



Methodological adjustment in subjective measurements to improve data quality and individual freedoms

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Abstract

Subjective measurements allow to evaluate the personal judgment of each person and not what experts or governments define as acceptable to be objectively measured, considering also that the capture of subjective information broadens the freedoms of individuals and improve the quality of the data. However, in the current proposed methodologies, among them: OPHI, OECD, the recommendations of the Sarkozy Commission, among many other authors, are far from achieving much wider individual freedoms. Although it is true that the collection of subjective data increases the freedoms of individuals when considering their "values", and freedom is an aspect related to our ability to get what we value, then it is correct to incorporate freedom to identify our "value", but it is also necessary to identify our "valuation level" of things, the last mentioned absent in the current methodologies. People can have different valuation levels of the same value, that is, they value the same but at different levels and in the current methodologies each one of the informants is evaluated under certain "value level" that is presumed universal. This omits the particularity that each individual can have in the levels of those values or "valuation level". As a consequence, it causes the capture of the data to suppress certain individual freedoms, therefore, to consider the freedom to choose their value, without considering in the data capture the classification in their "valuation level", is also a violation of their freedom. Obviously all of the above prejudices the quality of the data, the validity and the comparability between the results of the individuals. According to some codes of good practice in Statistics, data and their collection should ensure consistency, comparability and validity, and in this sense, subjective measures should take into account "valuation levels". Precisely the result of this research is to contribute to improve the method in subjective measurements for data capture, quality, comparability between subjects, validity and even extend individual freedoms.

Keywords: Interpretation; respondent; value; valuation level.

1. Introduction

One of the statistical thinkers who have recognized the importance of the subjective reality of individuals was, without a doubt, Pearson (1892), who recognizes that besides a reality outside of us, there are also thoughts and memories, a reality within each person. However, throughout history the model of statistical thought promoted by social physics of Quetelet (1869) with the so-called "average man" was promoted. According to Porter (2000) the approach considers that it is possible to reason about collectivities without any detailed knowledge of individuals, social reality were the characteristics of the mass human species, the so-called society, characterizing not the individual man but the "average man" to understand social causes.

Obviously this approach ignores the subjective particularities, but over the years science has incorporated aspects of a subjective nature in public opinion polls, especially were incorporated in recent years by the absence of the subjective dimension as an important feature in the measurement of well-being. According to Phélan (2011) the subjective is fundamental, since there are dimensions of the human being that are detected only by this means. Innovation and transformation in measurements



make sense when it has been proven that traditional categories and indicators do not respond to social reality.

Among the many methodological recommendations aimed at statistical systems to improve the quality of subjective data and their capture, the OECD (2013) "Guidelines on Measuring Subjective Well-being" can be mentioned, allowing significant advances in the design, collection and validity. Likewise, the "Psychological and Subjective Wellbeing: A Proposal of internationally comparable indicators" written by Samman (2007) of OPHI. But let us say that in general the historical point from which more emphasis is placed on the importance of improving subjective measurements is after the publication of the "Report by the Commission on the Measurement of Economic Performance and Social Progress" by Stiglitz et al. (2009), where statistical agencies were recommended to collect and publish measures of subjective well-being. This leads to an increase in methodological discussions and their use in various indicators.

For Stiglitz et al. (2009) measurements of well-being, both objective and subjective, provide essential information about the quality of life. Statistical institutes should integrate in their surveys questions whose objective is to know the evaluation that each one makes of his life, his experiences and his priorities. Likewise, the UN (2012) in the report "The future we want" recognizes the importance of the participation of the individual in the decisions and expressions of their concerns for sustained development.

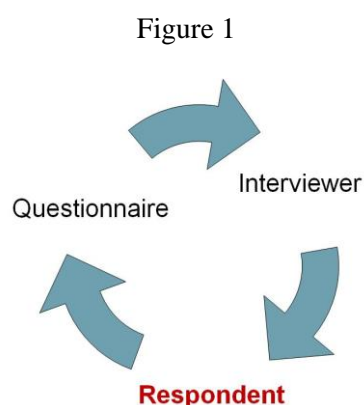
In view of the above, it is undoubtedly important to consider subjective measurements within statistical systems. If all human behavior, opinions and thoughts, are influenced by social norms and context, this does not diminish their validity in subjective responses. But according to Helliwell et al. (2013) if it is imperative to collect data carefully. However, current methodologies do not consider extending freedoms to improve comparability and validity of subjective data.

