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The American Statistician Manuscript Submission

Dear members of the *The American Statistician* editorial team:

My coauthors and I are submitting a manuscript entitled "On Misuses of the Kolmogorov–Smirnov Test for One-Sample Goodness-of-Fit" for possible publication in *The American Statistician*.

The Kolmogorov–Smirnov (KS) test is one of the most popular goodness-of-fit tests for comparing a sample with a hypothesized continuous distribution, but it is often misused in practice. The standard one-sample KS test applies to independent, continuous data with a hypothesized distribution that is completely specified. It is not uncommon, however, to see in the literature that it was applied to dependent, discrete, or rounded data, with hypothesized distributions containing estimated parameters.

We believe this manuscript is most suitable for the Statistical Practice section of the *The American Statistician*, as we demonstrate in simulation how the one-sample KS test performs under three common misuse scenarios, and also provide a remedy for each of the three scenarios in practice. The discussed remedies are implemented in `R`, which we intend to make publicly available upon publication.

We hope that you find this manuscript to be a valuable contribution to the Statistical Practice literature. Please inform me if I can provide any additional information or assistance.

Thank you very much for your consideration. I look forward to hearing from you.

Best regards,

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