Will Gemini Make Us Stupid?

Benjamin Lira[a,1]

[a]University of Pennsylvania

Generative AI (GenAI) applications—especially those based around large language models like Gemini and ChatGPT—are now ubiquitous, and their adoption rate is increasing. They are potentially the most powerful piece of technology ever developed, matching or surpassing human performance in many complex tasks. As AI becomes embedded in our email clients, word processors, and smartphones, it becomes critically important to understand its effects on how we think. I plan to delineate how AI influences our cognitive processing, specifically by encouraging System 1 thinking, which is fast, associative, automatic, and fluent, vs. System 2 thinking, which is slower, resource-intensive, and deliberative. I propose a series of experiments in which participants are randomly assigned to engage with an AI-chatbot or traditional web search in a research task, and evaluate the resulting changes in cognition during the task. This research will (1) establish whether the ease of processing AI responses prompts System 1 thinking, or if, alternatively, these interactions free up cognitive resources, allowing for increased System 2 processing; (2) identify the key mediators that drive this effect; and (3) develop manipulations, targeting user interaction and/or interface design, that encourage more vs. less System 2 thinking when engaging with AI. This research elucidate how AI interactions shape our thinking, which will enable better alignment between AI systems and users.

Fifteen years ago, The Atlantic published an essay that went viral. It was titled "Is Google making us stupid?", and it argued that the convenience of internet search was reducing people's capacity for deep, critical thinking. It is clear that search engines did not spell the end of complex human thought, but rather made information more easily accessible. The rise of generative artificial intelligence raises the question: "Is *generative AI* making us stupid?"

Without doubt, interacting with digital technologies can shape how we think. Students randomly assigned to take notes on laptops performed worse on conceptual questions than students who took notes longhand [1]. Similarly, the use of search engines has been shown to influence memory processes, for example, even when directed to remember facts, we are more likely to forget them if we know they will be accessible in a computer; and may better remember where to access information rather than the information itself [2].With long term use, technological tools can shape our brains. For example, taxi drivers in London, who must complete an exam without the aid of GPS, had significant posterior hippocampi relative to control subjects [3,4].

Generative AI tools—programs capable of generating seemingly new, meaningful content such as text, images, or audio [5]—have been shown to increase worker productivity, [6–8] but research remains silent on the psychological mechanisms behind these changes in performance. Studies have sampled different kinds of work tasks, such as writing, [6] customer support, [7] and consulting-related tasks like idea generation and product innovation [8]. In studies where tasks were simpler (e.g., customer support calls [7]) using generative AI improves performance—especially for users at the bottom of the performance distribution. In more complex tasks, however AI use led to higher error rates [8]. Similarly, an analysis of 150 million lines of code, shows that since the inception of AI coding assistants, written code is more likely to be repeated, violating principles of code maintainability [9].

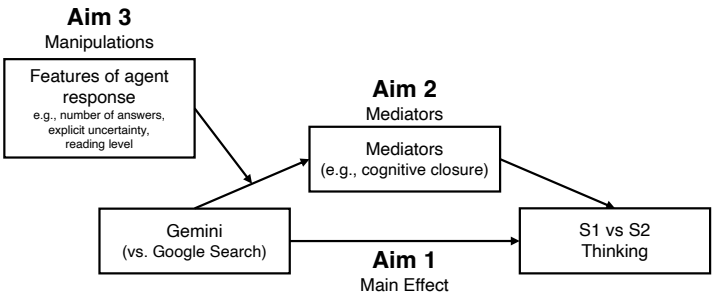


Fig. 1. Specific aims

Dual-process theories of reasoning [10–12] provide a useful framework for analyzing the effects of generative AI on human cognition. These models posit that the mind has two ways of processing information. System 1, characterized by associative pattern matching, is fast, effortless, and intuitive, underpinning our unconscious, automatic processes. In contrast, System 2 is deliberative, embodying our conscious, slow, and effortful cognitive activities that are more critical and reflective in nature. While there is debate regarding the details and the validity of this approach, [13–16] it is undeniable that when encountering problems we sometimes think deeply, and sometimes do not.

What determines whether System two will become engaged? One contemporary model [17] posits that when encountering a problem, System 1 will produce intuitions and monitor the amount of uncertainty, given the (potentially contradictory) intuitions. System 2 becomes activated when uncertainty exceeds a certain threshold. It will then engage in deliberative processing. The results of these processing will feed back into System 1, making some intuitions more active and others less so, which will change the level of uncertainty in turn. If uncertainty never passes the threshold, an intuitive response will be effected, if System 2 processing reduces uncertainty, then a more deliberative response will be effected.

While more deliberation may seem like desired outcome, there are many times when System 1 yields correct answers more efficiently than System 2. Take for instance chess masters, who are able to intuit the right move, even though they have no better general working memory and search for plays no more extensively than novices [18]. Despite this, there are plenty of times when over-relying on intuitions lead us astray, and more thinking would produce better results. For instance, if a decision is important, there is time available for deliberation, and we are would not be better off outsourcing the task to another person, then more deliberation is likely going to produce better results.

How might interactions with AI influence the way we think? On one hand, interactions with AI may allow us to engage more in System 2 deliberative thinking. By reducing cognitive load, and thereby freeing up cognitive resources, users can then allocate mental energy to more critical and reflective System 2 processing. There is evidence that people are able to more effectively engage in System 2 thinking when cognitive load is reduced [19]. Likewise, individuals with higher cognitive ability, are also more effective in using System 2 [20].

On the other hand, AI produces responses that are complete and easy to process. This fluency may lead to a greater subjective feelings of certainty (i.e, higher *feelings of rightness* [21,22]), which

[1]To whom correspondence should be addressed. E-mail: blira@sas.upenn.edu

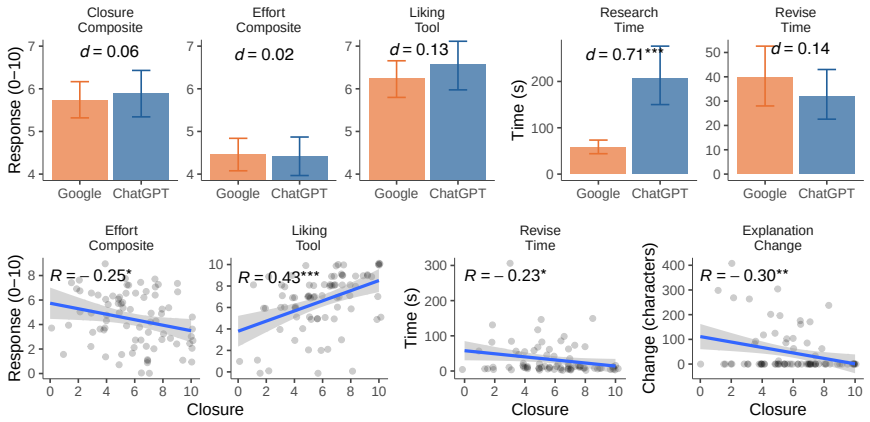


Fig. 2. Differences in user perceptions and engagement time of Google Search vs. Chatbot users in a judgment task. Correlations between closure and liking and effort metrics.

function as a metacognitive signal that no more thinking is necessary, and thus might reduce the amount of System 2 thinking. Past research suggests that the more some content is more easily processed, we are more likely to engage in shallower processing and to unquestioningly accept that content as true—a phenomenon known as fluency bias[23,24]. Thus, I predict that AI interactions will prompt more System 1 processing. The apparent contradiction in the role of cognitive load is resolved by the fact that reducing cognitive load is only helpful when what is being eliminated is not directly related with the task at hand (i.e., extraneous cognitive load[25]). When cognitive load is related to the main task (rather than a distractor task), higher amounts of cognitive load (i.e., deeper processing) often leads to increased performance,[23] even if we misperceive this effort as poor learning[26].

I propose a series of experiments to clarify how using generative AI prompts System 1 vs. System 2 thinking, relative to other kinds of interactions, such as traditional web search. I plan to shed light on the mechanisms by which generative AI changes the way we think, and the downstream consequences of these shifts on users' persuasiveness. I will then design interventions to help users engage with GenAI in ways that lead to faster System 1 thinking, or more careful System 2 thinking when appropriate. This research will uncover the cognitive consequences of our evolving AI landscape, and inform efforts at alignment of AI technologies with users most valued goals.

1. Specific Aims

As shown in **Figure 1,** This proposal has three main objectives.

Aim 1: How does GenAI change thinking? (Main effect). I will conduct a series of experiments to evaluate the degree to which engaging with GenAI (as opposed to traditional web search) for a research task results in increased automatic thinking.

