Karyssa Courey

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Education

Ph.D. Rice University (expected May 2026)

Concentration: Industrial-Organizational Psychology

Dissertation work (in progress):

Communicating the impact ratio with precision: Comparing Bayesian and frequentist statistics

M.A. Rice University (May 2024)

Concentration: Industrial-Organizational Psychology

Thesis: Is hiring fair and accurate? Perceptions of statistical and practical significance of

adverse impact indices

B.A. University of California, Irvine (June 2021)

Psychology Major; Management Minor (Cumulative GPA: 4.00/4.00)

Honors Thesis: A model-based examination of scale effects in student evaluations of teaching

Honors

Summa Cum Laude Phi Beta Kappa Campuswide Honors Collegium Disciplinary Honors: Psychology Dean's Honors List – 11 quarters

Grants

National Science Foundation Graduate Research Fellowship Program (NSF GRFP) recipient (September 2023 – September 2026). *Understanding and reducing employment discrimination: Combining expert opinions and employee perceptions using Bayesian statistics*, \$111,000.

Zedeck-Jacobs Adverse Impact Research Grant recipient from the Society for Industrial-Organizational Psychology (2023). When do data speak louder than words? A Bayesian approach to adverse impact. **PIs: Courey, K. A.**, & Oswald, F. L. \$3,000.

Summer Undergraduate Research Program funding recipient from University of California Irvine (2020). \$2,000 for a project on student evaluations of teaching.

Summer Undergraduate Research Program funding recipient from University of California Irvine (2019). \$1,500 for a project on full information optimal stopping problems.

Undergraduate Research Opportunities Program funding recipient from University of California Irvine (2019). \$252 for a project on student evaluations of teaching. \$202 for a project on coping strategies. \$202 for a project on academic burnout.

Undergraduate Research Opportunities Program funding recipient from University of California Irvine (2019). \$300 for a project on full information optimal stopping problems.

Awards

Graduate Student Award for Excellence in Teaching from Rice University Department of Psychological Sciences (2024). \$250

Recipient of the School of Social Sciences Order of Merit Award from University of California Irvine (2021). \$150.

Nellie Ansley Reeves Campuswide Honors Collegium Thesis Award from University of California Irvine (2021). \$250.

Chancellor's Award of Distinction from University of California Irvine (2021).

Distinguished Anteater Award Scholarship from University of California Irvine (2020). \$1,500.

Chancellor's Award for Excellence in Undergraduate Research from University of California Irvine (2020).

Publications

Peer-Reviewed Articles

10. Ruffin, M. A., Courey, K. A., & Beier, M. E. (in press). Gender roles in Keynes' predictions: Progress or stagnation? *Industrial and Organizational Psychology: Perspectives of Science and Practice*.

- 9. **Courey, K. A.**, Wu, F. Y., Oswald, F. L., & Pedroza, C. (2024). Dealing with small samples disability research: Do not fret, Bayesian analysis is here. *Rehabilitation Psychology*. https://doi.org/10.1037/rep0000579 **APA Editor's Choice (10/24/2024)**
- 8. Courey, K. A., Oswald, F. L., & Culpepper, S. A. (2024). Clearer analysis, interpretation, and communication in organizational research: A Bayesian guide. *Practical Assessment, Research, and Evaluation*, 29(1), Article 1. https://doi.org/10.7275/pare.1975
- 7. Wu, F. Y., Courey, K. A., Oswald, F. L., McPhail, S. M., & Tippins, N. T. (2023). Navigating the open seas of AI-based hiring technologies: An open fishbowl discussion. *The Industrial-Organizational Psychologist*, 61(3).
- 6. Stewart, D., **Courey, K. A.**, Chen, Y., & Banerjee, N. (2023). Future-proofing I-O psychology: The need for updated graduate curriculum. *Industrial and Organizational Psychology*, *16*(1), 125-128. https://doi.org/10.1017/iop.2022.110

