

The Score



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*Jolynn Pek**Daniel Bauer*

REFOCUSING ON METHODOLOGY VERSUS METHOD

Jolynn Pek & Daniel Bauer

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The American Psychological Association (APA) describes quantitative psychology as a field that “develops methods and techniques for the measurement of human behavior and attributes” (<https://www.apa.org/education-career/guide/subfields/quantitative/education-training>). The focus is on *methods*, which broadly concerns tool development or the “what” of quantitative psychology. Not emphasized is *methodology*, which focuses instead on the motivation and justification of tools and their implementation, or the “why” and “how” aspects of quantitative psychology. Focused on methods over methodology, much of the research conducted by quantitative psychologists consists of complex technical refinements that are relatively inaccessible to substantive researchers. Unfortunately, this narrow focus has led research in quantitative psychology to develop relatively separately from “substantive research”, that is, research within content areas of psychology. Not surprisingly, quantitative psychologists also tend to have limited involvement in substantive psychological research projects (Wijsen et al., 2022), with the most common role (in our experience) being to bless a proposed study design or analysis (i.e., sanctifying data; Tukey, 1969), or answer the occasional question about model specification or software implementation. This situation is counterproductive, given the essential role of methodology in advancing psychological science. We thus observe that current quantitative developments tend to go against Tukey’s (1962, p. 13–14) maxim, “Far better an approximate answer to the right question, which is often vague, than an exact answer to the wrong question, which can always be made precise.” Methods research tends to increase the precision of existing solutions to old problems, often with diminishing returns, whereas methodology often leads to approximate solutions to important new problems.

Expanding on this distinction (see also Beaujean, 2021 and Pek & Bauer, 2023), a method refers to a tool or technique (e.g., PROCESS macro; Hayes, 2022), whereas methodology combines method with logos (i.e., discourse), becoming “knowledge about, or a reasoned argument for, doing something a certain way” (Beaujean, 2021). Thus, methodology refers to reasoned argument about using a method. For example, a formula for computing reliability is a method whereas discerning which measure of reliability is pertinent to a particular design reflects methodology (see Cronbach & Shavelson, 2004; Shrout & Fleiss, 1979). Another example which distinguishes method from methodology is the calculation of effect size. Here, method reflects formulas for unstandardized versus standardized effect sizes whereas methodology maps onto the justifications required for using unstandardized over standardized effect sizes (see Baguley, 2006; Pek & Flora, 2018; see also King, 1986).

The methodological developments of many early psychologists were highly impactful. For example, according to Google Scholar, Thurstone's (1927) law of comparative judgment as a mathematical formulation of discriminating between two choices (methodology) has been cited 8,052 times as a precursor to modern approaches to cognitive modeling. Another example is Cronbach's (1951) paper on coefficient alpha as a quantification of reliability (cited 60,463 times). Cronbach (1951) is cited for providing a closed form equation to coefficient alpha (method) but also for its contribution to classical test theory (methodology). A more modern example is Baron and Kenny's (1986) paper on mediation and moderation (cited 117,726 times), which did not introduce a method but a refreshing perspective on how to think about examining underlying mechanisms in a process (a methodology). What is common among these methodological papers is that they highlight issues concerning how best to approach and conduct research, which remains a common language across disciplines in psychological science.

Given the high impact of many methodological contributions, why has contemporary research in quantitative psychology instead favored methods? We highlight two systemic constraints that seem to motivate the narrowed focus on developing methods (i.e., tools in a statistical toolbox) over methodology (i.e., justifications for applying statistical tools in particular research contexts). The first is that there is a limited number of graduate programs in quantitative psychology. Specifically, there are fewer than 30 quantitative doctoral programs compared to almost 300 psychology PhD programs in the U.S. and only 8% of job postings requiring expertise in quantitative psychology were housed within a quantitative psychology program (Aiken, 2020). While counts from 2007 to 2017 based on the National Science Foundation Survey of Earned Doctorates indicate a growing number of quantitative psychology graduates over time (see Aiken, 2020), the opportunities for these graduates to develop a career focused on methodology are limited. This is the second constraint: quantitative psychologists are typically recruited into faculty positions to teach tools rather than to develop new methodological approaches. In a systematic study of faculty job postings that involve teaching quantitative methods from 2017 to 2018, Aiken (2020) found that 92% of these postings named at least one substantive area of specialization. Implicitly, these job descriptions regarded quantitative expertise as secondary to candidates' substantive areas of research, valuing method application without regarding methodological development as a discipline of research in its own right. In earlier work, Aiken et al. (2008) highlighted this continuing trend for "twofer" (two for the price of one) faculty positions that seek faculty who have two responsibilities: (a) teach and conduct research in a substantive specialty area and (b) teach advanced graduate-level quantitative methods courses while providing quantitative consulting. It is unclear how faculty in such positions are evaluated for tenure in terms of their scholarship (e.g., substantive research versus method application and development), but Aiken et al. (2008) note that early career faculty hired into such positions historically had difficulty achieving tenure.