Aim 2: What the mechanisms by which this happens? (Mediators). Once the main effect is established, a second set of experiments will tease out the characteristics of the AI interaction which drive the effect observed in Aim 1.

Aim 3: What manipulations can promote deliberation? (Manipulations). Finally, I will test whether manipulating the identified mediators with manipulations targeting both user behavior and interface design can result in more deliberative thinking.

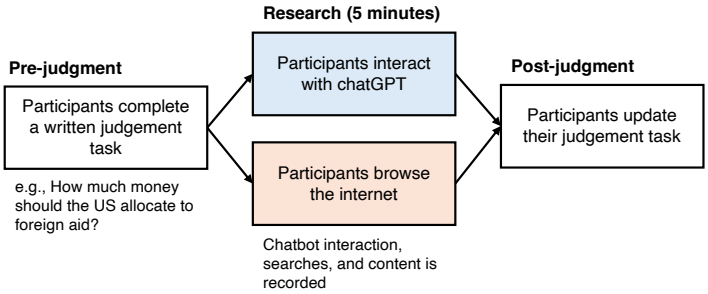


Fig. 3. Experimental task

2. Research Strategy

Pilot Data. As shown in **Figure 2,** preliminary pilot data supports the hypothesis that interacting with AI prompts participants for automatic thinking, consistent with fluency bias[23,24]. In a pilot study of 178 people, I found that participants interacting with AI-chatbot based on GPT-4 as opposed to traditional web search, spent 10 fewer seconds writing their revised response ($d = 0.14$), and reported exerting about the same effort ($d = 0.02$), despite having had done research for about four times as long ($d = 0.71^{***}$). Participants liked using the chatbot for research more than they did Google Search ($d = 0.13$), and they liked chatGPT more when they felt it produced more closure ($r = .43^{***}$). In ChatGPT users, closure, in turn, predicted less self-reported effort ($r = -.25^{*}$), less revision time ($r = -.23^{*}$), and smaller changes to their answers ($r = -.30^{**}$).

Aim 1: Main effect. To establish whether interacting with GenAI prompts automatic (System 1) or deliberative (System 2) thinking, I will conduct an experiment where participants will be assigned to complete a task using either traditional web search (e.g., Google), or a GenAI chatbot.

Our basic task procedure is shown in **Figure 3.** Participants will be asked to write a paragraph on a topic for which they might have strong priors (e.g., how much money should the U.S. allocate for foreign aid) but could benefit from learning additional information. They will then be randomized to learn more about the topic, either by using Google, or by interacting with an AI-chatbot. I will fully record their interactions with Google and the AI-chatbot. After up to 15 minutes, participants will be asked to re-write their views in the topic.

I will assess the extent of System 1 thinking by analyzing participants' perceived effort and confidence in their response, as well as

the time spent researching and writing, and the amount of work they produced. I will also use natural language processing and human raters to evaluate the quality, complexity, independence, and persuasiveness of the writing. I also introduce an incentivized behavioral outcome where naive participants produce allocations which they can later adjust based on the user's response. Additionally, I will assess the degree of effortful cognitive processing via pupillometry at the Wharton Behavioral Lab. I intend to use stimulus sampling[27] to make sure that results are not unique to a particular judgment task. See **Table 1** for a potential list of tasks, spanning judgment, decision, and forecasts.

Task Type	Example Tasks
Judgment	How much money do you think the US should allocate for aid?
Forecast	How likely is it that the Russia-Ukraine conflict ends within the next year?
Decision	If you were buying a car, would you buy a Toyota Corolla or a Ford Focus?

Table 1. Proposed judgement, forecasting, and decision tasks

To adequately power studies, I am working under the assumption that differences would be in the range of $.10 < d < .20$, which implies a sample size of between 395 and 1570 participants in each condition to achieve power of 0.80.

Aim 2: Mediators. The goal of Aim 2 is to pinpoint the specific characteristics of AI interactions that mediate the cognitive shift towards the hypothesized increase in System 1 thinking, as observed in Aim 1. I predict that processing AI responses will be less cognitively demanding than integrating information obtained through google search. This will trigger feelings of fluency and cognitive closure,[21] which will then explain the observed changes in cognitive style.

I will extend the methodology outlined in Aim 1, to measure these mediators by analyzing the content users engaged with in two ways.

1. **User Perceptions.** Users will report how they perceived their interaction with the AI and the search websites.

2. **Natural Language Processing.** I will use natural language processing to identify the stylistic features of AI responses that explain reduced deliberation.

The findings from this aim will provide crucial insights into how AI can be designed and used in a manner that promotes more deliberate cognitive processing. This understanding will be instrumental in developing manipulations (as outlined in Aim 3) to promote System 2 thinking when engaging with AI.

Aim 3: Manipulations. In the third phase of my research, I plan to develop dual-faceted manipulations aimed at increasing deliberative engagement with AI by targeting the mediators identified during Aim 2. These interventions will target interface design, as well as user interaction.

1. **Interface design.** I plan to modifying the AI-chatbot interfaces to foster more reflective and analytical engagement. By manipulating prompts and features of the user interface, I plan to reduce feelings of fluency and confidence.

2. **User interaction.** I plan to provide users with strategies to encourage more System 2 thinking while interacting with AI. These interventions will put users in a more deliberative mindset that will counteract automatic thinking.

A 2×2 factorial design will allow me to compare the effectiveness of strategies aimed at users as well as the interface design. I predict that interventions aimed at the interface will be more effective, and will be perceived as less intrusive by users. This line of work will be useful for designers building AI applications for situations where more deliberation is effective.

3. Conclusion

The proposed research will shed light on how the rapidly changing capabilities of generative artificial intelligence will shape our minds. From a **theoretical perspective,** it will elucidate some mechanisms that—with or without AI— prompt more automatic vs. more deliberative thinking. Additionally, it will inform on the cognitive mechanisms behind the mixed effects of AI-augmentation on workplace performance[6–8]. In more **practical terms,** my findings will inform the design of AI systems that better aligns to our goals and values.

If this proposal is successful, it would open new avenues for research. Specifically:

Short-term spillover effects. First, future research should address whether cognitive changes persist on an unrelated task after the AI interaction is over.

Long-term effects on cognitive style. Second, future research should address whether continued interaction with AI produces more enduring changes in cognitive style and learning motivation.

Generalizability. Third, this proposal focuses on a small number of tasks and compares chatbots to a single other information-seeking behavior. Future research should compare AI to other ways in which people get information, such as social media, or face-to-face human interaction. Likewise, future research should explore whether effects generalize over a wider range of tasks. Finally, while I focus on chatbots as the interface, future research should explore other alternatives such as autocomplete, email, and word processors.

Developmental impacts. I focus on the effects on adults who are transitioning to an AI world. Future research should address the effects of AI interactions in development, in particular as it relates to the development of cognitive skills that might be replaced by large language models.

Artificial intelligence will no doubt have a significant impact on human thinking. The goal of my research is to begin to understand this unexplored phenomenon. Specifically, this research will illuminate the nuances of how engagement with AI can steer our thinking towards more automatic or deliberative processes. As AI continues to permeate various facets of human life, understanding its cognitive implications is paramount. My hope is that findings from this work will help align the evolution of artificial intelligence with the enhancement of the cognitive abilities that make us human, rather than inadvertently reducing them.

