



The Score

July 2026
Volume 48, Issue 3

Editor:
Kevin M. Williams

APA Division 5 - Quantitative and Qualitative Methods

INSIDE

Feature Article

Parsimony-Parameter Model for
Evidential Accuracy and Precision
(Gandi, p. 1)

In This Issue

Pearson and Fisher Were Eugenacists.
Should We Rename Pearson's r ? We
Asked Students to Decide
(Alfaro-Varnes et al., p. 5)

Adolescent Digital Research Methods:
Advancing Equity, Diversity, Inclusion,
and Decolonial Principles through
Ambulatory Assessment and
Indigenous Storywork (Sam et al., p. 7)

APA Convention 2026: Division 5
Program of Sessions and Events (p. 11)

Publication Corner (p. 17)

Links to previous issues (p. 18)

Div. 5 Membership Info (p. 19)

Advertising in The Score (p. 19)

Publishing in The Score (p. 19)



Parsimony-Parameter Model for Evidential Accuracy and Precision

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A demonstration supporting the use of the I^2 statistic in meta-analysis

Introduction

Parsimony, according to Johnson and Tallant (2017), could be qualitative (which explains type) or quantitative (which explains size). A qualitative parsimony minimizes the types of postulated entities while a quantitative parsimony minimizes the number of postulated entities. However, although Fisher et al. (2024) lamented that "too much of a good

thing may be bad”, the more quantitatively parsimonious theories are mostly preferred because of assured probabilistic justifications that correspond with specific chosen theory (Kelley et al., 2003; Johnson & Tallant, 2017). The parsimonious model originated from law of briefness (rendered as *lex parsimoniae* in Latin), popularly referred to as Occam’s razor, which provides that only necessary things should be used (Gen, 2015). The said necessary things, in the context of parsimonious model, are “parameters”. Matthiessen (2022) proposes an account of accurate scientific representation, which Gandi (2025) corroborates, in terms of suitable techniques that produce data from a target phenomenon. It considers an approach to accurate representation from epistemic factors, justified by Ontic Priority, which holds that the criteria for representational accuracy depend on a pre-established account of the nature of relationship between a model and its target phenomenon (Roberts, 2009). This concurs with the position that achieving parsimony requires reducing parameter, because a parsimonious model needs fewer parameters for more efficient estimation. This suggests that a good knowledge of parsimony and parameter will translate into developing more effective and efficient models that accurately describe complex phenomena (Howell, 2012; Mueller, et al. 2018).



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Design and Procedure

The study adopted systematic review of published studies (1965-2025) on accuracy, parameter, parsimony, and precision were methodically performed and a meta-analysis conducted. It seeks to determine possibility of any inference(s) or correlation(s) between parsimony-parameter model equation in consonance with evidential accuracy and precision as applied to measurement quality. Consequently, the psychometrics of the two one-sided tests (TOST) for two proportions’ equivalence ratio tests (Lakens, 2017), the Neyman-Pearson analysis for testing pre-specified type 1 error rate (Roberts, 2019), and the I-squared (I^2) statistic for heterogeneity (consistency) checks were used. The overall procedural nitty-gritty includes the following:

Step 1: Protocol development. The study protocol does not require formal approval from ethics committee, but informed consent from some authors.

Step 2: Information sources and search. The databases with dates of coverage and other information were sourced from SciSearch, PubMed/Medline, PsycInfo, PsycARTICLES, PsycTests, and PsycEXTRA.

Step 3: Defining eligibility criteria for the data to be included. Compatible articles were defined and those to be assessed and selection done based on the concepts under consideration.

Step 4: Strategy delineation for identifying the relevant studies. Study selection includes screening and eligibility for both systematic review and meta-analysis, according to the research question and the relevance of study. This facilitated selecting particular studies for inclusion in the analysis.

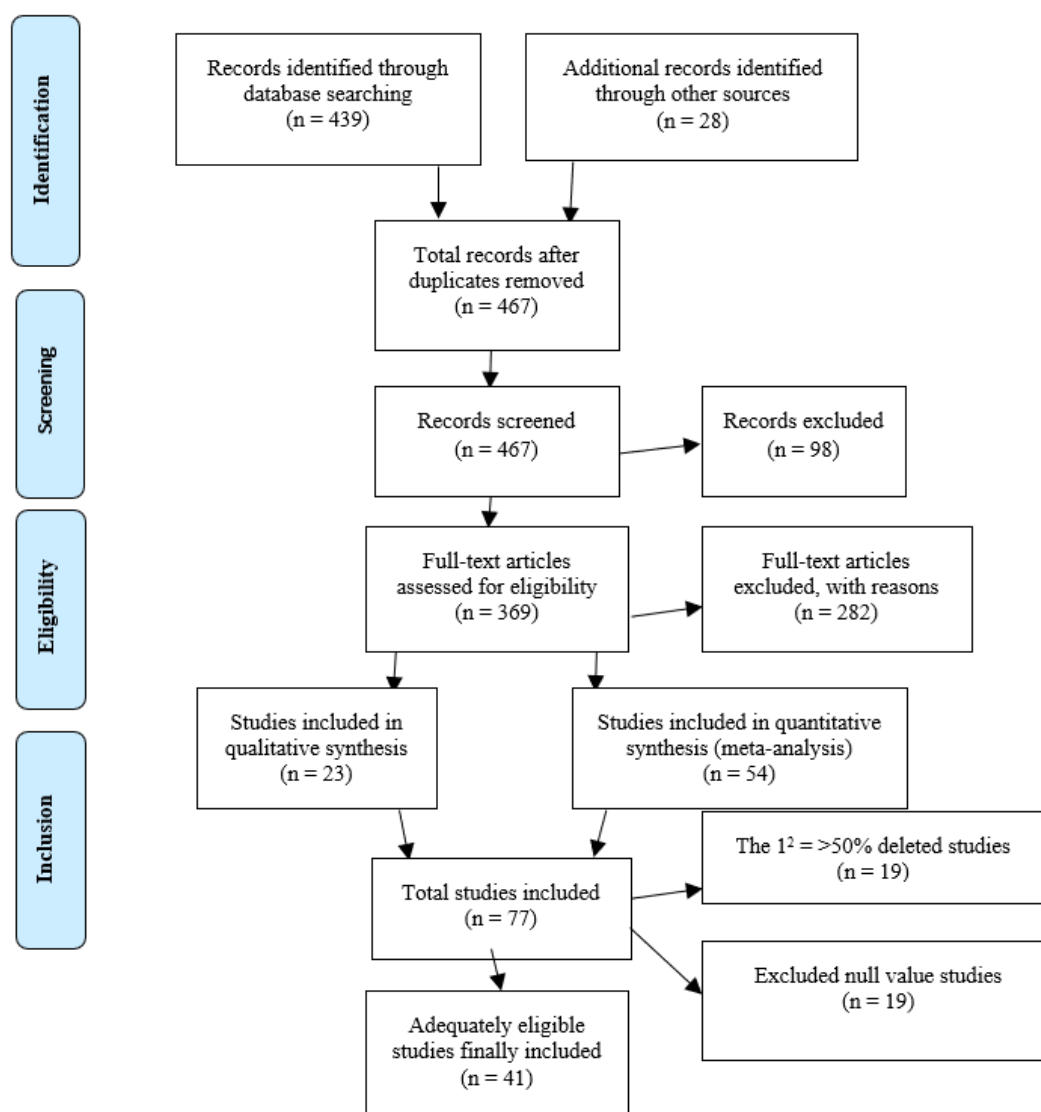
Step 5: Creating standardized form(s) for data collection. Standardized forms, blinded to all identifying factors such as authors and their institutions, names of journals, sources of funding, and acknowledgements, were provided to observers who facilitated reliable data extraction.

