

# uan David **Leongómez**

Faculty of Psychology, Universidad El Bosque

[ (+57) 601-6489000 Ext. 1901 | ➡ jleongomez@unbosque.edu.co | ★ jdleongomez.info | ⑩ 0000-0002-0092-6298

I am a researcher mainly interested in human behaviour, as well as quantitative methods and reproducible science.

#### About me

I am an Associate Professor and Researcher at EvoCo: Human Behaviour and Evolution Lab, and leader of the CODEC: Cognitive and Behavioural Sciences research group (classified as A1), Faculty of Psychology, at Universidad El Bosque in Bogota, Colombia. I am also a founding and board member of the Latin American Association for Human Behavioral and Evolutionary Sciences (LAAHBES). My research primarily focuses on human vocal communication, mate choice, and musicality, as well as bioacoustics, psychoacoustics, and hormonal effects on human behaviour. I have published some of the first articles demonstrating within-individual changes in voice pitch in response to the social status of the listener, as well as the significant effects of voice modulation on listeners in courtship contexts. Passionate about quantitative methods and R programming, I advocate for reproducibility and open science. In line with these values, I serve as a recommender (editor) for Peer Community In Registered Reports.



#### Skills

**Programming** R (advanced: all data wrangling, analysis, plots and tables —and even this CV— made in R)

**Reproducible Reports** Markdown/R Markdown (including LATEX and HTML ■). Version control: Git ◆ and GitHub • **Quantitative Research** General and generalised models, linear mixed-effects models, multi-model inference, machine learning

**Software** RStudio, Visual Studio Code, Praat, Audacity, InkScape, Zotero

**Languages** English/Spanish (native)

#### Research

Research Areas Human voice • Vocal modulation • Mate choice • Human behaviour

**Primary Research Methods** Experimental designs • Acoustic analysis • Geometric morphometrics • Stimuli rating

#### Education

**University of Stirling** Stirling, UK

PhD - Psychology

• Research project: Contextual musicality: vocal modulation and its perception in human social interaction

- Supervisors: Prof. S. Craig Roberts and Prof. Anthony C. Little
- Committee members: Prof. Phyllis C. Lee (dissertation chair) and Prof. Stuart Semple

**University of Liverpool** Liverpool, UK

MSc in Evolutionary Psychology • Research project: Variation of pitch and loudness range of human voice in response to intra- and inter-sexual stimuli

- Supervisor: Prof. S. Craig Roberts
- Best overall performance in the MSc

#### **Universidad Pedagógica Nacional**

Bogota, Colombia

2006

2014

2009

BA IN MUSIC PEDAGOGY

· GPA: 4.28/5.00

• Research project: 4.90/5.00 | El origen no humano de la música

#### Relevant further education

**Eindhoven University of Technology** 

IMPROVING YOUR STATISTICAL INFERENCES

GPA: 100/100 (see certificate)

**Johns Hopkins University** 

PRACTICAL MACHINE LEARNING

• GPA: 97/100 (see certificate)

**University of Dundee** Dundee, UK

STATISTICAL PROGRAMMING IN R AND LINEAR MIXED MODELS

2012

Apr. 2019 - Present

Coursera 🗭

Coursera 🕶

2024

**Working Experience** 

**Universidad El Bosque** Bogota, Colombia

ASSOCIATE PROFESSOR

• Researcher at **EvoCo**: Human Behaviour and Evolution Lab

- Leader of the CODEC: Cognitive and Behavioural Sciences research group (since 2016)
- Methodological and statistical advisor for postgraduate and faculty research projects
- Supervision of a variety of undergraduate research projects associated with psychology and biology
- Member of the Research Committee
- Member of the Advisory Committee on Research Ethics

**Universidad El Bosque** Bogota, Colombia Jan. 2015 - Apr. 2019

ASSISTANT PROFESSOR

- Researcher at EvoCo: Human Behaviour and Evolution Lab
- Leader of the **CODEC**: Cognitive and Behavioural Sciences research group (since 2016)
- Methodological and statistical advisor for postgraduate and faculty research projects
- Organiser of the Nerd Café weekly conference series of the Faculty of Psychology (2016-2017)
- Supervision of a variety of undergraduate research projects associated with psychology and biology
- Postdoctoral stay (2018-2019)
- Co-supervision of Doctoral Students: Milena Vásquez-Amézquita (PhD in Neuroscience, University of Valencia, Spain 2015-2018)
- · Co-supervision of Doctoral Students: Francisco Javier Flores (Professional Doctorate in Counselling Psychology, University of East London, UK - 2016-2018)

Universidad de La Sabana Chia, Colombia

CATHEDRATIC PROFESSOR

· Teaching and supervision of research projects

**University of Stirling** Stirling, UK

Supervision of an MSc research project (Evolutionary Psychology MSc)

Marking and statistical advice to MSc students

**Universidad Pedagógica Nacional** 

Bogota, Colombia AUXILIAR PROFESSOR

• Member of the Research Committee

Supervision of research projects

RECOGNISED TEACHER IN PSYCHOLOGY

**Teaching Experience** 

Universidad El Bosque Bogota, Colombia

ASSOCIATE PROFESSOR

Quantitative Methods II (Psychology MSc) (2019)

Universidad El Bosque Bogota, Colombia ASSISTANT PROFESSOR

• Quantitative Methods II (Psychology MSc) (2017-2018)

- Research Degree Project (2018)
- Quantitative Methods I (Psychology MSc) (2017)
- Sources and Documentation Styles in Psychology (2015)

Juan David Leongómez · Academic Curriculum Vitae

26 NOVEMBER, 2024

Jan. 2015 - Dec. 2016

2011 - 2014

2019

2015 - 2018

Universidad de La Sabana Chia, Colombia

CATHEDRATIC PROFESSOR 2015 - 2016

- · Evolution and Development of Vocal Communication: Songs, Fashion, and Language (2016)
- Inferential Statistics (2015 2016)

