are allowed to discuss their choices and make decisions collaboratively with their husbands. Research has shown that husbands often exert considerable control over household resources and decision-making, which can either facilitate or constrain women's economic activities (Bernhardt et al., 2018; Friedson-Ridenour and Pierotti, 2019; Bursztyn, Gonzalez and Yanagizawa-Drott, 2020; Wolf and Frese, 2018; Rajah, 2025).

Second, we test the effectiveness of a light-touch video intervention designed to challenge social norms around the acceptability of women working in non-traditional sectors. The video features role model women who successfully completed training in male-dominated fields in their locality and now operate profitable businesses with strong family support. Using random assignment, we test whether the video intervention has an effect on women's choice of trade and the presence of their husband on decisions.

Our paper contributes to the literature on gender norms, economic decision-making, and female labor force participation (Jayachandran, 2021; Field, McKelway and Voena, 2026). It builds on prior research related to the impact of information on occupational choices (Gassier, Rouanet and Traore, 2024; Croke, Goldstein and Holla, 2022), the role of role models in shaping economic aspirations (La Ferrara, 2019; Beaman et al., 2009), and the influence of social norms and family dynamics on women's employment (Dhar, Jain and Jayachandran, 2022; Bursztyn, Gonzalez and Yanagizawa-Drott, 2020; Clerici, Bianchi and Biesalski, 2024).

Our paper also contributes to the literature on social image concerns by manipulating visibility and varying audience presence, building on existing research that explores how social perceptions and norms influence individual behavior. Previous studies have examined this phenomenon across diverse contexts, including peer pressure in education (Bursztyn and Jensen, 2015; Bursztyn, Egorov and Jensen, 2019; Brar et al., 2026), gender norms and labor market investments (Bursztyn, Fujiwara and Pallais, 2017), conspicuous consumption and status goods (Bursztyn et al., 2017), and the internalization of norms and moral behavior (Bursztyn, Gonzalez and Yanagizawa-Drott, 2020). Prior research indicates that third-party

effects can bias responses, particularly on sensitive topics related to gender roles and marriage, as respondents often adjust their answers to align with social desirability or perceived expectations (Bursztyn et al., 2025). Our study focuses on the influence of the spouse's presence on women's occupational choices. Eagly and Carli (2007) in a meta-analysis finds that women are more persuadable and conforming than men in group pressure situations that involve surveillance.

While familial networks might help women to overcome restrictive social norms, conversely, they may work to reinforce the norm. There is an increasing call for the engagement of men and boys not only as allies but as participants, partners and agents of change in women's empowerment efforts. For example, women who had male role models growing up are more likely to operate in male-dominated sectors when they are older (World Bank, 2022). In this paper we experimentally examine the influence of the presence of a husband who may serve as a champion or a gatekeeper on decisions related to employment in male-dominated sectors. Our experiment will be useful for informing policies that aim to encourage women to pursue income generating activities in sectors with higher earnings potential. Through the experiment we seek a more nuanced understanding of what the norm based constraints are for women's occupational choice and how husbands may be leveraged as agents of change to empower women.

2 Experimental Design

2.1 Research Questions

The lab-in-the-field experiment consists of two sequential stages designed to measure the influence of gender norms and social pressure on women's occupational choices.

In Stage 1, we implement a discrete choice experiment to quantify the social tax—the wage premium women forgone to avoid male-dominated sectors (MDS). Respondents evaluate five pairs of hypothetical job offers, each differing only in sector (female-dominated vs. male-dominated) and wage. The baseline wage for the female-dominated sector (FDS) job remains constant, while the wage for the MDS job increases incrementally. The switch point—the wage at which a woman opts for the MDS job—reveals her implicit social tax. To isolate the effect of social influence, we randomize whether the respondent completes the exercise alone or jointly with her husband.

In Stage 2, respondents view a short motivational video featuring women who successfully completed technical training in traditionally male-dominated fields and now operate profitable businesses with family support. The video is purely informational and inspirational, containing no employment guarantees. Half of the sample watches the video alone, while

the other half views it alongside their husbands. Post-video, respondents answer questions assessing changes in their perceptions of role models, sectoral preferences, and interest in vocational training across sectors.

Our research addresses three core questions:

1. What is the magnitude of the social tax associated with women entering male-dominated sectors and does this tax differ by key demographics?
2. How does the presence of a husband alter this tax?
3. Does exposure to a motivational video meant to shift gender norms increase willingness to apply for MDS training or enter male-dominated sectors, and how does joint viewing with a husband moderate this effect?

