

Dr. Douglas Steinley Editor, Psychological Methods April 14th, 2021

Dear Dr. Steinley,

I am pleased to submit an original research article, "Treading Carefully: Agnostic Identification as the First Step of Detecting Differential Item Functioning", to Psychological Methods. In looking at recent work in psychology and educational measurement, we noticed that use of DIF methods often don't acknowledge the uncertainty caused by use of such methods. We feared that too often DIF detection was happening through use of software defaults and sometimes without deep examination. In response, we have written this paper to provide a suggested framework for DIF detection that empowers the researcher. Along the way, we have created new and adapted methods that fit into this framework. For example, we present GLIMMER, a graphical method for examining the possibility of DIF in raw item response data without making any assumptions. We believe that use of this framework will increase the validity of scientific results that involve DIF detection along the way.

We believe that this work will be of particular interest to readers of Psychological Methods as this framework guides a researcher in how to responsibly conduct DIF detection, which is arguably a necessary step anytime research involves the measurement of latent variables. By focusing on building the researcher's intuition about potential DIF in their data, we believe that we position them to offer more detailed explanations of the construct that they are measuring.

We recently posted a preprint at <a href="https://psyarxiv.com/974vw">https://psyarxiv.com/974vw</a>. This manuscript has not been previously published and is not under consideration for publication elsewhere. We have no conflicts of interest to disclose. If you have any questions about this submission, please do not hesitate to reach out.

Thank you for your consideration.

Sincerely,

Ben Stenhaug

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