Step 6: Data extraction and risk of bias assessment. Titles and abstracts were screened by two reviewers whose respective inputs contributed to avoiding risk of bias and ensuring appropriate data extraction.

Step 7: Standardize individual results for comparison between studies. Results for homogeneity were standardized to something homogenous while the mean difference were extracted for continuous outcomes while the odd ratios considered for binary outcomes.

Step 8: Overall effect calculation by combining the data. Differences in statistical power showed fixed effect and random effect models' weighted average with more influence than the smaller ones.

Figure 1. Article Selection, Screening, Eligibility, and Inclusion Flow Chart



Results

Screening and assessment of the initial 112 candidate studies for eligibility, during initial study selection, have dropped 45 and retained 67 candidate studies at the first instance. From the resulting 67 studies, 30 were further excluded as noted on flow chart (Figure 1) for the purpose of avoiding possible within studies risk of bias. Thirty-seven studies, consisting of 12 qualitative and 25 quantitative syntheses, were retained for heterogeneity check to ensure consistency. Consequently, in light of the candidate studies retained (for the said accuracy), I-squared (I^2) detected the presence of heterogeneity by showing the I^2 value as $>50\%$ for 19 individual studies which were thereafter deleted for inconsistency. From the remaining 18 studies sequel to I^2 check, it was further discovered that three studies had various null values (suggesting if it were on forest plot) they would be described as having crossed the vertical line and are lying within 95% confidence intervals. The three candidate studies were excluded for lack of statistically significant difference, leaving 15 studies as more eligible in every sense of it. By and large, the synthesis corroborates rejection of effect sizes larger than equivalence bounds [0.9 and 1.1 ($H_0: P1/P2 < 0.9$ or $P1/P2 > 1.1$ versus $H_1: 0.9 < P1/P2 < 1.1$)] which (by implication) pre-specified type 1 error rate. From this analytic synthesis, the forest plot (Figure 2) seems to significantly corroborate the flow chart (Figure 1) in terms of study output and outcome.

Discussion and Conclusion

Measurement of a property involves assignment of numbers to the relational systems representing that property. Meta-analysis in this case benefitted from I-squared (I^2) statistic because inconsistency among candidate studies can affect validity and allow (at most) only a predictive interval instead of a valid confidence interval. The inconsistency detected by I^2 in the study can be blamed to whether methodological deficiency, analytical irrelevance, or impact of bias. Inclusion of any of the studies with I^2 as $>50\%$ in the meta-analytical results will lead to questionable conclusions from what the study forest plot depicts. The study supports hypothetical assumption that the "parsimony-parameter" model facilitates ensuring significant evidential accuracy and precision by capturing important features of the phenomenon that it purports to represent. Therefore, any inference from the model in this case also applies to the associated phenomenon or to the realities of the situation and not only to itself. On this note, it is worth concluding that the parsimony-parameter model is a significant match for determining psychometric soundness which lends credence to measurement quality.

References

- Fisher, A. V., Godwin, K. E., & Seltman, H. (2014). Visual environment, attention allocation, and learning in young children: When too much of a good thing may be bad. *Psychological Science*, 25(7), 1362-1370. <https://doi.org/10.1177/0956797614533801>
- Gandi, J. C. (2025). Meta-analysis on parsimony-parameter model for evidential precision and accuracy. *African Journal for the Psychological Studies of Social Issues*, 28(4), 361-370.
- Glen, S. (2015). Parsimonious model: Definition, ways to compare models. <https://www.statisticshowto.com/parsimonious-model/>
- Howell, D. C. (2012). *Statistical methods for psychology*. Cengage Learning.
- Johnson, L., & Tallant, J. (2017). Quantitative parsimony: Probably for the better. *The British Journal for Philosophy of Science*, 68(3), 781-803. <https://doi.org/10.1093/bjpsaxv064>
- Kelley, K., & Maxwell, S. E. (2003). Sample size for multiple regression: Obtaining regression coefficients that are accurate, not simply significant. *Psychological Methods*, 8(3), 305-321. <https://doi.org/10.1037/1082-989X.8.3.305>

- Lakens, D. (2017). Equivalence tests: A practical primer for *t* tests, correlations, and meta-analyses. *Social Psychological and Personality Science*, 8(4), 355-362. <https://doi.org/10.1177/1948550617697177>
- Matthiessen, D. (2022). Empirical techniques and the accuracy of scientific representations. *Studies in History and Philosophy of Science*, 94, 143-157. <https://doi.org/10.1016/j.shpsa.2022.06.002>
- Mueller, M., D'Addario, M., Egger, M., Cevallos, M., Dekkers, O., Mugglin, C., & Scott, P. (2018). Methods to systematically review and meta-analyse observational studies: a systematic scoping review of recommendations. *BMC Medical Research Methodology*, 18(44), 1-18. <https://doi.org/10.1186/s12874-018-0495-9>
- Roberts, F. S. (2009). Measurement theory. In G. Rota (ed.), *Encyclopedia of mathematics and its applications* (Vol. 7). Cambridge University Press.