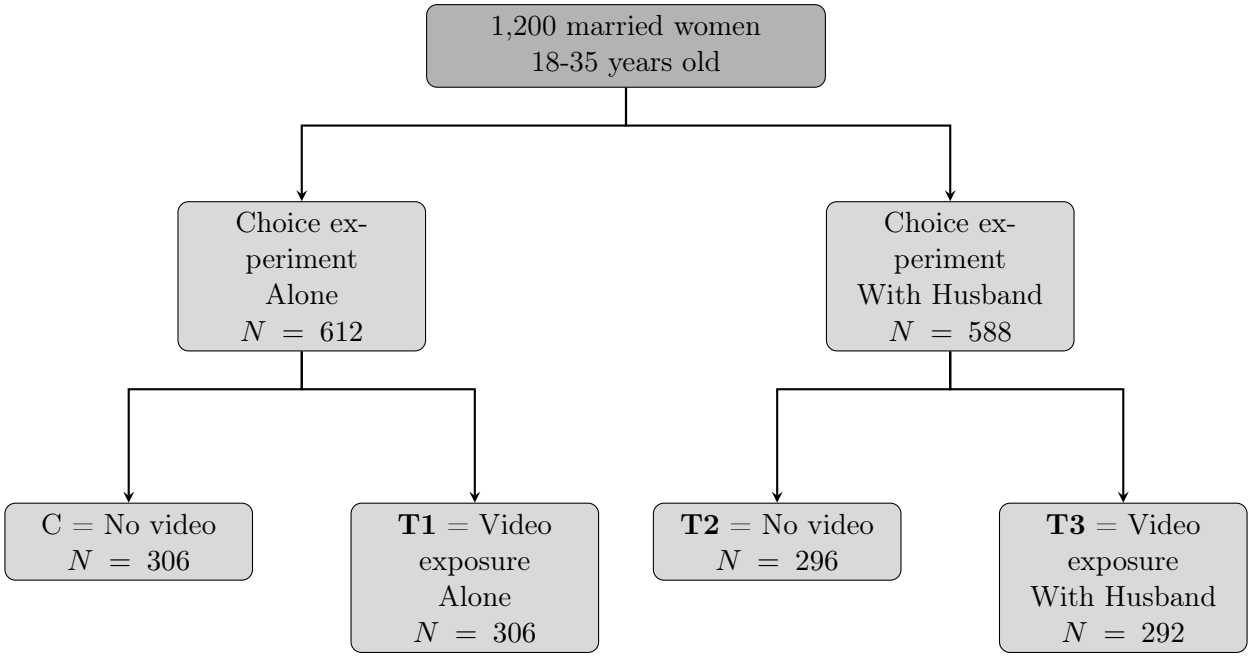
2.2 Design and Sample

The study will recruit 1,200 married women (formally and in de-facto union) aged 18–35 from vulnerable communities in the province of Zambezia, Mozambique[4]. The program is part of the Government of Mozambique's East Africa Girls Empowerment and Resilience (EAGER) program supported by the World Bank that will offer vocational skills training to young women in the region. Women in the study sample were recruited by seven district focal points working for the vocational skills training program, Acredita Emprega. The lab-in-the-field takes place before the official recruitment campaign for the vocational skills program that is expected to start in August 2026.

Recruitment efforts took place in December 2025 and the final sample comprises 1,200 eligible women. The randomization process divided the sample into 4 treatment groups (Figure 1). The sample was stratified along 3 variables: focal point name (representing location), age (dummy-coded as 0 for ages 18–24 and 1 for ages 25–35), and education level (dummy-coded as 0 for grades 5–8 and 1 for grades 9 and above). This stratification created 28 strata, with the smallest cell containing 23 observations. Participants who did not fit neatly into a stratum were randomly assigned across strata using the randtreat command to ensure balanced allocation.

[4]We conducted power calculations for the primary binary outcome — women's take-up of male-dominated sector (MDS) courses—assuming a baseline rate of 13% and a target increase to 25%. With 80% power and a 5% significance level, we require 183 participants per arm; for 90% power, 239 are needed. To ensure robustness across multiple binary outcomes, we targeted 300 participants per arm, resulting in a total sample of 1,200 participants across six treatment groups.

