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Interpreting nonsignificant findings in psychological research

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Abstract: In this study, we examined the current practice and alternative methods for interpreting nonsignificant findings in psychological research. The traditional null-hypothesis testing presents a challenge for researchers to interpret nonsignificant findings. We reviewed the abstracts of all empirical articles published in three high-esteem psychological journals in 2015 and selected those which referred to a nonsignificant result (N=134).We found that the majority of the statements interpreted the results only within the sample, yet in 23% the authors inferred from the results to the absence of an effect. Bayes factor analyses on these statistics indicated that the support of these results for the null-hypothesis is strong only in 4%, moderate in 70% and anecdotal in 26%. The results revealed that Bayes factor analysis can help researchers in interpreting nonsignificant results and also highlight that psychological studies with traditional sample sizes are unlikely to present strong evidence for the null-hypothesis.