

Digital Health & Education Research (DHER) Lab

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External Research Lab Faculty

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This lab focuses on using the power of 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 am the Director of i4Health, currently working on various projects related to the usability of online psychoeducation tools to help manage feelings of depression, anxiety, and stress, and how people engage with these tools. I teach courses related to Digital Mental Health for the Master's and Undergraduate Programs and Research Methods for the Undergraduate Program. I completed my MA in Interdisciplinary Education with a 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.

- 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:

- Willingness to conduct research in more than one language when possible.
- Experience with online survey development (ideally using Qualtrics).
- Experience producing multimedia presentations.
- Strong database management and data analysis skills.
- Willingness to work on systematic reviews and 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 creating online projects, including building intervention websites or apps, videos, and methods to disseminate them widely.
- You will have the opportunity to participate in all stages of the research process including forming ideas for research projects, conducting literature reviews, submitting IRBs, participant recruitment, data collection and analysis, and 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@palozou.edu by the 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 the 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, or a way to download your app or screenshots 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*. <https://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>