Figure 1: Experimental Design: Two-Stage Process with Four Treatment Groups



2.3 Experiment Details

Stage 1: Choice experiment. To elicit latent preferences over sector of employment, we use a discrete choice experiment in which respondents choose between pairs of hypothetical job opportunities for an adult woman in the household. Scenarios are framed as hypothetical and do not constitute real job offers. The exercise is administered by a trained enumerator using a tablet-based CAPI interface, allowing the enumerator to guide respondents through each scenario and ensure comprehension. Each choice set presents two employment options differing only on the level of monthly earnings. All other job attributes — working hours, location, safety conditions, absence of night shifts or commission-based pay, and training requirements — are held constant and explicitly stated. Respondents are instructed to set aside current skill endowments, as training is assumed provided. A key design concern is that sectoral labels may bundle unobserved job-specific attributes — physical effort, dirtiness, prestige, hazard — that correlate with gender norms independently of wage. To attenuate this, we run the exercise over five sequential job pairs, include a male-dominated but non-physical occupation to separate the gender from the manual-labor dimension. Table 1 in Appendix presents the five job-pairs used in the choice experiment. To help materialize each occupation, enumerators presented laminated printed images of job settings and equipment before each choice.

Stage 2: Motivational video exposure. Respondents assigned to a video treatment watch a five-minute motivational video featuring women from the province of Zambezia who

work in male-dominated vocational sectors — specifically electrician and construction trades. The video is designed to be locally resonant: the women speak directly to their experience entering and succeeding in these sectors, providing credible, context-specific testimony. For three of the five women featured, their husbands are also filmed expressing their support, directly addressing the household bargaining dimension of the intervention. The video closes with a motivational message about the upcoming Acredita program, which will offer eligible candidates a three-month vocational skills training in their area.

Women are randomly allocated to one of the following treatment arms:

- **Control:** Women are interviewed alone and No Video.
- **T1:** Women are interviewed alone and Video Exposure.
- **T2:** Women are interviewed in the presence of their spouse and No video.
- **T3:** Women are interviewed in the presence of their spouse and Video Exposure.

The treatment arms are mutually exclusive. Comparing average outcomes for the treatment and control group arms post-video will provide rigorous evidence on the video's impact.

2.4 Hypotheses

Due to social norms constraining women's participation in male-dominated sectors (MDS), women may underreport their true aspirations to enter MDS even when conducting the experiment alone. In T1 treatment arm, women receive only the video norms intervention and are expected to increase their interest in applying to a male-dominated trade or job, relative to the control group. We are also interested in testing whether the presence of their husband influences their reported aspirations to enter a MDS. In T2 treatment arm, in the presence of the husband, women are expected to consider how their spouse would perceive and react to their answers; and in T3 with the video intervention both women and their husbands are expected to change their reported aspirations for women to enter MDS.

The theory behind the video intervention is that being exposed to women who are successful in a male-dominated sector with supportive husbands reduces the expectation of social disapproval and reassures the respondent (and their husband). This leads to an increased likelihood of choosing a male-dominated trade. The main hypotheses to test:

Hypothesis 1: Women under-report aspirations to choose a hypothetical job in a MDS in the presence of their husband (T2) to align with perceived social norms (measured relative to the control group (C)).
Hypothesis 2: Neither the presence of the husband (T2 or T3) nor the video intervention (T1 and T3) has an impact on trade or job choice outcomes among women.
Hypothesis 3: Among the experiment with husbands, the video intervention (T3) has no

impact on men's willingness to for his wife to apply to a trade in a MDS.
Hypothesis 4: The impact of any treatment arm does not vary with pre-experiment measures of decision-making power, demographic, relationship, or family history characteristics.

3 Empirical Strategy

3.1 Stage 1: Choice experiment

3.1.1 Tax calculation

Stage 1 elicits individual-level switching points in a wage ladder comparing a baseline job paying w_0 to an MDS job paying w_k at step $k \in \{1, \ldots, 8\}$. The relative premium at step k is defined as

$$r_k = \frac{w_k - w_0}{w_0}.$$

Let k_i denote the first step at which individual i chooses the MDS job. The parameter of interest is the individual latent social tax τ_i, defined as the minimum relative premium required for individual i to switch to the MDS job. For switchers (i.e. individuals who switches at $k_i \geq 2$, τ_i is part of an interval: $\tau_i \in [r_{k_i-1}, r_{k_i}]$. For early switchers ($k_i = 1$), $\tau_i \leq r_1$. For non-switchers (never choose MDS by step 9), $\tau_i \geq r_8$. Early switchers are therefore left-censored observations and non-switchers are right-censored observations; both will be retained in all analyses.

Our primary individual-level outcome will be the midpoint of the identified interval for switchers,

$$\widehat{\tau}_i = \frac{r_{k_i-1} + r_{k_i}}{2}.$$

For early switchers and non-switchers, we will construct lower and upper bounds consistent with the censoring structure. In all descriptive statistics, we will report the share of left- and right-censored observations.[5]

Since individuals complete multiple job pairs (A–E), we will first construct a within-individual summary measure before estimating treatment effects. Our primary specification will use the within-person mean of $\widehat{\tau}_i$ across available pairs. As a robustness check, we will alternatively use the within-person median to reduce sensitivity to extreme or highly censored pairs. In the Appendix we compute the social tax using an example response.

