Pre-Analysis Plan:
Effects of Subordinates' Gender on Managers' Disciplinary Actions

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1 Introduction

This document describes our pre-analysis plan to estimate the effect of subordinates' gender on managers' disciplinary actions. In this experiment, we randomly assign the gender of subordinates in hypothetical scenarios in which managers are required to take disciplinary actions in Pakistan.

2 Intervention

This experiment randomly assigns the gender of subordinates in hypothetical scenarios in which top managers are required to take a disciplinary action. The gender of subordinates are expressed as very common names: *Amna* for the female subordinate, and *Ahmed* for the male subordinates.

In this experiment, each respondent is asked to think of himself as the top manager of a hypothetical company, A whose has the following profile, and that the following questions are about a hypothetical employee, *Amna* or *Ahmed* at this company.

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Figure 1: Hypothetical Company A Profile

Company A Profile	
Revenue	6,280 lakh Rs.
Profit	1,667 lakh Rs.
Average daily persons engaged during a year	286
Number of female employees	None
Main product	Garments for export
Factory environment	- Currently no separate workspace for women - no transportation service for women - no child care facility - no maternity leave
Position you are hiring for	Sewing positions

The respondent is provided with the following scenario.

1. Suppose that [*Name*] is late to work by an hour for the first time.
2. Suppose that [*Name*] is late to work by an hour for the second time.
3. Suppose that [*Name*] is too distracted during the work hour and talking to other employers.
4. Suppose that [*Name*] is taking a break much longer than allowed during the work day.

After each scenario he is asked to choose from one of the following disciplinary actions.

1. Warning
2. Pay reduction
3. Suspension
4. Contract termination
5. Transfer to a lower paid position

3 Sampling

We randomly sample 600 firms from the membership lists of two trade associations: the Pakistan Hosiery Manufacturers and Exporters Association (PHMA) and the Pakistan Ready-made Garment Manufacturers and Exporters Association (PRGMEA). 0f the 600 firms, we randomly assign 300 firms to the video treatment group, and the other half to the control group with no video showing.

This intervention is administered during a survey interview that takes place at each company's premise sometime between January - April, 2023. At each company's premise, we interview its top manager who has control over the firm's hiring policy and is not necessarily its owner. During this interview, if the company is assigned to the treatment group, its top manager watches the video on a tablet provided by our enumerator. Therefore, respondents, while they share membership to either of the above trade associations, do not know who receive the video treatment.

4 Outcomes of Interest

The primary outcome of interest is top managers' disciplinary action choice under each hypothetical scenario.

More specifically, we construct the following dummy variables:

1. If a top manager chose to warn;
2. If a top manager chose to reduce pay;
3. If a top manager chose to suspend the contract;
4. If a top manager chose to terminate contract; and
5. If a top manager chose to transfer the subordinate to a lower-paying position.

Moreover, we also expect that the degree to which top managers reduce pay and the length for which they suspend the contract differ by the gender of subordinates. To explore this possibility, we construct the following outcome variables:

1. Percentage of the daily wage reduced; and
2. Number of days of suspension.

5 Estimation and Testing

To estimate the effect of the subordinates' gender on managers' disciplinary behaviors, we estimate the following equation with OLS:

$$y_i = \beta_1 F_i + X_i'\beta_2 + Z_i'\beta_3 + \epsilon_i \tag{1}$$

where y_i is one of the outcome variables above for top manager i; F_i is the dummy variable with 1 if i has been assigned the hypothetical female subordinate ($Amna$); X_i' is a vector of firm characteristics such as the years in operation, size in terms of revenue and the number of employees, whether it exports, access to finance, and types of production; Z_i' is a vector of top manager characteristics including sex, age, education level, experience in the business if his wife has out-of-the-home employment if he is the firm owner, willingness to pay for norm compliance and so forth; and ϵ_i is the error term.

6 Robustness Checks

We will estimate a version of equation 5 without the firm and top manager characteristics, X_i' and Z_i'.

7 Heterogeneity Analysis

We will estimate heterogeneous treatment effects across variables collected at the initial interview (at the time of treatment assignment) by including the interaction between the treatment assignment, T_i and one of the following variables, and the variable itself:

1. Firm size
2. Firm's exporter status
3. Firm's export destination
4. Firm's experience in hiring women
5. Types of goods produced
6. Top managers' baseline views on female hiring and cultural norms
7. Daughters' education level
8. Wife's employment status