Pearson and Fisher Were Eugenicists. Should We Rename Pearson's *r*? We Asked Students to Decide

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If we knew everything our founders stood for, would we still honor them? Would we still employ their statistical methods? We tackled these two questions together and separately.

Francis Galton, Ronald Fisher, and Karl Pearson are well-known for their contributions to science and the origins of statistics, including linear model methods of regression, correlation, and analysis of variance (ANOVA). Meanwhile, a look at history reveals Galton as a pioneer of the eugenics movement, who believed that "humanity could be improved through selective breeding" (Gillham, 2001). Pearson and Fisher followed by spending their careers, in the early 20th century, as vocal eugenicists. Pearson once claimed, "if you bring the white man into contact with the black ... you get superior and inferior races living on the same soil" (Cleather, 2020). For those of us who have calculated Pearson's *r* countless times, this was a stunning revelation. The second author of this project had taught university statistics for 15+ years – and even once took a class on the history of statistics – and still had no idea that the biographies of our method founders were so tainted.

This might lead one to question whether Pearson's apparent objective use of data to make inferences about social groups was biased by the interests and groups that he was a part of (Delzell & Poliak, 2012). Today, despite their histories, these founders' names are also still attached to statistical terms and tests with little question regarding their appropriateness. Some may believe that such historical figures cannot be judged by modern-day standards, and that their contributions to the field should remain honored (Adamson & Lipoff, 2020). Alternatively, others may believe in a humanitarian obligation to reconsider, when monikers denote those involved in egregious activity.

We often intend the field of statistics to be an objective playing field free of bias in measurement and analysis. Therefore, theoretically the personal views of statistical founders may not be considered a relevant conversation for a methods course. However, implementation of anti-racist pedagogy in classrooms is ongoing, inspiring institutional and social change (see Kishimoto, 2018). Even if race is not our independent variable, it certainly once was for Pearson and Fisher, and continues to be such in analyses conducted every day. There are implications for the conclusions we draw. Can racial differences – or other demographic differences for that matter –

ever cause changes in behavior? This is a slippery issue, compounded by the implication that Pearson and Fisher would have surely answered “yes” to this question.

So how should we proceed, and what should we recommend? We decided to ask students.

Methods

204 undergraduate students were recruited from a psychological statistics course, across multiple terms. Toward the end of each term and as part of the curriculum, they were shown a factual video detailing the history of common statistical methods and their founders, as well as the founders' associations with eugenics. Afterward, students were given an open-ended prompt to share their perspectives on whether statistical terms, such as Fisher's F and Pearson's r , should be renamed or retained. Qualitative themes were pulled from their responses.

Results

Overall, students favored renaming these statistics, although views were mixed. Of the 204, 96 students generally supported renaming, 54 opposed, and 46 were ambivalent toward the issue. Themes reflected a tension between honoring historical scientific contributions and addressing the harm that may now be associated with the methods or terminology.

In favor of re-evaluating our terms, one student said, “I believe history should not be rewritten or deleted as it shows the wrongful and horrible treatment of people of color. Still, the people who were involved should not get the notoriety that comes from their creation.” Some students believed that renaming terms was only a first step, calling into question the validity of these statistical methods. For example, one argued: “It's wise to take the step of renaming methods in statistics from racist statisticians further and examine how their creations might have supported the world around them and if these equations need to be changed as well.” Another was a bit more guarded: “We're currently seeing a movement of renaming and taking down sports teams, statues, etc. I think (renaming Pearson's r) is a great start, but just a start.”

Others presented more nuanced views. One opined, “Given the creators' attitudes, I believe that renaming these methods would be ineffective, as any hidden biases inside them would remain unchanged. As a result, I believe the techniques should be revisited in order to identify any such biases and make a meaningful change.” Another stated, “I don't think the name should be changed because if keeping these names around reminds statistics teachers to discuss the history of eugenics, then I think it's potentially a good segue into important discussions.” Indeed, the lesson left some students at a crossroads: “Math, itself, is supposed to be factual and unbiased, so learning about how some methods of statistics are rooted in racism and bigotry sounds hypocritical.”



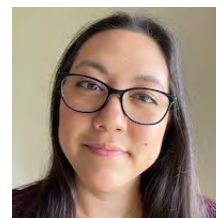
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Conclusion

These results highlight the complexity of the issue presented to students. We intend to forward their attitudes as a starting point for consideration of changes in how we view the methods revisited here. Hypothetically, what would happen if we renamed Pearson's r as just r , or the ANOVA F as say, the MS ratio? If the changes made it all the way into our textbooks and computer packages, folks would surely notice and wonder why they occurred. This may serve as a starting point of further action, such as re-evaluations of the appropriateness or potential biases inherent in the methods. Or it may just call attention to, and bring awareness of, the questionable world views of the methods' founders. Either way, inaction is not recommended, at least not by the whole of our modest sample of undergraduate student guides. At minimum, we hope to inspire ongoing conversations on these issues.