These structural constraints reflect a misalignment of what constitutes quantitative expertise (method versus methodology) among psychologists with substantive expertise versus quantitative psychologists, which likely influences incentives for promotion and tenure for quantitative psychologists. The focus on method over methodology incentivizes publishing highly technical and narrow work (e.g., deriving second-order derivatives for a standard error in a finite mixture structural equation model; Pek et al. 2011) over methodological work (e.g., test theory by Lord & Novick, 1968) that has inspired the development of new methods and methodology. Unfortunately, in the current research climate, highly technical methods work seems to be regarded as a mark of intellectual prowess, in contrast to the development and dissemination of widely relevant and applicable methodology (Fabrigar et al., 1999; Harlow, 2017). From time to time, quantitative psychologists, from graduate students to senior faculty, seem to emphasize the technical level of their work

like peacocks displaying their feathers to impress, with other psychologists finding this posturing largely incomprehensible and bewildering. Given this value system, scholarly work on methods instead of methodology is more straightforward to publish. Highly technical method developments are primarily evaluated for errors in their derivation or implementation with little controversy. However, methodological work can be contentious and take a long time to publish. For example, Baron & Kenny (1986) was initially rejected from *Psychological Bulletin* before being published in *Journal of Personality and Social Psychology*. More recently, Flake et al. (2022) was rejected from *Psychological Bulletin* and *Perspectives in Psychological Science* before appearing in *American Psychologist*. Some method papers are also highly cited (e.g., Preacher & Hayes, 2004, cited 20,328 times), motivating such publications. Finally, because most substantive experts do not have the training to fully evaluate technical methods developments, they may tend to emphasize quantity over quality of publications when evaluating their quantitative colleagues. Taken together, systemic structures and incentives have likely promoted method over methodological development, leading to the increasing separation of quantitative psychology from content in psychology that produces piecewise knowledge on methods that contributes little to improving psychological science. Tukey (1962, p. 7–8) regarded this pursuit of “apparent neatness” in optimizing methods an “ossification” in contrast to “real research” in methodology.

How can we refocus our research on methodology rather than methods? Let us begin by redefining quantitative psychology to be a field that prioritizes methodological over method development (cf. APA’s description of quantitative psychology that highlights technical developments). Like statisticians and engineers, quantitative psychologists have done well in developing and refining tools (Thissen, 2001). Like data scientists, quantitative psychologists have applied methods to increasingly complex data. To distinguish ourselves from statisticians and data scientists, quantitative psychologists should attend more to the application of our tools to substantive psychological problems and embrace the uncertainty and approximate nature of their results (see also Tukey, 1962). Our scholarly activities should better align with our redefined identity as methodological methodologists. Instead of sanctifying data with cookbook methods, we should emphasize our roles as data detectives by advancing methodology (Tukey, 1969). Additionally, the quantitative psychologist should be an integral part of the scientific team tackling a substantive research problem, not a contractor-for-hire to merely approve or apply methods to data. Often, it is the substantive research problem that begets methodological developments and not the converse. For example, dyadic data analysis was borne out of studying interpersonal phenomena (e.g., Kenny, Kashy, & Cook, 2020), integrative data analysis (IDA) was devised to pool multiple data sets together to study developmental psychopathology over the life course (e.g., Curran & Hussong 2009), and moderated nonlinear factor analysis was developed to take into account measurement invariance when harmonizing responses to distinct but related measures across multiple data sets (Bauer & Hussong, 2009). As these examples illustrate, only by being engaged in substantive research can quantitative psychologists become aware of the methodological challenges that must be overcome to meaningfully advance the science. Re-aligning research practices, values, and incentives in these and other ways is necessary to support increased engagement in impactful methodological work.