If the OECD (2013) understands that in order to develop adequate policies it is essential to understand what constitutes a better life for each citizen, then the freedom of individuals in the subjective information they provide should be expanded. In addition, from the perspective of Sen (2009), freedom is an aspect related to our ability to achieve what we value, and in addition Stiglitz et al. (2009) indicates that what really matters is people's capacities, that is, the scope of their set of possibilities and the freedom to choose the life they value, then there must be a freedom to identify our "valuation level" of things. Since two individuals can value the same, but at different levels, and not considering this aspect in the measurement is a violation of their principles of freedom.

2. Subjective measurement. The freedom of "values".

In statistical opinion studies, where subjective aspects are incorporated, the errors of non-sampling associated with data collection through the questionnaire, the interviewer and the respondent, are those that should be given attention (see figure 1). For OECD (2013) there may be differences among respondents in terms of how questions are interpreted, response formats, scales, and certain response styles. Including Helliwell et al. (2013) mentions that cultural differences in response styles can give diverse results with the same question, although the quality of welfare aspects is the same, as well as different interpretations of the questions and the meaning of the scales in the responses .

For subjective measurement, errors from the questionnaire and from the interviewer can be minimized by adopting some recommendations from the OECD (2013) Guidelines on Measuring Subjective Well-being. Where in addition this guide makes recommendations as to sample design, questionnaire design, question writing, data processing, response formats, coding, among other aspects.



Source: Own elaboration

But the type of error that remains to be checked even more in the current methodologies is the one from the interaction with the respondent. From it, three types of errors commonly known as: deliberate, ignorance and interpretation occur. The deliberate, when the respondent simply misrepresents the response, this error can never be controlled for either subjective or objective measurements. The mistake of ignorance is when the interviewee does not know the answer to the question, an aspect that can be reinforced with some interview techniques. The third error, in which we deepen in this paper, is the one of interpretation, associated with the values and principles proper to the subject with regard to the objective concept of measurement.

In this sense, errors of interpretation can be caused by the incomprehension of the concept in which his perception is being measured. To reduce this error, the OECD (2013) recommends maximum clarity and precision in defining the concept. But even there is the possibility that the concept may not be associated with the principles and values of the subject, this leads to errors in the comparisons. In order to reduce this possible error, the person must be placed within his or her free interpretation of the concept, for example in the case of happiness, each person should be placed in what he "values" as happiness and thus collect the information under that concept. These can evidently differ according to the personality of the individual. Rojas (2003) in an empirical study identifies a typology of conceptual references and determines 8 different conceptions of happiness. Therefore, each individual can have a different conception according to what he values.

But this error is not really caused by the subject; it is caused by the measurement methodology. The subject is free to interpret the concept to which he is being subjected. But if the individual is placed under a single concept, then, you cause errors in the capture of the data, in addition to suppressing the first level of freedom: that of your "values".

3. Subjective measurement. The freedom of the "valuation level".

Although in current methodologies it is possible that the individual can freely associate with his subjective concept in which it will be measured and compared with others, it is necessary to reach a second level of freedom that is currently suppressed and this is the "valuation level".

The OECD (2013) mentions that it must be clear how people value the concepts. Even in current methodologies, the individual in general chooses a "value level" within a predetermined scale, but this does not give him the freedom that some consider accomplished. That is to say, having the freedom to choose a "value level" within a scale is analogous to having the freedom to go to vote in a presidential



election between two candidates that I have not previously chosen. This is an example of representative democracy, but if the maximum expression of democratic freedom is given by participatory democracy, where each individual participates in the whole process, then analog in the choice of the "value level" must be the same.

To explain the above, under the conception of values in Sen (2009) where every individual "values" and has reasons to "value", suppose that people have the freedom to choose their concept of happiness. It is also imperative that what is valued by the individual comes accompanied by the "valuation level" of the same, as part of their freedoms. This is because each person can have different "valuation levels" of the same "value". For example, two individuals may value the same concept of happiness but their minimum "valuation levels" to achieve it may be different between the two. For this reason, classifying it on a scale that illustrates the comparison of "value" and "value level" between two or more subjects, without considering the differences between the "valuation levels" of individuals, is a current error in the capture of data (see figure 2). But in addition, to consider the freedom to choose their "value", without taking into account their classification in their "valuation level", is also a violation of their individual freedom.