4. References

1. PA Mueller, DM Oppenheimer, The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychol. Sci.* (2014).
2. B Sparrow, J Liu, DM Wegner, Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips. *Science* **333**, 776–778 (2011).
3. EA Maguire, et al., Navigation-related structural change in the hippocampi of taxi drivers. *Proc. Natl. Acad. Sci.* **97**, 4398–4403 (2000).
4. EM Griesbauer, E Manley, JM Wiener, HJ Spiers, London taxi drivers: A review of neurocognitive studies and an exploration of how they build their cognitive map of london. *Hippocampus* **32**, 3–20 (2022).
5. S Feuerriegel, J Hartmann, C Janiesch, P Zschech, Generative ai. *Bus. & Inf. Syst. Eng.* **66**, 111–126 (2024).
6. S Noy, W Zhang, Experimental evidence on the productivity effects of generative artificial intelligence. (2023).
7. E Brynjolfsson, D Li, LR Raymond, Generative AI at work. *NBER Work. Pap. Ser.* **Working Paper 31161** (2023).
8. F Dell'Acqua, et al., Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality. *SSRN Electron. J.* (2023).
9. W Harding, M Kloster, Coding on Copilot: 2023 Data Shows Downward Pressure on Code Quality, Technical report (2024).
10. D Kahneman, *Thinking, Fast and Slow.* (Penguin Books), (2011).
11. P Wason, J.St.B.T Evans, Dual processes in reasoning? *Cognition* **3**, 141–154 (1974).
12. JSBT Evans, Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition. *Annu. Rev. Psychol.* **59**, 255–278 (2008).
13. W De Neys, On Dual- and Single-Process Models of Thinking. *Perspectives on Psychol. Sci.* **16**, 1412–1427 (2021).
14. DE Melnikoff, JA Bargh, The Mythical Number Two. *Trends Cogn. Sci.* **22**, 280–293 (2018).
15. G Keren, Y Schul, *Two Is Not Always Better than One: A Critical Evaluation of Two-System Theories.* Vol. 4, (2009).
16. G Keren, A Tale of Two Systems: A Scientific Advance or a Theoretical Stone Soup? Commentary on Evans & Stanovich (2013). *Perspectives on Psychol. Sci.* **8**, 257–262 (2013).
17. W De Neys, Advancing theorizing about fast-and-slow thinking. *Behav. Brain Sci.* **46**, e111 (2023).
18. WG Chase, HA Simon, Perception in chess. *Cogn. Psychol.* **4**, 55–81 (1973).
19. ED Johnson, E Tubau, W De Neys, The unbearable burden of executive load on cognitive reflection: A validation of dual process theory. (2014).
20. KE Stanovich, RF West, Advancing the rationality debate. *Behav. Brain Sci.* **23**, 701–717 (2000).
21. VA Thompson, JA Prowse Turner, G Pennycook, Intuition, reason, and metacognition. *Cogn. Psychol.* **63**, 107–140 (2011).
22. VA Thompson, SC Johnson, Conflict, metacognition, and analytic thinking. *Think. & Reason.* **20**, 215–244 (2014).
23. DM Oppenheimer, The secret life of fluency. *Trends Cogn. Sci.* **12**, 237–241 (2008).
24. AL Alter, DM Oppenheimer, Uniting the Tribes of Fluency to Form a Metacognitive Nation. *Pers. Soc. Psychol. Rev.* **13**, 219–235 (2009).
25. J Sweller, Cognitive Load Theory in *Psychology of Learning and Motivation.* (Elsevier) Vol. 55, pp. 37–76 (2011).
26. A Kirk-Johnson, BM Galla, SH Fraundorf, Perceiving effort as poor learning: The misinterpreted-effort hypothesis of how experienced effort and perceived learning relate to study strategy choice. *Cogn. Psychol.* **115**, 101237 (2019/12/01/).
27. GL Wells, PD Windschitl, Stimulus sampling and social psychological experimentation. *Pers. Soc. Psychol. Bull.* **25**, 1115–1125 (1999).

5. Will Gemini Make Us Stupid? - 1000 Character Abstract

Generative AI (GenAI) applications based on large language models like Gemini are now ubiquitous. As AI becomes embedded in our email clients, word processors, and smartphones, it becomes crucial to understand how it influences how we think. I propose a series of experiments where participants are assigned to do research with an AI-Chatbot or traditional web search to explore how AI influences System 1 thinking, which is fast, associative, and automatic, vs. System 2 thinking, which is slower, resource-intensive, and deliberative. I plan to (1) establish whether the ease with which AI responses are processed prompts System 1 thinking, or whether the reduced cognitive load allows for increased System 2 processing; (2) identify the key mediators that drive this effect; and (3) develop interventions—targeting user interaction and interface design—that encourage more System 2 thinking. This research is pivotal for optimizing AI design to enhance user cognition and decision-making.

6. Describe the desired impact your research will make on the field and society, and why this is important to you. Include any personal, educational and/or professional experiences that have motivated your research interests.

I was already a grownup when smartphones and social media came along. I remember how exciting it felt to be in touch with friends and family members who lived many miles away. Today, this early excitement has given way to concern. I am constantly distracted by my phone. Social media drives political polarization around the world. Young people, especially girls, face mental health issues. A lively conversation after dinner is often replaced with sitting side-by-side staring into our phones and ignoring each other.

As we integrate ever more powerful generative AI (GenAI) into our daily lives, the lessons learned from past innovations weigh heavily on my mind. I often find myself chatting with GenAI models for leisure and work. Many of these interactions are fulfilling. I get to solve pressing problems much quicker and learn in the process much faster than I otherwise would. Sometimes, however, I find myself interacting with AI passively. Over relying on it to tell me what to think or write, and thoughtlessly accepting its first suggestion.

The way we think and behave is heavily dependent on the structure of our environments. This means that the way in which we design and engage with AI will determine whether it elevates the very capacities for thought and engagement that make us human, or whether it replaces them.

My desire is that my research will guide GenAI designers and users towards enriching human capabilities rather than inadvertently diminishing them. By understanding the mechanisms of how AI systems shape the way we think, we will be able to design interventions that help GenAI surface the best of us. My hope is that this knowledge will help steer our developing AI landscape closer to one where we can do more rather than less, think deep rather than shallow, and enhance the capabilities that make us human rather than mindlessly outsourcing them.

7. Describe an example of your leadership experience in which you have positively influenced others, helped resolve disputes or contributed to group efforts over time. (A leadership role can mean more than just a title. It can mean being a mentor to others, acting as the person in charge of a specific task, or taking the lead role in organizing an event or project. Think about what you accomplished and what you learned from the experience. What were your responsibilities? Did you lead a team? How did your experience change your perspective on leading others? Did you help to resolve an important dispute at your school, church, in your community or an organization? And your leadership role doesn't necessarily have to be limited to school activities. For example, do you help out or take care of your family?).

In many ways, I am now right where I was supposed to end up. And yet, without a fair bit of luck, I would not be. Very few graduates of Peruvian universities are admitted to PhD programs at world class institutions. Language and culture aside, Peruvian scholars who dream of becoming scientists at the cutting edge don't have access to meaningful research experiences, and local universities lack the Ivy League pedigree.

I now have mentorship, resources, and opportunities beyond the wildest dreams of my younger self. I feel beholden to help those who—in one way or another—look like an earlier version of myself. My hope is that they too will crack into an environment where their talents can be expressed. I have taken opportunities to advance this goal with undergraduate researchers and students navigating the graduate admission process, both from Peru and the US.

I have been lucky to work closely with undergraduate students exploring what psychological research looks like. At first, I was tempted to intervene too much, too soon. I quickly realized that my role was to make suggestions, provide feedback, and some support.

Likewise, I've been enriched by learning from PhD applicants. Providing feedback on their research statements and conducting mock interviews with them has allowed them to expand my own views. My questioning and probing have allowed them to refine their research programs.

It's easy to think that leadership is only about propelling a project forward by telling people what needs to be done. These experiences have taught me that leadership is often much more about listening, empathy, and connecting meaningfully with others. I am only powerful to help others when I listen to them, ask questions rather than give answers, and help others untangle their thoughts on their own.

I certainly put in a lot of effort and perseverance in getting to where I am. I was also extremely lucky. I hope I can contribute a little so that others from backgrounds like mine, might rely a little less on luck and more on a supportive community that I strive to nurture.

8. Student CV and Supervisor CV (1 page)

See attached.

9. Transcripts

See attached.

Benjamin Lira Luttges

Duckworth Lab
University of Pennsylvania
3720 Walnut St., Philadelphia, PA.

blira@sas.upenn.com
+1 813 362 0500

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 funcitons 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 Chincha 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	diherrer@pucp.edu.pe

Angela L. Duckworth

Education

UNIVERSITY OF PENNSYLVANIA (2002–2006)
MA, PhD in Psychology
UNIVERSITY OF OXFORD (1994–1996)
MSc with Distinction in Neuroscience
HARVARD COLLEGE (1988–1992)
AB *magna cum laude* in Advanced Studies Neurobiology

Current Positions

Rosa Lee and Egbert Chang Professor, University of Pennsylvania (2020–current)
Character Lab Co-Founder, Chief Scientist, and Board Member (2015–current)

Selected Publications

Lira, B., Gardner, M., Quirk, A., Stone, C., Rao, A., Ungar, L., ... & Duckworth, A. L. (2023). Using artificial intelligence to assess personal qualities in college admissions. *Science Advances*, *9*(41), eadg9405.

Buyalskaya, A., Ho, H., Milkman, K. L., Li, X., Duckworth, A. L., & Camerer, C. (2023). What can machine learning teach us about habit formation? Evidence from exercise and hygiene. *Proceedings of the National Academy of Sciences*, *120*(17), e2216115120.

Lira, B., O'Brien, J. M., 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,* 19189.

