How healthy are you really? Cross-country comparisons of wellbeing with survey data

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Much of the discussion surrounding the design of wellbeing indicators is – rightfully – devoted to the question of which and how many dimensions should be considered: Do we conceptualise wellbeing based on objective dimensions, like income and health, or subjective dimensions, like life satisfaction? Yet the next step, the actual measurement of wellbeing using available data, is equally tricky. In this phase, researchers often face an important trade-off between detailed and reliable datasets for a small, selected group of countries, or messy data sources for more countries that allow for global comparisons. In particular, administrative data, or survey data based on tests, are rarely available for many countries, especially from low-income regions. Instead, the little data available is usually based on self-reports, i.e. survey participants are simply asked about their income or health. This type of collection has the advantage of being less resource intensive, but comes with a set of drawbacks. For example, seemingly objective variables become influenced by subjective interpretations of survey questions, differences in perception, or culture-specific reporting behaviour.

An objective wellbeing dimension, for which the difference between tested and self-reported data is particularly important, is health status. Research has shown that the perception and reporting of one's own health varies systematically by socio-demographic characteristics like age (Crossley & Kennedy, 2001; Oksuzyan et al., 2019; Spitzer & Weber, 2019; Srisurapanont et al., 2017), gender (Merrill et al., 1997; Schneider et al., 2012), country of residence (Capistrant et al., 2014; Spitzer & Weber, 2019), education (Black et al., 2017), and race (Jackson

et al., 2017). By comparing self-reported and tested health status for the same individual, it is possible to explore the effect of biased reporting behaviour on measures of health status. Spitzer and Weber (2019) found that older individuals are more likely to overestimate their health than younger individuals, i.e. they believe they are healthier than is actually the case, making comparisons based on self-reported health across age groups difficult. Similarly, reporting behaviour differs substantially across countries; for example, Southern Europeans are more likely to overestimate their health than people from Western Europe (Spitzer & Weber, 2019). This latter point is especially important for cross-country comparisons of wellbeing, as differences in the reporting of health might obscure actual differences in health status across regions.

One way to overcome these difficulties are tested health measures, like handgrip strength, a well-established indicator of functional status, and powerful predictor of morbidity and mortality (Bhasin et al., 2020; Mainous et al., 2015; Rijk et al., 2015). Handgrip strength is usually measured using a hand dynamometer, which requires additional resources and special training of the survey interviewers. Less resource intensive tests include the chair stand test or walking speed test, which are more targeted towards older individuals. Tests can also be used to measure cognitive health, for example, via word recall tests, for which survey participants have to memorise a list of words. The execution of these tests might still vary across countries; they are, however, robust to other forms of measurement bias, such as perception and reporting bias, making them ideal candidates for the measurement of objective wellbeing dimensions.

While these tested wellbeing measures are resource intensive and not feasible in certain settings, approaches like the use of anchoring vignettes can also improve the comparability across socio-demographic groups (Voňková & Hullegie, 2011). When opting for an objective conceptualisation of wellbeing – be it in combination with subjective dimensions, or without – it is important that this objective variable is not picking up the same variation as their subjective counterparts. Improving data quality and data availability for all regions is thus key for cross-country comparisons of wellbeing, and ultimately for the design of policies that promote wellbeing on a global scale.

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