



## Measuring Well What Is Ill Defined?

David Torres Iribarra

Pontificia Universidad Católica de Chile, Escuela de Psicología

Maul's paper is a clever and pointed indictment of a set of specific but widespread practices in psychological measurement and the social sciences at large. Through it, Maul highlights central issues in the way we approach theory building and theory testing, bringing to mind the words of Allport, who indicated in 1935 that *attitudes*—a central concept in social psychology—were “measured more successfully than they are defined” (p. 828).

Maul's studies add to the evidence supporting the unsettling conclusion that, as social scientists, we are still engaged in a field that oftentimes claims to validly measure something that has been ill defined.

Overall, I agree with Maul in what I take to be the two central points in his paper. First, I agree that greater care and attention should be devoted to the definition of the psychological attributes that we purport to measure, particularly to the critical appraisal of our assumptions regarding the structure of the attributes. To this end, it is imperative that we move away from the latent remains of operationalism and the “operational definitions” that they engender. Second, I agree with Maul that this greater focus on the characterization of the psychological attributes should be accompanied by the abandonment of the standard paint-by-numbers approach to instrument validation that is widespread in certain areas of psychology. Having said that, I do have some comments and questions about the paper.

### Considering intended use to contextualize validation

My first comment revolves around the relationship, or lack thereof, between the intended use of the survey instrument and the process of validation. In his paper, Maul recognizes that the relevance of survey instruments is not only related solely to their role in basic psychological research, citing multiple examples where surveys are used in educational contexts with varying numbers of consequences. However, it seems to me that the paper is focused on the process of validation as preeminently a scholarly pursuit, even though the *classic trinity of validation activities*—factor analysis, Cronbach's alpha, and a correlation analysis—is used to justify the use of instruments in applied contexts such as educational accountability, as pointed out by Maul himself.

Consider, for instance, Maul's treatment of validation as a Popperian process, in which we attempt to falsify a theory or hypothesis. I think that this framing of the validation process works well in the context of these studies because Maul is presenting a set of extreme—albeit very illuminating—cases. However, I am unconvinced of the advantages of adopting a validation-as-falsification approach in general. The adoption of a Popperian framework invites the rehash of the debate over demarcation of science in terms of a debate over the demarcation of measurement, emphasizing the discussions about ontology and measurability of attributes as more important—or the only important—issues to be discussed while ignoring questions about the intended uses of the instrument specifically and the measurement goal in general. This strikes me as problematic because it seems that heeding Maul's recommendation of abandoning a one-size-fits-all approach to validation would necessarily involve giving some consideration to the intended use of a given survey