References

- Adamson, A. S., & Lipoff, J. B. (2021). Reconsidering named honorifics in medicine—the troubling legacy of dermatologist Albert Kligman. *JAMA Dermatology*, 157(2), 153–155. <https://doi.org/10.1001/jamadermatol.2020.4570>
- Cleather, D. (2020, March 11). Is statistics racist?. A number of the most important... | by Daniel Cleather | the startup | medium. Is statistics racist? <https://medium.com/swlh/is-statistics-racist-59cd4ddb5fa9>
- Delzell, D. A., & Poliak, C. D. (2012). Karl Pearson and eugenics: Personal opinions and scientific rigor. *Science and Engineering Ethics*, 19(3), 1057–1070. <https://doi.org/10.1007/s11948-012-9415-2>
- Gillham, N. W. (2001). Sir Francis Galton and the birth of eugenics. *Annual Review of Genetics*, 35, 83–81. <https://doi.org/https://doi.org/10.1146/annurev.genet.35.102401.090055>
- Kishimoto, K. (2018). Anti-racist pedagogy: From faculty's self-reflection to organizing within and beyond the classroom. *Race Ethnicity and Education*, 21(4), 540–554. <https://doi.org/10.1080/13613324.2016.1248824>

Adolescent Digital Research Methods: Advancing Equity, Diversity, Inclusion, and Decolonial Principles through Ambulatory Assessment and Indigenous Storywork

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Demonstrates how blending digital AA with strength-based participatory approaches influences research findings in the context of studying the impact of cyberbullying among a diverse youth sample

Digital research methods have expanded possibilities for understanding adolescents' online experiences, yet they often fail to engage racialized youth in culturally relevant, respectful, reciprocal, and relational ways (Kirkness & Barnhardt, 1991; Uhls et al., 2017; Tynes et al., 2019). These limitations are not merely technical but raise deeper questions about whose knowledge is valued and how it is produced (Kovach, 2009; Wilson, 2008).

Ambulatory assessment (AA) approaches (e.g., “in-the-moment” or beeper studies) often rely on standardized Western frameworks and individualistic self-report measures, overlooking relational, community-led, and culturally grounded perspectives (La Scala et al., 2023). Addressing these gaps requires centering equity, diversity, inclusion, and decolonial (EDID) principles while recognizing that Indigenous methodologies may challenge conventional EDI frameworks, prioritizing Indigenous knowledges to reflect the cultural, relational, and historical contexts shaping adolescents’ digital experiences.

This article draws on two complementary studies with distinct methodological approaches. The first, CyberKids Live (CKLive), piloted a fully digital AA method to capture “in-the-moment” emotions and behaviors during online interactions. While feasible, CKLive reflected researcher-driven priorities and Western assumptions, limiting engagement with cultural and relational dimensions of adolescent experience. The second study, Online Warriors, grounded in Indigenous Storywork principles and Indigenous governance, co-created an AA mobile app with Black, Indigenous, and LGBTQ2S+ youth. Participatory Sharing Circles and guidance from Indigenous Knowledge Keepers positioned youth as co-creators, shaping AA app design and measures to reflect community values and Indigenous teachings. Placing these studies in dialogue highlights how adolescent digital research can move beyond extractive monitoring toward approaches that affirm relational ways of knowing and enact EDID principles.

Study Snapshots

CKLive: Ambulatory Assessment in Adolescents’ Digital Lives

CKLive piloted fully digital AA protocols to examine how a diverse group of adolescents experienced online interactions and coped with cyber-aggression. Participants ($n = 53$; ages 11–16; 56% girls, 44% boys) were recruited through schools, community centers, and social media (e.g., Instagram influencer posted a story to promote the study). Ethnic self-identification included East Asian (40%), White (24%), Southeast Asian (16%), South Asian (8%), West Asian (4%), and Other (8%). They received multiple daily prompts via an AA mobile app to report on their emotions and online interactions, producing dynamic insights beyond what retrospective surveys capture (Heron et al., 2017; Trull & Ebner-Priemer, 2020).

Although methodologically innovative, CKLive also revealed limitations. Compliance varied, with some participants finding frequent notifications intrusive. The design assumed that predetermined monitoring times outside of school hours were sufficient to capture adolescents’ digital experiences. The approach produced data but did little to meaningfully engage with the cultural and relational worlds shaping racialized youths’ online lives.

Online Warriors: Indigenous Storywork as a Digital Method

Online Warriors was developed with an Indigenous governance partner to explore adolescent digital research grounded in strength-based Indigenous methodologies. Guided by Archibald’s (2008) Indigenous Storywork principles—respect, responsibility, reverence, reciprocity, holism, inter-relatedness, and synergy—the study centered collective storytelling. Seventeen youth (ages 13–25) took part, identifying as Black ($n = 12$) and Indigenous ($n = 5$), with some also sharing LGBTQ2S+ identities ($n = 3$). Recruitment strategies included community events, Indigenous youth advisory councils, and targeted social media advertisements.

They created “persona” narratives reflecting their online experiences, resilience, and wellness practices. Rather than serving as monitored subjects, participants acted as knowledge holders who co-shaped the design and implementation of fully digital AA research tools. Indigenous governance ensured that study protocols respected Indigenous epistemologies, promoted social justice, and aligned with Indigenous teachings (Smith, 2021; Wilson, 2008). This approach reframed digital research from compliance-driven monitoring to participatory, relationally

accountable knowledge generation.

Comparative Insights

Three key lessons from these two studies inform the development of fully digital research methods with adolescents.

First, relational support is as critical as technological design. In CKLive, compliance relied on research assistants who built rapport with participants. In Online Warriors, relationality was built into the study itself through Indigenous Storywork protocols and governance structures. Digital research tools are most effective when grounded in supportive, accountable relationships rather than deployed in isolation.

Second, Indigenous governance partners transform epistemology. CKLive followed a researcher-driven model, while Online Warriors showed how Indigenous governance reshaped procedures, research questions, interpretation, and knowledge sharing. Indigenous governance refers to the decision-making structures through which Indigenous peoples, such as the Métis Nation Government, exercise political leadership, law-making, and service administration to uphold self-determination, protect language and culture, and ensure community accountability. Unlike some EDI approaches, Indigenous frameworks prioritize sovereignty and oral protocols, which may not always align with externally defined equity or inclusion goals.

Third, Indigenous storytelling is a methodological pathway. AA generated granular quantitative data, but Indigenous Storywork produced holistic accounts of resilience, struggle, and identity. For racialized youth navigating complex digital environments, stories captured nuance, relational meaning, and cultural context that numbers alone could not (Archibald, 2008; Ungar, 2019).