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.*

Milkman, K. L., Gromet, D., Ho, H., Kay, J. S., Lee, T. W., Pandiloski, P., Park, Y., Rai, A., Bazerman, M., Beshears, J., Bonacorsi, L., Camerer, C., Chang, E., Chapman, G., Cialdini, R., Dai, H., Eskreis-Winkler, L., Fishbach, A., Gross, J. J., . . . Duckworth, A. L. (2021). Megastudies improve the impact of applied behavioural science. *Nature, 600,* 478–483.

Duckworth, A. L., & Gross, J. J. (2020). Behavior change. *Organizational Behavior and Human Decision Processes, 161,* 39-49.

Duckworth, A. L. (2019). Using psychological science to help children thrive. *Perspectives on Psychological Science*, *14*(1), 34-36.

Duckworth, A. L., Milkman, K. L., & Laibson, D. (2019). Beyond willpower: Strategies for reducing failures of self-control. *Psychological Science in the Public Interest, 19*(3), 102-129.

Duckworth, A. L., Quirk, A., Gallop, R., Hoyle, R. H., Kelly, D. R., & Matthews, M. D. (2019). Cognitive and noncognitive predictors of success. *Proceedings of the National Academy of Sciences*, *116*(47), 23499-23504.

Duckworth, A. L., Taxer, J., Eskreis-Winkler, L., Galla, B. M., & Gross, J. J. (2019). Self-control and academic achievement. *Annual Review of Psychology, 70,* 373-399.

Eskreis-Winkler, L., Milkman, K. L., Gromet, D. M., & Duckworth, A. L. (2019). A large-scale field experiment shows giving advice improves academic outcomes for the advisor. *Proceedings of the National Academy of Sciences*, *116*(30), 14808-14810.

Duckworth, A. L., Gendler, T. S., & Gross, J. J. (2016). Situational strategies for self-control. *Perspectives on Psychological Science*, *11*(1)*,* 35–55.

Duckworth, A. L., & Yeager, D. S. (2015). Measurement matters: Assessing personal qualities other than cognitive ability for educational purposes. *Educational Researcher, 44*(4), 237–251.

Duckworth, A. L., Gendler, T. S., & Gross, J. J. (2014). Self-control in school-age children. *Educational Psychologist*, *49*(3), 199–217.

Eisenberg, N., Duckworth, A. L., Spinrad, T. L., & Valiente, C. (2014). Conscientiousness: Origins in childhood? *Developmental Psychology, 50*(5), 1331–1349.

Duckworth, A. L., Kim, B., & Tsukayama, E. (2013). Life stress impairs self-control in early adolescence. *Frontiers in Psychology, 3*(608), 1–12.

Duckworth, A. L., Quinn, P. D., Lynam, D. R., Loeber, R., & Stouthamer-Loeber, M. (2011). Role of test motivation in intelligence testing. *Proceedings of the National Academy of Sciences*, *108*(19), 7716–7720.

Borghans, L., Duckworth, A. L., Heckman, J. J., & ter Weel, B. (2008). The economics and psychology of personality traits. *Journal of Human Resources, 43*(4), 972–1059.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology, 92*(6), 1087–1101.

Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ predicting academic performance in adolescents. *Psychological Science, 16*(12), 939–944.

Record of: Benjamin Lira Luttges
Penn ID: 38161334
Date of Birth: 01-FEB
Date Issued: 04-MAR-2024

U N O F F I C I A L Page: 1

The University of Pennsylvania

Level:Graduate/Research

Primary Program
Program: Graduate School of Arts & Sciences Doctor of Philosophy
Division : School of Arts & Sciences - Graduate Division
Major : Psychology

Secondary Program(s)
Program : Master of Arts
Division : School of Arts & Sciences - Graduate Division
Major : Psychology

Degree(s) Awarded Master of Arts 21-DEC-2023
Program : Master of Arts
Division : School of Arts & Sciences - Graduate Division
Major : Psychology

SUBJ	NO.	COURSE TITLE	CU	GRD	R
INSTITUTION CREDIT:					
Fall 2021					
CIS	520	Machine Learning	1.00	A	
OIDD	937	Methods Stumblers	0.50	A	
PSYC	600	Proseminar in Psych: Social Emotional Develop	0.50	A	
PSYC	600	Proseminar in Psych: Cognitive Neuroscience	0.50	A	
PSYC	699	Indiv Res for 1st Yr Grd	1.50	A+	
Ehrs: 4.00 GPA-Hrs: 4.00 QPts: 16.00 GPA: 4.00					
Spring 2022					
OIDD	941	Dist System Sem: Topics in Bandits, Rl & Transfer Learning	0.50	A+	
PSYC	600	Proseminar in Psych: Language	0.50	A	

********** CONTINUED ON NEXT COLUMN **********

SUBJ	NO.	COURSE TITLE	CU	GRD	R
Institution Information continued:					
PSYC	600	Proseminar in Psych: Neuroendocrinology	0.50	A	
PSYC	699	Indiv Res for 1st Yr Grd	1.50	A+	
Ehrs: 3.00 GPA-Hrs: 3.00 QPts: 12.00 GPA: 4.00					
Fall 2022					
EDUC	7847	Social and Statistical Network Analysis	1.00	A+	
PSYC	6000	Social Psychology	0.50	A+	I
PSYC	6000	Judgment & Decisions	0.50	A+	I
PSYC	9999	Individual Study and Research	1.00	A	I
Ehrs: 3.00 GPA-Hrs: 3.00 QPts: 12.00 GPA: 4.00					
Spring 2023					
PSYC	9999	Individual Study and Research	4.00	A+	I
Ehrs: 4.00 GPA-Hrs: 4.00 QPts: 16.00 GPA: 4.00					
Fall 2023					
PSYC	9999	Individual Study and Research	3.00	A+	I
Ehrs: 3.00 GPA-Hrs: 3.00 QPts: 12.00 GPA: 4.00					
Spring 2024					
PSYC	9999	Individual Study and Research	3.00	IN PROGRESS	
In Progress Credits 3.00					

********** CONTINUED ON PAGE 2 **********

Record of: Benjamin Lira Luttges
Penn ID: 38161334
Date of Birth: 01-FEB
Date Issued: 04-MAR-2024

Level:Graduate/Research

********** TRANSCRIPT TOTALS **********

	Earned Hrs	GPA Hrs	Points	GPA
TOTAL INSTITUTION	17.00	17.00	68.00	4.00
TOTAL TRANSFER	0.00			
OVERALL	17.00	17.00	68.00	4.00

********** END OF TRANSCRIPT **********

0440568

14.02.2014 15:32

KU LEUVEN

FACULTY OF PSYCHOLOGY AND
EDUCATIONAL SCIENCES
DEKENSTRAAT 2 - box 3701
3000 LEUVEN

339

Mr. Benjamin Lira Luttges
Surco
Lima
Las Cantutas 301 Ap 601
L33 LIMA
PERU

TRANSCRIPT

Programme : Programme for Exchange Students Faculty Psychology and Educational Sciences (Leuven)

Course Units		Credits	Grade		
Current academic year 2013-2014					
1S-H02A0C	Fundamentals of Artificial Intelligence	5	C	18	13-14/jan
1S-H02B2A	Cognitive Science	4	C	17	13-14/jan
1S-P0P24B	Philosophy of Education	5	C	18	13-14/jan
1S-P0P25C	Education in Relation to Society and Culture	5	C	18	13-14/jan
1S-P0P33A	Educational Policy	5	C	18	13-14/jan
1S-P0P34A	Educational Effectiveness	5	C	17	13-14/jan

Overall result : Establish results

Date of issue of results : 13.02.2014

secretary,

Prof. dr. Walter Schaeken

chair,

Prof. dr. Jan Elen

International Students Office
Faculty of Psychology
and Educational Sciences
Katholieke Universiteit Leuven
Dekenstraat 2 box 3702
3000 LEUVEN (Belgium)

Exam results are graded on a scale of 20. However in some cases the student may receive a code G to indicate that he/she has passed a part of the course for which there is no numerical grading. A code C indicates that a student has passed that course. A code T indicates that whereas a student has not passed that course he/she has still passed the year or programmae as a whole. A code V indicates that the student is exempted from that course. A code NA indicates that either the student did not sit the exam or did not complete the course. A code FR indicates that the student has been found to have cheated. A code NVT indicates that the course is no longer relevant for this student. A code GR indicates that there is no result yet for this course, but that a result is expected later on.

This report on your marks is provided purely as an extra service. In no way does it replace the study progress dossier that can be found on KU Loket, the only official source through which results and procedures of appeal are communicated.

