**Estimating treatment effects of physical activity on subcategories of mental health: A propensity score analysis among a global sample of 341,956 adults**

Christopher Huong, BA & Denver M. Y. Brown, PhD

Department of Psychology, The University of Texas at San Antonio

**Author Note**

Christopher Huong: [christopher.huong@utsa.edu](mailto:christopher.huong@utsa.edu),  [0009-0008-6986-7784](https://orcid.org/0009-0008-6986-7784)

Denver Brown: [denver.brown@utsa.edu](mailto:denver.brown@utsa.edu),  [0000-0003-4078-8253](https://orcid.org/0000-0003-4078-8253)

Correspondence concerning this article should be addressed to Christopher Huong, Department of Psychology, One UTSA Circle, Main Building 2.306, San Antonio, TX 78249, USA. E-mail: christopher.huong@utsa.edu. We have no conflicts of interest to disclose.

Author Contributions: **Christopher Huong**: formal analysis, writing – original draft, methodology (equal). **Denver Brown**: conceptualization, methodology (equal), writing – review and editing

*Keywords*: mental health, well-being, physical activity, exercise, machine learning

**Transparency Statement**

1. **Study registration**.
   * This study was not formally registered.
2. **Analytic plan pre-registration**.
   * The analysis plan was not formally pre-registered.
3. **Data availability:**
   * Data from the Global Mind Database can be requested directly from Sapien Labs: <https://sapienlabs.org/global-mind-project/researcher-hub/>
4. **Analytic code availability.** 
   * Analytic code used to conduct the analyses presented in this study are not currently available in a public archive. They may be available by emailing the corresponding author. Once the authors are completed with organizing and annotating the analytic code, it will be made publically available on a GitHub repository.
5. **Materials availability.** 
   * Materials concerning the development of the Mental Health Quotient instrument used from the Global Mind Project can be found in the references of the methods section of the main paper and on their website: <https://sapienlabs.org/global-mind-project/>