Implications for Digital Research and Practice

These findings highlight that digital research must promote authentic participation and knowledge co-creation rather than simply extract compliance. Incorporating Indigenous epistemologies and governance strengthens cultural validity and ethical integrity. Unlike EDI-informed community involvement, Indigenous governance grants formal decision-making authority to Indigenous peoples, shaping research questions, methods, and knowledge sharing according to oral protocols and self-determination. Quantitative and qualitative tools can complement one another: AA provides precision and ecological validity, while Indigenous Storywork adds depth and cultural context. Centering EDID requires careful attention to who shapes studies, how methods reflect community values, and how results are returned to benefit participants (La Scala et al., 2023; Kovach, 2021).

By integrating AA with Indigenous Storywork, researchers can capture adolescents' real-time experiences while situating them in culturally grounded, youth-led narratives. For example, AA prompts might appear during digital storytelling, asking participants to reflect on emotions or decisions as they create a "persona" narrative of online interactions. This approach interprets behaviors and feelings within their relational, linguistic, and cultural contexts, supporting ethically responsive, culturally grounded, and developmentally meaningful research, challenging Western individualistic frameworks, and advancing relational, transformative approaches.

Closing Reflections

Juxtaposing CKLive and Online Warriors illustrates that methods are never neutral; they embed assumptions about whose knowledge counts and how it is shared. Indigenous Storywork reframes these assumptions, positioning adolescents as collaborators and knowledge holders. Blending digital AA with strength-

based participatory approaches offers a promising model for EDID-focused adolescent research. Future work should prioritize questions emerging from communities and racialized youth themselves, carried through stories and embedded within relationships of accountability. In doing so, adolescent digital research can move beyond measurement to co-create knowledge that shapes healthier, more inclusive, and decolonial digital futures.

References

- Archibald, J. (2008). *Indigenous storywork: Educating the heart, mind, body, and spirit* (1st ed.). UBC Press. <https://doi.org/10.59962/9780774855440>
- Heron, K. E., Everhart, R. S., McHale, S. M., & Smyth, J. M. (2017). Using mobile-technology-based ecological momentary assessment (EMA) methods with youth: A systematic review and recommendations. *Journal of Pediatric Psychology*, 42(10), 1087-1107. <https://doi.org/10.1093/jpepsy/jsx078>
- Kirkness, V. J., & Barnhardt, R. (1991). First nations and higher education: The four R's--respect, relevance, reciprocity, responsibility. *Journal of American Indian Education*, 30(3), 1.
- Kovach, M. (2021). *Indigenous methodologies: Characteristics, conversations, and contexts* (Second ed.). University of Toronto Press.
- La Scala, S., Mullins, J. L., Firat, R. B., Michalska, K. J., & Emotional Learning Research Community Advisory Board. (2023). Equity, diversity, and inclusion in developmental neuroscience: Practical lessons from community-based participatory research. *Frontiers in Integrative Neuroscience*, 16, 1007249. <https://doi.org/10.3389/fnint.2022.1007249>
- Trull, T. J., & Ebner-Priemer, U. W. (2020). Ambulatory assessment in psychopathology research: A review of recommended reporting guidelines and current practices. *Journal of Abnormal Psychology* (1965), 129(1), 56-63. <https://doi.org/10.1037/abn0000473>
- Uhls, Y. T., Ellison, N. B., & Subrahmanyam, K. (2017). Benefits and costs of social media in adolescence. *Pediatrics (Evanston)*, 140(Supplement_2), S67-S70. <https://doi.org/10.1542/peds.2016-1758E>
- Ungar, M. (2019). Designing resilience research: Using multiple methods to investigate risk exposure, promotive and protective processes, and contextually relevant outcomes for children and youth. *Child Abuse & Neglect*, 96, 104098. <https://doi.org/10.1016/j.chiabu.2019.104098>

APA 2026 CONVENTION

Division 5

Quantitative and Qualitative Methods

Program of Sessions & Events

August 6-8, 2026 | Washington, DC*Walter E. Washington Convention Center (unless otherwise noted)*

Division 5 brings together specialists in evaluation, measurement, assessment, statistics, and qualitative methods. This year's program centers on the intersection of psychological methodology and artificial intelligence.

★ Continuing Education

Four Division 5 sessions are designated for continuing education credit (1 CE credit each):

1. **Using Generative Artificial Intelligence to Create or Analyze Survey or Test Items** — Thursday, 1:00–2:00 PM, Room 102B
2. **Harnessing Generative AI for Scientific Discovery: Quantitative and Qualitative Perspectives** — Thursday, 2:30–3:30 PM, Room 103A
3. **Division 5 Keynote Addresses: Psychological Methodology Meets Artificial Intelligence** — Thursday, 4:00–5:00 PM, Room 102B
4. **The Future of Psychological Methods in the Context of AI** — Friday, 2:30–3:30 PM, Room 102B

Sessions, times, and locations are subject to change. Final CE details will be confirmed by APA prior to the convention.

Division 5 Member Lounge & Quiet Space

Capitol Hill Room – a meeting room in the Marriott Marquis Washington, DC, on Meeting Level 3 (M3, three levels below the lobby)

Open all day Thursday, Friday, and Saturday (August 6-8).

Division 5 has reserved a dedicated space for members to rest, chat, and ideate on project ideas in a quieter spot away from most conference activities – a place to recharge and connect with colleagues.

