Basic and Applied Social Psychology

Editorial

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The *Basic and Applied Social Psychology* (BASP) 2014 Editorial emphasized that the null hypothesis significance testing procedure (NHSTP) is invalid, and thus authors would be not required to perform it (Trafimow, 2014). However, to allow authors a grace period, the Editorial stopped short of actually banning the NHSTP. The purpose of the present Editorial is to announce that the grace period is over. From now on, BASP is banning the NHSTP.

With the banning of the NHSTP from BASP, what are the implications for authors? The following are anticipated questions and their corresponding answers.

Question 1. *Will manuscripts with p-values be desk rejected automatically?*

Answer to Question 1. No. If manuscripts pass the preliminary inspection, they will be sent out for review. But prior to publication, authors will have to remove all vestiges of the NHSTP (*p*-values, *t*-values, *F*-values, statements about ''significant'' differences or lack thereof, and so on).

Question 2. *What about other types of inferential statistics such as confidence intervals or Bayesian methods?*

Answer to Question 2. Confidence intervals suffer from an inverse inference problem that is not very different from that suffered by the NHSTP. In the NHSTP, the problem is in traversing the distance from the probability of the finding, given the null hypothesis, to the probability of the null hypothesis, given the finding. Regarding confidence intervals, the problem is that, for example, a 95% confidence interval does not indicate that the parameter of interest has a 95% probability of being within the interval. Rather, it means merely that if an infinite number of samples were taken and confidence intervals computed, 95% of the confidence intervals would capture the population parameter. Analogous to how the NHSTP fails to provide the probability of the null hypothesis, which is needed to provide a strong case for rejecting it, confidence intervals do not provide a strong case for concluding that the population parameter of interest is likely to be within the stated interval. Therefore, confidence intervals also are banned from BASP.

Bayesian procedures are more interesting. The usual problem with Bayesian procedures is that they depend on some sort of Laplacian assumption to generate numbers where none exist. The Laplacian assumption is that when in a state of ignorance, the researcher should assign an equal probability to each possibility. The problems are well documented (Chihara, 1994; Fisher, 1973; Glymour, 1980; Popper, 1983; Suppes, 1994; Trafimow, 2003, 2005, 2006). However, there have been Bayesian proposals that at least somewhat circumvent the Laplacian assumption, and there might even be cases where there are strong grounds for assuming that the numbers really are there (see Fisher, 1973, for an example). Consequently, with respect to Bayesian procedures, we reserve the right to make case-by-case judgments, and thus Bayesian procedures are neither required nor banned from BASP.

Question 3. *Are any inferential statistical procedures required?*

Answer to Question 3. No, because the state of the art remains uncertain. However, BASP will require strong descriptive statistics, including effect sizes. We also encourage the presentation of frequency or distributional data when this is feasible. Finally, we encourage the use of larger sample sizes than is typical in much psychology research, because as the sample size increases, descriptive statistics become increasingly stable and sampling error is less of a problem. However, we will stop short of requiring particular sample sizes, because it is possible to imagine circumstances where more typical sample sizes might be justifiable.

We conclude with one last thought. Some might view the NHSTP ban as indicating that it will be easier to publish in BASP, or that less rigorous manuscripts will be acceptable. This is not so. On the contrary, we believe

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that the $p < .05$ bar is too easy to pass and sometimes serves as an excuse for lower quality research. We hope and anticipate that banning the NHSTP will have the effect of increasing the quality of submitted manuscripts by liberating authors from the stultified structure of NHSTP thinking thereby eliminating an important obstacle to creative thinking. The NHSTP has dominated psychology for decades; we hope that by instituting the first NHSTP ban, we demonstrate that psychology does not need the crutch of the NHSTP, and that other journals follow suit.

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