

Benjamin Lira Luttges

Duckworth Lab
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Interests

Artificial Intelligence
Self-Regulation

Motivation
Non-Cognitive Skills

Education

- 2021 – 2026 University of Pennsylvania
PhD in Psychology
Advisor: Dr. Angela Duckworth
- 2015 – 2017 Universidad de Lima, Peru
Professional Licensure in Psychology
Thesis Topic: Parental predictors of children's effortful control
Thesis Advisor: Carolina Camino, M.A.
- 2009 – 2015 Universidad de Lima, Peru
B.A., Psychology. GPA 4.0 (18.6/20)
Class Rank: 1st out of 40 psychology graduates
- 2013 Katholieke Universiteit Leuven, Belgium
Exchange student in master level courses
Relevant courses: Education, Society and Culture, Cognitive Science, Artificial Intelligence
6 courses (29 credits)

Grants and Awards

- 2018 Annual research competition winner, Pontificia Universidad Católica del Perú
Awarded to the Motivation and Emotion Research Group (PUCP).
Basic Psychological Needs in the Context of Poverty
Grant Award: 135 000 and 45 000 PEN (53,576 USD)
- 2010 – 2015 Full honors scholarship, Universidad de Lima
Est. Value: 146 523 PEN (43,612 USD)

Academic Positions

- 2020 **Predoctoral Visiting Scholar**, University of Pennsylvania
Duckworth Lab, PI: Angela Duckworth
PSYC 005-401: Grit Lab (TA)
- 2017 – 2019 **Instructor**, Pontificia Universidad Católica del Perú
PSB229: Motivation and Emotion

2019 – 2: Enrollment 27.

2018 – 1: Enrollment 26.

2019 – 1: Enrollment 51.

2017 – 2: Enrollment: 16.

PSG207: Psychological Test Construction

2018 – 1: Enrollment 49.

2017 – 2: Enrollment 51.

PSG204: Psychological Research

2017 – 2: Enrollment 28.

- Guest Lecturer**
- 2018 Universidad Cayetano Heredia. Cognitive Behavioral Intervention Methods
- 2021 University of Pennsylvania. Self-concordant Goals.

Publications

[Google Scholar](#)

Published

- Putnam, S. P., Sehic, E., French, B. F., Gartstein, M. A., **Lira, B.**, & Peltola, M. (2024). The Global Temperament Project: Parent-Reported Temperament in Infants, Toddlers and Children from 59 Nations. *Developmental Psychology*.
- Herrera, D., Costalat-Founeau, A. M., Chau, C., Mendoza, N., Arakaki, M., Cerna, Y., **Lira, B.** & Drouin, N. (2023). Adaptación de la escala de sentido de capacidad para estudiantes peruanos. *Liberabit*, 29(2).
- Paredes, DIH, Arakaki, M., Dammert, M, **Lira, B.**, Orientación futura, bienestar y rendimiento en universitarios de un programa de tutoría durante la pandemia COVID-19 Revista Peruana de Investigación Educativa 14 (17)
- Lira, B.**, Duckworth, A. L., Gardner, M., Quirk, A., Stone, C., Rao, A., ... & D'Mello, S. K. Using Human-Centered Artificial Intelligence to Assess Personal Qualities in College Admissions. *Science Advances*. [\[link\]](#)
- Lira, B.**, O'Brien, J., Peña, P.A., Galla, B.M., D'Mello, S., Yeager, D., S., Defnet, A., Kautz, T., Munkacsy, K., Duckworth, A.L., (2022). Large Studies Reveal How Reference Bias Limits Policy Applications of Self-Report Measures. *Scientific Reports* 12(1) 19189.
- Lira, B.** & Lopez, F. E. (2022). Evaluación psicométrica de una escala de creencias conspirativas para población peruana [Psychometric evaluation of a conspiracy belief scale in a Peruvian population]. *Persona* 25, 33-51.
- Duckworth, A.L., Kautz, T., Defnet, A., Satlof-Bedrick, E., Talamas, S., **Lira, B.**, & Steinberg, L. (2021). Students Attending School Remotely Suffer Socially, Emotionally, and Academically. *Educational Researcher* 50(7), 479-482. <https://doi.org/10.3102/0013189X211031551> [\[link\]](#)
- Caffarena, C., **Lira, B.**, Campos, A.L., Rojas-Barahona, C. (2021). Psychometric properties of the Child Behavior Questionnaire (CBQ) in Chile. *Current Psychology*. 1-10. <https://doi.org/10.1007/s12144-021-01871-9> [\[link\]](#)
- Herrera, D., Matos, L., Gargurevich, R., **Lira, B.**, Valenzuela, R. (2021). Context matters: Teaching styles and basic psychological needs predicting flourishing and perfectionism in university music students. *Frontiers in Psychology* 12. 1-9. <https://doi.org/10.3389/fpsyg.2021.623312> [\[link\]](#)
- Lira, B.** (2017). The predictive role of parental and maternal emotion regulation, empathy, and alexithymia in toddler's effortful control. Universidad de Lima Undergraduate Thesis. [\[link\]](#)
- Gleichgerrcht, E., **Lira, B.**, Salvarezza, F., & Campos, A.L. (2015). Educational neuromyths among teachers in Latin America. *Mind, Brain, and Education* 9(3). 170–78. <https://doi.org/doi:10.1111/mbe.12086>. [\[link\]](#)
- Gleichgerrcht, E. & **Lira, B.** (2014). Attention: fostering educational neuroscience 5. Lima: Cerebrum Ediciones.

