

Preface: What Behavioral Scientists Are Unwilling to Accept

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This manuscript should have been published over thirty years ago. That's not to say that it would have averted the crises affecting multiple fields of psychology and some other behavioral sciences—other Cassandras, before and after it was written, were ignored—but that its broad and specific criticisms were valid then and they are equally valid now.

So why publish Petrinovich's paper now? First, anybody interested in behavioral research, whether they are researchers, students, or even following one of many Twitter feeds, can see that serious problems in how research in some fields is conducted remain. Second, the (now) article, like other historical papers, highlights the fact that many of the basic problems were as present in the 1990s as they are today. To take a small example, when reviewing manuscripts, student work, grant proposals, and consulting, we *still* come across people, including those at august institutions, who interpret p-values as falling on a continuum (see p. 21 of the article). How does such a simple, serious, misconception persist let alone get published in the American Psychological Association's flagship journal *American Psychologist* let alone in less prominent places? Third, by asking contemporary researchers and reformers to comment, it allows us to get an idea of what has improved (see, for example, the commentaries by Gelman and Vazire and by Krauss, respectively). In the same vein, nearly all the people that we approached to write commentaries but who were unable to contribute a commentary or declined for other reasons, recognized that the problems that Petrinovich described in 1990 were still with us.

Lewis Petrinovich's death at 91 this past July came as a shock. He was pleased that JMM was preparing to publish his article. We are, too, for in our opinion, his article is a missing voice in a core body of literature. Its reiteration of the perils of null hypothesis testing and the need for working hypotheses, Brunswikian symmetry, constructive replications, and the importance of measuring constructs using multiple methods are so obvious that it is incredible that the article was never published.