

# Using self-assessments and observations to capture non-cognitive skills: Insights from a skills training program in Mozambique

Anne Hilger<sup>1</sup>

Extended Abstract

December 2017

Skills have been a prominent component of the public debate in recent years as jobs evolve and work becomes ever more complex. Non-cognitive skills in particular have captured the attention of researchers and policy makers, due to both their positive effects on educational attainment, labor market success, health, and criminality, and their malleability over the life cycle. While the evidence of the effect on non-cognitive skills has gained attention, their measurement tends to be confined to self-assessment questionnaires, such as the Big Five, or judgment based on observable behaviors, i.e. delinquent behavior (Kautz et al., 2014). The former is rooted in psychologist's measurement of personality traits and relies on the lexical hypothesis that important traits will be reflected in language (Golsteyn and Schildberg-Hörisch, 2017).

However, it is unclear whether these are valid measures, especially among young and vulnerable populations, who might not be used to the type of self-reflection required for a self-assessment. Focusing on a vulnerable, low-literacy population is crucial, as this is arguably the population that can benefit most from improvements in non-cognitive skills. For example, a preliminary evaluation study in France looking at the effect of non-cognitive school-based training found that while teachers observed a substantial improvement in self-discipline among pupils, pupils did not perceive themselves any differently prior to and after the intervention (Algan et al., 2016).

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The MUVA program is implemented by Oxford Policy Management (OPML) and funded by DFID. This paper benefited strongly from comments from entire MUVA team, most notably Jana Bischler (OPM), Anne-Cecile M. Rebelo (MUVA), Paul Jasper (OPM), Karin de Rooij (MUVA), and Luize Guimaraes (OPM).

<sup>1</sup>Paris School of Economics-EHESS, DIAL, and IFP. Email: [anne.hilger@psemail.eu](mailto:anne.hilger@psemail.eu)

This paper contrasts the traditional self-assessment with a different form of measurement, observational exercises. We use panel data from two cohorts of skills training program implemented in urban Mozambique (Maputo and Beira), which aimed at improving the employability skills of young people from disadvantaged backgrounds by providing capacity building in non-cognitive skills and vocational training. The program, MUVA'titude, is comprised of two complementary components: 1) Two months of intensive soft-skills training (four times per week), followed by 2) six months of TVET courses combined with a light touch soft skills training (once a week).

The data collected include a non-cognitive skills self-assessment and non-traditional assessment tools such as observational exercises (applied to individuals and in groups) for the same individuals. These task-based tests meant that respondents were observed 'in action', during group and individual exercises. A team of experts then rated the respondents' display of a range of non-cognitive skills. These observational exercises were designed to mimic ethnographic research, observing the individual in action. Data were collected in three waves for two cohorts of beneficiaries (at baseline, midline, and endline).

First results show that participants' non-cognitive skills seem to have improved over the span of the program. These results hold in sign for both types of measurement though the size and the timing of the effect differs. Observational exercises better capture the results of the actual program, as they more clearly measure the effect of teaching skills, practicing those skills with certain exercises, and then assessing these same exercises. In this set-up, the observational exercises seem better able to determine whether or not the student is able to perform the given task at hand. The self-assessments, in turn, do not seem to be correlated as much with the actual tasks practiced during the training sessions; the exact number of sessions attended is not a significant determinant of increases in non-cognitive skills as measured by the self-assessment.

The research contributes to the literature by providing further evidence for the role of non-cognitive skills in developing countries, offering a methodological note on measurement among vulnerable populations. It is crucial for policy-making, as more and more programs aim to enhance or augment non-cognitive skills. Without proper measurement, assessing the effect of these programs remains futile, especially among vulnerable populations.

## References

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