

# Ihnwhi Heo

## Curriculum Vitae in August 2025

CONTACT INFORMATION	School of Social Sciences, Humanities and Arts University of California, Merced 5200 North Lake Road Merced, CA 95343, USA	<a href="mailto:ih eo2@ucmerced.edu">ih eo2@ucmerced.edu</a> <a href="https://github.com/ihnwhiheo">ihnwhiheo.github.io</a> <a href="https://orcid.org/0000-0002-6123-3639">orcid.org/0000-0002-6123-3639</a> 
EDUCATION	<b>University of California, Merced, USA</b> Ph.D. Candidate in <a href="#">Quantitative Methods, Measurement, and Statistics</a> Dissertation: <i>Advanced methods for implementation of Bayesian growth mixture modeling</i> Advisors: Dr. <a href="#">Sarah Depaoli</a> and Dr. <a href="#">Fan Jia</a>  <b>Utrecht University, The Netherlands</b> M.Sc. in <a href="#">Methodology and Statistics</a> , <i>Cum Laude</i> Thesis: <i>All models are uncertain, but averaging is useful: Bayesian multi-model inference in structural equation models with bridge sampling</i> Supervisor: prof. dr. <a href="#">Eric-Jan Wagenmakers</a> (University of Amsterdam)  <b>Sungkyunkwan University, South Korea</b> B.A. in Psychology, <i>Highest Honors</i>	May 2026 (Expected)  July 2021  August 2019
AWARDS AND FELLOWSHIPS	<b>Professional Organizations</b> <ul style="list-style-type: none"><li>• APA Dissertation Research Award, American Psychological Association</li><li>• SMEP Dissertation Research Grant, Society of Multivariate Experimental Psychology</li><li>• Nomination for Open Science Award, Open Science Community Utrecht</li><li>• Scholarship for GESIS Summer School, European Survey Research Association</li></ul> <b>Universities</b> <ul style="list-style-type: none"><li>• Psychological Sciences Dissertation Fellowship, University of California, Merced</li><li>• Outstanding Graduate Student Award, University of California, Merced</li><li>• Publication Award in Quantitative Psychology, University of California, Merced</li><li>• Graduate Student Opportunity Program Fellowship, University of California, Merced</li><li>• Graduate Student Association Travel Award, University of California, Merced</li><li>• William R. Shadish Award for Leadership and Service, University of California, Merced</li><li>• Summer Research Fellowship, University of California, Merced</li><li>• Professional Development Award, University of California, Merced</li><li>• Utrecht Excellence Scholarship, Utrecht University</li><li>• Presidential Award for Scholarly Excellence, Sungkyunkwan University</li><li>• Best Undergraduate Research Project Award, Sungkyunkwan University</li><li>• Alumni Scholarship for Academic and Research Excellence, Sungkyunkwan University</li><li>• Academic Achievement Scholarship, Sungkyunkwan University</li><li>• Academic Excellence Scholarship, Sungkyunkwan University</li></ul>	2025 2025 2024 2020  2025 2024–2025 2024–2025 2022–2023 2023 2022 2022–2025 2021–2024 2019–2021 2019 2018 2018 2018 2016–2018
PEER-REVIEWED ARTICLES	11. <b>Heo, I.</b> , Simons, J. W., & Liu, H. (2025). A tutorial on Bayesian model averaging for exponential random graph models. <i>British Journal of Mathematical and Statistical Psychology</i> . Advance online publication. <a href="https://doi.org/10.1111/bmsp.70007">https://doi.org/10.1111/bmsp.70007</a>  10. <b>Heo, I.</b> , Liu, R., Liu, H., Depaoli, S., & Jia, F. (2025). A study of latent state-trait theory framework in piecewise growth models. <i>Applied Psychological Measurement</i> . Advance online publication. <a href="https://doi.org/10.1177/01466216251360565">https://doi.org/10.1177/01466216251360565</a>	

