

Partnership for Economic Inclusion Impact Collaborative

Technical Workshop

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Overview of Discussion



- Two well-designed studies on a very important question
- 1. Statistical power for distinguishing treatment arms
- 2. Systems for tracking participants to minimize attrition

Power Analysis



- Do we have enough statistical power to detect effect of a small change in program delivery?
 - E.g. training preferred female versus non-preferred male in South Sudan study
- Differences across treatment arms are likely much smaller than Treatment-to-Control differences
- Need large sample sizes to detect even quite large differences in treatment effects





- Treatment effect of intervention is 0.2 SD
- No baseline data
- Good chance of detecting effect with 400 T, 400 C
- Treatment effect on preferred female is 50% larger than on non-preferred male (0.16 versus 0.24 – difference of 0.08)
- Need almost 2500 T and 2500 C to detect with 80% power

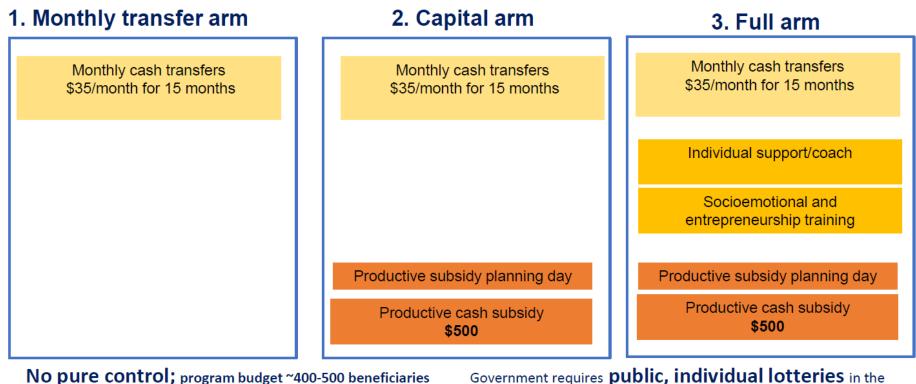


Design:

HH with	Control	Treatment, Participant = 1st choice	Treatment, Participant = 2nd choice
2+ eligibles, M preferred [35%]	900	1,050 / 750	450
2+ eligibles, F preferred [35%]	600	600	0 / 300
1 eligible only (M) [15%]	450	450	
1 eligible only (F) [15%]	450	450	
Total	2,400	3,000	

Required: 50% Female 50% Male Open Question: 0 vs 300, 2nd choice under F preferred?





per arm

Individual randomization, stratified by area

Government requires **public, individual lotteries** in the presence of organizations for people with disabilities due to low trust

If there is low registration/verification numbers, package 2 may be dropped to increase power

Efforts to minimize attrition



- Poor populations in fragile settings likely have high migration rates
- Migration likely higher in control group can lead to unbalanced attrition
- Put in place system to track participants
 - Duflo, Dupas and Kremer (2021) have had high success with giving people mobile phones and credit
 - Put in place tangible economic incentives to stay in touch



Thank you!