1S = 1st Semester - 2S = 2nd Semester - AY = Academic Year

ECTS – European Credit Transfer System

KU LEUVEN Grading System

Duration of course unit:

AY = full academic year
1S = 1 semester during 1st semester
2S = 1 semester during 2nd semester

Description of the institutional grading system:

Individual grades are reported to the students on a scale ranging from 0 to 20.

ECTS credits for a given course are awarded (C) if a student gets a grade of 10 out of 20 (or higher). NA = Not Attended.

For students who pass the examinations, the grades have the following meaning:

- 10 or 11: sufficient;
- 12 or 13: satisfactory;
- 14 or 15: good;
- 16 or 17: very good;
- and 18 or more: excellent

ECTS grading scale:

ECTS grade	% of successful students normally achieving the grade	Definition
A	10	EXCELLENT - outstanding performance with only minor errors
B	25	VERY GOOD - above the average standard but with some errors
C	30	GOOD - generally sound work with a number of notable errors
D	25	SATISFACTORY - fair but with significant shortcomings
E	10	SUFFICIENT - performance meets the minimum criteria
FX	–	FAIL - some more required before the credit can be awarded
F	–	FAIL - considerable further work is required

http://www.kuleuven.be/education/ects/positioning/faculties/ppw.html

ICPNA
Instituto Cultural
Peruano Norteamericano

icpna.edu.pe
informes@icpna.edu.pe
(511) 706 7000

Oficina Central
Av. Angamos Oeste 120, Miraflores
Apartado 0784 - Lima 18 - Perú

The undersigned Certified Translator, Member of the Peruvian Association of Professional Licensed Translators (CTP) with No. 0243, is currently working in the ICPNA's Translation and Interpretation Center, and is authorized by the CTP to sign certified translations.

Lima, November 18, 2019

INSTITUTO CULTURAL PERUANO NORTEAMERICANO
CENTRO DE TRADUCCIÓN E INTERPRETACIÓN

Graciela Miranda Ramón
CTP N° 0243

ata
American Translators Association
CORPORATE MEMBER

COLEGIO DE TRADUCTORES DEL PERÚ

Creado por Ley Nº 26684

GRACIELA M. MIRANDA RAMÓN
Certified Translator CTP No. 0243
Spanish – English – German
Calle Maurizio Cassati 115, Dpto. 101 San Borja
Cellphone: 998 948628
E-mail: gramiranda@hotmail.com

CERTIFIED TRANSLATION

CT No. 0653-2019

CERTIFICATE
BENJAMIN LIRA LUTTGES
UNIVERSIDAD DE LIMA

COLEGIO DE TRADUCTORES DEL PERU · CTP · 1996 ·

Graciela Miranda Ramón
CTP Nº 0243

Nº 0372552

Valor 3.50 Soles

VER INDICACIONES AL REVERSO

GRACIELA M. MIRANDA RAMÓN
Certified Translator
CTP No. 0243

CERTIFIED TRANSLATION No. 0653-2019

[Logo]
UNIVERSIDAD DE LIMA [UL]
[UNIVERSITY OF LIMA]
Scientia et Praxis
MCMLXII

[Photograph]

CERTIFICATE

The University Director of Student Services and Registry does hereby certify that

Benjamin LIRA LUTTGES,

with code **20092009**, completed the curriculum of the PSYCHOLOGY degree program in the 2015 April-July academic term. He belongs to the graduating January-July Class of 2015 and ranked first in the Honor List out of 40 alumni.

This certificate is issued at the request of the interested party for the purposes deemed convenient.

Lima, October 14, 2015

[Signed]
University Bureau of Student Services and Registry

[Seal]
University Bureau of Student Services and Registry
UL

Graciela Miranda Ramón
CTP N° 0243

Maurizio Cassati 115, Apt. 101 San Borja
Cellphone: 998 948628
E-mail: gramiranda@hotmail.com

I, the undersigned Certified Translator, Member of the Peruvian Association of Professional Licensed Translators (CTP), do hereby certify that this Certified Translation, consisting of 01 pages, is a true and correct translation into English of the original document in Spanish enclosed herewith, which has been produced before me.

This certification shall be considered an acknowledgment of the accuracy of the translation but no of the authenticity or contents of the document in source language attached hereto.

Signed in Lima, this 18th day of November, 2019

COLEGIO DE TRADUCTORES DEL PERÚ CTP

Graciela Miranda Ramos
CTP N° 0243

ICPNA
Instituto Cultural
Peruano Norteamericano

icpna.edu.pe
informes@icpna.edu.pe
(511) 706 7000

Oficina Central
Av. Angamos Oeste 120 Miraflores
Apartado 0764 – Lima 18 / Perú

The undersigned Certified Translator, Member of the Peruvian Association of Professional Licensed Translators (CTP) with No. 0243, is currently working in the ICPNA's Translation and Interpretation Center, and is authorized by the CTP to sign certified translations.

Lima, November 18, 2019

Carmen Miranda Ramón
CTP N° 0243

ata
American
Translators
Association
CORPORATE MEMBER

CONSTANCIA

El Director Universitario de Servicios Académicos y Registro deja constancia de que

BENJAMIN LIRA LUTTGES

con código **20092009**, completó el plan de estudios de la carrera de PSICOLOGÍA en el período abril-julio del 2015. Pertenece a la promoción enero-julio del 2015 y obtuvo el puesto número 1 en el orden de mérito de un total de 40 egresados.

Se extiende la presente constancia a solicitud del interesado para los fines que considere conveniente.

Lima, 14 de octubre de 2015.

Dirección Universitaria
de Servicios Académicos y Registro

COLEGIO DE TRADUCTORES DEL PERÚ

Creado por Ley Nº 26684

GRACIELA M. MIRANDA RAMÓN
Certified Translator CTP No. 0243
Spanish – English – German
Calle Maurizio Cassati 115, Dpto. 101 San Borja
Cellphone: 998 948628
E-mail: gramiranda@hotmail.com

CERTIFIED TRANSLATION

CT No. 0651-2019

ACADEMIC TRANSCRIPT: GENERAL STUDIES PROGRAM
BENJAMIN LIRA LUTTGES
UNIVERSIDAD DE LIMA

Nº 0372550

Graciela Miranda Ramón
CTP Nº 0243

Valor 3.50 Soles

VER INDICACIONES AL REVERSO

CERTIFIED TRANSLATION No. 0651-2019

No. 0087474

[Logo]
UL
Scientia et Praxis

***UNIVERSIDAD DE LIMA* [UL]**
[UNIVERSITY OF LIMA]
ACADEMIC TRANSCRIPT

[Photograph]

GENERAL STUDIES PROGRAM

The undersigned UL authorities do hereby certify that
Benjamin LIRA LUTTGES, code 20092009
took the courses shown below with the following results:

Code	Course	Credits	Grade	Book	Folio	Term
6325	Foundations of Mathematics	04.0	CVLD. R.D. 2009/345			2009-1
6324	Introduction to University Research	01.0	CVLD. R.D. 2009/345			2009-1
6320	Spanish Language I	04.0	CVLD. R.D. 2009/345			2009-1
6319	Contemporary Universal History	03.0	Seventeen	113	102	2009-1
6321	Introduction to Research	03.0	Eighteen	113	350	2009-1
6322	Foundations of Political Science	02.0	Eighteen	113	472	2009-1
6323	Psychology	03.0	Sixteen	113	588	2009-1
6327	General Economics	03.0	Nineteen	113	844	2009-1
6328	Spanish Language II	03.0	Eighteen	113	926	2009-1
6329	Introduction to Social Science	03.0	Nineteen	113	939	2009-1
6330	History of Contemporary Peru	03.0	Seventeen	114	703	2009-2
6331	Literature	04.0	Eighteen	114	749	2009-2
6332	Philosophy	04.0	Seventeen	114	799	2009-2

AS STATED IN THE BOOKS TO WHICH WE REFER IF NECESSARY.
This transcript records courses with passing grades only. It does not attest to the completion of studies or the attainment of any academic degree or professional title.
Academic performance is graded on a 20-point scale, eleven [11] being the minimum passing grade.
Any amendment or addition voids this transcript.

Lima, June 13, 2018

[Signed]
Bárbara Milagros FARFÁN FIORANI
Secretary General

[Seal]
UL
Lima - Perú
General Secretariat

[Signed]
Alejandro Gustavo LARREA DAVILA
University Director of Student Services and Registry

[Seal]
University Bureau of Student Services and Registry
UL

[Watermark logo]
UL
Scientia et Praxis

I, the undersigned Certified Translator, Member of the Peruvian Association of Professional Licensed Translators (CTP), do hereby certify that this Certified Translation, consisting of 01 page(s), is a true and correct translation into English of the original document in Spanish enclosed herewith, which has been produced before me.