- 5. Oswald, F. L., **Courey, K. A.**, & Liu, Z. (2023). Knowledge, skills, and workforce development: Commentary on Ackerman (2023). *American Psychologist*, 78(3), 298–300. https://doi.org/10.1037/amp0001127
- 4. **Courey, K. A.**, Oswald, F. L. (2022). Communicating adverse impact analyses clearly: A Bayesian approach. *Journal of Business and Psychology*. *39*, 137–157. https://doi.org/10.1007/s10869-022-09862-8
- 3. Courey, K. A. & Ruffin, M. A. (2022). The new age of ethics: University-led education and student-led discussion. *Industrial and Organizational Psychology: Perspectives of Science and Practice*, 15(2), 250–254. https://doi.org/10.1017/iop.2022.11
- 2. Courey, K. A., & Lee, M. D. (2021). A model-based examination of scale effects in student evaluations of teaching. *AERA Open*, 7. https://doi.org/10.1177/23328584211040083
- 1. Lee, M.D., & Courey, K. A. (2020). Modeling optimal stopping in changing environments: A case study in mate selection. *Computational Brain & Behavior*, 4(1), 1–17. https://doi.org/10.1007/s42113-020-00085-9

Peer-Reviewed Book Chapters

Oxendahl, T. A., Courey, K. A., Ruffin, M. A., Fattoracci, E., & King, E. B., (2024). Effects of diversity on the future of HRM. In B. Murray, J. H. Dulebohn, D. Stone, & K. Lukaszewski (Eds.), *The future of human resource management*. Information Age Publishing.

Ruffin, M., Courey, K., Stewart, D., Hebl, M., Seged, L., Townsend, M. A., & Williams, J. (2024). Seven strategies to reduce gender disparities through the generative interactions framework. In B. Murray, J. H. Dulebohn, D. Stone, & K. Lukaszewski (Eds.), *The future of human resource management*. Information Age Publishing.

Courey, K. A., Ruffin, M. A., Hebl, M., Stewart, D., Townsend, M. A., Seged, L., Williams, J., Patterson, C., Mei, Y., & King, E. B. (2022). *Gender in organizations*. The Oxford Research Encyclopedia of Psychology (ORE). Oxford University Press. https://doi.org/10.1093/acrefore/9780190236557.013.862

Oswald, F. L., Wu, F. Y., & Courey, K. A. (2022). Training (and retraining) in data, methods, and theory in the organizational sciences. In K. R. Murphy (Ed.), *Data, methods, and theory in the organizational sciences* (pp. 294–316). Routledge.

Preprints

Courey, K. A., Oswald, F. L., Culpepper, S. A. (2022). *Clearer analysis, Interpretation, and communication in organizational research: A Bayesian guide*. PsyArXiv. https://doi.org/10.31219/osf.io/z9xd6

Manuscripts Under Review

- **Courey, K. A.**, & Oswald, F. L. (2024). Evaluating the impact ratio and its associated uncertainty: A Bayesian approach [Manuscript provisionally accepted].
- **Courey, K. A.**, & Oswald, F. L. (2024). A qualitative analysis of personnel selection and legal experts' perspectives on adverse impact measures [Manuscript under review].
- Oswald, F. L., **Courey, K. A.**, Wu, F. Y., McPhail, M. & Tippins, N. T. (2024). A qualitative analysis of personnel selection and legal experts' perspectives on adverse impact measures [Manuscript under review].
- Liu, L., Courey, K. A., Kinsey, D., Ober, T. M., & Johnson, D. G. (2024). Navigating the digital horizon: A proposed framework and strategies for assessing digital literacy. [Research report under review].
- Ober, T. M., Johnson, D. G., Liu, L., Kinsey, D., & Courey, K. A. (2024). Communication as a future ready skill: A proposed Framework and strategies for assessment [Research report under review].