Wednesday, August 5

Division 5 is sponsoring a Preconference Workshop in quantitative methods that will include three workshops. The Preconference Workshop will take place on August 5th, 2026, the day before the APA Convention and will feature the following presentations:

- Artificial Intelligence in Research, presented by Dr. Reza Mousavi, University of Virginia (<https://profile.virginia.edu/rm6uz>)
- Social Network Analysis, presented by Dr. Tracy Sweet, University of Maryland (<https://education.umd.edu/directory/tracy-sweet>)
- Longitudinal Data Analysis: Knowing What to Do and Learning How to Do It, presented by Dr. Patrick Curran, University of North Carolina, Chapel Hill, with materials developed with Dr. Dan Bauer

The workshop is funded through the Roger E. Kirk Division 5 Fund, established by Dr. Kirk to support programming in quantitative methods. Grounded in Division 5's mission to advance methodology, the workshop will provide a dynamic and supportive environment in which participants will have opportunities to engage in professional development, networking, and mentoring activities. The application can be found here: https://wsu.co1.qualtrics.com/jfe/form/SV_blucQpUJeuLBP7g

Thursday, August 6

AI and Online Surveys: Data Quality, Fraud Detection, and Text Analysis

Symposium • 10:00-11:00 AM • Room 147B, Street Level

Online survey research currently faces unprecedented challenges from declining data quality and AI-driven fraud. This symposium examines differences across leading sample vendors, introduces validated tools for detecting AI exploitation in surveys, and explores best practices for collecting open-ended responses, including whether LLMs can match humans at generating insights.

PRESENTATIONS

Not All Samples Are Created Equal: A Comparison of Online Sample Quality

Andrew Gordon, PhD – Prolific

Using LLMs to Measure and Improve the Quality of Free-Text Survey Responses

Masha Krupenkin, PhD – University of Maryland

AI Threats to Online Social Science Research: Understanding and Responding

Nick Stagnaro – MIT

Using Generative Artificial Intelligence to Create or Analyze Survey or Test Items

Symposium • 1:00-2:00 PM • Room 102B, Street Level ★ **Continuing Education – 1 credit**

Generative artificial intelligence (GenAI) holds considerable promise across research and applied settings, yet its use in high-stakes domains such as psychological assessment, training, and personnel selection remains understudied. This symposium brings together two panelists and a discussant who are experts in the area to

examine the current state of GenAI-supported assessment and training development across educational, psychological, and organizational contexts, highlighting both its potential and its limitations. The panelists' overviews will address GenAI-developed personality assessments, AI-powered training simulations, AI-assisted psychometric evaluation of behavioral measures, and the broader endeavor of using GenAI to develop, score, and evaluate human-centered constructs. Panelists will then engage in discussion among themselves, with the discussant, and with the audience. Both technical experts and those newer to GenAI will find this session valuable. A discussant will synthesize themes across presentations and offer a critical perspective on the field's trajectory. Attendees are encouraged to participate through discussion, Q&A, and interactive demonstrations.

PRESENTATIONS

GenAI-developed work assessments and training simulations: Pros and cons

Kevin Williams, PhD – Educational Testing Service

Generative AI Across the Assessment Lifecycle: From Item Writer to Simulated Respondent

Ying Cheng, PhD – University of Notre Dame

Discussant

Ken Kelley, PhD – University of Notre Dame

Harnessing Generative AI for Scientific Discovery: Quantitative and Qualitative Perspectives

Symposium • 2:30-3:30 PM • Room 103A, Street Level ★ **Continuing Education – 1 credit**

Artificial intelligence is reshaping scientific research across methodological traditions. This session features two presentations examining AI's role in scientific inquiry from complementary quantitative and qualitative perspectives. Together, they advance a nuanced conversation about when and how AI can enhance scientific discovery and when its use demands caution.

PRESENTATIONS

Qualitative Research in the Age of Generative AI: Rigor, Ethics, and Relational Validity

Gabriel Velez, PhD – Marquette University

Discovering and Testing Scientific Theories Using Deep Learning

Peter Kvam, PhD

Division 5 Keynote Addresses — Psychological Methodology Meets Artificial Intelligence: Modern Innovations and Future Advancements

Invited Address (Keynotes) • 4:00-5:00 PM • Room 102B, Street Level ★ **Continuing Education – 1 credit**

Two award-winning researchers who were early movers in the artificial intelligence space for understanding behavioral and psychological outcomes address the topic of Psychological Methodology Meets Artificial Intelligence. Each draws on extensive work in the space, beginning roughly two decades ago. The talks sit at the transformative intersection of artificial intelligence and psychological science, particularly for advancing methodology. As AI technologies reshape research landscapes, psychologists are uniquely positioned to advance both the science and practice of AI-enabled measurement, assessment, statistical analysis, and qualitative approaches, as well as pedagogy in methodology – and to address the logical and ethical limits of AI use in psychological science. Each keynote is 30 minutes.

KEYNOTE SPEAKERS**AI4Psych: A Tale of Three Paradigms for AI in Psychology**

Ahmed Abbasi – University of Notre Dame

AI and LLMs in Psychological Measurement: What We've Learned and What Comes Next

Kai Larsen – University of Colorado Boulder

Friday, August 7

Division 05 Poster Session I*Poster Session • 11:30 AM–12:30 PM • Hall D, Solutions Center, Level Two*

30 methods posters will be presented.

Awards Ceremony, Division 5 (Quantitative and Qualitative Methods)*Invited Address • 1:00–2:00 PM • Room 144C, Street Level*

The annual awards ceremony for Division 5. All are welcome.

PRESENTERS

Michelle Ryder, PhD – American Psychological Foundation

Brian French, PhD – Washington State University

Gabriel Velez, PhD – Marquette University

The Future of Psychological Methods in the Context of AI*Division Presidential Address • 2:30–3:30 PM • Room 102B, Street Level* ★ **Continuing Education – 1 credit**

Division 5 President Jolynn Pek will give an invited address on AI and psychological science.

Presidential Address

Jolynn Pek, PhD – Ohio State University

Division 5 (Quantitative and Qualitative Methods) Business Meeting*Business Meeting • 4:00–5:00 PM • Room 144C, Street Level*

The business of Division 5 will be discussed by the executive board, with reports and updates from each officer. Members are encouraged to attend.

SPECIAL EVENTS — FRIDAY EVENING**Speed Mentoring — Early Career Professionals & Students***5:00–6:00 PM • 1201 Pennsylvania Avenue NW, Suite 200, Washington, DC 20004*

Division 5 cordially invites early career professionals and students to a 60-minute speed mentoring event. Through a series of structured small-group discussions, attendees will have the opportunity to connect with fellow early career professionals and senior Division 5 members in a focused and collegial setting. Whether you are navigating the next step in your academic or professional career or seeking guidance on a current research challenge, this event offers an excellent opportunity to gain insight from experienced colleagues and expand your network within the Division.