9. **Heo, I.**, Jia, F., & Depaoli, S. (2025). Recovering knot placements in Bayesian piecewise growth models with missing data. *Behavior Research Methods*, 57(7). 1–27. <https://doi.org/10.3758/s13428-025-02716-0>
  8. Liu, H., **Heo, I.**, Ivanov, A., & Depaoli, S. (2025). Model assumption violations in Bayesian latent mediation analysis: An exploration of Bayesian SEM fit indices and PPP. *Structural Equation Modeling: A Multidisciplinary Journal*. Advance online publication. <https://doi.org/10.1080/10705511.2025.2503789>
  7. Liu, H., **Heo, I.**, Depaoli, S., & Ivanov, A. (2025). Parameter recovery for misspecified latent mediation models in the Bayesian framework. *Structural Equation Modeling: A Multidisciplinary Journal*, 32(4). 618–637. <https://doi.org/10.1080/10705511.2025.2475490>
  6. **Heo, I.**, Pfadt, J. M., & Wagenmakers, E.-J. (2025). Contributed discussion of “Sparse Bayesian factor analysis when the number of factors is unknown”. *Bayesian Analysis*, 20(1). 295–296. <https://doi.org/10.1214/24-BA1423>
  5. **Heo, I.**, Depaoli, S., Jia, F., & Liu, H. (2024). Bayesian approach to piecewise growth mixture modeling: Issues and applications in school psychology. *Journal of School Psychology*, 107. 101366. <https://doi.org/10.1016/j.jsp.2024.101366>
  4. **Heo, I.**, Jia, F., & Depaoli, S. (2024). Performance of model fit and selection indices for Bayesian piecewise growth modeling with missing data. *Structural Equation Modeling: A Multidisciplinary Journal*, 31(3). 455–476. <https://doi.org/10.1080/10705511.2023.2264514>
  3. Depaoli, S., Jia, F., & **Heo, I.** (2023). Detecting model misspecification in Bayesian piecewise growth models. *Structural Equation Modeling: A Multidisciplinary Journal*, 30(4). 574–591. <https://doi.org/10.1080/10705511.2022.2144865>
  2. **Heo, I.**, Jia, F., & Depaoli, S. (2023). Book review of *Longitudinal structural equation modeling with Mplus: A latent state-trait perspective* by Geiser. *Psychometrika*, 88(2), 733–737. <https://doi.org/10.1007/s11336-022-09897-z>
  1. Liu, R., **Heo, I.**, Liu, H., Shi, D., & Jiang, Z. (2023). Applying negative binomial distribution in diagnostic classification models for analyzing count data. *Applied Psychological Measurement*, 47(1), 64–75. <https://www.doi.org/10.1177/01466216221124604>
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|-----------------------------|---|
| MANUSCRIPTS<br>UNDER REVIEW | <ol style="list-style-type: none"> <li>2. Jia, F., <b>Heo, I.</b>, Depaoli, S., &amp; Li, Y. (2025). <i>Latent mediation analysis with missing data: A comparison of Bayesian SEM and Monte Carlo-adjusted frequentist approaches</i> [Manuscript submitted for publication]. Department of Psychological Sciences, University of California, Merced.</li> <li>1. Depaoli, S., <b>Heo, I.</b>, Jauregui, M., Liu, H., &amp; Jia, F. (2025). <i>A comprehensive evaluation of model selection indices for class enumeration in Bayesian latent growth mixture models</i> [Manuscript submitted for publication]. Department of Psychological Sciences, University of California, Merced.</li> </ol>  |
| TUTORIALS                   | <ol style="list-style-type: none"> <li>11. Koch, M., <b>Heo, I.</b>, &amp; van Kesteren, E. J. (2022). Latent growth curve modeling (LGCM) in JASP. <i>JASP: A Fresh Way to Do Statistics</i>. <a href="https://jasp-stats.org/2022/02/22/latent-growth-curve-modeling-lgcm-in-jasp/">https://jasp-stats.org/2022/02/22/latent-growth-curve-modeling-lgcm-in-jasp/</a></li> <li>10. Koch, M., <b>Heo, I.</b>, &amp; van Kesteren, E. J. (2022). Multiple indicators multiple causes (MIMIC) model in JASP. <i>JASP: A Fresh Way to Do Statistics</i>. <a href="https://jasp-stats.org/2022/02/01/multiple-indicators-multiple-causes-mimic-model-in-jasp/">https://jasp-stats.org/2022/02/01/multiple-indicators-multiple-causes-mimic-model-in-jasp/</a></li> <li>9. <b>Heo, I.</b>, &amp; van de Schoot, R. (2020). Tutorial: Advanced Bayesian regression in jamovi. <i>Zenodo</i>. <a href="https://doi.org/10.5281/zenodo.4117883">https://doi.org/10.5281/zenodo.4117883</a></li> </ol> |

