## Dialogues in Philosophy, Mental and Neuro Sciences

## **DIALOGUES**



A pragmatic meta-conception of validity for diagnostic concepts in psychiatry: a step prior to utility, theories and methods of validation
ADRIANO C. T. RODRIGUES<sup>1</sup>
CLAUDIO E. M. BANZATO<sup>2</sup>

1: Health Sciences Center, Federal University of Piaui – UFPI (Brazil); 2: Department of Psychiatry, Faculty of Medicine, University of Campinas – UNICAMP (Brazil) email: adriano\_ctr@uol.com.br adriano\_ctr@hotmail.com

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Dear Editor, in a previous paper we have tried to delve into what validity means in the context of psychiatric nosology, arguing for a pragmatic view of it (Rodrigues and Banzato, 2009). Here we want to briefly reassert the basic points of our analysis, make a few clarifications and address some issues raised by commentators.

The most basic assumption in our argumentation is that validity is an epistemological attribute. Accordingly, the structural elements and processes implied in knowledge — like arguments, inferences and propositions — would be its objects par excellence. If this is correct, then the term validity does not refer to the diagnostic categories themselves, as often is assumed, but actually refers to relevant propositions or hypothesis held in regard of these diagnostic concepts. Besides, since many propositions and hypothesis about diagnostic categories may be taken as nosologically relevant, the targets of validity assessment in psychiatric nosology are manifold. Furthermore, as particular scientific and epistemological frameworks have their own presuppositions and priorities, the preferential or even the exclusive focus of validity assessment is expected to vary across them.

That said, the first clarification we would like to make is the following: we do not reject that, within the limits of a specific scientific and epistemological framework, utility may be legitimately considered the single most paramount feature of diagnostic categories. However, we do not take it as the ultimate meaning of validity, but only as one of the views one could possibly embrace. So, in this sense, our position is compatible with instrumentalism. However, by endorsing a pragmatic view of validity in psychiatric nosology we are not necessarily committing to instrumentalism, as may seem at first sight (Oulis, 2010; Pies, 2011). At the same time, we do not intend to suggest that the validity of diagnostic categories should be ruled by any other particular perspective or feature. Instead, our plea is for the recognition that different scientific interests and epistemological perspectives are at play when one is talking about the validity of psychiatric diagnoses. Therefore, the methodology of assessment employed in each case should vary in accordance with the kind of hypothesis to be tested. For us, by overlooking this pluralist stance, validity of psychiatric nosology often becomes subject matter of pseudo-debates, and nosologists engage in criticizing each other for embracing different research programs or for supporting nosographic strategies other than their owns. In addition, we claim that both the adoption of a particular epistemological perspective and the choice between distinct nosological interests are highly value-laden decisions in most of the cases.

A second point we would like to stress concerns the widespread belief that psychiatric diagnostic categories lack strong theoretical background and that this undermines their validity (e.g.: Trafimow, 2010). The pragmatic view we spouse on validity recommends us to be cautious about it. Once again, what are at stake are the epistemological frameworks and the scientific programs in which the validity of diagnostic categories is to be assessed, as well as the various roles attributed to theories in each of them.

Roughly, we recognize the many virtues of theories and, among them, the fact that they comprise robust systems of correlations that afford meaningfulness to their objects. Within well-developed theories diagnostic concepts are non-trivial (either proven or putatively) — a condition we have previously argued as necessary to their validity. We must be aware, however, that meaningfulness is not provided by the theories themselves, but by each of the relationships that are part of the nomological network. In fact, whether we have a theory on schizophrenia that postulates a correlation between this disorder and a certain outcome, or we merely happen to know about this association based on the clinical tradition (despite lacking a theory on the disorder), meaningfulness is similarly being conferred to schizophrenia. Therefore, the meaningfulness and the certainty about such correlation are not dependent on the fact that its countless observed tokens were or were not warranted by a theory. Indeed, all the certainty we have about correlations and all the meaningfulness theories may provide to a diagnostic concept come originally from observations. Thus, scientifically sound and fruitful investigations about schizophrenia may certainly benefit from, but do not demand a pre-existing theory on this disorder (except, of course, an observational theory, which may remain implicit). Starting almost from the scratch, a given diagnostic concept may become the subject matter of sound and progressively incremental investigative programs, gaining in the process meaningfulness and validity, without ever rendering a theory that links all the discovered correlations. Of course, for a diagnostic category to be valid in such case, what one thinks of and expects from these diagnostic categories become a critical issue once again. If someone, for any reason, recognizes that a given diagnostic category is somehow meaningful, but denies its validity because a nomological network is not available for the existing data, this is fair enough if the project in question for diagnostic categories demands theories. The most suitable example here is perhaps the psychometric conception of validity, which has exerted great influence on psychiatric nosology. Within its original field, this conception of validity fundamentally refers to how properly a given test measures the construct or latent variable it is supposed to measure. Of course, assessing how well a given test performs such task benefits to a large extent from a detailed picture of the target constructs. Indeed, a theoretical model of the latent variable is one of the core requirements in the conception

of construct validity put forward by Cronbach and Meehl (1955), and so the formulation of this model would figure as the first step in the validity assessment of a psychological test. While a theory on the construct of concern may be very useful and facilitate validity assessment in this case, this happens because what is at stake is the correspondence between test and construct. The need for a theoretical model of schizophrenia, on the other hand, is not an obvious condition for it to be considered a valid diagnostic concept. After all, when we ask about the validity of schizophrenia, are we asking if the diagnostic criteria for schizophrenia in ICD-10 and DSM-IV truly depict what we think schizophrenia is? Though it may be one of the concerns at play, other questions are almost certainly being asked simultaneously, and each of them requires different demonstrations and makes diagnostic categories valid or invalid in several different ways.

Finally, we must emphasize that we do not intend our analysis to be taken as a particular conception of or a theory on validity. As a consequence, we also do not expect it to generate a program that will aid either the formulation of new valid diagnostic categories or the validation of already existing ones. Instead, the aim of our analysis is exposing reductionist pitfalls and helping to circumvent some pseudo-debates on the validity of psychiatric diagnoses. More in the vein of a meta-conception of validity, it claims for the recognition of the particular conceptions of validity at play in each given context and then, accordingly, for the implementation or development of adequate - vis-à-vis the conception of validity adopted - validation programs or methods of validity assessment (e.g.: Stoyanov, 2010).

## REFERENCES

Cronbach LJ, Meehl P. Construct validity in psychological tests. Psychological Bulletin 1955; 52:281-302.

Oulis P. Nature and main kinds of psychopathological mechanisms. Dial Phil Ment Neuro Sci 2010; 3(2):27-34.

Pies R. Toward a concept of instrumental validity: Implications for psychiatric diagnosis. Dial Phil Ment Neuro Sci 2011; 4(1):xx-xx.

Rodrigues AC, Banzato CEM. A logical-pragmatic perspective on validity. Dial Phil Ment Neuro Sci 2009; 2(2):40-44.

Stoyanov D. Why a logical-pragmatic perspective on validity in mental health is not sufficient: introduction to the principle of convergent trans-disciplinary cross-validity. Dial Phil Ment Neuro Sci 2010; 3(1):25-26.

Trafimow D. The implications of meaning for the validity of diagnostic categories. Dial Phil Ment Neuro Sci 2010;3:23-24.