RECOGNISED TEACHER IN PSYCHOLOGY

Descriptive Statistics (2015 - 2016)

**University of Stirling** Stirling, UK

• Animal Behaviour (lecture on vocal communication) (2012)

- Quantitative Methods (Psychology MSc several lectures, practical supervision, one-on-one teaching) (2012-2014)
- Cognition Module (leading research projects in psychoacoustics) (2012-2014)

#### **Universidad Pedagógica Nacional**

Bogota, Colombia

2012 - 2014

AUXILIAR PROFESSOR

- Research Project I (2010)
- Research Lab II (2010)

### Scholarships, Awards and Honors.

**Universidad El Bosque** Bogota, Colombia

'PAPYRUS' AWARD Oct. 2024

• Most impactful article in Arts and Humanities

**Universidad El Bosque** Bogota, Colombia

IX EXCELLENCE AWARDS Dec. 2022

· COP\$10.000.000

**Ig Nobel Prize** Cambridge, MA, USA.

**ECONOMICS PRIZE** Sep. 2020

· For 'trying to quantify the relationship between different countries' national income inequality and the average amount of mouth-to-mouth kissing' (Watkins, et al., 2019)

**Universidad El Bosque** Bogota, Colombia

VIII EXCELLENCE AWARDS

Dec. 2019

· COP\$7.000.000

**Universidad El Bosque** Bogota, Colombia

VII EXCELLENCE AWARDS Dec. 2018

• COP\$5.000.000

**Universidad El Bosque** Bogota, Colombia

VI EXCELLENCE AWARDS Dec. 2017

• COP\$5.000.000

**Experimental Psychology Society** Canterbury, UK

**GRINDLEY GRANTS** Sep. 2014

**Minciencias** Bogota, Colombia

Francisco José de Caldas Scholarship for Doctoral Studies Oct. 2010 - Oct. 2014

**School of Life Sciences - University of Liverpool** Liverpool, UK

ANNUAL PRIZE IN EVOLUTIONARY PSYCHOLOGY Oct 2009

· Best overall performance in the MSc

**University of Liverpool** Liverpool, UK

University of Liverpool International Scholarship Sep. 2008 - Sep. 2009

Colfuturo Bogota, Colombia

SCHOLARSHIP-LOAN PROGRAMME Sep. 2008 - Sep. 2009

#### Grants

Universidad El Bosque Bogota, Colombia

XI INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2023

Feb. 2024 - Present

- Project: Effect of real and simulated resource control on androphilic women's preferences for masculinity in men's faces: an experimental study
  using eye-tracking
- PI: Milena Vásquez-Amézquita
- · COP\$89.979.750

Minciencias Bogota, Colombia

POSTDOCTORAL RESEARCH STAYS - COLCIENCIAS BENEFICIARIES 2017

Jan. 2018 - Jan. 2019

- · Project: Perceptible signals of physical and mental health in faces, voices and body odors, and their relationship with hormonal levels
- · COP\$84.000.000

Universidad El Bosque Bogota, Colombia

IX INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2017

Jan. 2018 - Dec. 2021

- · Project: Perceptible signals of physical and mental health in faces, voices and body odors, and their relationship with hormonal levels
- COP\$136.586.537

Universidad El Bosque

Bogota, Colombia

VIII INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2016

Jan. 2017 - Dec. 2020

· Project: Effects of evolutionary relevant static signals (sex, dominance, and attractiveness) on the cortical processing of human faces

· COP\$80.000.000

Universidad El Bosque Bogota, Colombia

VII INTERNAL CALL FOR FINANCING RESEARCH AND TECHNOLOGICAL INNOVATION PROJECTS EL BOSQUE UNIVERSITY, 2015

Jan. 2016 - Dec. 2019

- · Project: Effects of hormone levels, masculinity and femininity, on pitch discrimination in men and women
- COP\$13.000.000

### **Publications**



#### **RECOMMENDATIONS**



**Note:** For more information about my role as a recommender (equivalent to Associate Editor) for *Peer Community In Registered Reports*, see the section dedicated to my editorial roles below.

**Leongómez, J. D.** (2024). The interplay of music, movement, and culture on rhythm processing. *Peer Community in Registered Reports,* 100646. https://doi.org/10.24072/pci.rr.100646