Presentations

- 17. Ober, T. M., Courey, K. A., Kinsey, D., & Lei, L. (2025). Insights from teachers on conceptualization and assessment of high school students' skills for post-secondary success. Paper to be presented at American Educational Research Association Annual Meeting, Denver, CO, United States.
- 16. Chakraburty, S., Courey, K. A., Ober, T. M., & Lei, L. (2024). A proposed framework for assessing AI literacy in K-12. Paper presented at the Annual Meeting of the International Association for Educational Assessment, Philadelphia, PA, United States.
- 15. **Courey, K. A.**, & Oswald, F. L. (2024). Evaluating the impact ratio and its associated uncertainty: A Bayesian approach. In Horatio D. Traylor (Chair), *In with the old, in with the new: Novel insights on foundational DEI concepts*. Symposium presented at the Society for Industrial and Organizational Psychology Annual Conference, Chicago, IL, United States.
- 14. Courey, K. A., Wu, F. Y., Oswald, F. L., & Pedroza, C. (2024). *Dealing with small samples in disability research: Do not fret, Bayes is here*. Poster presented at the Society for Industrial and Organizational Psychology Annual Conference, Chicago, IL, United States.
- 13. **Courey, K. A.**, Guo, F., Ikner, B. N., Tang, C., Thompson, I., Traylor, J., & Hayes, T. L. (2024). *It's time to update your prior: Bayesian benefits for organizational analysis*. Ignite session presented at the Society for Industrial and Organizational Psychology Annual Conference, Chicago, IL, United States.
- 12. Silver, E. R., Courey, K., Stewart, D., Hebl, M., & Oswald, F. L. (2024). What does she know?! Gendered effects of challenging and supportive instructor behavior on evaluations of

- instructor competence. In J. L. Wessel & A. Kuvaeva (Co-Chairs), *In our own backyard:* Diversity science in academic work contexts. Symposium presented at the Society for Industrial and Organizational Psychology Annual Conference, Chicago, IL, United States.
- 11. Chen, Y. R., Wu, F. Y., Mulfinger, E., Liu, Z., Courey, K. A., Behrend, T. S., Handler, C. A., & Oswald, F. L. (2024). AI technologies in talent management systems: It glitters, but is it gold? In G. Liou & L. Tay (Co-Chairs), *Future of performance prediction and evaluation: Artificial intelligence and big data.* Symposium presented at the Society for Industrial and Organizational Psychology Annual Conference, Chicago, IL, United States.
- 10. Courey, K. A., Chen, Y. R., Zhang, S., & Oswald, F. L. (2023). *Conducting careful EFA: Two tools for detecting careless responses*. Poster presented at the Society for Industrial and Organizational Psychology Annual Conference, Boston, MA, United States.
- 9. Courey, K. A. (Co-Chair), Wu, F. Y. (Co-Chair), Tippins, N. T (Co-Chair), & McPhail, S. M. (2023). *Navigating the open seas of AI-based hiring technologies: An open fishbowl discussion*. Alternative session presented at the Society for Industrial and Organizational Psychology Annual Conference, Boston, MA, United States.
- 8. Courey, K. A., Oswald, F. L., & Culpepper, S. A. (2022). *Better analyses and communication in organizational research: It's time for Bayes*. Master Tutorial presented at the Society for Industrial and Organizational Psychology Annual Conference, Seattle, WA, United States.
- 7. Murphy, K. R., Fink, A., Guzzo, R., Kozlowski, S. W. J., Cucina, J., Field, J., Russell, C. J., Chao, G. T., Hickman, L., & Courey, K. A. (2022). *Organizational frontiers series presents data, methods and theory in the organizational sciences*. Alternative session presented at the Society for Industrial and Organizational Psychology Annual Conference, Seattle, WA, United States.
- 6. Courey, K. A. & Lee, M. D. (2021). A model-based examination of scale effects in student evaluations of teaching. Virtual presentation at the Virtual MathPsych/ICCM.
- 5. Courey, K. A. & Lee, M. D. (2021). A model-based examination of scale effects in student evaluations of teaching. Virtual presentation at the Undergraduate Research Symposium, UC Irvine.
- 4. Courey, K. A. & Lee, M. D. (2020). Exploring end-point use and identifying predictors of overall ratings in student evaluations of teaching. Virtual presentation at the 2020 Virtual Psychonomics.
- 3. Lee, M. D. & Courey, K. A. (2020). *Modeling optimal stopping in changing environments: A case study in mate selection* [Co-author]. 57th Edwards Bayesian Research Conference, Fullerton, CA.