[5]For about half of the sample, an additional high-premium scenario (step 9) is included in the questionnaire. It mechanically reduces right-censoring. To harmonize across the sample while still using the additional information collected, we will report aggregate lower-bound estimates excluding the additional 9th step and upper-bound estimates including it, thereby documenting sensitivity to the upper support of the ladder.

We will examine how the social tax value differs by subgroups, such as women's age, education level and rural/urban location as well as husband's demographics.

3.1.2 Regression Specification

To estimate the effect of the joint decision-making on the social tax, we pool the control group (C and T1) and treatment groups T2 and T3 (Figure 1). At this stage of the experiment (before any viewing of the motivational video) we are interested in the effect of their husband's presence.

We will run two specifications using a linear regression model:

1) At the job-pair response level

To analyze the responses at the job-pair level, we will run a regression using all observations of responses (j). The regression model at the job-pair level is specified as:

$$Y_{ij} = \alpha + \beta \cdot \text{Husband}_{ij} + \gamma \cdot S_{ij} + \delta_j + \epsilon_{ij},$$

where:

- Y_{ij} is the outcome variable for individual i in job pair j
- Husband_{ij} is a binary indicator for whether the woman completed the measurement exercise for job pair j with her husband present.
- S_{ij} is a vector of control variables for individual i in job pair j, including age, education level, district, and other relevant covariates.
- We pool all five job pairs and analyze the results as a stacked regression with job pair fixed effects (δ_j).
- ϵ_{ij} is the error term. Standard errors are clustered at the individual level.

This specification allows us to analyze the effect of joint decision-making on the social tax at the job-pair level with a large sample and statistical power. One limitation of this model however is to be sensitive to job attributes rather than using an aggregated measure across job pairs that helps smooth out some unobservable attributes.

2) At the individual level

$$\bar{\tau}_i = \alpha + \beta \cdot \text{Husband}_i + \gamma S_i + \epsilon_i, \tag{1}$$

where:

- Y_i is the outcome variable for individual i

- Husband_i is a binary indicator for whether the woman completed the measurement exercise with her husband present.
- S_i is a vector for strata variables including age, education level, and districts.
- ϵ_i is the error term

To test the robustness of our results, we will estimate two additional models that explicitly account for censoring in the social tax variable:

- **Tobit Model:** We will estimate a Tobit model at the job-pair level, where the social tax is left-censored at 0% (for early switchers) and right-censored at 95% (for non-switchers).
- **Interval Regression:** We will estimate an interval regression model at the respondent level. For each individual, we compute an aggregate social tax interval by averaging the lower and upper bounds of the switching intervals across the five job pairs. This approach preserves censoring information while summarizing preferences at the individual level.

Comparing results across OLS, Tobit, and interval regression will allow us to assess the sensitivity of our findings to different assumptions about censoring and measurement.

3.2 Stage 2: Norms video intervention

We run the following regression specification to measure the effects of the video intervention with and without the husband:

$$\begin{aligned} Y_{ir} = \beta_0 + \beta_1 WomanAlone \times Video_{ir} + \beta_2 HusbandPresent \times NoVideo_{ir} \\ + \beta_3 HusbandPresent \times Video_{ir} + \gamma_1' X_{ir} + \delta_r + \epsilon_{ir} \end{aligned} \tag{2}$$

Where Y_{ir} is the outcome of interest for individual i in region r. $WomanAlone \times Video_{ir}$ is a binary variable equal to 1 if the woman conducts the experiment alone and is shown the video in stage 2, $HusbandPresent \times NoVideo_{ir}$ equals 1 if the woman conducts the experiment in the presence of their husband and is not shown the video, and $HusbandPresent \times Video_{ir}$ equals 1 if the woman conducts the experiment in the presence of her husband and is shown the video. The reference category in the regression is $WomanAlone \times NoVideo_{ir}$, the control group where a woman conducts the experiment alone and is not shown the video. X_{ir} is a set of demographic controls of individual i, and δ_r indicates randomization strata fixed effects. Robust Eicker-Huber-White standard errors are used throughout. Equation 2 is estimated using Ordinary Least Squares (OLS) estimation.

4 Main Outcome Variables

We surveyed female respondents prior to the experiment at “baseline" (prior to the Stage 1 and 2 of the experiment) to capture location information, respondent’s age, education, marital status,

whether has children, work in the past 30 days, monthly income, employment status, sector of employment, whether they have a phone, household head status, breadwinner status, control over their own earnings, and decision-making power on major purchases. We also ask the respondent to report about their husband's age, education, marital status, employment status, and sector of employment before the experiment.

