MARÍA MARTÍN LÓPEZ
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EDUCATION

University of California, Berkeley, Berkeley, CA *August 2022– Present*
PhD Psychology – Computational Clinical & Cognitive Science
Designated Emphasis (Minor) in Cognitive Science
Advisor: William Thompson, PhD

Fordham University, New York, NY *August 2020 – May 2022*
M.S. Clinical Research Methods – *Focus on quantitive psychology*
Thesis: Normal and Abnormal Personality Correlates of Distress Tolerance
Advisor: Christopher Conway, PhD

New York University, New York, NY *Jan 2013 – May 2017*
B.A. Political Science
Minors in Computer Science, Child and Adolescent Mental Health
Honors: Cum Laude, Founder's Day Award, Dean's List

WORK & RESEARCH EXPERIENCE

Graduate Student Researcher *March 2023-Present*
Computational Cognitive Science Lab
Principal Investigator: Dr. William Thompson, PhD
University of California, Berkeley, Department of Psychology
- Developing more complete models of the computational processes that arise in social networks as a consequence of human interaction and the transmission of knowledge from person to person.
- Combining behavioral experiments, computational modeling, and machine learning (NLP and ANN) to study how these processes influence ways of thinking and communicating about mental health and behavior.
- Focusing on the social foundations of higher cognitive abilities such as language, problem-solving, reasoning, decision-making, and creative thinking
- Exploring how these models can be applied to the study and understanding of human psychopathology.
- Lead a team of 2 computer and cognitive science students building applications and computational pipelines for experimental paradigms.
- Project leader and primary data analyst in charge of computational language modeling projects for prediction of substance use and misuse projects.
- Collaborator on cognitive experiments exploring human social behavior.

SGraduate Student Researcher *July 2022-May 2025*
Clinical Research on Externalizing & Addiction Mechanism
Principal Investigator: Dr. Keanan Joyner, PhD
University of California, Berkeley, Department of Psychology
- Applying LLM algorithms to uncover the multilingual understanding of individual differences in alcohol and cannabis related behaviors.

- Using neuroscientific methods (primarily electroencephalogram/event-related potentials [EEG/ERPs]), ambulatory assessment techniques (such as ecological momentary assessment), biometric (behavioral genetic) analyses, and a variety of computational and statistical methods (like machine learning algorithms, longitudinal multilevel modeling, Bayesian) to study the etiology of substance use disorders across time (both within- and between-individuals).

TaskUs – Wellness + Resiliency
Contract Quantitative Data Scientist   *Sept 2022 – Sept 2024*
- Collaborator contract data scientist for a range of quantitative studies exploring wellness of content moderators
- Analyzed, synthesized, and disseminated results of psychometric and quantitative project for the team

D-Lab Data Science Fellow 2023-2024   *Aug 2023-Aug 2024*
University of California, Berkeley, D-Lab
- Teaching and assisting in workshops of 10-65 people on a range of computational and statistical skills including: R Fundamentals, Python Fundamentals, Python Data Wrangling, Python Text Analysis, Geospatial Analysis in R.
- Participating and leading weekly presentations on a range of data and advanced statistical topics on a variety of interdisciplinary research areas.

Graduate Research Assistant   *Oct 2021-June 2022*
Cham Lab
Principal Investigator: Dr. Hei Ning Cham, PhD
Fordham University, Department of Psychology
- Project leader in charge of organizing, managing, cleaning, and analyzing departmental data for administrative and strategic planning purposes. Lab with 6 people.
- Author of a proposal for the Department of Psychology and Fordham's Graduate School of Arts and Sciences based on the results of the analysis.

Graduate Research Assistant   *Aug 2020-June 2022*
Bronx Personality Lab
Principal Investigator: Dr. Christopher Conway, PhD
Fordham University, Department of Psychology
- Expertise in time series project management, study design, and conceptualization.
- Lead lab data analyst in charge of data management for 4 major projects, all data visualization, and analysis (machine learning, multilevel modeling, Bayesian statistics, and time series analysis).
- Led analysis for pilot data and collaborated on project creation and presentation for NIMH R21 ($251k).
- Managed 6 undergraduate research assistants and worked with a team of 4 graduate students.
- Disseminated results via collaborations on 3 papers, 9 posters, and 1 international conference talk.
- Conducted multi-year research project that culminated in 54-page thesis and multiple public presentations (Honorable mention of the Laura Bassi Scholarship 2020).