Submitted

- Lira, B., Bartlett, Maria. E., Kautz, T., & Duckworth, A. L. (2024). Remote Schooling Depresses Grades for the Most Vulnerable. *PNAS Nexus* [\[link\]](#)
- Matos, L., Herrera, D., Lira, B., Gargurevich, R., Benita, M. Perceived Teaching Styles, Basic Psychological Needs, Motivation, Engagement, Academic Achievement and Student Well-Being in a Peruvian in a low socioeconomic students' sample. Manuscript submitted for publication.

In Prep

- Lira, B., & Duckworth, A. L. What I see my role models do: Elucidating the mechanisms of reference bias. In preparation for *Psychological Methods*. [\[link\]](#)
- Lira, B., ... Gross, J., & Duckworth, A.L., Delivering motivational interventions at scale using Artificial Intelligence in Khan Academy.
- Lira, B., & Duckworth, A.L., Attention is the missing element of Expectancy Value Theories

Press coverage

- Duckworth et al., (2021) Students Attending School Remotely Suffer Socially, Emotionally, and Academically [\[HealthDay\]](#)[\[U.S. News\]](#)[\[The 74\]](#)[\[District Administration\]](#)[\[Yahoo\]](#)[\[Phys Org\]](#)

Presentations

- Ungar, L., Lira, B., Using Large Language Models to Help People be their 'Best' Selves. (2023, November) Psychology of Technology Conference. UC Berkeley. [\[link\]](#)[\[slides\]](#)
- Lira B.**, Seraj, S., Neiderhoffer, K., Ireland, M., (2023, February) Panel on collaboration between industry and academia. Language Preconference, Society for Personality and Social Psychology Convention. Atlanta.
- Chalén, J., **Lira B.**, & Herrera, D. (2022, July). Future Orientation, Wellbeing, Life Purpose & Academic Performance in University Students from Lima [Symposium]. 5th International Conference on Time Perspective. Vilnius, Lithuania (Virtual). [\[link\]](#)[\[link2\]](#)
- Lira, B.**, O'Brien, J., Peña, P., Galla, B. M., D'Mello, S., Yeager, D. S., Defnet, A., Kautz, T., Munkacsy, K., & Duckworth, A. L. (2022, July). Large Studies Reveal How Reference Bias Limits Policy Applications of Self-Report Measures. In C.J. Soto (Chair), *Conceptualization, Assessment, and Implications of Social, Emotional, and Behavioral Skills* [Symposium]. European Conference on Personality 2022, Madrid, Spain.
- Lira B.**, et al. (2021, September). Students Attending School Remotely Suffer Socially, Emotionally, and Academically. In B. Gill & E. Stuart (Chairs), *Mental and Physical Health Implications of School Operating*

Approaches During the COVID-19 pandemic [Symposium]. Society for Research on Educational Effectiveness Conference 2021. [\[link\]](#)

- Lira, B.** (2018, May). The predictive role of parental emotion regulation, empathy, and alexithymia on preschooler's effortful control [Poster presentation]. 22nd Occasional Temperament Conference (OTC). Murcia, Spain.
- Lira, B.** (2016, November). *Self-regulation and its impact in and out of the classroom* [Presentation]. Self-Regulation Seminar: Cerebrum. Puerto Varas, Chile. [\[link\]](#)
- Lira, B.** (2016, September). *Educational neuromyths in Latin America* [Conference Session]. Fifth Peruvian Society for Educational Research Conference (SIEP) Seminar. Ayacucho, Peru. [\[link\]](#)
- Lira, B.** (2016, September). *The importance of cognitive regulation in the classroom* [Presentation]. Self-regulation Seminar: Cerebrum. Medellin, Colombia. [\[link\]](#)
- Lira, B.** (2015, March). *Neurodiversity and Inclusion in Education* [Panel participant]. International Seminar on Neurodiversity: Cerebrum. Lima, Peru. [\[link\]](#)

Technical Skills

Programming: Qualtrics, R, SPSS, Factor, MPlus, MLWin, Psychopy

Statistical Methods: Exploratory and confirmatory factor analysis, multilevel modelling, structural equation modelling, cluster analysis, polynomial regression with response surface analysis (RSA), nonparametric regression methods including logistic, poisson, and negative binomial regression, and machine learning methods including tress, random forests, penalized regression, boosting, support vector machines, deep learning, neural networks, autoencoders, generalized mixture models, k-means, reinforcement learning, text modelling (transformers, LDA, naïve bayes).

