**Interviewer Effects on Measuring Attitudes**

**Evidence From a Face-To-Face Survey in Zambia**

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### Background

#### Survey

- Survey on financial behaviour & attitudes, as well as standard of living in 2016
- Target: savings group members participating in Rural Finance Expansion Programme
- 2,051 respondents of 529 savings groups (ca. 4 respondents randomly drawn/group)
- 40 interviewers in 11 teams of 5 (15 interviewers worked across teams/provinces)
- Interviewer survey on socio-demographics, survey experience and attitudes

#### Quasi-interpenetrated design (interviewers are randomly assigned to respondents)

- 0.191
- 0.223
- 0.193
- 0.317
- 0.388
- 0.383
- 0.375
- 0.318
- 0.385
- 0.181
- 0.256

#### 8 districts in Northern, Eastern and Western Province

### Gender-of-Interviewer Effects on Trust Questions

Percentages of respondents who do not trust in institutions separated by male (M) and female (F) interviewers.

### Hypotheses

1. Different interviewers collect systematically different answers.
2. Even after controlling for respondent-level characteristics (such as age or gender of the respondent), systematic interviewer effects persists.
3. Interviewers’ characteristics (such as age, gender and own attitudes) influence the respondents’ answers systematically.

### Model Specification Using Step-Up Approach

#### Model 1

The response $y_{ij}$ of the i-th respondent being interviewed by a certain interviewer $j$ can be specified in a general model as follows:

$$ y_{ij} = \beta_0 + \beta_1 \cdot \text{district}_{ij} + v_j + \epsilon_{ij} $$

- $\beta_0$ is the overall mean for the respondents’ answers;
- $\beta_1$ represents the fixed effect of district$_{ij}$ (id);
- $v_j \sim N(0, \sigma_v^2)$ denotes the random intercept associated with interviewer $j$;
- and $\epsilon_{ij} \sim N(0, \sigma^2)$ represents the residual error at the respondent level.

And it is assumed that $\epsilon_{ij} \perp v_j$.

#### Model 2

$$ y_{ij} = \beta_0 + \beta_1 \cdot \text{district}_{ij} + \beta_2 \cdot X_{\text{cov}} + v_j + \epsilon_{ij} $$

- $X_{\text{cov}}$ represents the vector of the covariates at the respondent level (such as gender and age of the respondent) and $\beta_2$ is the fixed effect of all respondent-level covariates.

#### Model 3

$$ y_{ij} = \beta_0 + \beta_1 \cdot \text{district}_{ij} + \beta_2 \cdot X_{\text{cov}} + \beta_3 \cdot X_{\text{att}} + v_j + \epsilon_{ij} $$

- $X_{\text{att}}$ denotes the vector of all covariates at the interviewer level, such as attitudes, gender and age of the interviewer and $\beta_3$ is the fixed effect of all interviewer-level covariates.

### Future Extensions

1. Expanding interviewer and respondent characteristics (e.g. survey experience, education)
2. Including interviewer-respondent interaction
3. Considering cultural context (e.g. language of interview)
4. Behavioural coding to further explain interviewer variance

### Main References & Footnotes


[1] Created with Excel, supported by Bing © GeoNames, Microsoft, Navteq, Wikipedia