8. **Heo, I.**, & van de Schoot, R. (2020). Tutorial: jamovi for Bayesian analyses with default priors. *Zenodo*. <https://doi.org/10.5281/zenodo.4117881>
7. **Heo, I.**, & van de Schoot, R. (2020). Tutorial: jamovi for beginners. *Zenodo*. <https://doi.org/10.5281/zenodo.4008372>
6. **Heo, I.**, & van de Schoot, R. (2020). Tutorial: WAMBS Checklist in JASP (using JAGS). *Zenodo*. <https://doi.org/10.5281/zenodo.4001365>
5. **Heo, I.**, & van de Schoot, R. (2020). Tutorial: JASP for Bayesian analyses with informative priors (using JAGS). *Zenodo*. <https://doi.org/10.5281/zenodo.4032756>
4. **Heo, I.**, & van de Schoot, R. (2020). Tutorial: Advanced Bayesian regression in JASP. *Zenodo*. <https://doi.org/10.5281/zenodo.3991325>
3. **Heo, I.**, Veen, D., & van de Schoot, R. (2020). Tutorial: JASP for Bayesian analyses with default priors. *Zenodo*. <https://doi.org/10.5281/zenodo.4008338>
2. **Heo, I.**, Veen, D., & van de Schoot, R. (2020). Tutorial: JASP for beginners. *Zenodo*. <https://doi.org/10.5281/zenodo.4008279>
1. **Heo, I.**, Veen, D., & van de Schoot, R. (2020). Tutorial: R for beginners. *Zenodo*. <https://doi.org/10.5281/zenodo.3963824>

GRANTS	<b>Collaborator</b> , <i>Bayesian model averaging for structural equation models</i> Walter Benjamin Grant, German Research Foundation (DFG) Principal Investigator: Julius M. Pfadt (University of Amsterdam)	2023–2025 Funded
CONFERENCE PRESENTATIONS	10. <b>Heo, I.</b> , Simons, J. W., & Liu, H. (2025, August 7–9). <i>A Bayesian multi-model inferential approach to exponential random graph modeling</i> [Poster presentation]. 133rd Annual Convention of the American Psychological Association, Denver, CO, USA.  9. <b>Heo, I.</b> , Jia, F., & Depaoli, S. (2025, May 22–25). <i>When will change: A nuanced understanding of turning points through Bayesian piecewise growth models</i> [Flash talk]. 37th Annual Convention of the Association for Psychological Science, Washington, DC, USA.  8. <b>Heo, I.</b> , Jia, F., & Depaoli, S. (2024, May 23–26). Advances in detecting misfit in Bayesian piecewise growth curve models. In H. Liu (Chair) & S. Depaoli (Discussant), <i>Model fit assessment of Bayesian structural equation modeling</i> [Symposium]. 36th Annual Convention of the Association for Psychological Science, San Francisco, CA, USA.  7. Liu, H., <b>Heo, I.</b> , Ivanov, A., & Depaoli, S. (2024, May 23–26). Misspecification in Bayesian latent mediation analysis: An exploration of Bayesian fit and comparison fit indices. In H. Liu (Chair) & S. Depaoli (Discussant), <i>Model fit assessment of Bayesian structural equation modeling</i> [Symposium]. 36th Annual Convention of the Association for Psychological Science, San Francisco, CA, USA.  6. Jauregui, M., <b>Heo, I.</b> , Depaoli, S., & Liu, H. (2024, May 23–26). <i>The final class model depends on the index: Exploring Bayesian model fit index performance in growth mixture modeling</i> [Poster presentation]. 36th Annual Convention of the Association for Psychological Science, San Francisco, CA, USA.  5. <b>Heo, I.</b> , Jia, F., & Depaoli, S. (2023, March 15–17). <i>On evaluating the performance of model fit and selection indices for Bayesian piecewise growth modeling: The effect of model misspecification and missing data</i> [Paper presentation]. Structural Equation Modeling Working Group Conference, Bielefeld, Germany.	

4. **Heo, I.**, Jia, F., & Depaoli, S. (2023, March 9–11). *Detecting model misspecification in Bayesian piecewise growth models with missing data: Sensitivity of model fit and selection indices* [Poster presentation]. 4th International Convention of Psychological Science, Brussels, Belgium.
3. **Heo, I.**, & Liu, R. (2023, March 9–11). Analyzing ordinal data to classify individuals and track their changes using polytomous diagnostic classification modeling: A Bayesian hidden Markov approach [Poster presentation]. 4th International Convention of Psychological Science, Brussels, Belgium.
2. **Heo, I.**, Jia, F., & Depaoli, S. (2022, May 26–29). *Bayesian model fit and selection indices for detecting misspecification: The case of Bayesian piecewise growth modeling* [Poster presentation]. 34th Annual Convention of the Association for Psychological Science, Chicago, IL, USA.
1. Liu, R., **Heo, I.**, Liu, H., Shi, D., & Jiang, Z. (2022, April 21–26). *Diagnostic classification models for analyzing examinees' responses to a large number of small and similar tasks* [Paper presentation]. 106th Annual Meeting of the American Educational Research Association, San Diego, CA, USA.