For the measurement exercise, respondents are asked to select the wage at which they would be prepared to switch from a FDS to a MDS for 5 different job pairs. After the video intervention women are asked about their interest in applying to a variety of trades. Husbands are also interviewed in private (post-video intervention) and asked about who they perceive to be the household head, breadwinner, control over their own earnings, and decision-making power on major purchases, to select the courses they think their wife should apply to, gender attitudes and perceived norms on women operating in male-dominated sectors.

We list below the main outcomes for each stage of the experiment:

Stage 1: Choice experiment and computation of the social tax

- **Non-Switchers**: Binary variables equal to 1 if they "never switch" to a male-dominated sector for any, all, and for each of the 5 job pairs.
- **Early-Switchers**: Binary variables equal to 1 if they "switch early" to a male-dominated sector for any, all, and for each of the 5 job pairs.
- **Switchers**: Binary variables equal to 1 if they "switch" to a male-dominated sector at any point for any, all, and for each of the 5 job pairs.
- **Job-pair social tax**: Continuous variable constructed for each of the five hypothetical job-pair scenarios. The tax is calculated as the midpoint of the interval of the possible premiums, where premiums are calculated as the relative difference between the wage at which the wife chooses the MDS (Wk) and the baseline wage (w0). Premium k = (Wk-w0)/w0. Further details can be found in Table X.
- **Aggregate social tax**: Continuous variable equal to the mean of the respondent's social taxes across the five hypothetical job-pair scenarios; the median across job pairs will be used as a robustness check.

Stage 2: Effect of the video norms intervention

- Women's interest in applying to ANY vocational training in a MDS. If any one of the chosen trades is in a MDS, analysis for each specific trade, and standardized index measures of interest in trades.
- Women's aspiration to work in a male-dominated sector.

- Woman's and husband's attitudes and perceived norms toward women's labor force participation in male-dominated sectors.
- Any one (of two) chosen trades applied to in the Acredita program are in a male-dominated trade (real-world outcome).

Key outcome variables are further detailed in Table 3 in Appendix.

5 Baseline Characteristics and Heterogeneity Analysis

Before starting the measurement exercise and prior to the video intervention we conduct a short "baseline" survey with the female respondent to be able to investigate the profile of the sample and conditions under which our treatment effects are more pronounced. In the questionnaire, we limited the number of questions on gender attitudes and beliefs before the experiment to avoid the risk of priming the respondent that the experiment was related to gender or social norms. We collect the following variables:

- Demographic characteristics: age, education, location, current work status, and income (above and below median).
- Women's role in intrahousehold decision-making power and control over the use of income (sole or joint).
- Relationship characteristics: breadwinner status, proxies for bargaining power including years married/cohabiting and age gap between spouses.
- Exposure and role models in family history: whether they know any women in male-dominated industry, or whether they had a male role model growing up.

We will use these variables to examine whether the randomization produced balanced groups on observable characteristics. For heterogeneity analysis, we will look at the distribution of effects for different sub-groups. We expect to observe differential effects along the variables used in the randomization stratification (age, education, and rural/urban location). However, we will also conduct heterogeneity analysis to explore how treatment effects vary by key demographic characteristics.

We also collect a social desirability scale (SDS) following Marlowe-Crowne short version of 13 items from both the wives and their husband (Crowne and Marlowe, 1960). As robustness, we could interact the scale with treatment to examine if any treatment effects are driven by responding with a socially desirable answer.[6]

[6]We use the 13-item social desirability scale, which Reynolds (1982) shows is a viable substitute for the 33-item Marlowe-Crowne scale.

Appendix

Table 1 below presents the five job-pairs used for the choice experiment of Stage 1 of the lab-in-the-field. Baseline and incremental monthly wages were calculated based on qualitative research in the study area for each of job pair. The monthly wage of the male-dominated sector (MDS) job increases at each ladder step following an incremental scale of 10% of the previous step. The 8th and last step is a high value, above average wage, but still within the range of possible salaries in the area.

