

ANALYSIS PLAN FOR SHORT-TERM FOLLOW UP SURVEY

Titukulane TEVET experiment in Mangochi and Zomba districts, Malawi

Pre-Analysis Plan

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Introduction

This document outlines the plan for analysis of the short-term follow-up survey for the TEVET experiment that is part of the Titukulane evaluation in Malawi. The purpose of the study is to evaluate the impacts of participation by eligible youths in a TEVET intervention that combines informal vocational training by a local artisan with supervised cash asset transfers. Participation offers were randomized individually after assessment of eligibility by the partner and assignment to potential trainers. We used an oversubscription design: for trainers assigned to more than five eligible and interested potential participants, five individuals were randomly selected to be invited to the program, and the remainder make up the control group.

Empirical analysis

We are conducting this short-term follow-up survey in person with the youth who initially registered for the TEVET program and the head of their households (if not the same person).

We carry out mean regression with outcomes of interest, described below, on a treatment indicator where treatment refers to offers to participate and stratification cell fixed effects, which in this case are equivalent to the specific trainers assigned to potential participants during intervention planning (each trainer provides training in one vocation only). We will winsorize the data if the standard deviation of a variable is more than 50% larger than its 1%-winsorized version. The primary outcomes below are defined based on the youth survey only and not the separate household survey module.

Primary outcomes of interest:

1. Hours spent in the past 7 days on all non-farm productive activities: sum across agricultural (off-farm) labor, non-agricultural labor, processing or trading agricultural goods, non-agricultural self-employment, formal employment, and apprenticeship
2. Value of productive assets associated with the target participant's non-farm economic activities (\$)
3. Sum of revenue from business owned or operated by the target participant and target participant wages, from any source (\$)

4. Subjective well-being: z-score index of three components – 10 point life satisfaction, 4 point happiness, Kessler-6 score¹

Outcomes 1 and 2 test for increased economic activity in the primary intended pathway of the program. Outcome 3 tests for downstream effects on income, taking into (a) account potential reductions in income from activities that were not related to the assigned vocation, (b) potential increases from redirecting the asset transfer or reinvesting initial profits related to the assigned vocation in other activities, and (c) direct impacts as a result of investment in the assigned vocation. Outcome 4 serves as a broader downstream measure of participant well-being.

Given the high skew of primary outcomes 2 and 3 we will fit median regression as an alternative to mean regression for looking at treatment effects on central tendency.

Secondary outcomes of interest:

Secondary outcomes will be grouped into three families:

- Household economic well-being
 - Total asset value of all productive assets owned by participant or household
 - Household food security
 - Household consumption
- Participant time use and employment
 - Focused impacts on primary outcomes 1, 2, and 3 but limited to hours, assets, and revenues in the specific vocation initially assigned to the participant at baseline (e.g. tailoring).
 - Components of the impacts on any business, hours of work, and asset values for each of the three categories of activity aggregated above (self-employment, paid work, apprenticeship).
- Life transitions
 - Marriage
 - Migration away from original household
 - Migration away from original village
 - Pregnancy
 - Establishing an independent household
 - A dummy variable that is 'any of the above transitions took place'.

Note that the main analysis sample for household level outcomes will not include observations from the household survey module for those cases where the youth migrated or is otherwise no longer part of the original household.

¹ For observations from the first two days of surveying, Kessler-6 score will be imputed based on other two measures, when the Kessler module was not included in the instrument.

Heterogeneity Analysis

We will conduct a standard analysis of heterogeneity (using interaction between treatment and covariates) across four dimensions:

- Gender
- Predicted probability of compliance
- Vocation
- District

Data collection and timing of analysis

While data collection was partially completed at the time of submission of this analysis plan, the researchers have generally been blind to the treatment status. Two exceptions are a) the analysis of survey attrition which was conducted during data collection and included comparisons of attrition rates by treatment status for the purpose of management of potential differential attrition; and b) the analysis of reported take-up figures that were used to verify administrative accounts of the same.