To be added to the list as a mentor or as a mentee, contact Umit Tokac (tokacu@umsl.edu).

Names are required in advance for building access (security, due to proximity to the White House).

Division 5 Social at Notre Dame's Washington, DC Office

6:00–7:30 PM • immediately following the Speed Mentoring event, same location

Following the mentoring session, attendees are warmly encouraged to continue the conversation at the Division 5 Social Hour.

Names are required in advance for building access. Please contact Ken Kelley (kkelley@nd.edu) for a calendar invitation to ensure you are added to the approved-attendee list.

Saturday, August 8

Assessment Breakfast — Assessment Section of Division 5

Section Event • 8:30–9:30 AM • Mount Vernon Square (meeting room), Marriott Marquis Washington, DC – Level Three

Breakfast gathering of the Assessment Section of Division 5.

Division 05 Poster Session II

Poster Session • 10:30–11:30 AM • Hall D, Solutions Center, Level Two

30 posters will be presented.

Division 5 (Quantitative and Qualitative) Executive Committee Meeting

Executive Committee Meeting • 12:00–1:00 PM • Mount Vernon Square (meeting room), Marriott Marquis Washington, DC – Level Three

Meeting of the Division 5 leadership / executive committee.

Division 5 (Quantitative and Qualitative Methods) Virtual Poster Session

Virtual Poster Session • 10:00–11:00 PM • Virtual

14 virtual posters will be presented online.

Related Sessions of Interest (Beyond Division 5)

Selected convention sessions relevant to Division 5 members. These are not Division 5 sessions.

Artificial Intelligence — Feature Stage Keynote

Keynote / Feature Stage • Thursday, Aug 6 • 2:30–3:30 PM • Ballroom C, Level Three

Keeping Humans Safe in the AI Era: Why Psychological Science Belongs at the Center of Model Evaluation

Alison Cerezo, PhD – SVP of Research, mpathic

The Largest Behavioral Experiment in Human History

Kieran Snyder – Microsoft

AI Therapists, Friends, and Assistants: Understanding AI Across Disciplines

Div. 1 (Society for General Psychology) – Critical Conversation • Thursday, Aug 6 • 1:00–2:00 PM • Main Stage, Ballroom AB, Level Three

The Pivot: Psychology Beyond Traditional Boundaries

Presidential Programming – Skill Building • Thursday, Aug 6 • 10:00–11:00 AM • Room 146B, Street Level

Graduate Students & Early Career Psychologists Networking & Coffee Break (sponsored by ABPP)

APA Committee on Early Career Psychologists – Social Hour • Thursday, Aug 6 • 2:30–3:30 PM • Marriott Marquis, Salon 01 (Level Two)

DC Block Party: Feel the Beat, Enjoy DC Flavor

APA Social Hour • Thursday, Aug 6 • 6:15–8:15 PM • Hall A, Concourse Level

AI as a Catalyst for Discovery in Psychological Science

APA Symposium • Friday, Aug 7 • 4:00–5:00 PM • Ballroom C, Level Three

Bringing Psychology to the AI Table

APA Critical Conversation • Saturday, Aug 8 • 10:30–11:30 AM • Hall D, Solutions Center, Spotlight Stage

Program Co-Chairs & Contact

Program Co-Chairs

Ken Kelley, PhD (kkelley@nd.edu)

Zachary Fisher, PhD (fisherz@unc.edu)

Questions regarding the program may be directed to either program co-chair.

Publication Corner



Madigan, D. J., Hong, J., Kim, L. E., & Grugan, M. C. (2026). Burnout literacy: A novel model and measure to aid the recognition, management, and prevention of student burnout. *Journal of Psychoeducational Assessment*, 44(3), 298-315. <https://doi.org/10.1177/07342829251407135>

Burnout is an increasingly common and debilitating phenomenon among students. However, while progress is being made, there are still limited options to promote its recognition, and aid in its management and prevention. Our aim was to provide one such option by introducing the concept of burnout literacy (i.e. knowledge and beliefs about burnout). Following a pre-registered protocol with open data, methods, and code, and using a multi-stage process, we developed and tested the Burnout Literacy Questionnaire-Student Version. We recruited multiple samples of university/college students from the UK and USA (total N = 500) and used exploratory factor analysis, confirmatory factor analysis, and exploratory structural equation modelling to test its psychometric properties. We also provided an initial exploration of its construct validity, and we examined differences in burnout literacy among various student subgroups. Overall, the findings supported a 17-item, five-factor measure with robust psychometric properties. The freely available Burnout Literacy Questionnaire-Student Version provides the first means to assess burnout literacy in students, which will aid in the recognition, management, and prevention of student burnout.

Van Cleave, J., Wolgemuth, J. R., & Marn, T. (2026). Manufacturing trustworthiness in qualitative research as a writerly and readerly accomplishment: Introduction to the special issue. *Qualitative Inquiry*, 32(6), 487-490. <https://doi.org/10.1177/10778004251383514>

This article introduces the special issue, "Manufacturing Trustworthiness in Qualitative Research." Rather than viewing trustworthiness as an inherent product of high-quality research practices, this special issue considers how researchers manifest and construct appearances of trustworthiness within and through academic texts. Conceptualizing trustworthiness as produced within scholarly writing opens the idea of trustworthiness to broader scrutiny, but also to a wider array of possibility—if trustworthiness is not singular or solely produced through methodology, then it is malleable and full of potential. It is not one trustworthiness, but a million tiny trustworthiness manifested and proliferated across multiple research accounts and readerly engagements. This is our special issue's conceptual play space that sometimes pushes on and against the notion of trustworthiness itself, and in which the authors, coming from a range of orientations, explore and tinker with their ideas of trustworthiness, highlighting how they produce their research as "trustworthy."