Clinical Research Coordinator *May 20217-July 2020*
Mood and Personality Disorders Lab
Principal Investigator: Dr. Harold W. Koenigsberg, MD
Icahn School of Medicine at Mount Sinai, Department of Psychiatry

- Project coordinator and manager of 3 behavioral and clinical trials (NIMH R01s each $1.25M).
- Expertise in multidisciplinary research methods (self-report, ambulatory assessment, fMRI, physiological measures, language modeling).
- Managed database for studies which included behavioral, fMRI, and physiological data for studies active for 35 years.
- Coded behavioral paradigms using E-prime and R to train participants and use during studies.
- Disseminated results via collaborations on 5 posters, 3 papers and 1 book chapter.
- Creative problem solving for human and technical problems.

TEACHING EXPERIENCE

Graduate Student Instructor
University of California, Berkeley, Department of Psychology
Computational Models of Cognition *Jan 2025 – May 2025*

- Teaching 50 students on computational methods used for cognitive science using python. Topics include: Bayesian models, cognitive diagrams, language models
- Develop materials (11 python lectures, 4 assignments, 1 exams), lead 2 hours of lectures weekly and provide 2+ hours of office hours per week in addition to case-by-case basis honors thesis consultation

Graduate Student Instructor
University of California, Berkeley, Department of Psychology
Methods for Research in Psychological Science *Aug -Dec 2022 & 2024*

- Teaching 50 honors students on statistical and data science methods used for psychological science using R. Topics include: regression, Bayesian inference, multilevel modeling, machine learning
- Develop materials (9 lectures, 9 assignments, 2 exams), lead 2 hours of lectures weekly and provide 2+ hours of office hours per week in addition to case-by-case basis honors thesis consultation
- Working alongside Dr. Keanan Joyner to prepare classes in addition to leading lab sections.

PUBLICATIONS

- **PAPERS –**

Martín López, M, Joyner, K., Thompson, W. (2025) What is Addiction? Substance-specific biases in human beliefs and LLMs. CogSci.

Martín López, M, Joyner, K., Thompson, W. (in preparation to be submitted to Nature Human Behavior) Key misalignments between large language models and the psychometric structure of psychopathology.

Martin Lopez, M., Naragon-Gainey, K., & Conway, C. C. (2023). Defining distress tolerance in a structural model of Big Five domains. *Journal of Personality*. https://osf.io/x675b/

Denny, B. T., Lopez, R. B., Wu-Chung, E. L., Dicker, E. E., Goodson, P., Fan, J., Schulz, K. K., Ochsner, K. N., Trumbull, J., **Martin Lopez, M.,** Fels, S., Galitzer, H., Perez-Rodriguez, M., Goodman, M., Rosell, D., Hazlett, E. A., McClure, M. M., New, A. S., & Koenigsberg, H. W. (2024). Training in cognitive reappraisal normalizes whole-brain indices of emotion regulation in borderline personality disorder. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*. https://doi.org/10.1016/j.bpsc.2023.00458R1

Calabrese, W.R., **Martín López, M.,** Koenigsberg, H.W., Perez-Rodriguez, M.M., (2022). The Structure of Antagonism: A Hierarchical Model of Self- and Interview-Related Psychopathology. *Personality Disorders: Theory, Research, and Treatment.*

Conway, C. C., Anderson, G. N., Larrazabal, M. A., **Martin Lopez, M**., & Williams, A. L. (2021). The Hierarchical Taxonomy of Psychopathology (HiTOP): A brief introduction and resource guide for clinical psychologists. *The Clinical Psychologist Newsletter.*

Calabrese, W. R., **Martín López, M**., Rutter, S. B., Trumbull, J., Perez-Rodriguez, M. (2019). Commentary on "Issues and new directions in personality disorder genetics," by K. Jang & F. Choi. In C. Lejuez & K. Gratz (Eds.), *The handbook of personality disorders.* Cambridge: Cambridge University Press.

Rutter, S., Cipriani, N., Smith, E., Ramjas, D. H., Vaccaro, M., **Martin Lopez, M.,** Calabrese, W., Torres, D., Campos-Abraham, P., Llaguno, M., Soto, E., Ghavami, M., Perez-Rodriguez, M.M. (2019). Neurocognition and the Suicidal Process. In *Current Topics in Behavioral Neurosciences Behavioral Neurobiology of Suicide and Self-Harm.* SpringerLink.

