

On the importance of measuring personality traits in household surveys

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This policy brief highlights the significance of including personality assessments in household surveys in developing countries, linking socio-emotional traits such as conscientiousness and emotional stability to economic behaviours like debt management and labour mobility. It emphasises the importance of obtaining accurate measurements using, for instance, the Big Five model and addressing potential biases inherent in this method. Policy recommendations include targeted interventions to refine personality traits, particularly during adolescence, to improve outcomes in health and work. However, in developing countries, such interventions should complement, rather than replace, broader policies aimed at addressing basic needs. In addition, policymakers and scholars should encourage the use of culturally adapted methods in household surveys.

Introduction

Personality traits significantly shape human behaviour, influencing economic decisions, health outcomes and social interactions. Yet they are often overlooked in household surveys, particularly in the Global South. Integrating personality assessments into household surveys can enable researchers to reveal key links between personality and economic outcomes, paving the way for important recommendations for public policy development.

Why measure personality traits?

It is important to measure personality traits in household and individual surveys in developing countries, as these characteristics can influence economic behaviour, decision-making and well-being. They influence labour market outcomes, educational choices, and health [1]. In the case of rural India, NEEMIS data reveal several interesting relationships be-

tween cognition and economic outcomes related to household debt and mobility on the labour market.

With respect to household debt, data show that conscientiousness is an advantage in negotiating and managing debt, particularly for non-Dalit women, while emotional stability is a disadvantage in negotiating and managing debt [2]. Locus of control is correlated with debt negotiation, but especially for non-Dalit men [3]. These results therefore suggest that, in a patriarchal rural context, women take advantage of their Big Five personality traits to overcome the constraints of social identity. However, an internal locus is an additional asset in negotiation for individuals who already have a favourable social position (non-Dalit men).

Regarding mobility on the labour market, data reveal that despite the region's highly rigid labour market structure, Big Five personality traits are important determinants of labour mobility, enabling individuals to overcome caste and gender discrimination [4]. However, these personality traits do not contribute to increased income mobility for migrants. Thus, for women, emotional stability and openness to new experiences lead to income gains, while for Dalits, emotional stability and agreeableness play an important role in relative income mobility.

How can personality traits be measured correctly?

Assessing personality traits involves navigating at least four complex challenges that must be carefully addressed to ensure accurate and reliable conclusions re-

garding the effects of personality traits.

Firstly, interactions between interviewers and respondents must be carefully managed, as they can lead to various biases that can distort the results. For instance, respondents may answer questions in a way that will be perceived favourably by others without expressing their true feelings (i.e., the social desirability bias). Or respondents may sometimes systematically answer questions in the same direction, even though they have the opposite meaning (i.e., the acquiescence bias). These biases, inherent in household surveys with face-to-face responses, are all the more pronounced when the level of education is low, as is the case in countries from the Global South. These biases can be tackled by allowing breaks in the administration of the questionnaire, by developing a relationship of trust between respondents and interviewers, and by using local vernacular terms to rephrase questions and make them more comprehensible. In addition, acquiescence bias may be corrected by including questions that have exactly the same meaning but are coded in reverse.

Secondly, in relation to the Big Five model, the selection of the item inventory is also an important consideration. While researchers argue that longer inventories tend to be more valid [5], there is an ethical trade-off between validity and the length of the questionnaire administered to participants. Indeed, individuals may not have several hours to dedicate to a socio-economic survey, so some shorter inventories may prove useful and effective [6].

Thirdly, it is crucial to check that the

personality traits that emerge from the data make sense from a social psychology point of view. To do this, it is necessary to construct personality traits on the basis of factor analyses and not on the basis of naive averages. It is also important to check the internal consistency of these measures (i.e., the degree of reliability with which items in a survey designed to evaluate the same concept actually fulfil this role) with, for example, McDonald's omega [7]. These two procedures make it possible to avoid drawing erroneous conclusions about the effects of personality traits. In more statistical terms, this removes the endogeneity arising from measurement errors.

Finally, because personality traits are not always stable over time (most psychologists at least agree on the notion that personality traits are malleable, i.e., that they are not perfectly stable and vary slightly over time), especially in a developing country context, it may be advised to study their stability wherever possible. Indeed, if instability cannot be detected but is present, the conclusions drawn from a study may be wrong. In statistical terms, there would be a strong risk of endogeneity through reverse causality. If instability is found, a lagged measure of personality traits or a variation in personality traits in a panel should be used. If stability cannot be assessed, care should be taken in the assumptions made and in the interpretation of the results.

What are the benefits for public policy?

The fact that personality traits are malleable suggests the potential for interventions aimed at refining specific traits to improve important life outcomes (e.g. health, work). Such interventions are most effective during adolescence, as they can elicit a succession of positive outcomes [8]. The effectiveness, up to one year after intervention, of a three-month digital intervention aimed at changing personality was verified [9]. Participants who benefited from the intervention reported greater personality changes than those in the control group, and these changes were consistent with the targeted change objectives. In addition, observers such as friends, family members or intimate partners also detected some significant personality changes in the direction desired by the individuals.

However, in the context of developing countries where basic needs are not always met, interventions aimed at improving cognitive skills should not replace broader development policies focused on meeting these basic needs. In the specific case of India, this means, for example, strengthening the mid-day meal programme by increasing budget allocations and enhancing the MGNREGA programme by both increasing its budget and the number of guaranteed job days. This is especially important as budgetary allocations to these programmes have been significantly reduced in recent years, even though they have proven successful [10]. In addition, by incorporating personality assessments into these wel-

fare schemes, policymakers could gain insights into the socio-emotional factors influencing programme success, enabling tailored enhancements to improve outcomes for different demographic groups.

Finally, policymakers and scholars should encourage the use of culturally adapted methods in household surveys. This includes training interviewers to reduce biases, using local vernacular to ensure comprehension, and applying advanced statistical techniques to verify the internal consistency of collected data.

Conclusion

The aim of this note is to demonstrate the importance of incorporating measures of personality traits into household and individual surveys in developing countries. This is the approach taken by the Observatory of Rural Dynamics and Inequalities in South India as part of its NEEMSIS quantitative survey of households and individuals. To our knowledge, NEEMSIS is the only survey in India to collect long-term information on the personality of individuals (a similar survey exists for Thailand and Vietnam, see the Thailand Vietnam Socio Economic Panel survey from the Leibniz Universität Hannover).

To ensure that NEEMSIS collects reliable data on personality, a relationship of trust was first established between the interviewers and the respondents (i.e., some members of the research team have been conducting field surveys for over 15 years in the study area).¹ The NEEMSIS survey is also based on the long version of the Big Five inventory and makes every effort to

use terms that are appropriate and understandable for local people. When analyses are undertaken with personality data, the team (i) systematically correct for acquiescence bias; (ii) use factorial analyses; and (iii) systematically check the internal consistency of personality traits.

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¹Interested readers may see the short audiovisual documentary on NEEMSIS data collection methods, available here: <https://youtu.be/b68yu1CTW0U> (Accessed on January 9, 2025).

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