## CAN MEDIATION REDUCE VIOLENCE?

The Effects of Negotiation Training for Local Leaders in North

## Central Nigeria

Appendix

## 1 Analytic Strategy

We use a difference-in-means estimation strategy to examine the effects of the training program on our outcomes of interest. The unit of analysis for this study is the community. Leaders were also clustered at the community level to control for the fact that they were trained together and would have contact with one another. As such, all analyses are conducted using robust standard errors clustered at the community level. For both the leader-level and community-level outcomes, our regression equation is as follows:

$$
\begin{equation*}
Y_{c}=\beta_{0}+\beta_{1} \text { Training }_{c}+\epsilon_{c} \tag{1}
\end{equation*}
$$

In this equation, $Y_{c}$ is the outcome at the endline survey, $\beta_{0}$ is the average of outcome $Y_{c}$ in the control communities, $\beta_{1}$ is the coefficient of interest measuring the effect of the training on outcome $Y_{c}$; and $\epsilon_{c}$ is the error term. Our primary specification does not include covariates. We include the covariate-adjusted models in the Appendix. In addition, we present the analyses using baseline measures of outcomes of interest, when applicable, in the Appendix as well. We have balance across the main outcomes of interest and most relevant covariates across our intervention and control communities.

## 2 Descriptive Data

2.1 Balance Test Across Leaders: Treatment \& Control

|  | Balance Table |  |  |
| :--- | :---: | :---: | :---: |
| Variable | Treatment, $\mathrm{N}=340$ | Control, $\mathrm{N}=317$ | p-value ${ }^{7}$ |
| Age |  | 0.002 |  |
| Mean (SD) | $44.02(10.73)$ | $46.94(11.79)$ |  |
| Income (Naira) |  | 0.4 |  |
| Mean (SD) | $211,616.18(220,274.87)$ | $221,630.91(294,703.15)$ |  |
| Gender $=$ Male | $71 \%$ | $76 \%$ | 0.14 |
| Relig $=$ Muslim | $32 \%$ | $35 \%$ | 0.4 |
| Occup $=$ Herder | $11 \%$ | $20 \%$ | $<0.001$ |
| Settles Disputes | $81 \%$ | $81 \%$ | 0.9 |
| ${ }^{\text {W Wilcoxon rank sum test; Pearson's Chi-squared test }}$ |  |  |  |

### 2.2 Balance Test Across Citizens: Treatment \& Control

| Variable | Balance Table: Citizen Survey |  |
| :---: | :---: | :---: |
|  | Control, $\mathrm{N}=2,034$ | Treatment, $\mathrm{N}=1,979$ |
| Age |  |  |
| Mean (SD) | 38.86 (11.66) | 40.68 (12.79) |
| Income (Naira) |  |  |
| Mean (SD) | 172,091.89 (733,484.95) | 179,911.38 (574,557.36) |
| Gender $=$ Female | 46\% | 42\% |
| Relig = Muslim | 32\% | 30\% |
| Occup $=$ Herder | 13\% | 11\% |
| Ethnicity |  |  |
| Fulani | 32\% | 23\% |
| Hausa | 0.1\% | 2.2\% |
| Tiv | 34\% | 31\% |
| Berom | 4.4\% | 12\% |
| Idoma | 1.3\% | 1.0\% |
| Agatu | 9.8\% | 8.7\% |
| Igala | 14\% | 17\% |
| Igbira | 0.3\% | 0.6\% |
| Irigwe | 4.8\% | 4.3\% |

## 3 Additional Analyses

### 3.1 Box-Plot Regression Table of Leader-Level Outcomes


(a) OLS Regression: No Covariates

(b) OLS Regression: With Covariates

Note: The graphs show the OLS specifications regressing the main outcomes of interest on the treatment variable (attending IBMN training)) with and without covariates in the first stage. All outcomes are standardized with a mean of 0 and SD of 1 . We included robust standard errors clustered at the unit of randomization. Covariates included are religon, age, occupation, and gender.

### 3.2 Box-Plot Regression Table of Citizen-Level Outcomes



Note: The graphs show the OLS specifications regressing the main outcomes of interest on the treatment variable (attending IBMN training)) with and without covariates in the first stage. All outcomes are standardized with a mean of 0 and SD of 1 . We included robust standard errors clustered at the unit of randomization. Covariates included are religon, age, occupation, and gender.

## 4 Ethical Concerns

The study was designed with special consideration of the potential ethical concerns that may arise while working in a conflict zone with people who have dealt with violence. First, all field activities had the approval of district officials prior to implementing the interventions and conducting surveys. Additionally, we made sure to obtain consent and approval from village leaders before surveying any citizens from both treatment and control communities. Second, the intervention and survey team were trained thoroughly on survey procedures, protocols, consent process, and ethical concerns that may arise during the course of the work for both surveys. All participants were told numerous times that they could drop out of the study or any survey at any time. Importantly, the interventions implemented for this study were finished prior to the Covid-19 pandemic lockdown. All activities throuhout 2020 and early 2021 were done remotely. In Spring 2021, Nigeria shifted its Covid-19 policies and allowed NGO activities to resume. The interventions and surveys used in this study were conducted in collaboration with Mercy Corps, an international NGO, and with funding from USAID. We only resumed resumption of activities after approval both from the funding source and Mercy Corps headquarters along with the official government policy of Nigeria. Still, we proceeded implementing full Covid-19 precautions: all enumerators wore masks at all times and social distancing was employed. All surveys were done in outside and open spaces.