- **P O S T E R S –**

Ilagan, G.S., **Martin Lopez, M.,** Manuel, I., Rabasco, A., Anderson, G.N., Silverman, M.R., Conway, C.C. (2023). *Examining the day-to-day relationship between suicidal thoughts and coping strategies: Within- and between-person associations* [Poster presentation]. Big Apple Health Psychology Colloquium, New York, NY.

Anderson, G.N., Rabasco, A., **Martin Lopez, M.,** Ilagan, G.S., Manuel, I.A., Silverman, M.R., Conway, C.C. (2023). *The predictive utility of distress tolerance on thoughts of self-harm in a high-risk, marginalized sample of adults: An experience sampling study.* [Poster presentation]. Big Apple Health Psychology, New York, NY.

Martin Lopez, M., Joyner, K.J. (2022, September) How specific are alcohol-specific indicators? A hierarchical examination of alcohol problems within the externalizing spectrum. Society for Research in Psychopathology, Philadelphia, PA.

Anderson, G.N., Rabasco, A., **Martin Lopez, M**., Ilagan, G.S., Manuel, I., Silverman, M.R., Conway, C.C. (2022, September). The short-term relationship between distress tolerance and non-suicidal self-injury in adults with a history of self-harm. Association of Behavioral and Cognitive Therapies, New York, NY. https://bit.ly/3Cg046u

Anderson, G.N., **Martin Lopez, M**., Rabasco, A., Ilagan, G.S., Manuel, I., Silverman, M.R., Conway, C.C. (2022, September). Daily variation in distress intolerance and emotion regulation strategies in a high-risk community sample. Association of Behavioral and Cognitive Therapies, New York, NY. https://bit.ly/3CfZTrQ

Ilagan, G.S., **Martin Lopez, M**., Manuel, I., Rabasco, A., Anderson, G.N., Silverman, M.R., Conway, C.C. (2022, September). Daily emotion regulation strategies and fluctuations in suicidal ideation: An experience sampling study in high-risk adults from a marginalized community. Association of Behavioral and Cognitive Therapies, New York, NY.

Ilagan, G. S., **Martín López, M.,** Rabasco, A., Silverman, M., Denomme, G., Chandy, R., & Conway, C. C. (2022). Dynamic relationship between NSSI and suicide ideation in adults with suicide attempt and NSSI history [Conference presentation]. North American Society for the Study of Personality Disorders Annual Conference, Pittsburgh, PA.

Ilagan, G. S., **Martín López, M**., Conway, C. C. (2022, May). Within-person coherence of suicidal ideation facets using experience sampling in high risk adults from a marginalized community. Paper to be presented at the Yale National Education Alliance for Borderline Personality Disorder Annual Conference, New Haven, CT.

Martín López, M., Rabasco, A., Silverman, M., Denomme, G., Chandy, R., & Conway, C.C. (2022, February) Comparing the Static and Dynamic Relationships between Negative Affectivity and Distress Tolerance using Ambulatory Assessment. To be presented at: Society for Personality and Social Psychology Annual Convention 2022. San Francisco, CA.

Cooley, C., Koenigsberg, H.W., Schulz, K., Perez-Rodriguez. M.M., **Martín López, M.,** Lindenmeyer, H. (2022, February) Alexithymia and Cognitive Reappraisal by Distancing to Emotional Sentences and Pictures. To be presented at: Society for Personality and Social Psychology Annual Convention 2022. San Francisco, CA.

Koenigsberg, W. H., Schulz, K., Fan, J., Lindenmeyer, H**., Martín López, M**., Cooley, C., Hazlett, E., Rosell, D., New, A., Perez-Rodriguez, M., McClure, M. (2020) Impaired Emotion Regulation as a Transdiagnostic Domain: The Capacity to Effectively Cope with Spoken Negative Personal Critiques. Presented at: American College of Neuropsychopharmacology.