Ma, T., Huggins, J. E., & Kang, J. (2026). Bayesian signal matching for transfer learning in ERP-based brain computer interface. *Journal of the American Statistical Association*, 121(553), 100-112. <https://doi.org/10.1080/01621459.2025.2563189>

An Event-Related Potential (ERP)-based Brain-Computer Interface (BCI) Speller System assists people with disabilities to communicate by decoding electroencephalogram (EEG) signals. A P300-ERP embedded in EEG signals arises in response to a rare, but relevant event (target) among a series of irrelevant events (non-target). Different machine learning methods have constructed binary classifiers to detect target events, known as calibration. The existing calibration strategy uses data from participants themselves with lengthy training time. Participants feel bored and distracted, which causes biased P300 estimation and decreased prediction accuracy. To resolve this issue, we propose a Bayesian signal matching (BSM) framework to calibrate EEG signals from a new participant using data from source participants. BSM specifies the joint distribution of stimulus-specific EEG signals among source participants via a Bayesian hierarchical mixture model. We apply the inference strategy. If source and new participants are similar, they share the same set of model parameters; otherwise, they keep their own sets of model parameters; we predict on the testing data using parameters of the baseline cluster directly. Our

hierarchical framework can be generalized to other base classifiers with parametric forms. We demonstrate the advantages of BSM using simulations and focus on the real data analysis among participants with neuro-degenerative diseases. Supplementary materials for this article are available online, including a standardized description of the materials available for reproducing the work.

Links to Previous Issues

Issue Date	Vol(Iss.)	Link
April, 2026	48(2)	https://www.apadivisions.org/division-5/publications/score/2026/04/issue.pdf
January, 2026	48(1)	https://www.apadivisions.org/division-5/publications/score/2026/01/issue.pdf
October, 2025	47(4)	https://www.apadivisions.org/division-5/publications/score/2025/10/issue.pdf
July, 2025	47(3)	https://www.apadivisions.org/division-5/publications/score/2025/07/issue.pdf
April, 2025	47(2)	https://www.apadivisions.org/division-5/publications/score/2025/04/issue.pdf
January, 2025	47(1)	https://www.apadivisions.org/division-5/publications/score/2025/01/issue.pdf
October, 2024	46(4)	https://www.apadivisions.org/division-5/publications/score/2024/10/issue.pdf
July, 2024	46(3)	https://www.apadivisions.org/division-5/publications/score/2024/07/issue.pdf
April, 2024	46(2)	https://www.apadivisions.org/division-5/publications/score/2024/04/issue.pdf
January, 2024	46(1)	https://www.apadivisions.org/division-5/publications/score/2024/01/issue.pdf
October, 2023	45(4)	https://www.apadivisions.org/division-5/publications/score/2023/10/issue.pdf
July, 2023	45(3)	https://www.apadivisions.org/division-5/publications/score/2023/07/issue.pdf
April, 2023	45(2)	https://www.apadivisions.org/division-5/publications/score/2023/04/issue.pdf
January, 2023	45(1)	https://www.apadivisions.org/division-5/publications/score/2023/01/issue.pdf
October, 2022	44(4)	https://www.apadivisions.org/division-5/publications/score/2022/10
July, 2022	44(3)	https://www.apadivisions.org/division-5/publications/score/2022/07
April, 2022	44(2)	https://www.apadivisions.org/division-5/publications/score/2022/04
January, 2022	44(1)	https://www.apadivisions.org/division-5/publications/score/2022/01
October, 2021	43(4)	https://www.apadivisions.org/division-5/publications/score/2021/10
July, 2021	43(3)	https://www.apadivisions.org/division-5/publications/score/2021/07
April, 2021	43(2)	https://www.apadivisions.org/division-5/publications/score/2021/04
January, 2021	43(1)	https://www.apadivisions.org/division-5/publications/score/2021/01
October, 2020	42(4)	https://www.apadivisions.org/division-5/publications/score/2020/10
July, 2020	42(3)	https://www.apadivisions.org/division-5/publications/score/2020/07
April, 2020	42(2)	https://www.apadivisions.org/division-5/publications/score/2020/04
January, 2020	42(1)	https://www.apadivisions.org/division-5/publications/score/2020/01

Issues of The Score can be accessed at the following webpage:

<https://www.apadivisions.org/division-5/publications/score/issues>

Division 5 Membership Information



Division 5 draws together specialists in the areas of quantitative and qualitative methods. Membership includes specialists in the fields of educational psychology, industrial-organizational psychology, individual assessment, measurement, program evaluation, psychometrics, qualitative inquiry, research interviewing, research methods and statistics. Division 5 provides the opportunity to participate in this critical aspect of professional development, and is a vibrant community that serves the core interests and needs of rigorous scientific inquiry in the social sciences. Those who are interested in joining the division or who would like more information should be referred to the Division 5 website:

<https://www.apadivisions.org/division-5/membership>

Advertising in The Score

The Score is the newsletter of the American Psychological Association's Division 5—Evaluation, Measurement, and Statistics. Division 5 is concerned with promoting high standards in both research and practical application of psychological assessment, evaluation, measurement, and statistics. Approximately half of the Division 5 members are university faculty members in quantitative psychology, psychometrics, educational psychology, or industrial organizational psychology and half are engaged in careers in industry, including the areas of individual and large-scale assessment. More than 1,000 Division 5 members receive The Score each quarter. Advertisements in The Score may be in the form of display advertisements or job announcements. Both types of ads can include graphics and other design features and can be submitted as text or camera-ready display art. Prices for advertisements and size requirements are provided in the accompanying table. Submission deadlines are 45 days prior to publication: February 15 for the April issue, May 15 for July, August 15 for October, and November 15 for January.

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The Score publishes ~1,000-word summaries on topics relevant to quantitative statistical methods, research methods, qualitative methods, assessment, and/or education. Submissions may be original research or a summary of research disseminated elsewhere (conference presentations, journal articles, etc.). There are no publication fees. For more information or to contribute your research to The Score, please contact Editor Kevin Williams (kwmwilliams@ets.org). Submissions are accepted in a priority sequence based on when they are received.