Table 1: Job Pairs and Wage Scenarios

Job Pair #	**Female-Dominated Sector (FDS)**	**Baseline wages**	**Male-Dominated Sector (MDS)**	**Incremental Values for MDS Wages**
1	Waitress	9,000	Electrician	9,000; 10,000; 11,000; 12,000; 13,000; 14,500; 16,000; 17,500
2	Hairdresser	10,000	Auto Mechanic	10,000; 11,000; 12,000; 13,500; 14,500; 16,000; 17,500; 19,500
3	Clothing Store Assistant	7,000	Mobile Phone Repair Technician	7,000; 7,500; 8,500; 9,500; 10,000; 11,500; 12,500; 13,500
4	Baker	8,500	Refrigeration Technician	8,500; 9,500; 10,500; 11,500; 12,500; 13,500; 15,000; 16,500
5	Community Health Worker	12,000	IT Technician	12,000; 13,000; 14,500; 16,000; 17,500; 19,500; 21,500; 23,500

Note: A ninth scenario with significantly higher wage premiums was included as an additional upper bound to capture individuals who would choose the MDS job for a higher value. This modification happened during the data collection for about half the sample with the intend to reduce the proportion of individuals for which we do not capture their premium. The values for the 9th wage step are as follow: Electrician (37,000 MZN); Auto Mechanic (41,500 MZN); Mobile Phone Repair Technician (29,000 MZN); Refrigeration Technician (35,000 MZN); IT Technician (50,000 MZN).

Example of Calculation of the Social Tax

Table 2 summarizes the responses and calculation of the social tax for an example individual.

The social tax is calculated for an individual based on her choices across five hypothetical job pairs, representing the wage premium forgone to avoid male-dominated sectors (MDS) due to gender norms. The tax for each job pair is the midpoint of the interval of possible premiums, where the premium is defined as:

Table 2: Example Calculation of the Social Tax

Job Pair	**FDS Wage (w_0)**	**Example of Switch Point (W_k)**	**Tax Calculation**
A	9,000 MZN	14,500 MZN (Step 6)	Midpoint of Premium 5 and 6
B	10,000 MZN	Never switches	Right-censored value (Premium 8)
C	7,000 MZN	7,500 MZN (Step 2)	Midpoint of Premium 1 and 2
D	8,500 MZN	15,000 MZN (Step 7)	Midpoint of Premium 6 and 7
E	12,000 MZN	12,000 MZN (Step 1)	Left-censored value (Premium 1)

$$\text{Premium } k = \frac{(W_k - w_0)}{w_0}$$

Here, W_k is the MDS wage at step k, and w_0 is the baseline wage in the female-dominated sector (FDS).

For Job Pair A (Tailor/Seamstress vs. Electrician), the individual switches at 14,500 MZN (Step 6), yielding a premium of 0.611. The tax is the midpoint of Premium 5 (0.44) and Premium 6 (0.61), resulting in **0.527**.

For Job Pair B (Hairdresser vs. Auto Mechanic), the individual never switches, and the tax is the **right-censored value** at the highest premium (0.95), resulting in **0.95**.

For Job Pair C (Clothing Store Assistant vs. Mobile Phone Repair Technician), the individual switches at 7,500 MZN (Step 2), yielding a premium of 0.071. The tax is the midpoint of Premium 1 (0) and Premium 2 (0.071), resulting in **0.035**.

For Job Pair D (Confectioner/Baker vs. Refrigeration Technician), the individual switches at 15,000 MZN (Step 7), yielding a premium of 0.765. The tax is the midpoint of Premium 6 (0.58) and Premium 7 (0.76), resulting in **0.676**.

For Job Pair E (Community Health Worker vs. IT Technician), the individual switches at 12,000 MZN (Step 1), yielding a premium of 0. The tax is **0**.

The **aggregate social tax** is the mean of the taxes across all job pairs:

$$\frac{0.527 + 0.95 + 0.035 + 0.676 + 0}{5} = \frac{2.189}{5} \approx 0.437$$

Thus, the aggregate social tax for this individual is 43.7%. We will use this estimate aggregated across all respondents to calculate the lifetime earnings loss. That is, the total projected income an individual cannot earn over their lifetime due to avoiding a male-dominated sector.