This certification shall be considered an acknowledgment of the accuracy of the translation but no of the authenticity or contents of the document in source language attached hereto.

Signed in Lima, this 18th day of November, 2019

Graciela Miranda Ramos
CTP N° 0243

Nº 0087474

UNIVERSIDAD DE LIMA
CERTIFICADO DE ESTUDIOS

PROGRAMA DE ESTUDIOS GENERALES

Las autoridades de la Universidad de Lima que suscriben, certifican que :
BENJAMIN LIRA LUTTGES, código 20092009,
ha cursado las asignaturas que se indican con los resultados siguientes :

Código	Nombre de Asignatura	Crédito	Calificativo	Tomo	Folio	Ciclo
6325	FUNDAMENTOS DE MATEMÁTICA	04.0	CVLD. R.D.2009/345			2009 - 1
6324	INTRODUCCIÓN AL TRABAJO UNIVERSITARIO	01.0	CVLD. R.D.2009/345			2009 - 1
6320	LENGUAJE I	04.0	CVLD. R.D.2009/345			2009 - 1
6319	HISTORIA UNIVERSAL CONTEMPORÁNEA	03.0	DIECISIETE	113	102	2009 - 1
6321	INTRODUCCIÓN A LA INVESTIGACIÓN	03.0	DIECIOCHO	113	350	2009 - 1
6322	FUNDAMENTOS DE CIENCIA POLÍTICA	02.0	DIECIOCHO	113	472	2009 - 1
6323	PSICOLOGÍA	03.0	DIECISEIS	113	588	2009 - 1
6327	ECONOMÍA GENERAL	03.0	DIECINUEVE	113	844	2009 - 1
6328	LENGUAJE II	03.0	DIECIOCHO	113	926	2009 - 1
6329	INTRODUCCIÓN A LAS CIENCIAS SOCIALES	03.0	DIECINUEVE	113	939	2009 - 1
6330	HISTORIA DEL PERÚ CONTEMPORÁNEO	03.0	DIECISIETE	114	703	2009 - 2
6331	LITERATURA	04.0	DIECIOCHO	114	749	2009 - 2
6332	FILOSOFÍA	04.0	DIECISIETE	114	799	2009 - 2

ASI CONSTA EN LOS LIBROS A LOS QUE NOS REMITIMOS EN CASO NECESARIO.
El presente certificado consigna únicamente las asignaturas aprobadas y no acredita la culminación de estudios o la obtención del grado académico o título profesional.
El rendimiento académico se califica con notas de cero (00) a veinte (20), siendo once (11) la nota mínima aprobatoria.
Cualquier enmendadura o anotación invalida el presente certificado.

Lima, 13 de junio de 2018

UNIVERSIDAD DE LIMA SECRETARIA GENERAL Lima - Perú

BÁRBARA MILAGROS FARFÁN FIORANI
SECRETARÍA GENERAL

Dirección Universitaria de Servicios Académicos y Registro UNIVERSIDAD DE LIMA

ALEJANDRO GUSTAVO LARREA DÁVILA
DIRECCIÓN UNIVERSITARIA DE SERVICIOS ACADÉMICOS Y REGISTRO

ICPNA
Instituto Cultural
Peruano Norteamericano

icpna.edu.pe
informes@icpna.edu.pe
(511) 706 7000

Oficina Central
Av. Angamos Oeste 120 Miraflores
Apartado 0784 - Lima 18 - Perú

The undersigned Certified Translator, Member of the Peruvian Association of Professional Licensed Translators (CTP) with No. 0243, is currently working in the ICPNA's Translation and Interpretation Center, and is authorized by the CTP to sign certified translations.

Lima, November 18, 2019

INSTITUTO CULTURAL PERUANO NORTEAMERICANO
CENTRO DE TRADUCCIÓN E INTERPRETACIÓN

Graciela Miranda Ramón
CTP N° 0243

ata
American Translators Association
CORPORATE MEMBER

Creado por Ley Nº 26684

GRACIELA M. MIRANDA RAMÓN
Certified Translator CTP No. 0243
Spanish – English – German
Calle Maurizio Cassati 115, Dpto. 101 San Borja
Cellphone: 998 948628
E-mail: gramiranda@hotmail.com

CERTIFIED TRANSLATION

CT No. 0652-2019

ACADEMIC TRANSCRIPT: PSYCHOLOGY ACADEMIC PROGRAM
BENJAMIN LIRA LUTTGES
UNIVERSIDAD DE LIMA

COLEGIO DE TRADUCTORES DEL PERÚ · CTP · 1996 ·

Graciela Miranda Ramón
CTP Nº 0243

Nº 0372551

Valor 3.50 Soles

VER INDICACIONES AL REVERSO

CERTIFIED TRANSLATION No. 0652-2019

No. 0087475

[Logo]
UL
Scientia et Praxis

***UNIVERSIDAD DE LIMA* [UL]**
[UNIVERSITY OF LIMA]
ACADEMIC TRANSCRIPT

[Photograph]

PSYCHOLOGY ACADEMIC PROGRAM

The undersigned UL authorities do hereby certify that
Benjamin LIRA LUTTGES, code 20092009
took the courses shown below with the following results:

Code	Course	Credits	Grade	Book	Folio	Term
1471	Written Expression	03.0	Nineteen	5	47	2009-2
1478	National Problems	03.0	Nineteen	5	93	2009-2
6020	Social Behavior	03.0	Sixteen	5	153	2009-2
1479	Value Theory	03.0	Seventeen	7	115	2010-1
6021	Psychology of Human Communication	03.0	Sixteen	7	181	2010-1
6156	Psychology of Learning	04.0	Nineteen	7	214	2010-1
6194	Community Psychology	02.0	Eighteen	7	229	2010-1
6304	Psychology of Motivation	04.0	Nineteen	7	290	2010-1
6355	Human Biopsychology I (Cellular Level of Psychic Activity)	03.0	Eighteen	7	321	2010-1
6022	Development of Social Skills	03.0	Nineteen	8	153	2010-2
6023	Life Cycle Development I	03.0	Nineteen	8	155	2010-2
6175	Experimental Psychology	04.0	Twenty	8	196	2010-2
6248	Philosophy of Science	03.0	Seventeen	8	217	2010-2
6273	Cognitive Psychology I	03.0	Nineteen	8	234	2010-2
6356	Human Biopsychology II (Methabolic and Functional Level of Psychic Activity)	03.0	Nineteen	8	291	2010-2
1203	Statistics I	03.0	Twenty	10	1	2011-1
6029	Life Cycle Development II	03.0	Eighteen	10	186	2011-1
6139	Psychological Systems I	03.0	Nineteen	10	200	2011-1
6150	Psychology of Personality	04.0	Nineteen	10	206	2011-1
6274	Cognitive Psychology II	04.0	Nineteen	10	263	2011-1
6357	Human Biopsychology III (Unconscious Level of Psychic Activity)	03.0	Twenty	10	318	2011-1
1204	Statistics II	03.0	Eighteen	11	4	2011-2
6031	Interview and Observation Techniques	04.0	Eighteen	11	168	2011-2
6032	Psychology of Adjustment	04.0	Nineteen	11	174	2011-2
6140	Psychological Systems II	03.0	Eighteen	11	181	2011-2
6249	Culture and Personality	03.0	Twenty	11	223	2011-2
6358	Human Biopsychology III (Conscious Level of Psychic Activity)	03.0	Nineteen	11	297	2011-2
6033	Foundations of Psychotherapy	03.0	Twenty	12	34	2012-0
6138	Epistemology of Psychology	03.0	Seventeen	13	189	2012-1
6151	Projective Techniques I	03.0	Nineteen	13	200	2012-1
6167	Psychometry I	04.0	Twenty	13	214	2012-1

AS STATED IN THE BOOKS TO WHICH WE REFER IF NECESSARY.
This transcript records courses with passing grades only. It does not attest to the completion of studies or the attainment of any academic degree or professional title.
Academic performance is graded on a 20-point scale, eleven [11] being the minimum passing grade.
Any amendment or addition voids this transcript.