This tension between method and methodology is not new, and the preference for refining tools is longstanding. It is not that developing methods should be devalued, but that developing methodology needs new emphasis. Imperfect solutions to important new scientific problems in psychology are worthy of recognition, funding, publication and citation, and have the potential to drive whole new areas of research. We must thus align training programs, faculty positions, and incentives for research that advances methodology. We must fully embrace Tukey’s (1962, p.65) call to quantitative methodologists: “That remains

to us, to our willingness to take up the rocky road of real problems in preference to the smooth road of unreal assumptions, arbitrary criteria, and abstract results without real attachments. Who is for the challenge?"

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*Debbi Bandalos**Fred Wertz**Alex Beaujean*

DIVISION PRESIDENTIAL TRIO INVITES MEMBER INPUT & DISCUSSION AT APA CONVENTION

*Debbi Bandalos, Fred Wertz
& Alex Beaujean*

The Division 5 Business Meeting at the APA Convention will be held Friday, August 3 at 4:00-4:50 at the Walter E. Washington Convention Center, Level 1, Room 154B. Several new Division initiatives will be announced and open discussion will be held: A Salon Program, the possibility of a new journal, and the 2024 convention program theme. All members are encouraged to attend this meeting to hear the news, raise questions, offer input, and engage in discussion of the three initiatives. The Business Meeting will be followed by a social at a location to be determined where participants in the continuing Division 5 Mentoring Program and all Division members are welcome to share refreshments, to network, and to continue to discuss new our initiatives.

First, a Division 5 Virtual Salon Program has been proposed by President Debbi Bandalos to begin in 2023. These salons will be held virtually for Division 5 members over the next year and may include skill-focused workshops, keynote speakers, panel discussions, and topics for debate and perspective exchange among division leaders and members. At the convention Business Meeting, we will brainstorm topics, speakers, and the desired frequency of our salons. All members are welcome to attend, participate, and share their ideas, including the interests and goals that our virtual salons will serve.

Second, the Executive Committee is considering the launch of a new divisional journal for the purpose of furthering our division's leadership in APA and psychology as well as creating a revenue stream that will enable the Division to enhance benefits to members. One possible title under consideration is Perspectives on Methodology and Assessment in Psychological Inquiry and Practice. The purpose of the new publication would be to provide a platform for discussing the conceptual foundations of inquiry into psychological and behavioral phenomena, including the assumptions, rationale, goals, kinds of evidence, norms, limits, and systems of methods. Consistent with the mission of Division 5, the journal would be inclusive of a wide range of methods, including those in all areas of inquiry--quantitative and qualitative research, measurement, assessment, and evaluation in psychology. This journal would be broadly inclusive and equitable regarding diverse cultural, theoretical, practical, and philosophical positions and perspectives on exploration, discovery, and validity to improve the acquisition of knowledge about psychological phenomena. At the APA Convention, members will have an opportunity to discuss the focus, aims, goals, possible titles, format, editorial structure, and potential publishers of a new Division 5 publication.

Third, a tentative theme for the 2024 Division 5 Convention Program is Nurturing Roots, Branching Innovation: Cultivating Synthesis and Growth in Psychological Methods. This theme follows Alex Beaujean's presidential address last year on the importance of methodology and the philosophy of science and the emphasis of Debbi Bandalos in this year's program on the importance of conducting more critical, nuanced, and racially just research. Tentative ideas for programming to highlight at next year's convention include our field's

epistemological roots, innovative new procedures, syntheses of existing methods, and the application of critical frameworks to study psychological phenomena across our subareas of Evaluation, Measurement, and Statistics (EMS); Assessment; and Qualitative inquiry. This program will align with APA's strategic plan and goals to build psychology's foundation on science, to champion diversity and inclusion, to impact social justice issues, and to prepare psychology for the future. Members are invited to help shape and refine the theme and suggest ideas including important recent articles, highly cited reviews, past symposia and presentations, and members' interests and projects that relate to the above program theme. Those attending the business meeting and social thereafter will be able to network in order to develop submissions for symposia, skill building sessions, critical conversations, and data blitzes.

These three initiatives--the virtual salons, a new Division journal, and next year's convention program--aim to renew our Division as the locus of forward-edge, critical, generative thinking about the scientific foundations of psychology and the methods we use to understand psychological phenomena. These three interrelated pathways of renewal will offer opportunities for leadership and learning where all our Division members, from preeminent researchers/scholars to new students of all our field's diverse orientations, can interact, develop mutual understanding, collaborate, and forge an ever-brighter future for psychology. After the August Convention, we will share a report in the Score that summarizes the discussions at the business meeting, social, and executive meeting in order to communicate to the larger Division membership emerging details about the Division 5 Salon Program, a possible new journal, and the 2024 division convention program. All members are encouraged to share their ideas about these new initiatives and our emerging vision for Division 5 with the presidential trio.