Table 3: Primary Outcomes

Primary Outcomes			
Category	**items**	**Outcome**	**Description**
P1: Stage 1 measurement exercise outcomes			
Job Choice (Hypothetical) in a Male-Dominated Sector (MDS) versus Female-Dominated Sector (FDS)	1	Non-switchers: proportion who never chooses to switch to a MDS	Binary variable that indicates if the respondent never switched to choosing a male-dominated sector. Variables analyzed across five hypothetical job-pair scenarios with indicators measured across all 5 job pairs, for any of the 5 job pairs, and for each job pair separately.
	2	Early switchers: proportion who immediately chooses to switch to a MDS at baseline (equal-pay) wage to a FDS	Binary variable that indicates if the respondent immediately switches to choosing a male-dominated sector at an equal wage to the female-dominated sector. Variables analyzed across five hypothetical job-pair scenarios with indicators measured across all 5 job pairs, for any of the 5 job pairs, and for each job pair separately.
	3	Switchers	Binary variable that indicates if the respondent switches at any point to a MDS.Variables analyzed across five hypothetical job-pair scenarios with indicators measured across all 5 job pairs, for any of the 5 job pairs, and for each job pair separately.
	4	Job-pair social tax	Continuous variable constructed for each of the five hypothetical job-pair scenarios. The tax is calculated as the midpoint of the interval of the possible premiums, where premiums are calculated as the relative difference between the wage at which the wife chooses the MDS (Wk) and the baseline wage (w0). Premium k = (Wk-w0)/w0. For each job-pair, three types of answers are possible: - Individual switches at scenario 1: the premium is equal to zero, since FDS and MDS wages are equal. - Individual switches at scenario k: the tax is calculated as the midpoint of the interval of Premium k-1 and Premium k. - Individual does not switches until after scenario 8: the tax is equal to the premium at the last scenario 8 (Premium 8 = (W8-w0)/w0)). This value is right-censored, i.e., it represents a lower bound as data is missing on the exact premium.
	5	Aggregate social tax	Continuous variable equal to the mean of the respondent's social taxes across the five hypothetical job-pair scenarios; the median across job pairs will be used as a robustness check.
P2: Stage 2 video intervention outcomes			
Vocational Skills Trade Choice	1	Courses they are interested in taking	Binary variables equal to 1 to indicate if the individual is interested in applying to the trade (for 28 trades).
	2	Total number of courses they are interested in taking	Standardized index and integer of multiple trade options.
	3	Total number of courses interested in taking in male-dominated trades	Standardized index and integer of multiple male-dominated trade options.
	4	Interest in any vocational skills training in a male-dominated trade.	Binary variable equals 1 if any one of the chosen trades they are interested in is in a MDS.
	5	Actual take-up of MDS in EAGER Acredita vocational skills program	Any one of the two real-life chosen trades applied to the Acredita program are in a male-dominated trade (contingent on the availability of secondary data collected by implementing partners)
Job aspirations in male-dominated sectors	1	Wife's aspirations to work in a MDS	Binary variable that indicates if the respondent chooses a male-dominated sector.
Attitudes and Norms around women working in male-dominated sectors	1	Wife's perceived norms around women's work in male-dominated sectors	Standardized index and integer variables (between 0-10) for each of the 4 statements: *"In your community, out of every 10 women, how many do you think currently work in occupations where the majority of workers are men?"* *"In your community, out of every 10 men, how many do you think would support their wife working in a male-dominated profession?"* *"In your community, out of every 10 women, how many do you think would like to work in male-dominated professions?* *"In your community, out of every 10 people, how many do you think would speak badly of a woman who worked in a profession where most workers are men?"* (reverse)
	2	Wife's Attitudes around women in male-dominated sectors	Standardized index and binary variables coded 1 if agree and strongly agree to the following 6 statements: *In your opinion do you agree or disagree (likert scale) that:* *"Women should be allowed to work in professions such as electrician, mechanic, or construction"* *"Women can do just as well as men in male-dominated professions"* *"I would support a woman in my community working in a male-dominated profession"* *"Women can earn as much money as men in male-dominated professions"* *"Employers should offer women the same opportunities as men in male-dominated sectors"* *"Women should NOT be in occupations where the majority of workers are men"* (reverse disagree coded 1)
Intrahousehold Support for Finding Work	1	Wife's perceived support of their husband being encouraging or discouraging in finding work: "influencer" or "gatekeeper"	Binary variable that indicates if the respondent perceives their husband as an influencer or gatekeeper for finding work.
Community Support for Finding Work	1	Wife's perceived support of their family or other community members being encouraging or discouraging in finding work: "influencer" or "gatekeeper"	Binary variable that indicates if the respondent perceives family or community members as an influencer or gatekeeper for finding work.
Husband's Recommended Vocational Skills Trade Choice for their Wife	1	Courses that husbands' think their wife should apply to	Binary variables equal to 1 to indicate if the husband thinks their wife should be applying to the trade (for 28 trades).
	2	Total number of courses they think their wife should apply to	Standardized index and integer variable for multiple trade options.
	3	Total number of courses they recommend for their wife in male-dominated trades.	Standardized index and integer variable for multiple trade options.
	4	Recommended any course in a male-dominated trade for their wife.	Binary variable equals 1 if any one of the chosen trades they recommend are in a MDS.
Husband's Attitudes and Norms around women working in male-dominated sectors	1	Husband's percieved norms around women's work in male-dominated sectors	Standardized index and integer variables (between 0-10) for each of the 4 statements (same as wife's)
	2	Husband's Attitudes around women in male-dominated sectors	Standardized index and binary variables coded 1 if agree and strongly agree to 6 statements (same as wife's)