Lima, June 13, 2018

[Signed]
Bárbara Milagros FARFÁN FIORANI
Secretary General

[Seal]
UL
Lima - Perú
General Secretariat

[Signed]
Alejandro Gustavo LARREA DAVILA
University Director of Student Services and Registry

[Seal]
University Bureau of Student Services and Registry
UL

CERTIFIED TRANSLATION No. 0652-2019

No. 0087476

UNIVERSIDAD DE LIMA [UL]
[UNIVERSITY OF LIMA]

[Logo]
UL
Scientia et Praxis

ACADEMIC TRANSCRIPT

[Photograph]

PSYCHOLOGY ACADEMIC PROGRAM

The undersigned UL authorities do hereby certify that
Benjamin LIRA LUTTGES, code 20092009
took the courses shown below with the following results:

Code	Course	Credits	Grade	Book	Folio	Term
6292	Organizational Behavior I	03.0	Seventeen	13	265	2012-1
6309	Educational Psychology I	04.0	Twenty	13	283	2012-1
6349	Qualitative Research	03.0	Eighteen	13	296	2012-1
6152	Projective Techniques II	03.0	Seventeen	14	189	2012-2
6168	Psychometry II	04.0	Nineteen	14	202	2012-2
6208	Professional Ethics	03.0	Twenty	14	210	2012-2
6285	Psychopathology	04.0	Twenty	14	244	2012-2
6293	Organizational Behavior II	03.0	Eighteen	14	250	2012-2
6341	Educational Psychology II	03.0	Nineteen	14	270	2012-2
6169	Design and Construction of Psychological Instruments	03.0	Eighteen	16	226	2013-1
6343	Diagnosis and Psychological Report	04.0	Eighteen	16	302	2013-1
6344	Psychological Research Methodology	03.0	Twenty	16	306	2013-1
6345	Group Techniques	03.0	Nineteen	16	308	2013-1
6350	Staff Training and Development	03.0	Eighteen	16	314	2013-1
6351	Instructional Psychology	03.0	Nineteen	16	316	2013-1
901124	Cognitive Science	02.0	RCNC. R.D. 2014/653			2013-2
901414	Education in Relation to Society and Culture	03.0	RCNC. R.D. 2014/653			2013-2
901415	Educational Effectiveness	03.0	RCNC. R.D. 2014/653			2013-2
901412	Educational Policy	03.0	RCNC. R.D. 2014/653			2013-2
901416	Fundamentals of Artificial Intelligence	02.0	RCNC. R.D. 2014/653			2013-2
901413	Philosophy of Education	03.0	RCNC. R.D. 2014/653			2013-2
6294	Psychological Counseling	03.0	Nineteen	19	124	2014-1
6297	Project Design and Evaluation	03.0	Eighteen	19	129	2014-1
6423	Vocational and Occupational Guidance	04.0	Nineteen	19	234	2014-1
6424	Psychology of Exceptionality	04.0	Nineteen	19	236	2014-1
6426	Diagnosis of Organizational Culture and Climate	03.0	Twenty	19	238	2014-1
6428	Research Seminar I	04.0	Twenty	20	234	2014-2
6429	Internship I	04.0	Nineteen	20	239	2014-2
6430	Current Issues in Psychology I	04.0	Nineteen	20	242	2014-2
6431	Research Seminar II	04.0	Nineteen	22	258	2015-1
6432	Internship II	04.0	Nineteen	22	260	2015-1
6433	Current Issues in Psychology II	04.0	Twenty	22	264	2015-1

AS STATED IN THE BOOKS TO WHICH WE REFER IF NECESSARY.
This transcript records courses with passing grades only. It does not attest to the completion of studies or the attainment of any academic degree or professional title.
Academic performance is graded on a 20-point scale, eleven [11] being the minimum passing grade.
Any amendment or addition voids this transcript.

Lima, June 13, 2018

[Signed]
Bárbara Milagros FARFÁN FIORANI
Secretary General

[Seal]
UL
Lima - Perú
General Secretariat

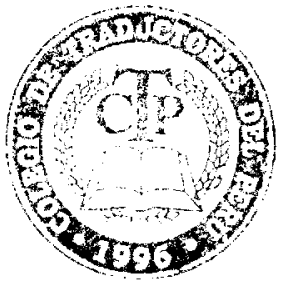
[Signed]
Alejandro Gustavo LARREA DAVILA
University Director of Student Services and Registry

[Seal]
University Bureau of Student Services and Registry
UL

I, the undersigned Certified Translator, Member of the Peruvian Association of Professional Licensed Translators (CTP), do hereby certify that this Certified Translation, consisting of 2 pages, is a true and correct translation into English of the original document in Spanish enclosed herewith, which has been produced before me.

This certification shall be considered an acknowledgment of the accuracy of the translation but no of the authenticity or contents of the document in source language attached hereto.

Signed in Lima, this 18th day of November, 2019



Graciela Miranda Rando
CTP N° 3243

356

Nº 0087475

UNIVERSIDAD DE LIMA
CERTIFICADO DE ESTUDIOS

CARRERA DE PSICOLOGÍA

Las autoridades de la Universidad de Lima que suscriben, certifican que :
BENJAMIN LIRA LUTTGES, código 20092009,
ha cursado las asignaturas que se indican con los resultados siguientes :

Código	Nombre de Asignatura	Crédito	Calificativo	Tomo	Folio	Ciclo
1471	EXPRESIÓN ESCRITA	03.0	DIECINUEVE	5	47	2009 - 2
1478	PROBLEMÁTICA NACIONAL	03.0	DIECINUEVE	5	93	2009 - 2
6020	CONDUCTA SOCIAL	03.0	DIECISEIS	5	153	2009 - 2
1479	TEORÍA DE LOS VALORES	03.0	DIECISIETE	7	115	2010 - 1
6021	PSICOLOGÍA DE LA COMUNICACIÓN HUMANA	03.0	DIECISEIS	7	181	2010 - 1
6156	PSICOLOGÍA DEL APRENDIZAJE	04.0	DIECINUEVE	7	214	2010 - 1
6194	PSICOLOGÍA COMUNITARIA	02.0	DIECIOCHO	7	229	2010 - 1
6304	PSICOLOGÍA DE LA MOTIVACIÓN	04.0	DIECINUEVE	7	290	2010 - 1
6355	PSICOBIOLOGÍA HUMANA I (EL NIVEL CELULAR DE LA ACTIVIDAD PSÍQUICA)	03.0	DIECIOCHO	7	321	2010 - 1
6022	DESARROLLO DE HABILIDADES SOCIALES	03.0	DIECINUEVE	8	153	2010 - 2
6023	DESARROLLO DEL CICLO VITAL I	03.0	DIECINUEVE	8	155	2010 - 2
6175	PSICOLOGÍA EXPERIMENTAL	04.0	VEINTE	8	196	2010 - 2
6248	FILOSOFÍA DE LA CIENCIA	03.0	DIECISIETE	8	217	2010 - 2
6273	PSICOLOGÍA COGNITIVA I	03.0	DIECINUEVE	8	234	2010 - 2
6356	PSICOBIOLOGÍA HUMANA II (EL NIVEL METABÓLICO Y FUNCIÓNAL DE LA ACTIVIDAD PSÍQUICA)	03.0	DIECINUEVE	8	291	2010 - 2
1203	ESTADÍSTICA I	03.0	VEINTE	10	1	2011 - 1
6029	DESARROLLO DEL CICLO VITAL II	03.0	DIECIOCHO	10	186	2011 - 1
6139	SISTEMAS PSICOLÓGICOS I	03.0	DIECINUEVE	10	200	2011 - 1
6150	PSICOLOGÍA DE LA PERSONALIDAD	04.0	DIECINUEVE	10	206	2011 - 1
6274	PSICOLOGÍA COGNITIVA II	04.0	DIECINUEVE	10	263	2011 - 1
6357	PSICOBIOLOGÍA HUMANA III (EL NIVEL INCONSCIENTE DE LA ACTIVIDAD PSÍQUICA)	03.0	VEINTE	10	318	2011 - 1
1204	ESTADÍSTICA II	03.0	DIECIOCHO	11	4	2011 - 2
6031	TÉCNICAS DE ENTREVISTA Y OBSERVACIÓN	04.0	DIECIOCHO	11	168	2011 - 2
6032	PSICOLOGÍA DEL AJUSTE	04.0	DIECINUEVE	11	174	2011 - 2
6140	SISTEMAS PSICOLÓGICOS II	03.0	DIECIOCHO	11	181	2011 - 2
6249	CULTURA Y PERSONALIDAD	03.0	VEINTE	11	223	2011 - 2
6358	PSICOBIOLOGÍA HUMANA IV (EL NIVEL CONSCIENTE DE LA ACTIVIDAD PSÍQUICA)	03.0	DIECINUEVE	11	297	2011 - 2
6033	FUNDAMENTOS DE PSICOTERAPIA	03.0	VEINTE	12	34	2012 - 0
6138	EPISTEMOLOGÍA DE LA PSICOLOGÍA	03.0	DIECISIETE	13	189	2012 - 1
6151	TÉCNICAS PROYECTIVAS I	03.0	DIECINUEVE	13	200	2012 - 1
6167	PSICOMETRÍA I	04.0	VEINTE	13	214	2012 - 1

ASI CONSTA EN LOS LIBROS A LOS QUE NOS REMITIMOS EN CASO NECESARIO.
El presente certificado consigna únicamente las asignaturas aprobadas y no acredita la culminación de estudios o la obtención del grado académico o título profesional.
El rendimiento académico se califica con notas de cero (00) a veinte (20), siendo once (11) la nota mínima aprobatoria.
Cualquier enmendadura o anotación invalida el presente certificado.