#### **PUBLISHED JOURNAL ARTICLES AND WORKS**

- Hadavi, S., Kuroda, J., Shimozono, T., **Leongómez, J. D.**, & Savage, P. E. (In Principle Accepted). Cross-cultural relationships between music, emotion, and visual imagery: A comparative study of Iran, Canada, and Japan [Stage 1 Registered Report]. *Peer Community In Registered Reports*. Preprint: https://doi.org/10.31234/osf.io/26yg5
- Martínez, C. A., & **Leongómez, J. D.** (2024). Dehumanizing framing effects on agency, punishment, and re-socialization attributions towards ex-perpetrators in post-conflict. *Peace and Conflict: Journal of Peace Psychology, 30*(3), 327–337. https://doi.org/10.1037/pac0000710
- Kleisner, K., Tureček, P., Saribay, S. A., Pavlovič, O., **Leongómez, J. D.**, Roberts, S. C., Havlíček, J., Valentova, J. V., Apostol, S., Akoko, R. M., & Varella, M. A. C. (2024). Distinctiveness and femininity, rather than symmetry and masculinity, affect facial attractiveness across the world. *Evolution and Human Behavior*, 45(1), 82–90. https://doi.org/10.1016/j.evolhumbehav.2023.10.001
- Vásquez-Amézquita, M., **Leongómez, J. D.**, Salvador, A., & Seto, M. C. (2023). What can the eyes tell us about atypical sexual preferences as a function of sex and age? Linking eye movements with child-related chronophilias. *Forensic Sciences Research, 8*, 5-15. https://doi.org/10.1093/fsr/owad009
- Terry, J., Ross, R. M., Nagy, T., ..., **Leongómez, J. D.**, ..., & Field, A. P. (2023). Data from an international multi-centre study of statistics and mathematics anxieties and related variables in university students (the SMARVUS dataset). *Journal of Open Psychology Data*, 11(1), 8. https://doi.org/10.5334/jopd.80
- **Leongómez, J. D.**, Havlíček, J., & Roberts, S. C. (2022). Musicality in human vocal communication: An evolutionary perspective. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 377, 20200391. https://doi.org/10.1098/rstb.2020.0391
- Santamaría-García, H., Burgaleta, M., Legaz, A., Flichtentrei, D., Cordoba-Delgado, M., Molina, J., Linares, J., Montealegre, J., Castelblanco Toro, S., Schulte, M., Paramo, J., Mondragón, I., **Leongómez, J. D.**, Salamone, P., González-Pacheco, J., Baez, S., & Ibañez, A.(2022). The price of prosociality in pandemic times. *Humanities and Social Sciences Communications*, 9, 15. https://doi.org/10.1057/s41599-021-01022-2

- Vásquez-Amézquita, M., Salvador, A., & **Leongómez, J. D.** (2022). Is digit ratio (2D:4D) different between sexual and non-sexual offenders, and non-offending men? Study of a Colombian sample [Existen diferencias en la ratio 2D:4D entre delincuentes sexuales y no sexuales, y hombres no delincuentes? Un estudio en una muestra colombiana]. *Interdisciplinaria. Revista de Psicología y Ciencias Afines*, 39(1), 127–141. https://doi.org/10.16888/interd.2022.39.1.8
- Watkins, C., Bovet, J., Fernandez, A. M., **Leongómez, J. D.**, Zelazniewicz, A., Correa Varella, M. A., & Wagstaff, D. (2022). Men say 'I love you' before women do: Robust across several countries. *Journal of Social and Personal Relationships*, 39(7), 2134–2153. https://doi.org/10.1177/02654075221075264
- Fiala, V., Třebický, V., Pazhoohi, F., **Leongómez, J. D.**, Tureček, P., Saribay, S. A., ... Kleisner, K. (2021). Facial attractiveness and preference of sexual dimorphism: A comparison across five populations. *Evolutionary Human Sciences, 3*, e38. https://doi.org/10.1017/ehss.2021.33
- Jones, B. C., DeBruine, L. M., Flake, J. K., Liuzza, M. T., ..., **Leongómez, J. D.**, ..., & Chartier, C. R. (2021). To which world regions does the valence-dominance model of social perception apply? *Nature Human Behaviour, 5*, 159–169. https://doi.org/10.1038/s41562-020-01007-2
- Kleisner, K., **Leongómez, J. D.**, Pisanski, K., Fiala, V., Cornec, C., Groyecka, A., ... Akoko, R. M. (2021). Predicting strength from aggressive vocalisations versus speech in African bushland and urban communities. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376, 20200403. https://doi.org/10.1098/rstb.2020.0403
- Kleisner, K., Tureček, P., Roberts, S. C., Havlíček, J., Valentova, J. V., Akoko, R. M., **Leongómez, J. D.**, Apostol, S., Varella, M. A. C., & Saribay, S. A. (2021). How and why patterns of sexual dimorphism in human faces vary across the world. *Scientific Reports*, *11*, 5978. https://doi.org/10.1038/s41598-021-85402-3
- **Leongómez, J. D.**, Pisanski, K., Reby, D., Sauter, D., Lavan, N., Perlman, M., & Varella Valentova, J. (2021). Voice modulation: From origin and mechanism to social impact. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 376, 20200386. https://doi.org/10.1098/rstb.2020.0386
- **Leongómez, J. D.**, Sánchez, O. R., Vásquez-Amézquita, M., & Roberts, S. C. (2021). Contextualising courtship: Exploring male body odour effects on vocal modulation. *Behavioural Processes*, 193, 104531. https://doi.org/10.1016/j.beproc.2021.104531
- Leongómez, J. D., Sánchez, O. R., Vásquez-Amézquita, M., Valderrama, E., Castellanos-Chacón, A., Morales-Sánchez, L., ... González-Santoyo, I. (2020). Self-reported health is related to body height and waist circumference in rural indigenous and urbanised Latin-American populations. Scientific Reports, 10, 4391. https://doi.org/10.1038/s41598-020-61289-4
- Bonilla, F. M., & **Leongómez, J. D.** (2019). Efectos de la expresión emocional y de la orientación del rostro sobre las respuestas conductuales y el componente N170. *Psychologia*, 13(2), 95–106. https://doi.org/10.21500/19002386.3473
- Vásquez Amézquita, M., **Leongómez, J. D.**, Seto, M. C., & Salvador, A. (2019). Differences in visual attention patterns to sexually mature and immature stimuli between heterosexual sexual offenders, nonsexual pffenders, and nonoffending men. *Journal of Sex Research*, 56(2), 213–228. https://doi.org/10.1080/00224499.2018.1511965
- Vásquez-Amézquita, M., **Leongómez, J. D.**, Seto, M. C., Bonilla, F. M., Rodríguez-Padilla, A., & Salvador, A. (2019). Visual attention patterns differ in gynephilic and androphilic men and women depending on age and gender of targets. *Journal of Sex Research*, 56(1), 85–101. https://doi.org/10.1080/00224499.2017.1372353
- Watkins, C. D., **Leongómez, J. D.**, Bovet, J., Żelaźniewicz, A., Korbmacher, M., Corrêa Varella, M. A., ... Bolgan, S. (2019). National income inequality predicts cultural variation in mouth to mouth kissing. *Scientific Reports*, 9, 6698. https://doi.org/10.1038/s41598 -019-43267-7
- Culpepper, P. D., Havlíček, J., **Leongómez, J. D.**, & Roberts, S. C. (2018). Visually activating pathogen disgust: A new instrument for studying the behavioral immune system. *Frontiers in Psychology*, *9*, 1397. https://doi.org/10.3389/fpsyg.2018.01397
- Danel, D. P., Valentova, J. V., Sánchez, O. R., **Leongómez, J. D.**, Corrêa Varella, M. A., & Kleisner, K. (2018). A cross-cultural study of sextypicality and averageness: Correlation between frontal and lateral measures of human faces. *American Journal of Human Biology*, 30(5), e23147. https://doi.org/10.1002/ajhb.23147
- Vásquez-Amézquita, M., **Leongómez, J. D.**, Seto, M. C., Bonilla, F. M., Rodríguez-Padilla, A., & Salvador, A. (2018). No relation between digit ratio (2D:4D) and visual attention patterns to sexually preferred and non-preferred stimuli. *Personality and Individual Differences,* 120, 151–158. https://doi.org/10.1016/j.paid.2017.08.022
- Bonilla, F. M., & **Leongómez, J. D.** (2017). Efectos en la amplitud y la latencia del componente N170 ante la presentación de rostros emocionales de ira y miedo. *Psychologia*, 11(1), 39–48. https://doi.org/10.21500/19002386.3100
- **Leongómez, J. D.**, Mileva, V. R., Little, A. C., & Roberts, S. C. (2017). Perceived differences in social status between speaker and listener affect the speaker's vocal characteristics. *PLOS One*, *12*(6), e0179407. https://doi.org/10.1371/journal.pone.0179407
- Cobey, K. D., Nicholls, M., **Leongómez, J. D.**, & Roberts, S. C. (2015). Self-reported dominance in women: Associations with hormonal contraceptive use, relationship status, and testosterone. *Adaptive Human Behavior and Physiology, 1*(4), 449–459. https://doi.org/10.1007/s40750-015-0022-8
- **Leongómez, J. D.** (2015). La música como objeto de estudio científico: consideraciones en torno a la musicalidad y el origen de la música. (*Pensamiento*), (*Palabra*) y *Obra*, 13, 77–86. https://doi.org/10.17227/2011804X.15PP077.86
- **Leongómez, J. D.** (2014). Contextual musicality: vocal modulation and its perception in human social interaction [PhD, University of Stirling]. http://hdl.handle.net/1893/21102