DIVISION 5 EVENTS AMERICAN PSYCHOLOGICAL ASSOCIATION CONFERENCE

Jolynn Pek & Wes Bonifay

Jolynn Pek Wes Bonifay

The APA 2023 convention will be in Washington, DC from August 3 to 5, 2023. In alignment with APA's Strategic Plan to "champion diversity and inclusion," Division 5 President, Deborah L. Bandalos, [emphasized](#) the importance of conducting more critical, nuanced, and racially just research. Our sessions continue to highlight research from the three sections: Evaluation, Measurement and Statistics; Assessment; and the Society for Qualitative Inquiry in Psychology (SQIP).

Division 5's program centers on improving methodological research and teaching on Equity, Diversity, and Inclusion (EDI). The invited address will be given by Tufuku Zuberi, an expert on the topic of Quantitative Critical Theory (*aka* QuantCrit) and co-author of *White Logic, White Methods: Racism and Methodology* (Saturday afternoon, 8/5). With leadership from Brian Leventhal, Division 5 is also offering a symposium focused on improving pedagogy in methodology with particular attention to EDI (Saturday morning, 8/5). Finally, Division 5 is proud to be a co-sponsor of the EDI Social (Thursday evening, 8/3), led by Division 27, along with nine other divisions (Divisions 1, 16, 22, 25, 29, 32, 33, and 48).

Division 5 Programming Highlights

Presidential Address (Saturday, August 5, 300-350pm)

"Culturally Responsive Testing: Perspectives from Education and Psychology."

Speaker: Deborah Bandalos, James Madison University

Invited Address (Saturday, August 5, 100-150pm)

"Critical Statistics of Race & Racism."

Speaker: Tufuku Zuberi, University of Pennsylvania

Symposia

“High risk, high reward: Methods for rigorous testing of psychological theories.” (Friday, August 4, 1000-1050am)

Speakers: Wes Bonifay, University of Missouri; Sonja Winter, University of Missouri; Ashley Greene, VISN 2 MIRECC; Ashley Watts, Vanderbilt University.

“Psychometric Applications in Clinical Science.” (Friday, August 4, 100-150pm)

Speakers: Brooke Magnus, Boston College; Yang Liu, University of Maryland at College Park; Jolynn Pek, The Ohio State University.

“Multiple Imputation Methods for Complex Data Analysis.” (Friday, August 4, 200-250pm)

Speakers: Amanda Montoya, UCLA; Jihyun Lee, University of North Texas; Linying Ji, Pennsylvania State University; Brenna Gomer, Utah State University

“Using Social Network Analysis in Applied Psychological Research.” (Saturday, August 5, 900-950am)

Speakers: Michael Broda, Virginia Commonwealth University; Kristen Granger, Vanderbilt University; Jason Chow, University of Maryland at College Park.

“Incorporating EDI perspectives into quantitative methodology teaching, practice, and research.” (Saturday, August 5, 1100am-1250pm)

Speakers: Brian Leventhal, James Madison University; Rachel Fouladi, Simon Fraser University; Susan Lottridge, Cambium Assessment, Inc.; Amanda Montoya, UCLA.

“Where are we going? Exploring next steps for SQIP.” (Thursday, August 3, 200-250pm)

Speakers: Deborah Tolman, City University of New York Hunter College.

“The value and applications of mixed methods in psychological research.” (Thursday, August 3, 300-450pm)

Speakers: Analay Perez, University of Nebraska-Lincoln; Theodore Bartholomew, Scripps College; Joseph Gallo, Johns Hopkins University; Matthew McCrudden, Pennsylvania State University,

Continuing Education

“Combining Focus Group with Interviews or Surveys to Enhance Cultural Validity” (Thursday, August 3, 1100-1150am)

Speaker: Jen Katz-Buonincontro, Drexel University

Sessions offering CE credits have been reviewed and approved by the American Psychological Association Office of Continuing Education in Psychology (CEP) and the Continuing Education Committee (CEC) to offer CE credits for psychologists. The CEP Office and the CEC maintain responsibility for the delivery of the programs.