Martín López, M., Rhodes, H., Calabrese, W., Lindenmeyer, H., Schulz, K., McClure, M., Rosell, D., Hazlet, E., New, A., Perez-Rodrigez, M., Koenigsberg, H. (2020) Exploring Trust Game Cooperation in Borderline Personality Disorder. *Biological Psychiatry, 87(9),* S134-S462. doi: https://doi.org/10.1016/j.biopsych.2020.02.456

Koenigsberg, H., Denny, B., Lopez., R., Fan, J., Schulz, K., Trumbull, J., **Martin Lopez, M**., Perez-Rodriguez, M., Rosell, D., New, A., Hazlett, E., & McClure, M. (2019).. F149 The Effects of Cognitive Reappraisal Training to Enhance Emotion Regulation in Borderline and Avoidant Personality Disorder Patients: Evidence from Self-Reported Affect Ratings and Neuroimaging. *Biological Psychiatry* 85(10).

Koenigsberg, H., Denny, B., Fan, J., Trumbull, J., **Martín López, M.,** New A., Perez-Rodriguez M., Hazlett, E., Rosell, D., McClure, M.; (2017) Enhancing Emotion Regulation in Borderline Personality Disorder Patients Through Longitudinal Reappraisal Training: Evidence from Self-

Reported Affect and fMRI. Presented at the Annual Meeting of the American College of Neuropsychopharmacology 2017.

Martín López, M, & Sarosi, A. (2016, August*)* Stimulation of the Serotonergic System. Presented at the 5th Annual New York University Child Study Center Conference**,** New York, NY.

MANUSCRIPTS UNDER PREPARATION

Conway, C. C., Rabasco, A., **Martín López, M**., Gromatsky, M., Kuehn, K. S., & King, K. M. (Stage 2 accepted). A personalized model of distress tolerance and non-suicidal self-injury among recurrent self-injurers. *Journal of Research in Personality.*

Martín López, M., Joyner, K. (in preparation) How specific are substance specific indicators?

Martín López, M, Joyner, K., Thompson, W. (in preparation) Semantic and Conceptual Network of Alcohol and Cannabis-related Language.

TALKS

Martin Lopez, M. Joyner, K.J., Thompson, W.D. (2024, May). Exploring a language-based approach to psychopathology measurement. Flash Talk presented at the 2024 Annual Meeting of the American Psychological Society.

Joyner, K. J., Ashlock, L., **Martin Lopez, M**. (2022, September). Delineating the Hierarchical Structure of Psychopathology across Between- and Within-Person Levels of Analysis. In Watts, A. L. (Chair) & Wright, A. G. C., (Discussant), Underexamined Methodological Challenges to Understanding the Structure of Psychopathology. Symposium presented at the 2022 Annual Meeting of the Society for Research in Psychopathology, Philadelphia, PA.

Martin Lopez, M., Ashlock, L., Joyner, K. (2022, May). *Understanding the placement of alcohol and cannabis use problems within the HiTOP structure at the within- vs. between-person level.* Presented at HiTOP 2022 Annual Meeting Trainee Flash Talk Series.

Martin Lopez, M. (2021, April). *Normal and maladaptive personality correlates of distress tolerance*. Presented at The North American Association for the Study of Personality Disorders 2021 Flash Talk Series.

FELLOWSHIPS, GRANTS & AWARDS

HiTOP Trainee Research Award
HiTOP Consortium, August 2022

Chancellor's Fellowship
UC Berkeley, August 2022

D-Lab Data Science Fellowship
UC Berkeley D-Lab, 2023-2024

Zedeck Culture, Behavior, and Management Study Fellowship Award
UC Berkeley & Dr. Sheldon Zedeck 2024, $3,000

SKILLS

Languages: Spanish (first language), English (fluent), French (fluent)

Software: Advanced proficiency in R and Python; Experience with C, MatLab SPM, and SPSS, Expertise in E-Prime, SurveySignal, and Qualtrics

Statistical Skills: SEM, longitudinal SEM, MLM and time series analysis, machine learning, Bayesian inference, natural language processing

- LLMs & NLP for Mental Health – Applied transformer models (BERT, GPT) for sentiment and semantic analysis, prediction, and AI-driven therapy tools.
- Machine Learning & Statistical Modeling – Predictive analytics, deep learning, Bayesian inference, SEM, time-series, and multilevel modeling.
- Strategic AI Implementation – Translating research into scalable digital health applications.
- Cross-Disciplinary Leadership – Leading teams across AI, psychology, and healthcare for data-driven solutions.
- Technical Communication & Education – Publishing, presenting, and teaching AI/ML methodologies.