- Leongómez, J. D., Binter, J., Kubicová, L., Stolařová, P., Klapilová, K., Havlíček, J., & Roberts, S. C. (2014). Vocal modulation during courtship increases proceptivity even in naive listeners. Evolution and Human Behavior, 35(6), 489–496. https://doi.org/10.1016/j.evolhumbehav.2014.06.008
- Binter, J., **Leongómez, J. D.**, Moyano, N., Valentova, J., Jouza, L., & Klapilová, K. (2012). Sex differences in the incidence of sexual fantasies focused on evolutionary relevant objects. *Anthropologie*, 50(1), 83–93. http://puvodni.mzm.cz/Anthropologie/article.php?ID=1413
- Ferdenzi, C., Lemaître, J.-F., **Leongómez, J. D.**, & Roberts, S. C. (2011). Digit ratio (2D:4D) predicts facial, but not voice or body odour, attractiveness in men. *Proceedings of the Royal Society B: Biological Sciences, 278*(1724), 3551–3557. https://doi.org/10.1098/rspb.2011.0544
- **Leongómez, J. D.** (2009). Variation of pitch and loudness range of human voice in response to intra- and inter-sexual stimuli [MSc]. University of Liverpool.
- **Leongómez, J. D.** (2008). El origen no humano de la música. (*Pensamiento*), (*Palabra*) y *Obra*, 1, 87-97. https://revistas.pedagogica.edu.co/index.php/revistafba/article/view/50

#### PREPRINTS AND ARTICLES UNDER REVIEW

- Vásquez-Amézquita, M., Castellanos-Chacón, A., Medina-Sarmiento, W., Cepeda, V., Martínez-González, M. B., & **Leongómez, J. D.** (2024).

  \*\*Resource availability and experiences of partner violence shape facial masculinity preferences in Colombian women. Open Science Framework. https://doi.org/10.31219/osf.io/me47r
- Ackerman, J., Samore, T., Fessler, D. M. T., Kupfer, T. R., Choi, S., Merrell, ..., **Leongómez, J. D.**, ..., & Žeželj, I. (2024). *I see sick people: Beliefs about sensory detection of infectious disease are largely consistent across cultures*. [Manuscript submitted for publication].
- Savage, P. E., Ampiah-Bonney, A., Arabadjiev, A., Arhine, A., Ariza, J. F., ..., **Leongómez, J. D.**, ..., & Zariquiey, R. (2024). *Does singing enhance cooperation more than speaking does? A global experimental Stage 1 Registered Report*. PsyArXiv. https://doi.org/10.31234/osf.io/pv3m9
- Vásquez-Amézquita, M., **Leongómez, J. D.**, Martínez-González, M. B., & Chivers, M. L. (2023). *Trait sexual desire-linked subjective sexual arousal to erotic and non-erotic stimuli: Gender, relationship status, and gender-specificity*. [Manuscript submitted for publication].