Lima, 13 de junio de 2018

UNIVERSIDAD DE LIMA SECRETARIA GENERAL Lima - Perú

BÁRBARA MILAGROS FARFÁN FIORANI
SECRETARÍA GENERAL

Dirección Universitaria de Servicios Académicos y Registro UNIVERSIDAD DE LIMA

ALEJANDRO GUSTAVO LARREA DAVILA
DIRECCIÓN UNIVERSITARIA DE SERVICIOS ACADÉMICOS Y REGISTRO

Nº 0087476

UNIVERSIDAD DE LIMA
CERTIFICADO DE ESTUDIOS

CARRERA DE PSICOLOGÍA

Las autoridades de la Universidad de Lima que suscriben, certifican que :
BENJAMIN LIRA LUTTGES, código 20092009,
ha cursado las asignaturas que se indican con los resultados siguientes :

Código	Nombre de Asignatura	Crédito	Calificativo	Tomo	Folio	Ciclo
6292	COMPORTAMIENTO ORGANIZACIONAL I	03.0	DIECISIETE	13	265	2012 - 1
6309	PSICOLOGÍA EDUCATIVA I	04.0	VEINTE	13	283	2012 - 1
6349	INVESTIGACIÓN CUALITATIVA	03.0	DIECIOCHO	13	296	2012 - 1
6152	TÉCNICAS PROYECTIVAS II	03.0	DIECISIETE	14	189	2012 - 2
6168	PSICOMETRÍA II	04.0	DIECINUEVE	14	202	2012 - 2
6208	ÉTICA PROFESIONAL	03.0	VEINTE	14	210	2012 - 2
6285	PSICOPATOLOGÍA	04.0	VEINTE	14	244	2012 - 2
6293	COMPORTAMIENTO ORGANIZACIONAL II	03.0	DIECIOCHO	14	250	2012 - 2
6341	PSICOLOGÍA EDUCATIVA II	03.0	DIECINUEVE	14	270	2012 - 2
6169	DISEÑO Y CONSTRUCCIÓN DE INSTRUMENTOS PSICOLÓGICOS	03.0	DIECIOCHO	16	226	2013 - 1
6343	DIAGNÓSTICO E INFORME PSICOLÓGICO	04.0	DIECIOCHO	16	302	2013 - 1
6344	METODOLOGÍA DE LA INVESTIGACIÓN PSICOLÓGICA	03.0	VEINTE	16	306	2013 - 1
6345	TÉCNICAS DE GRUPOS	03.0	DIECINUEVE	16	308	2013 - 1
6350	CAPACITACIÓN Y DESARROLLO DE PERSONAL	03.0	DIECIOCHO	16	314	2013 - 1
6351	PSICOLOGÍA INSTRUCCIONAL	03.0	DIECINUEVE	16	316	2013 - 1
901124	COGNITIVE SCIENCE	02.0	RCNC. R.D.2014/653			2013 - 2
901414	EDUCATION IN RELATION TO SOCIETY AND CULTURE	03.0	RCNC. R.D.2014/653			2013 - 2
901415	EDUCATIONAL EFFECTIVENESS	03.0	RCNC. R.D.2014/653			2013 - 2
901412	EDUCATIONAL POLICY	03.0	RCNC. R.D.2014/653			2013 - 2
901416	FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE	02.0	RCNC. R.D.2014/653			2013 - 2
901413	PHILOSOPHY OF EDUCATION	03.0	RCNC. R.D.2014/653			2013 - 2
6294	CONSEJERÍA PSICOLÓGICA	03.0	DIECINUEVE	19	124	2014 - 1
6297	DISEÑO Y EVALUACIÓN DE PROYECTOS	03.0	DIECIOCHO	19	129	2014 - 1
6423	ORIENTACIÓN VOCACIONAL Y OCUPACIONAL	04.0	DIECINUEVE	19	234	2014 - 1
6424	PSICOLOGÍA DE LA EXCEPCIONALIDAD	04.0	DIECINUEVE	19	236	2014 - 1
6426	DIAGNÓSTICO DE CULTURA Y CLIMA ORGANIZACIONAL	03.0	VEINTE	19	238	2014 - 1
6428	SEMINARIO DE INVESTIGACIÓN I	04.0	VEINTE	20	234	2014 - 2
6429	INTERNADO I	04.0	DIECINUEVE	20	239	2014 - 2
6430	TEMAS ACTUALES EN PSICOLOGÍA I	04.0	DIECINUEVE	20	242	2014 - 2
6431	SEMINARIO DE INVESTIGACIÓN II	04.0	DIECINUEVE	22	258	2015 - 1
6432	INTERNADO II	04.0	DIECINUEVE	22	260	2015 - 1
6433	TEMAS ACTUALES EN PSICOLOGÍA II	04.0	VEINTE	22	264	2015 - 1

ASI CONSTA EN LOS LIBROS A LOS QUE NOS REMITIMOS EN CASO NECESARIO.
El presente certificado consigna únicamente las asignaturas aprobadas y no acredita la culminación de estudios o la obtención del grado académico o título profesional.
El rendimiento académico se califica con notas de cero (00) a veinte (20), siendo once (11) la nota mínima aprobatoria.
Cualquier enmendadura o anotación invalida el presente certificado.

Lima, 13 de junio de 2018

UNIVERSIDAD DE LIMA SECRETARIA GENERAL Lima - Perú

BÁRBARA MILAGROS FARFÁN FIORANI
SECRETARÍA GENERAL

Dirección Universitaria de Servicios Académicos y Registro UNIVERSIDAD DE LIMA

ALEJANDRO GUSTAVO LARREA DÁVILA
DIRECCIÓN UNIVERSITARIA DE SERVICIOS ACADÉMICOS Y REGISTRO

[Logo]
UNIVERSIDAD DE LIMA
[UNIVERSITY OF LIMA]
SCIENTIA ET PRAXIS
MCMLXII

[PHOTOGRAPH]

CERTIFICATE

The University Director of Academic Services and Registration does here certify that

BENJAMIN LIRA LUTTGES

(Student ID 20092009) completed his studies in the Psychology Major in the period March-July 2015 and earned a cumulative weighted average (P.P.A.) of 18.633.

The equivalence in the above-mentioned major between the P.P.A. 20-point grading scale (0-20) and the G.P.A. (0-4) is given in the following table:

20-point grading scale	G.P.A.
11.0 to 13.89	2.0 to 2.49
13.9 to 4.99	2.5 to 3.49
15.0 to 15.99	3.5 to 3.99
16.0 and above	4.0

This certificate is issued at the request of the interested party to serve and avail as occasion shall or may require.

Lima, November 29, 2019

(Illegible Signature)
ALEJANDRO GUSTAVO LARREA DAVILA
Director Academic Services and Registration

(Signed) B. Farfán
BÁRBARA MILAGROS FARFÁN FIORANI
General Secretariat

[Barcode]
67783

CONSTANCIA

El Director Universitario de Servicios Académicos y Registro deja constancia de que

BENJAMIN LIRA LUTTGES

con código **20092009** completó el plan de estudios de la carrera de Psicología en el período académico 2015-1 y obtuvo 18.633 de promedio ponderado acumulado.

La equivalencia entre las escalas vigesimal (0-20) y G.P.A (0-4) para dicha carrera es la siguiente:

Escala vigesimal	G.P.A
11.0 a 13.89	2.0 a 2.49
13.9 a 14.99	2.5 a 3.49
15.0 a 15.99	3.5 a 3.99
16.0 en adelante	4.0

Se extiende la presente constancia a solicitud del interesado para los fines que considere convenientes.

Lima, 29 de noviembre de 2019

ALEJANDRO GUSTAVO LARREA DAVILA
DIRECTOR UNIVERSITARIO DE SERVICIOS ACADÉMICOS Y REGISTRO

BÁRBARA MILAGROS FARFÁN FIORANI
SECRETARIA GENERAL

67783