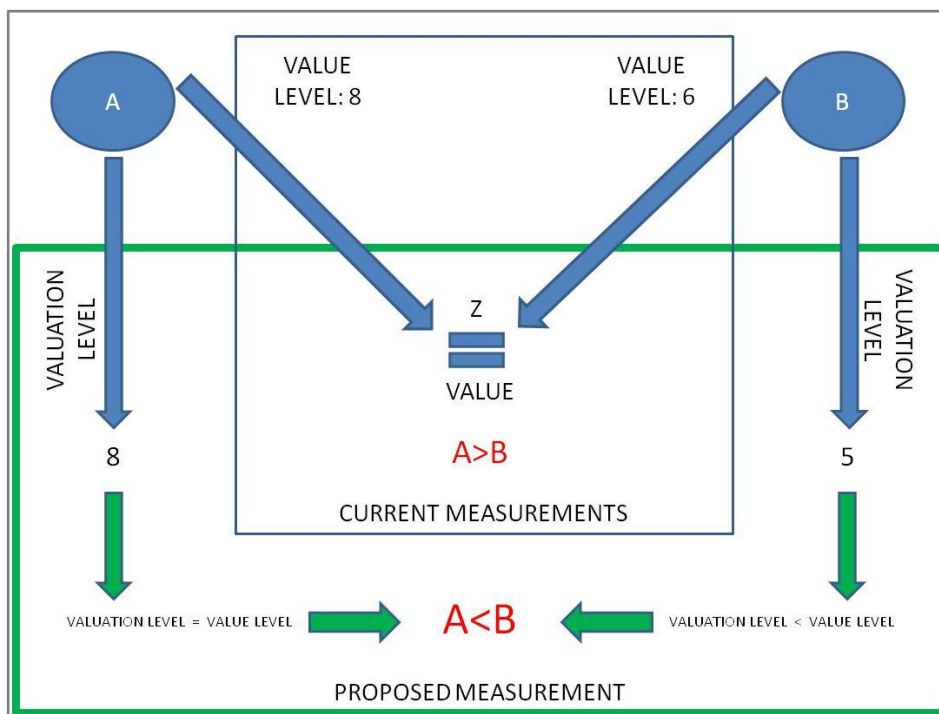
This aspect is not considered within the OECD (2013) Guidelines on Measuring Subjective Well-being. Nor is it encompassed by the recommendations of Samman (2007) in the "Psychological and Subjective Wellbeing: A Proposal of internationally comparable indicators". It is not enough to ask the interviewee to be represented in the "Cantril Ladder". In that case, the interviewee classifies his "value level", but not his "level of assessment" as a reference. This so-called "valuation level" is what will make it possible to make more reliable comparisons between individuals, evidently because it is a natural bias that originates from different levels of valuation, even if each individual shares the same value and classifies it in a similar way.

Additionally Samman (2007) indicates that individuals' scores already contain judgment of importance or "valuation level" and that very high score suggest that the individual values this category highly. But as can be seen in figure 2, what was proposed by Samman (2007) is debatable. To this end, the comments described by Helliwell et al. (2013) indicating that individuals have their own personal adjustment points (valuation level) for their happiness and that while good or bad experiences can push people away from their benchmarks, it eventually returns to their point of adjustment. Precisely that benchmark or "valuation level" is the one that is not being captured in current methodologies, and making these methodological adjustments are extremely important to improve the biases derived from subjective measurements.

In the description of figure 2, suppose a scenario of two individuals, A and B having the same "value" or concept Z. On a scale of 1 to 10, individual A classified its "value level" with a level 8 and the individual B is classified with a level 6. If we compare both results in a subjective measurement, it would seem logical to think that individual B considers a lower "value level" for the concept Z. But if we increase his freedoms by allowing him to select his "valuation level" on the scale, the same individual B assigns his "valuation level" at 5, while A assigns him at a level 8. Thus, the relationship between the "value level" assigned to the scale and its "valuation level" is now higher for B. In this sense, each individual is free to choose their own "valuation level" and once they know it, it is possible to compare and affirm Individual values the concept much more.



Figure 2



Source: Own elaboration

4. Conclusions

With the proposed methodological adjustments for subjective measurements, data quality, accuracy and comparability are improved. It also broadens the freedoms of individuals in the studies to which they participate, and even extends their participation.

The aspects discussed in this research should be considered by those who perform subjective measurements and promote associated research. It is important to note that the Eurostat (2011) stresses that the data and their collection should ensure consistency, comparability and precision. Consistency will depend on the use of concepts associated with a wide range of "values"; Comparability must incorporate the "value level" and the "valuation level"; The precision is a little complex to validate given the subjective component, since in itself it depends on each subject, therefore we can say that to the extent that the subject has more freedom, it should be more precise.

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