### **Educational Resources and Science Communication**

#### INVESTIGACIÓN ABIERTA (YOUTUBE CHANNEL)



- ▶ Investigación Abierta [Open Research] is a YouTube channel (in Spanish) where I post videos and tutorials related to quantitative research methods and open science, as well as useful open source software.
- **Leongómez, J. D.** [Investigación Abierta]. (2023). *Meta-análisis de correlaciones en R [Meta-analysis of correlations in R]* [Video]. YouTube. https://jdleongomez.info/en/post/meta\_corr\_r/
- **Leongómez, J. D.** [Investigación Abierta]. (2021). *Hacer meta-análisis en jamovi es muy fácil [Meta-analysis in jamovi is very easy]* [Video]. YouTube. https://jdleongomez.info/en/post/meta/
- **Leongómez, J. D.** [Investigación Abierta]. (2020). *Poder estadístico y tamaño de muestra en R [Statistical power and sample size calculation in R]* [3 Videos]. YouTube. https://jdleongomez.info/en/post/power/
- **Leongómez, J. D.** [Investigación Abierta]. (2020). ¿Qué es un valor p? Te lo puedo mostrar gráficamente y con simulaciones [What is a p-value? I can show you graphically] [Video]. YouTube. https://jdleongomez.info/en/post/pvalue/
- **Leongómez, J. D.** [Investigación Abierta]. (2020). *Introducción a jamovi* [Introduction to jamovi] [2 Videos]. YouTube. https://jdleongomez.info/en/post/jamovi/
- **Leongómez, J. D.** [Investigación Abierta]. (2020). *Introducción a OBS Studio* [*Introduction to OBS Studio*] [Video]. YouTube. https://jdleongomez.info/en/post/obs/

#### **ONLINE PRACTICAL GUIDES**

- **Leongómez, J. D.** (2023). Meta-análisis de correlaciones y meta-regresión en R: Guía práctica [Meta-analysis of correlations and meta-regression in R: A Practical Guide]. *MetaArXiv*. https://doi.org/10.31222/osf.io/yaxd4
- **Leongómez, J. D.** (2020). Análisis de poder estadístico y cálculo de tamaño de muestra en R: Guía práctica [Statistical power analysis and sample size calculation in R: A practical guide]. *Zenodo*. https://doi.org/10.5281/zenodo.3988776

#### **PUBLIC ARTICLES**

Mileva, V. R., & **Leongómez, J. D.** (2018). Want to know if your partner's cheating on you? Just listen to their voice. *The Conversation*. https://theconversation.com/want-to-know-if-your-partners-cheating-on-you-just-listen-to-their-voice-92387

Mileva, V. R., & Leongómez, J. D. (2017). We change our voice when we talk to high-status people, shows new study. *The Conversation*. https://theconversation.com/we-change-our-voice-when-we-talk-to-high-status-people-shows-new-study-80053

#### SHINY APPS FOR EDUCATIONAL PURPOSES



Developed interactive apps in R using Shiny mainly for for teaching and illustrating statistical concepts. In this section you can find some examples.

Leongómez, J. D. (2023). PowerSimulate [Computer software collection]. https://shiny.jdl-svr.lat/PowerSimulate/

- PowerSimulate: Correlation, https://shiny.jdl-svr.lat/PowerSimulate\_corr\_EN/
- PowerSimulate: Independent t-test, https://shiny.jdl-svr.lat/PowerSimulate\_ind\_t\_EN/
- PowerSimulate: Paired t-test, https://shiny.jdl-svr.lat/PowerSimulate\_pair\_t\_EN/
- **Leongómez, J. D.** (2023). **ScolarlyOutput**: Create and Export a complete plot of your academic Google Scholar profile (Version 1.0.0) [Computer software]. https://doi.org/10.5281/zenodo.8060475
- **Leongómez, J. D.** (2021). *ProbDnD*: Probability of getting a score in DnD, combining multiple dice and a modifier [Computer software]. https://github.com/JDLeongomez/ProbDnD\_EN