- 2. Courey, K. A. & Lee, M. D. (2020). What's on the scale? An examination of different evaluation scales and their effects on biases in ratings of professors. Virtual presentation at the 2020 Undergraduate Research Spotlight.
- 1. Lee, M.D. & Courey, K. A. (2019). *Mate selection as a full information optimal stopping problem.* Poster presentation at the Undergraduate Research Symposium, UC Irvine.

Research Experience

Graduate Researcher (2021-2026)

Department of Psychological Sciences – Rice University

Advisor: Dr. Fred Oswald

Lab: Organization & Workforce Laboratory (OWL)

Research interests: Bayesian methods, adverse impact, disparate treatment, statistical

communication, decision-making, individual differences (numeracy), careless responding, psychometrics, fairness, and data visualization

Undergraduate Researcher (2018-2021)

Department of Cognitive Sciences – UC Irvine

Advisor: Dr. Michael Lee

Lab: Computational Modeling Laboratory

Project: A model-based examination of scale effects in student evaluations of teaching

Project: Modeling optimal stopping in changing environments: A case study in mate selection

Undergraduate Researcher (2018-2019)

Department of Psychological Sciences – UC Irvine

Lead Researcher: Dr. Ilona Yim

Project: The effects of postpartum depression on gestational diabetes in refugees

Undergraduate Researcher (2017-2019)

Department of Cognitive Sciences – UC Irvine

Lead Researcher: Dr. Donald Hoffman

Project: Applied vision science for marketing and product design

Teaching Experience

Instructor of Record

Undergraduate Statistics Lab (2024)

Department of Psychological Sciences - Rice

Course: Spring, PSYC 102, Quantitative Analysis for Social Sciences, Psychology Lab

- Responsible for all aspects of the class of 27 students
- Overall Teaching Effectiveness Rating: 4.82/5 (1 = Poor to 5 = Outstanding)

Undergraduate Statistics Lab (2023)

Department of Psychological Sciences - Rice

Course: Fall, PSYC 102, Quantitative Analysis for Social Sciences, Psychology Lab

- Responsible for all aspects of the class of 45 students
- Overall Teaching Effectiveness Rating: 4.88/5 (1 = Poor to 5 = Outstanding)

Guest Lecture/Speaker

Guest Lecture – Undergraduate Statistics (2024)

Department of Social Sciences - Rice

Course: Fall, SOC 302, Quantitative Analysis for Social Sciences

Topic: Correlation

Guest Lecture – Undergraduate Statistics Lab (2024)

Department of Psychological Sciences - Rice

Course: Fall, PSYC 102, Quantitative Analysis for Social Sciences, Psychology Lab

Topic: Chi-square

Guest Speaker – Department Presentation (2024)

Department of Psychological Sciences - Rice

Course: Spring, PSYC 533, Industrial-Organizational Psychology Research Seminar

Topic: Communicating frequentist 95% CI and Bayesian 95% CrI

Guest Lecture – Undergraduate I-O Psychology (2023)

Department of Psychological Sciences - Rice

Course: Spring, PSYC 231, Introduction to Industrial-Organizational Psychology

Topic: Fairness in the workplace

Guest Lecture – Graduate Statistics (2023)

Department of Psychological Sciences - Rice

Course: Spring, PSYC 503, Advanced Psychological Statistics II **Topic:** Bayesian and frequentist *t*-test, ANOVA, and regression

Guest Speaker – Department Presentation (2023)

Department of Psychological Sciences - Rice

Course: Spring, PSYC 533, Industrial-Organizational Psychology Research Seminar

Topic: Bayes factors for model comparison

Teaching Assistant

Teaching Assistant – Graduate Level Statistics (2023)

Department of Psychological Sciences - Rice

Course: Spring, PSYC 503, Advanced Psychological Statistics II

- Supported students in using and learning R
- Held one office hour per week
- Graded and provided feedback on assignments to all students

Teaching Assistant – Graduate Level Statistics (2022)

Department of Psychological Sciences - Rice

Course: Fall, PSYC 502, Advanced Psychological Statistics I

- Supported students learning R and Jamovi by providing tutorials, code, and support
- Held two office hours per week and assisted in grading/providing feedback
- Nominated for a Graduate Teaching Award for Course Support