Other Events

Planning for the Division 5 Business Meeting (Friday, August 4, 400-450pm)

Assessment Breakfast (Friday, August 4, 800-950am)

Awards Ceremony (Saturday, August 5, 200-250pm)

Division 5 Program Committee

Jolynn Pek, 2023 Program Co-Chair

Wes Bonifay, 2023 Program Co-Chair

Deborah Bandalos, 2023 President

The program committee is grateful for the time and effort put forth by the following individuals who reviewed the Division 5 symposia and posters submitted for presentation: Jacob Coutts, Yang Liu, Chris McVittie, and Sonja Winter.



WHAT'S NEW IN BOOKS

Compiled by
Joanna Solomon

“Statistical Power Analysis, 5th Edition”

<https://www.routledge.com/Statistical-Power-Analysis-A-Simple-and-General-Model-for-Traditional-and-Myors-Murphy/p/book/9781032283005>

By Brett Myers and Kevin R. Murphy

Published March 2023 by Routledge (\$160.00 hardback; \$66.95 paperback; e-books also available)

This new edition promises a simple and general model for traditional and modern hypothesis testing. Researchers and students alike will benefit from the theoretical and applied content related to power analysis. The book outlines key concepts, provides examples, and offers tools to apply analyses in social science settings. Performing power analysis and interpreting the results are discussed in detail, especially as it applies to correlation, regression, and multi-level studies. Code is provided to illustrate and teach practical applications, using R, as well as a web-based app for novice R users. The book seeks to inform study design and provide instruction for current methodologies.

“Essentials of Research Methods in Education”

<https://us.sagepub.com/en-us/nam/essentials-of-research-methods-in-education/book279681#contents>

By Scott Buckler and Harriett Moore

Published by May 2023 SAGE Publications Ltd. (\$140.00 hardback; \$46.00 paperback; e-books also available)

In this book, research design is discussed in detail and advice for each step is provided. The tome begins with early considerations, such as literature review, ethics, and philosophical perspectives. Next, methodology and analysis are covered through both qualitative and quantitative angles, as well as mixed approaches and considerations for presenting results. The authors provide a comprehensive review of available methods, accompanying examples, and pragmatic guidance for conducting studies. While the examples stem from a range of educational fields, the structure and content may be applicable to a wider audience of students and researchers in social and behavioral sciences.

“Practical Psychometrics: A Guide for Test Users”

(<https://www.guilford.com/books/Practical-Psychometrics/Benjamin-Lovett/9781462552092>)

By Benjamin J. Lovett

Published April 2023 by Guilford Press (\$68.00 hardback; \$45.00 paperback; e-books also available)

The science behind test construction and validation is outlined in this book and geared for practitioners as a guide, reference, and/or course text. Individuals who choose tests, administer tests, or score test data will find this guide helpful as it describes fundamentals and applications in accessible language. Chapters include key terms, norms, reliability, validity, fairness and test bias, and reporting, along with case studies. Exercises are included to illustrate main points; math skills are not required as a pre-requisite. An annotated appendix and guide is provided for further reading on advanced topics.

“Qualitative Content Analysis: Methods, Practice, and Software (2nd Edition)”

(<https://us.sagepub.com/en-us/nam/qualitative-content-analysis/book282907>)

By Udo Kuckartz and Stefan Rädiker

This book’s authors provide a hands-on handbook and strategy guide for tackling content analysis. Qualitative research, stemming from field notes, images, narratives, social media, and as illustrated in this book, mainly interviews, can be integrated into research projects in a structured way. The book provides principles behind content analysis, a step-by-step guide to multiple approaches, and a detailed discussion of relevant software and reporting standards. Instructors and students will find the breadth and depth of content valuable, along with many illustrative examples. The authors are international experts, updating a leading worldwide text to its second edition.

Guidelines for the “What’s New?” Column:

Have you published a new psychological test or testing product; a book on advanced statistics, measurement, or evaluation; an interesting website or other Internet group related to measurement, statistics, or evaluation; or a computer program useful to Division 5 membership? If so, we would like to include an announcement of about 100 words in the What’s New column. We would also appreciate any suggestions, or feedback, on how this section of the newsletter can better serve the Division 5 membership. Please take the opportunity to share information with colleagues through your contributions to this column. Please send announcements and/or product literature to *The Score* Associate Editor, Joanna Solomon: joanna.solomon@mhs.com.



PUBLICATON CORNER

*Compiled by
Gill Sitarenios*

This column provides a brief synopsis and reference information for select recent journal publications.