### **Conference Presentations, Posters and Workshops**

- **Leongómez, J. D.** (2023, August). Powering your conclusions: Exploring the vital importance of statistical power and sample size for reliable inference. Invited talk presented at XXIX Institutional Research Congress (Universidad El Bosque), Bogotá, Colombia. https://investigaciones.unbosque.edu.co/s/D-00730\_\_ViceInvestigaciones\_\_-agenda-Congreso-Institucional-links-1.pdf
- **Leongómez, J. D.** (2023, July). From data to knowledge: Conducting meta-analyses of correlations and t-tests. Invited workshop presented at Summer Institute of the International Society for Human Ethology (ISHE), Universidade Federal de Pernambuco, Recife, Brazil. https://ishe.org/wp-content/uploads/2023/07/BoA\_v06\_km.pdf (see certificate)
- **Leongómez, J. D.** (2023, July). Ensuring reliable results: Power analysis and sample size estimation in behavioural research. Invited workshop presented at Summer Institute of the International Society for Human Ethology (ISHE), Universidade Federal de Pernambuco, Recife, Brazil. https://ishe.org/wp-content/uploads/2023/07/BoA\_v06\_km.pdf (see certificate)
- **Leongómez, J. D.**, Havlíček, J., & Roberts, S.C. (2022, October). *Musicality in human vocal communication*. Paper presented as part of The Evolution of Human Musicality symposium at the 4th Brazilian Meeting on Evolution of Human Behavior (University of São Paulo), São Paulo, Brazil. https://youtu.be/gK\_rl0r4nfs?t=9662
- **Leongómez, J. D.** (2022, October). *jamovi face-to-face session*. Workshop for the Research Training Plan of the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia.
- Leongómez, J. D. (2022, September). Introduction to jamovi: Modern, free, open source alternative for statistical analysis. Presentation for the Research Training Plan of the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia. https://investigaciones.unbosque.edu.co/eventos/cuestioneseticas-jjnlm-92bkj-n249w-hbnhl-6tpj4-pm22x-8m3yh-645tt-gw59h-xwc6x-d9sgw-6fzel-hm6dd-2wrls-569m2-8zns8-rg363
- Leongómez, J. D. (2022, August). Beyond Open Access: The need for comprehensive Open Science to address the implications of the naturalisation of malpractice and the replication crisis. Presentation for the Research Training Plan of the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia. https://investigaciones.unbosque.edu.co/eventos/cuestioneseticas-jjnlm-92bkj-n249w-hbnhl-6tpj4-pm22x-8m3yh-645tt-gw59h-xwc6x-d9sgw-6fzel-hm6dd-2wrls-569m2-8zns8
- **Leongómez, J. D.** (2022, April). How reliable is the scientific literature? Open science as a strategy to address the implications of the naturalisation of bad practices and the replication crisis. Presentation organised by the Research Unit of the Faculty of Psychology (Universidad El Bosque), Bogotá, Colombia. https://youtu.be/F198MoBqSaI
- **Leongómez, J. D.** (2020, November). How many participants do I need? Statistical power analysis and sample size calculation in R. Workshop presented at the Online International Congress of Neurosciences: Brain and Behaviour in times of COVID-19 (Universidad El Bosque, Universidad de los Andes), Bogotá, Colombia. https://youtu.be/tVB9sh5ZFH0
- Leongómez, J. D. & Sánchez, O. R. (2019, September). Association between height and waist circumference with health in rural indigenous and urban populations in Latin America. Paper presented at the XXV Institutional Research Congress (Universidad El Bosque), Bogotá, Colombia. https://static1.squarespace.com/static/5fb667be752a000eaf4b5869/t/60454941f7f209159575a773/1 615153475374/Memorias+-XXV+Congreso+2019.pdf
- Leongómez, J. D., Sánchez, O.R., Vásquez-Amézquita, M., Valderrama, E., Castellanos-Chacón, A., Morales-Sánchez, L., Nieto, J., & González-Santoyo, I. (2019, August). Self-reported Health is Related to Body Height and Waist Circumference in Rural Indigenous and Urbanised Latin-American Populations. Paper and poster presented at the VII Summer Institute of the International Society for Human Ethology (ISHE), Zadar, Croatia. Poster: https://jdleongomez.info/en/publication/leongomez2020/PosterA0.pdf
- Leongómez, J. D. (2019, June). Experimental Designs. Workshop at the Vicerectory of Research (Universidad El Bosque), Bogotá, Colombia.
- **Leongómez, J. D.**, Murray, A.K., & Roberts, S.C. (2018, September). *Contextualising courtship: Male body odour effects on vocal modulation*. Paper presented at the XXIV Biannual Conference for Human Ethology (ISHE), Santiago, Chile.

- **Leongómez, J. D.** (2017, September). Effects of hormonal levels, masculinity and femininity, on men's and women's pitch discrimination. Paper presented at the XXIII Institutional Research Congress (Universidad El Bosque), Bogotá, Colombia.
- **Leongómez, J. D.** (2017, August). *The sound of seduction: Vocal modulations and their effects during courtship.* Plenary session at the 2nd Symposium of Neurosciences, Cognition and Society (Universidad Javeriana), Bogotá, Colombia.
- **Leongómez, J. D.** (2017, March). *Is the relationship between musical and linguistic processing a vestige of the evolutionary origins of music?*. Plenary session at the 2017 Brain Awareness Week 2017 (Universidad El Bosque), Bogotá, Colombia.
- **Leongómez, J. D.**, Mileva, V.R., Little, A.C., & Roberts, S.C. (2016, August). *Perceived differences in social status between speaker and listener affect the speaker's vocal characteristics*. Paper presented at the XXIII Biennial Congress On Human Ethology (ISHE), Stirling, UK.
- **Leongómez, J. D.**, Binter, J., Kubicová, L., Stolařová, P., Klapilová, K., Havlíček, J., & Roberts, S.C. (2014, April). *Vocal modulation during courtship increases proceptivity even in naive listeners*. Paper presented at the European Human Behaviour and Evolution Association (EHBEA) Annual Meeting 2014 (University of Bristol), Bristol, UK.
- **Leongómez, J. D.**, & Roberts, S.C. (2013, April). The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals. Oral presentation for the Mind and Brain Group (University of Stirling), Stirling, UK.
- **Leongómez, J. D.**, & Roberts, S.C. (2013, March). The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals. Poster presented at the European Human Behaviour and Evolution Association (EHBEA) Annual Meeting 2013 (VU University Amsterdam), Amsterdam, Netherlands.
- **Leongómez, J. D.** (2013, March). *Voice research techniques using Praat*. Workshop at the Faculty of Humanities (Charles University), Prague, Czech Republic.
- Leongómez, J. D. (2013, March). Acoustic Communication. Oral presentation at the Centre for Theoretical Study, Prague, Czech Republic.
- **Leongómez, J. D.**, & Roberts, S.C. (2012, May). The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals. Oral presentation for the Group of Human Ethology (Charles University), Prague, Czech Republic.
- **Leongómez, J. D.** (2013, March). *Voice research techniques using Praat*. Workshop at the Scottish Universities Psychology Postgraduate Research Training SUPPORT (University of Stirling), Stirling, UK.
- **Leongómez, J. D.**, & Roberts, S.C. (2011, February). *The sound of sweet nothings: How men and women modulate vocal parameters in speech directed towards attractive and unattractive individuals*. Oral presentation for the Behaviour and Evolution Research Group (University of Stirling), Stirling, UK.
- **Leongómez, J. D.**, & Roberts, S.C. (2010, December). *Context-dependant modulation of vocal parameters*. Poster presented at The Language of Music, the Music of Language; Meeting 2: Entrainment/Meaning (Centre for Music & Science, University of Cambridge), Cambridge, UK.