#### INSTITUTIONAL PRESENTATIONS

9. **Heo, I.** (2025, February 5). *Evaluating Bayesian informative hypotheses in latent growth models using JASP*. Quantitative Methods, Measurement, and Statistics Brownbag Series, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
8. **Heo, I.** (2024, September 11). *Deep learning-based multiple imputation robust to missing data mechanisms in structural equation modeling*. Quantitative Methods, Measurement, and Statistics Brownbag Series, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
7. **Heo, I.** (2024, March 6). *On the advance and promise of analyzing psychological text data*. Quantitative Methods, Measurement, and Statistics Brownbag Series, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
6. **Heo, I.** (2023, September 27). *A gentle introduction to Monte Carlo simulation methods using R and Mplus*. Quantitative Methods, Measurement, and Statistics Brownbag Series, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
5. **Heo, I.** (2023, September 13). *On the recovery of knot locations for Bayesian piecewise growth modeling with missing data*. Quantitative Methods, Measurement, and Statistics Brownbag Series, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
4. **Heo, I.** (2023, January 25). *The latest update on the performance of model comparison tools in Bayesian structural equation modeling*. Quantitative Methods, Measurement, and Statistics Brownbag Series, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
3. **Heo, I.** (2022, April 29). *The impact of model misspecification and missing data on Bayesian piecewise growth modeling*. Annual First-Year Research Talk, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
2. **Heo, I.** (2021, October 27). *Bayesian multi-model inference in structural equation models with bridge sampling*. Quantitative Methods, Measurement, and Statistics Brownbag Series, Department of Psychological Sciences, University of California, Merced, Merced, CA, USA.
1. **Heo, I.** (2018, November 9). *The paradox in goal pursuit: Preference reversal when means justifies ends*. Annual Research Presentation, Department of Psychology, Sungkyunkwan University, Seoul, South Korea.

TEACHING EXPERIENCE	<b>Department of Psychological Sciences, University of California, Merced</b>	
	• Instructor of Record	
	– PSY 010: Analysis of Psychological Data (undergraduate)	Spring 2026
	• Guest Lecturer	
	– PSY 010: Analysis of Psychological Data (undergraduate)	Spring 2025
TEACHING EXPERIENCE	– PSY 202A: Advanced Psychological Statistics I (graduate)	Fall 2024
	– PSY 202B: Advanced Psychological Statistics II (graduate)	Spring 2024, 2025
	– ECON 271: Economics and Data Science (graduate)	Spring 2025
	• Lab Instructor	
	– PSY 010: Analysis of Psychological Data (undergraduate)	Fall 2021, Spring 2022, 2025
	– PSY 015: Research Methods in Psychology (undergraduate)	Fall 2023
	<b>Department of Methodology and Statistics, Utrecht University</b>	
	• Lab Instructor	
	– Advanced Research Methods and Statistics for Psychology (bachelor)	Spring 2020
	• Lab Assistant	
PEDAGOGICAL TRAINING	– Advanced Longitudinal Modeling in <i>Mplus</i> (master)	Summer 2021
	– Introduction to Structural Equation Modeling Using <i>Mplus</i> (master)	Summer 2021
	<b>Center for Engaged Teaching and Learning, University of California, Merced</b>	
	• Certification in Advanced Pedagogy	Spring 2023
	• Certification in Principles of Pedagogy	Fall 2022
SERVICE TO PROFESSION	• Certification in Fundamentals of Teaching	Fall 2021
	<b>Journal Reviewer</b>	
	• <i>Advances in Methods and Practices in Psychological Science</i>	
	• <i>Multivariate Behavioral Research</i>	
	• <i>Psychological Methods</i>	
	• <i>Structural Equation Modeling: A Multidisciplinary Journal</i>	
	<b>Conference Reviewer</b>	
	• American Educational Research Association–Division D	
	• National Council on Measurement in Education	
INSTITUTIONAL SERVICE	<b>University of California, Merced</b>	
	Department Service	
	• Student Representative, Faculty Search Committee in Quantitative Psychology	2023–2024
	• Manager, Quantitative Program ✕ Account @UCM_QuantPsych	2023–2026
	• Panelist, Psi Chi Graduate Student Panel	2021–2025