The Occupational Performance Assessment-Response Distortion (OPerA-RD) scale: Measuring bias in performance evaluation

The ubiquity and consequences of job performance evaluations (Campbell & Wiernik, 2015) necessitate accurate responding. However, response distortion or response bias can produce systematic tendency to respond to a range of questionnaire items on some basis other than the specific item content, and represents a significant threat to the veracity of performance evaluations. Examples of response bias include positive impression management and negative impression. Self-reported bias is often related to pervasive dispositional factors or temporary situational pressures (e.g., job interviews), whereas other-report bias (e.g., evaluations from supervisors or coworkers) may be influenced by ratees' impression management (IM) tactics, raters' self-interest or to motivate ratees (Murphy, 2008; Murphy & Cleveland, 1995), or unrepresentative observations (Berry et al., 2012; Murphy, 2008). Bias indicators may lack appropriate relevance or specificity, given that most bias indicators utilized in workplace research include noncontextualized, generic statements. This author Aims to address these concerns by developing a response bias assessment contextualized to workplace settings. Converting non-contextualized statements (e.g., "I am a responsible person") to workplace-contextualized statements (e.g., "I am a responsible employee") may detect workplace response bias more accurately. Meta-analyses and reviews suggest that contextualizing assessments increases their predictive validity (e.g., Heggstad & Gordon, 2008; Shaffer & Postlethwaite, 2012). Although instruments such as personality assessments have been contextualized in this manner, it appears that contextualization has yet to be applied to bias indicators.

Williams, K. M. (2022). The Occupational Performance Assessment–Response Distortion (OPerA-RD) scale: Measuring bias in performance evaluation. *Journal of Personnel Psychology*, 21(4), 185–196. <https://doi.org/10.1027/1866-5888/a000301>

Dynamic Fit Index Cutoffs for Confirmatory Factor Analysis Models

Despite their overwhelming popularity, methodological studies have cautioned against fixed cutoffs, noting that the meaning of fit indices varies based on a complex interaction of model characteristics like factor reliability, number of items, and number of factors. Criticism of fixed cutoffs stems primarily from the fact that they were derived from one specific confirmatory factor analysis model and lack generalizability. These authors propose a simulation-based method called *dynamic fit index* cutoffs such that derivation of cutoffs is adaptively tailored to the specific model and data characteristics being evaluated. To facilitate usage, an open-source, Web based Shiny software application is provided that automates the entire process so that users neither need to manually write any software code nor be knowledgeable about foundations of Monte Carlo simulation. The authors also provide

an approach specifically designed for the nuances of 1-factor models, which have received surprisingly little attention in the literature despite frequent substantive interests in unidimensionality

McNeish, D., & Wolf, M. G. (2023). Dynamic fit index cutoffs for confirmatory factor analysis models. *Psychological Methods*, 28(1), 61-88. <https://doi.org/10.1037/met0000425>

Parsimony in Model Selection: Tools for Assessing Fit Propensity

There is a vast literature on model selection and multi-model inference that focuses on how to assess which statistical model, and therefore which theory, best fits the available data. For example, given some data, one can compare models on various information criterion or other fit statistics. However, what these indices fail to capture is the full range of counterfactuals. That is, some models may fit the given data better not because they represent a more correct theory, but simply because these models have more *fit propensity*—a tendency to fit a wider range of data, even nonsensical data, better. The authors offer a toolkit for researchers to better study and understand parsimony through the fit propensity of structural equation models. An *R* package (*ockhamSEM*) built on the popular *lavaan* package is described for this usage.

Falk, C. F., & Muthukrishna, M. (2023). Parsimony in model selection: Tools for assessing fit propensity. *Psychological Methods*, 28(1), 123-136. <https://doi.org/10.1037/met0000422>

Deep Learning: A Primer for Psychologists

Deep learning has revolutionized predictive modeling in topics such as computer vision and natural language processing but is not commonly applied to psychological data. In an effort to bring the benefits of deep learning to psychologists, the authors provide an overview of deep learning for psychological researchers. The benefits of the deep learning approach to predictive modeling is described. Three basic deep learning models generalize linear regression: the feedforward neural network (FNN), the recurrent neural network (RNN), and the convolutional neural network (CNN). R code is provided to demonstrate how each model may be applied to answer prediction-focused research questions using common data types collected by psychologists.

Urban, C. J., & Gates, K. M. (2021). Deep learning: A primer for psychologists. *Psychological Methods*, 26(6), 743-773. <https://doi.org/10.1037/met0000374>

Guidelines for the “Publication Corner” Column:

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