#### **Scientific Events**

#### **ISHE International Congress 2024**

July 12 - 16, 2024

MEMBER OF THE PROGRAMME COMMITTEE

- Conference Program (PDF)
- Book of Abstracts (PDF)
- ISHE Meetings

## CIVN2020 - Online International Congress of Neurosciences: Brain and Behaviour in times of COVID-19

Universidad El Bosque & Universidad de los Andes

November 25 - 28, 2020

PRESIDENT OF THE SCIENTIFIC COMMITTEE

MEMBER OF THE SCIENTIFIC COMMITTEE

- · Book of Abstracts
- YouTube channel (The entire congress is available)

#### 1st International Virtual Congress ISEP

ISEP

May 5 - 7, 2020

• Scientific Committee

### **Editorial Appointments**

Note: My verified review and editor record is available from my Web of Science profile.

#### **Peer Community In Registered Reports**

Recommender

Since 2023

RECOMMENDER (EQUIVALENT TO ASSOCIATE EDITOR)

- Issue Stage 1 and Stage 2 recommendations
- Recommender profile

#### **Philosophical Transactions of the Royal Society B: Biological Sciences**

Guest editorial team

2018 - 2024

GUEST EDITOR 2020 - 2021

- Theme Issue Voice modulation: from origin and mechanism to social impact (Parte 1, Parte 2)
- Edited by Juan David Leongómez, Katarzyna Pisanski, David Reby, Disa Sauter, Nadine Lavan, Marcus Perlman & Jaroslava Varella Valentova

Frontiers in Psychology Editorial team

REVIEW EDITOR

- Specialty section on Evolutionary Psychology
- Loop profile

Ad Hoc Reviewer Journals

Since 2013

JOURNALS INCLUDE

- Peer Community In Registered Reports
- Proceedings of the Royal Society B: Biological Sciences
- Royal Society Open Science
- PLOS ONE
- · Biology Letters

- Evolution and Human Behavior
- Scientific Reports
- Cortex
- · Journal of Nonverbal Behavior
- Perception
- Basic and Applied Social Psychology
- Frontiers in Psychology
- Evolutionary Psychology
- Summa Psicológica
- Human Ethology

**Academic Reviewer** 

PUBLICATION/GRANT EVALUATION

- Minciencias
- Universidad Nacional de Colombia

Colombian Institutions

Since 2015

### **Research Supervision**

#### **POSTGRADUATE**

The Faculty of Psychology at Universidad El Bosque does not offer research degrees, and all M-level courses are professional masters. Because of this, opportunities to supervise postgraduate students are limited, and most of my postgraduate supervision has been external.

#### Milena Vásquez-Amézquita

Universitat de València, Spain

PhD in Neuroscience

2015 - 2018

- Thesis (Summa Cum Laude): Preferencias sexuales típicas y atípicas según sexo y edad de los estímulos: Utilidad de la técnica de rastreo ocular [Typical and atypical sexual preferences according to sex and age of the stimuli: Usefulness of the eye tracking technique]
- · Supervised together with Alicia Salvador

Francisco Javier Flores U. of East London, UK

PROFESSIONAL DOCTORATE IN COUNSELLING PSYCHOLOGY

2015 - 2018

- Tésis: What sense do people make of the functions of their 'behaviours that may be causing problems in their everyday life'? A hybrid deductive/inductive template analysis
- Supervised together with Lisa Chiara Fellin

#### Adrián Acosta Guerrero

Universidad El Bosque, Colombia

MSc in Psychology

2019 - 2020

- Research project (Distinction): La voz como predictor de sintomatología asociada a depresión y ansiedad [Voice as a predictor of symptomatology associated with depression and anxiety]
- Supervised together with Milena Vásquez-Amézquita

**Julia Sanz-Vidania** University of Stirling, UK

PSYCHOLOGICAL RESEARCH METHODS (EVOLUTIONARY PSYCHOLOGY) MSC

2013 - 2014

- Research project (Distinction): Sexy Chat: Mate-Choice Preferences for Speech Content in the Absence of Auditory Cues
- Supervised together with S Craig Roberts

#### **UNDERGRADUATE**

The supervised undergraduate students listed below come from different universities and academic programmes. This list only includes students for whom I was the main supervisor or who were awarded honours degrees. Additionally, I am currently supervising six students as a principal supervisor, and have supervised over 25 students as a co-supervisor.

Universidad El Bosque, Colombia

BSC IN PSYCHOLOGY Since 2017

- Professional practice in research supervision (2017 2018)
- Project: Señales perceptibles de salud física y mental en rostros, voces y olores corporales, y su relación con niveles hormonales [Perceptible signs
  of physical and mental health in faces, voices, and body odours, and their relationship to hormone levels]
- Research project with *distinction*
- Teaching supervision (2019 Present)

#### Scharik Yuliana Bello Lizarazo, Maria Camila Plazas López & Natalia Rodríguez Bautista

Universidad El Bosque, Colombia

**BSc in Psychology** 

2023 - 2024

• Research project: ¿Es posible percibir la promiscuidad de una persona con tan solo escuchar su voz? [Is it possible to perceive a person's promiscuity just by listening to his or her voice?]

Isabella Russo Universidad El Bosque, Colombia

BSc in Psychology

2023

• Research project: ¿El género, preferenca sexual y nivel de sociosexualidad de una persona podrían influir en su capacidad para detectar la sociosexualidad de otros a través de rostros? [Could a person's gender, sexual preference and level of sociosexuality influence their ability to detect the sociosexuality of others from their faces?]

