CULTA MODEL 1

## Common and Unique Latent Transition Analysis (CULTA) as a Way to Examine the Trait-State Dynamics of Alcohol Intoxication

Ivan Jacob Agaloos Pesigan<sup>1</sup>, Michael A. Russell<sup>1, 2</sup>, and Sy-Miin Chow<sup>3</sup>

<sup>1</sup>Edna Bennett Pierce Prevention Research Center, The Pennsylvania State University

<sup>2</sup>Department of Biobehavioral Health, The Pennsylvania State University

<sup>3</sup>Department of Human Development and Family Studies, The Pennsylvania State University

## **Author Note**

Ivan Jacob Agaloos Pesigan https://orcid.org/0000-0003-4818-8420; Michael A. Russell https://orcid.org/0000-0002-3956-604X; Sy-Miin Chow https://orcid.org/0000-0003-1938-027X.

The data reported in this manuscript were previously used in Russell et al. (2025) and Richards et al. (2025).

This research was made possible by the Prevention and Methodology Training Program (PAMT) funded by a T32 training grant (T32 DA017629, MPIs: J. Maggs & S. Lanza) from the National Institute on Drug Abuse (NIDA); the National Center for Advancing Translational Sciences grant UL1TR002014-06; and pilot mentoring and professional development awards through P50DA039838 awarded to Michael A. Russell (National Institute on Drug Abuse, PI: L. Collins), as well as support from the Social Science Research Institute at Penn State and departmental funds awarded to Michael A. Russell.

Computations for this research were performed on the Pennsylvania State University's Institute for Computational and Data Sciences' Roar supercomputer using SLURM for job scheduling (Yoo et al., 2003), GNU Parallel to run the simulations in parallel (Tange, 2021), and Apptainer to ensure a reproducible software stack (Kurtzer et al., 2017, 2021).

Correspondence concerning this article should be addressed to Ivan Jacob Agaloos Pesigan, Edna Bennett Pierce Prevention Research Center, College of Health and Human Development, The Pennsylvania State University, 320 Biobehavioral Health Building, University Park, PA 16802 or by email (ijapesigan@psu.edu).