Table 4: Baseline Characteristics

Baseline Descriptive Statistics: Demographic Characteristics, Intrahousehold Decision Making, Breadwinner status, and Family History			
Demographic characteristics	1	Wife and husband's age, education, has children, work status, sector of work, income, and location	Baseline levels of wife's demographic characteristics: current age (number and categories 18-25 and 26-25), highest level of completed education (binary variables for grades 5-7; grades 8-11; and 12 and above); binary variable whether has children; binary variable if currently work, binary variable if currently work in a MDS, income (value using IHS transformation) and location (urban/rural and by district). Also code same for husband's characteristics as reported by his wife
Wife's decision-making power	2	Wife is (sole or joint) decision-maker related to purchase of large household expenditures	Binary variable if wife has sole or joint decision making power on "*Who usually decides on major purchases (e.g., furniture, livestock, equipment) for the household?"* Comparison with husband's response: binary variables that indicate when a wife's power is recognized by her husband.
	3	Wife is sole decision-making power on any decision	Binary variable if wife has sole decision making power on any decisions.
Control over the use of income	4	Wife's decision about how to use earnings	Binary variable if wife has sole or joint decision making power on use of profits from the business. *"In your household who usually decides how the money that the respondent earns is spent?"* Comparison with husband's response on who has control over decisions
Wife's Role Models	5	Had any role model (male/female) growing up	Binary variable if had any role models growing up Binary variable if had any male role models growing up Binary variable if personally knows any women who works in a male-dominated profession
Breadwinner status	6	Breadwinner is wife or husband	Binary variable if wife considers herself to be the main breadwinner, joint with her husband, or her husband. Comparison with husband's response on breadwinner status in the household.
Proxy for Bargaining power	7	Ages of husband and wife when first married and education gap	Wife's age and age differential when they first started co-habitating (husband's age minus wife's age). Difference between husband's education level and wife's (husband's grade minus wife's grade)

Table 5: Trade Classification - Defining MDS/FDS

Sector	Male-Dominated Sector (MDS) or Female-Dominated Sector (FDS) or Mixed	MDS/FDS Strict Categorization
Journalism and communication	Mixed	FDS
Plumbing	MDS	MDS
Cooking and confectionery	FDS	FDS
Metalwork / civil metalwork	MDS	MDS
Childcare	FDS	FDS
Residential and industrial electricity	MDS	MDS
Handicrafts	FDS	FDS
Computer repair	MDS	MDS
Hospitality and tourism	FDS	FDS
Tailoring and sewing	Mixed	FDS
Nursing	FDS	FDS
Refrigeration systems	MDS	MDS
Construction	MDS	MDS
Agricultural extension	Mixed	MDS
Carpentry	MDS	MDS
Information technology (IT)	MDS	MDS
Painting	MDS	MDS
Automotive mechanics	MDS	MDS
First aid	FDS	FDS
Food processing	FDS	FDS
Automotive electricity	MDS	MDS
Livestock and horticulture	Mixed	MDS
Hairdressing and beauty therapy	FDS	FDS
Locksmithing	MDS	MDS
General medicine	Mixed	FDS
Driving light vehicles	MDS	MDS
Accounting	Mixed	MDS
Banking	Mixed	MDS

Table 6: Sector Classification - Defining MDS/FDS

Sector	Male-Dominated Sector (MDS) or Female-Dominated Sector (FDS)
Textile and clothing industry - tailoring	FDS
Leather and leather products industry	MDS
Intermediate food/beverage - flour/milling	FDS
Food/beverage production - food preparation	FDS
Metalworking and engineering	MDS
Carpentry or woodwork - furniture	MDS
Construction materials - stone crushing	MDS
Construction contracting	MDS
Wholesale trade - imported or national	FDS
Retail trade - buying and selling goods	FDS
Education - teaching	FDS
Small transport services - taxi driver	MDS
Cafes and restaurants - bakery	FDS
Public administration - government	MDS
Tourism services	FDS
Storage and logistics services	MDS
Business services - printing, secretary	MDS
Engineering services	MDS
Municipal services - waste collection	MDS
Automotive maintenance	MDS
Maintenance services (non-automotive)	MDS
Equipment rental - electronic, agricultural	MDS
Hairdressing or beauty salon	FDS
Software development / web design	MDS
Interior design/decoration services	MDS
ICT services - cyber cafe, mobile charging	MDS
Cleaning services (non-laundry)	FDS
Laundry services	FDS
Health services - medicine/nursing	FDS
Childcare services - nanny	FDS
Financial services - banking	MDS
Modern livestock - including dairy	MDS
Beekeeping	MDS
Poultry farming	MDS
Seed production	MDS
Vegetable and fruit production	MDS
Animal feed production	MDS
Other (specify)	FDS

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