#### Maria Camila Wilches & Johan Sebatián Castiblanco

Universidad El Bosque, Colombia

BSc in Psychology

2022 - 2023

 Research project: El rol del género en la identificación de la sociosexualidad a partir de las voces [The role of gender in the identification of sociosexuality from voices]

#### Angie Alejandra Lozano Sanjuan, Daniela Martínez Franco & Mariana Saavedra Botero

Universidad El Bosque, Colombia

BSc in Psychology

2021 - 2022

• Research project (*Distinction*): ¿Somos capaces de detectar qué tan sociosexual es una persona a partir de su voz y/o su rostro? [Are we able to detect the sociosexual orientation of a person from their voice and/or face?]

John Jairo Rubio Universidad El Bosque, Colombia

**BSc in Psychology** 

2021 - 2022

• Research project: ¿Existe relación entre la simetría facial y el atractivo de la voz? [Association between facial symmetry and vocal attractiveness]

#### Maria Daniela Martínez Luna & Juan Sebastián Preciado Ruíz

Universidad El Bosque, Colombia

BSc in Psychology

2020 - 2021

• Research project (Distinction): ¿Existe relación entre la sociosexualidad y la voz? [Is there a relationship between sociosexuality and voice?]

#### Maria Paula Moreno Rodríguez & Andrés Felipe Orozco Serrato

Universidad El Bosque, Colombia

BSc in Psychology

2019 - 2021

Research project: ¿Existe relación entre la forma del rostro y la socio-sexualidad? [Is there an association between face shape and socio-sexuality?]

#### Danny Ferley Gaitan Rodríguez & Hasbleidy Gamboa Ordoñez

Universidad El Bosque, Colombia

BSc in Psychology

2019 - 2020

Research project: Detección de infidelidad y sociosexualidad a partir de rostros: Análisis preliminar [Perception of socio-sexuality from facial cues]

#### Natalia Elízabeth Moreno Buitrago & Juan Felipe Pérez Ariza

U. Pedagógica Nacional, Colombia

BA IN MUSIC PEDAGOGY

2017 - 2019

Research project (Distinction): Musicalidad y cohesión social: una aproximación experimental y bibliográfica desde el trabajo en equipo [Musicality and social cohesion: An experimental and bibliographic approach from teamwork]

#### Paula Andrea Betancourt Velandia & Ana Sofía Gómez Castelblanco

Universidad El Bosque, Colombia

BSc in Psychology

2018 - 2019

• Research project: Hombres que alcanzan voces menos agudas y con un volumen más bajo, tienden a tener más relaciones sexuales casuales [Men who achieve lower-pitched voices and with a lower intensity tend to have more casual sex]

#### Maria Alejandra Abello Mozo

Universidad El Bosque, Colombia

BSc in Biology

2017 - 2018

• Research project (*Distinction*): Desarrollo y evaluación de una metodología nueva para manipular las variables del atractivo, dominancia y sexo simultáneamente en fotos de caras humanas con el programa PsychoMorph [Development and evaluation of a new methodology to simultaneously manipulate attractiveness, dominance and sex in photos of human faces with PsychoMorph]

#### Cindy Paola Moncada Gómez

Universidad El Bosque, Colombia

BSc in Psychology

2017 - 2018

• Research project: La voz del sexo casual: ¿las características vocales predicen la disposición al sexo sin compromiso en hombres y mujeres? A [The voice of casual sex: do vocal characteristics predict willingness to engage in uncommitted sex in men and women? A]

#### Laura Milena Estupiñan Aldana

Universidad El Bosque, Colombia

BSc in Psychology 2017 - 2018

• Research project: La voz del sexo casual: ¿las características vocales predicen la disposición al sexo sin compromiso en hombres y mujeres? B [The voice of casual sex: do vocal characteristics predict willingness to engage in uncommitted sex in men and women? B]

Vanesa Díaz Güiza Universidad El Bosque, Colombia

BSc in Psychology

2016 - 2018

Research project: La voz del sexo casual: ¿las características vocales predicen la disposición al sexo sin compromiso en hombres y mujeres? C
 [The voice of casual sex: do vocal characteristics predict willingness to engage in uncommitted sex in men and women? C]

#### Lina María García Hoyos

Universidad El Bosque, Colombia

BSc in Psychology

2016 - 2018

• Research project: ¿Se puede determinar si una persona ha sido infiel a partir de su voz? [Can you determine if a person has been unfaithful from their voice?]

#### Angie Liliana Pérez Rodríguez

Universidad El Bosque, Colombia

BSc in Psychology

2016 - 2017

• Research project: Efectos de los niveles hormonales en la discriminación tonal de mujeres [Effects of hormone levels on pitch discrimination in women]

#### Lina María Morales Sánchez

Universidad El Bosque, Colombia

BSc in Psychology

2016 - 2017

• Research project: Discriminación tonal predice satisfacción con pareja y su inversión parental, en hombres y mujeres [Pitch discrimination predicts partner satisfaction and parental investment, in men and women]

#### Haydn Ricardo Roldán Morales

Universidad El Bosque, Colombia

BSc in Psychology

2015 - 2016

Research project: El sonido de la seducción: discriminación tonal, satisfacción en pareja, y niveles hormonales en hombres [The Sound of Seduction: Tonal Discrimination, Partner Satisfaction, and Hormone Levels in Men]

### **Memberships**

LATIN AMERICAN ASSOCIATION FOR HUMAN BEHAVIORAL AND EVOLUTIONARY SCIENCES (LAAHBES)

Since 2024

INTERNATIONAL SOCIETY FOR HUMAN ETHOLOGY (ISHE)

2016 - Present

ASSOCIATION FOR PSYCHOLOGICAL SCIENCE (APS)

2013 - 2020

EUROPEAN HUMAN BEHAVIOUR AND EVOLUTION ASSOCIATION (EHBEA)

2013 - 2016