Work Experience

- 2020 – **Visiting scholar**, Duckworth Lab, University of Pennsylvania
Duckworth Lab, PI: Angela Duckworth
- Participated in all aspects of the research process: conceptualization, data collection, data analysis, writing, submission and revision.
 - Mentored an undergraduate researcher and a group of high-school interns.
 - Designed activities for an undergraduate course on motivation.
 - Designed and taught a series of lessons on statistical analysis using R.
- 2016 – 2020 **Research assistant**, Pontificia Universidad Católica del Perú
Motivation and Emotion Research Group. Projects:
- Basic psychological needs and poverty
 - Maternal autonomy support
 - Basic psychological need support and thwarting and engagement in school and university
 - Autonomy support intervention program
 - Need support and thwarting in competitive sports
- 2015 – 2017 **Lead research analyst**, Cerebrum
- Was responsible for research and intervention programs.
 - Taught and supervised graduate students' theses.
 - Wrote articles for the education community.
 - Participated in conferences.
 - Developed content for graduate courses in educational neuroscience.
- 2016 **Statistical consultant**, EVACP Consulting
- Carried out psychometric and statistical analysis for a social program impact evaluation for the Peace Corps in Peru.
- 2015 – **Thesis advisor**
- Coached and supported +30 undergraduate and graduate students from Universidad de Lima, Pontificia Universidad Católica del Perú, Universidad Peruana de Ciencias Aplicadas in multiple stages of their thesis projects.
- 2014 – 2015 **Research and educational psychology intern**, Cerebrum
- Created an intervention program for the development of self-regulation and executive function and designed a tool to evaluate its impact.
 - Developed content for graduate courses in educational neuroscience.
- 2013 **Assistant to Ricardo Braun Ph.D.**, Universidad de Lima
- Edited and reviewed a book manuscript about the philosophy of the mind.

2012

Assistant to Sandra Inurritegui Ph.D., Universidad de Lima

- Designed the methodology, developed experiments, and coordinated school logistics.

Languages

Spanish: Native

English: Advanced

German: Basic

Additional Education

Foundations of Data Analysis – Part I. University of Texas at Austin. MOOC.

The Analytics Edge. MITx. MOOC.

Quantitative Biology Workshop. MITx. MOOC

Additional Projects

- [#Investigatips](#). Video library explaining research methods and statistics. +55K video views. (In Spanish)
- Statistics for Psychologists with R. A series of self-guided tutorials and practice sets exploring common data manipulation, visualization, and analysis tasks in R. Collaboration with Chayce Baldwin
- [R Package](#). Custom functions for ordinal alpha, Mahalanobis outlier detection, discriminant validity analysis, and data simulation.
- [Natural Language Processing Tools](#). Custom R and Python functions and tutorials for Natural Language Processing in the Social Sciences.
- R Programming. [Web application](#) to predict grape harvest dates and volumes based on weather and agricultural data.

Community Service

- Volunteer for the program Un Techo Para Mi País, building houses after the Chíncha 2007 earthquake. Constructed 5 houses for the benefit of 5 families.
- Volunteer for CPDI, a malnutrition prevention center in Pamplona. Worked with the community to generate appropriate strategies to promote healthy eating habits.
- One hundred and fifty hours of service in the IB-CAS program: building homes, tutoring children, among other service labors.
- Volunteer for the Peruvian Ministry of Education. Conducted interviews with teachers and principals regarding the effectiveness of feedback received by schools after the Census Student Evaluation.

Organizational Involvement

Member of Colegio de Psicólogos del Perú (National Association of Psychologists of Peru). CPsP. 31816

Test Scores

Graduate Records Examination (GRE) – Nov 14, 2019.

Verbal: 169 (99th Pc.), Quantitative: 166 (89th Pc.), Analytical Writing: 5.5 (98th Pc.)

Test of English as a Second Language (TOEFL): 119/120 – Sept 28, 2019.

Writing: 30, Speaking: 29, Reading: 30, Listening: 30.

References

Angela Duckworth	Professor Psychology	aduckworth@characterlab.org
Lyle Ungar	Ph.D. in Psychology	lmatosf@pucp.edu.pe
Sandra Inurritegui.	Ph.D. in Psychology	sinurrit@ulima.edu.pe
Dora Herrera	Ph.D. in Psychology	dierrer@pucp.edu.pe