Consulting Experience

Educational Testing Service - Princeton, NJ

Date: September 2023 – September 2025

Project: Skills for the future initiative, assessment development

- Developed skill frameworks for digital literacy, communication, and collaboration
- Published these frameworks with my team in ETS Research Reports

AAMC - Washington, DC

Date: August – October 2022

Project: SJT measure development

Development Corps – Los Angeles, CA

Date: June 2022

Project: *Qualitative coding of performance evaluations*

Fast Forward Analytics – Houston, TX

Date: March – August 2022

Project: Improving personnel selection through measure validation

HumRRO - Washington, DC

Date: March – May 2022

Project: *SJT measure development*

OpenStax - Houston, TX

Date: January – March 2022

Project: Diversity and inclusion survey evaluation

Professional Service

Ad Hoc Reviewer (2024)

One article in Leadership Quarterly

Conference Submission Reviewer (2024)

Society for Industrial and Organizational Psychology

Judge for Undergraduate Fall Project Pitch Challenge (Fall 2024)

UC Irvine, Undergraduate Research Opportunities Program (UROP)

Coordinator for Industrial-Organizational Psychology Brown Bag Series (2024-2025)

Rice University, Department of Psychological Sciences

Panelist for NSF GRFP Panel for NSF REU Students (Spring 2024)

Rice University, Department of Psychological Sciences

Informal Mentor for Undergraduate Psychology Students (2024)

Rice University, Department of Psychological Sciences

Graduate Research Mentor (2023-2024)

Rice University, OWL Lab mentor to an undergraduate student

Judge for Social Sciences Undergraduate Research + Creative Symposium (Spring 2024)

Rice University, Department of Psychological Sciences

Judge for Undergraduate Research Symposium Oral Presentation (Spring 2024)

UC Irvine, Undergraduate Research Opportunities Program (UROP)

Panelist for Cognitive Science Panel: Our Graduates in the Real World (Fall 2023)

UC Irvine, Department of Cognitive Science

Panelist for Rice University Coffee Chat with UC Irvine CHC (Fall 2023)

Rice University and UC Irvine

Conference Submission Reviewer (Fall 2023)

Society for Industrial and Organizational Psychology

Volunteer for Psychological Sciences Prospective Student Visit Weekend (Spring 2023)

Rice University, Department of Psychological Sciences

Volunteer for Psychological Sciences Department Colloquiums (2021-2022)

Rice University, Department of Psychological Sciences

Ad Hoc Reviewer (2021)

One article in Judgment and Decision Making

Other Work Experience

Graduate Fellowship Coach (2023-Present)

Rice University

Graduate Student Ambassador (2023-2024)

Rice University

Human Resource Intern (2019-2020)

JNR Incorporated

Team Member (2015-2017)

Pinkberry

Volunteer Experience

Students Transforming Rice into a Violence-Free Environment (STRIVE) Graduate Liaison (2024-Present)

Rice University, The Safe Office

Volunteer Program Assessment Consultant (2021-Present)

Rice University, Department of Psychological Sciences

Professional Leadership Experience

Treasurer (2024-2025)

Rice University, Psychology Graduate Student Association

Co-President (2020-2021)

UC Irvine, Students for Industrial Organizational Psychology Club

Research Coordinator (2019-2020)

UC Irvine, Students for Industrial Organization Psychology Club

Podcasts

Hai, T., & Jonathan, A. (2020). Exploring Undergraduate Research with Karyssa Courey (No. 5). http://weareuci.libsyn.com/ep-5-exploring-undergraduate-research-with-karyssa-courey?tdest_i= 2325194

Professional Affiliations

Society for Industrial-Organizational Psychology (SIOP) (2021-Present)

Society for Mathematical Psychology (2020-Present)
Psi Chi International Honor Society of Psychology (2019-Present)

Society for Human Resource Management (SHRM) (2019-2020)

American Psychological Association (APA) (2017-2020)

Skills

Analysis: R, JASP, MAXQDA, SPSS, JAMOVI, JMP, MATLAB,

Spreadsheets: MS Excel, Google Sheets

Data collection: Qualtrics, Mechanical Turk, Prolific, Google Forms **Graphics:** Adobe Illustrator, MS PowerPoint, Google Slides, Tableau

Other: Zotero