Digital Health & Education Research (DHER) Lab Updated February, 2024

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This lab focuses on using the power technology to evaluate, develop, and disseminate digital tools to improve health and educational/psychoeducational outcomes, and contribute to the reduction of health and educational disparities worldwide.

Mission:

- Reach as many people as possible.
- Make a concerted effort to work with underserved populations.
- Develop digital tools in more than one language when possible.
- Evaluate digital tools that have been developed in more than one language when possible.
- Use Internet interventions and digital technologies to enhance learning outcomes in psychology and education.

My background: I joined PAU in 2018 as the Research Project Director for i4Health. I completed my MA in Interdisciplinary Education with focus on STEEM (Science, Technology, Environmental Education, and Math) from Santa Clara University and completed my Doctorate in Education with a focus on Learning and Instruction from the University of San Francisco. Before joining PAU, I worked at Stanford University for over 17 years in the departments of Medicine and Bioengineering in various roles including Computing and Educational Coordinator and Teaching Hub Developer. I also served as Chair of the Latinx Task Force at PAU from 2019-2021. I am bilingual (English/Spanish). See below for my list of publications.

Students joining my lab will have the following attributes:

Required:

- Strong interest in using digital technology to develop and/or evaluate tools that can help reduce health and/or educational disparities.
- Documented commitment to serving underserved populations.
- Commitment to develop or evaluate digital tools (websites, videos, chatbots, apps, etc.).
- Excellent writing skills and intention to publish your work in professional and popular journals.

Preferred:

- Advanced speaking, reading, and writing ability in Spanish or other languages.
- Experience with online survey development (ideally using Qualtrics).
- Experience producing multimedia presentations.
- Strong database management and data analysis skills.
- Willingness to work on meta-analyses.

Expectations:

- Attend weekly lab meetings during the academic year and spend approximately 7 hours per week on research projects related to the lab.
- Become familiar with current online projects by assisting with data management, data analysis, creation of tables and figures, and co-authoring posters, presentations, and articles.
- Assist with creation of online projects, including constructing intervention websites or apps, videos, and methods to disseminate them widely.
- You will have the opportunity to participate in all states of the research process including; forming ideas for research projects, conducting literature reviews, submitting IRBs, participant recruitment, data collection and analysis, poster and paper publications.

Graduates of the lab will have obtained documented training in:

• Developing and evaluating digital tools to help reduce health and educational disparities for underserved populations and in multiple languages when possible.

To apply: Please submit the following to bpineda@paloaltou.edu by application deadline.

- Curriculum Vitae
- Transcripts (unofficial is fine)
- One page research interest statement
- A writing sample in English
 for example, a paper submitted to a psychology class (undergraduate or graduate). Your Research Methods proposal paper from Fall quarter would be fine.
- If you are bilingual in Spanish, an additional writing sample in Spanish.
- If you have built websites or apps, a link to your site, how to download your app, or screen shots of the site or app.

Selected students will be invited to Zoom interviews.

Publications:

M. Roller, K., Snow, W., Grapa, J., Hernández, M., Consolí, A., **Pineda, B.,** & Andrade, E. (2023). Estimating the Impact of Limited English Language Proficiency on Mental Health Services for Spanish Speakers in the United States. *Journal of the National Hispanic Medical Association*, 1(2), 10–17. https://doi.org/10.59867/nhma0202

- **Pineda, B. S.,** Mejia, R., Qin, Y., Castro, J., Delgadillo, L. G., & Muñoz, R. F. (2023). Updated taxonomy of digital mental health interventions: A conceptual framework. *mHealth*, *23*(6). https://doi.org/10.21037/mhealth-23-6
- Bunge, E. L., **Pineda, B. S.**, Topooco, N., & Stephens, T. N. (2021). Introduction to technological approaches for the treatment of mental health in youth. *Soc. Sci. 10*, 461. Editorial. https://doi.org/10.3390/socsci10120461
- Muñoz, R. F., Le, H.-N., Barrera, A. Z., & **Pineda, B. S.** (2021). Leading the charge toward a world without depression: Perinatal depression can be prevented. *Archives of Women's Mental Health*. https://doi.org/10.1007/s00737-021-01160-1
- Cano, M. T., Pennington, D. L., Reyes, S., **Pineda, B. S.,** Llamas, J. A., Periyakoil, V. P., & Muñoz, R. F. (2021). Factors associated with smoking in low-income persons with and without chronic illness. *Tobacco Induced Diseases*, *19*(July), 1–11. https://doi.org/10.18332/tid/138241
- Muñoz, R. F., **Pineda, B. S.**, Barrera, A. Z., Bunge, E., & Leykin, Y. (2021). Digital tools for prevention and treatment of depression: Lessons from the Institute for International Internet Interventions for Health. *Clínica y Salud*, *32*(1), 37–40. https://doi.org/10.5093/clysa2021a2 (invited publication)
- Muñoz, R. F., Leykin, Y., Barrera, A. Z., Dunn, L. B., Gutierrez, R., Curland, R. A., & **Pineda, B. S.** (2021). Who comes to a self-help depression prevention website? Characteristics of Spanish-and English-speaking visitors. *Internet Interventions*, *23*, 100359. https://doi.org/10.1016/j.invent.2020.100359
- Cuijpers, P., **Pineda, B. S.**, Quero, S., Karyotaki, E., Struijs, S. Y., Figueroa, C. A., Llamas, J. A., Furukawa, T. A., & Muñoz, R. F. (2021). Psychological interventions to prevent the onset of depressive disorders: A meta-analysis of randomized controlled trials. *Clinical Psychology Review*, 101955. https://doi.org/10.1016/j.cpr.2020.101955
- Bond, M., Bunge, E., Leykin, Y., Barrera, A., Wickham, R., Barlow, M., Reyes, S., **Pineda, B.**, Ceja, A., Cano, M., & Muñoz, R. (2021). Development and usability of a Spanish/English smoking cessation website: lessons learned. *MHealth*. http://dx.doi.org/10.21037/mhealth-19-255
- Cuijpers, P., **Pineda, B. S.**, Ng, M. Y., Weisz, J. R., Muñoz, R. F., Gentili, C., Quero, S., & Karyotaki, E. (2021). Psychological treatment of subthreshold depression in children and adolescents: A meta-analytic review. *J. Am. Acad. Child Adolesc. Psychiatry*. https://doi.org/10.1016/j.jaac.2020.11.024
- Dosovitsky, G., **Pineda, B. S.**, Jacobson, N. C., Chang, C., Escoredo, M., & Bunge, E. L. (2020). Artificial Intelligence Chatbot for Depression: Descriptive Study of Usage. *JMIR Formative Research*, *4*(11), e17065. https://doi.org/10.2196/17065

Muñoz, R. F., **Pineda, B. S.**, Llamas, J. A. (2019). Indigeneity, diversity, and equity in Internet interventions: Could ISRII contribute to making health care a universal human right? *Internet Interventions*, *18*, 100269. https://doi.org/10.1016/j.invent.2019.100269