

MARTA MARTINS

CURRICULUM VITAE

E-MAIL: Marta.Sofia.Martins@iscte-iul.pt

Ciência-IUL: <https://ciencia.iscte-iul.pt/authors/marta-martins/cv>

Ciência Vitae: <https://www.cienciavitae.pt/OC1B-E2EE-E106>

ResearchGate: https://www.researchgate.net/profile/Marta_Martins8



EDUCATION

- 2019 Ph.D. in Psychology (FCT Doctoral Fellowship SFRH/BD/99622/2014), Faculty of Psychology and Education Sciences, University of Porto, Portugal
- 2012 M.Sc. in Educational Administration and Management, Universidade Portucalense Infante D. Henrique (www.upt.pt), Portugal
- 2008 8th Grade – Descant/Treble Recorder, Associated Board of the Royal Schools of Music, United Kingdom
- 2007 Graduated in Biology, Faculty of Sciences, University of Porto, Portugal

PROFESSIONAL EXPERIENCE

CURRENT POSITION

Post-doctoral researcher at Centre for Social Research and Intervention, CIS, University Institute of Lisbon (ISCTE-IUL)

MUSE - Music for the development of social skills: The impact of music training on socio-emocional processing (PTDC/PSI-GER/28274/2017)

PAST POSITIONS

- 2017 - ... Collaborator, Behavioral Characteristics and Neural Correlates of Reading Impairment in FASD, Gaab Lab, Boston Children’s Hospital, Harvard Medical School, USA (National Institute on Alcohol Abuse and Alcoholism Research Grant awarded to Nadine Gaab and Sandra Jacobson)
- 2015 - 2019 Team Member, The Impact of music training on reading and mathematical abilities of normal and reading disabled children: a behavioral and neuroimaging longitudinal study, Neurocognition and Language Research Group, Center for Psychology at University of Porto, Portugal (Bial Foundation grant 304/2014 awarded to São Luís Castro; FCT Doctoral Fellowship SFRH/BD/99622/2014 awarded to Marta Martins)
- 2014 Team member, Age-related changes in the musical perception, Neurocognition and Language Research Group, Center for Psychology at University of Porto, Portugal
- 2011 - 2014 Team member, The role of artistic projects in the academic achievement of 2nd cycle students, Porto’s School of Music and Performing Art, IPP, Portugal
- 2007 Research Assistant, Sustainable Fish Farming, Department of Biological and Environmental Science, University of Jyväskylä, Finland

2004 Research Assistant, Amoeba gill disease and sucoticiatosis of aquaculture sea bass, Investigação Científica na Pré-graduação, Faculty of Sciences, University of Porto, Portugal

PEDAGOGICAL EXPERIENCE

2020 - Invited Assistant Professor, Department of Psychology, ISCTE-IUL
Courses: Biological Bases of Emotions (MSc Emotion Sciences), Psychophysiology and Genetics (BSc Psychology)

2020/2021 Teaching Assistant, Elements of Human Anatomy and Physiology course, Master in Medical Physics, Faculty of Sciences, University of Porto

2020/2021 Guest lecturer, Rehabilitation Nursing course, Post-graduate Specialization Program in Rehabilitation Nursing, Escola Superior de Enfermagem Cruz Vermelha Portuguesa, Alto Tâmega

2018 - Teaching assistant, School of Medicine and Biomedical Sciences, ICBAS, University of Porto
Courses: Introduction to Medicine I and Nervous System Anatomy and Physiology courses (Integrated MSc in Medicine)

2015 - 2018 Teaching assistant, History of Medicine course, Integrated Master in Medicine, School of Medicine and Biomedical Sciences, ICBAS, University of Porto

FORTHCOMING

2020/2021 Invited Assistant Professor, Post-graduation in Neuroscience of Music, Universidade Católica Portuguesa, Lisboa

Other

2007 - 2015 Music teacher, primary education, Agrupamento de Escolas Irmãos Passos, Matosinhos

2007 - 2015 Music teacher, kindergarten, Infantário de Catassol, Maia

SCIENTIFIC MERIT

PUBLICATIONS

1. Neves, L.*, Martins, M.*, Correia, A. I., Castro, S. L., & Lima, C. F. (Preprint, 2021). Associations Between Vocal Emotion Recognition and Socio-emotional Adjustment in Children. <https://doi.org/10.1101/2021.03.12.435099> *equal contribution
2. Martins, M., Reis, A. M., Castro, S. L.*, & Gaser, C.* (Preprint, 2020). Gray-matter correlates of reading fluency deficits: SES matters, IQ does not. <https://doi.org/10.21203/rs.3.rs-368426/v1> *equal contribution
3. Martins, M. & Lima, C. F. (Preprint, 2020). Does Music Training Improve Emotion Recognition Abilities? A Critical Review. <https://doi.org/10.31234/osf.io/esbva>
4. Martins, M. (2021). As bases neurobiológicas da leitura. In R. A. Alves & I. Leite (Eds.). Alfabetização Baseada na Ciência: Manual do Curso ABC. MEC & CAPES. ISBN: 978-65-87026-86-2
5. Correia, A. I., Branco, P., Martins, M., Reis, A. M., Martins, N., Castro, S. L., Lima, C. (2019). Resting-state connectivity reveals a role for sensorimotor systems in vocal emotional processing in children. *NeuroImage*, 201, 116052. <https://doi.org/10.1016/j.neuroimage.2019.116052>

6. Martins, M., Silva, S., & Castro, S. L. (2019). Perceiving rhythmic repetition and change across development: effects of concurrent pitch. *Empirical Studies of the Arts*. <https://doi.org/10.1177/1367549417708437>
7. Martins, M., Neves, L., Rodrigues, P., Vasconcelos, O., & Castro, S. L. (2018). Orff-based music training enhances children's manual dexterity and bimanual coordination. *Frontiers in Psychology*, 9, 2616. <https://doi.org/10.3389/fpsyg.2018.02616>
8. Martins, M., Neves, L., Rodrigues, P., Vasconcelos, O., & Castro, S. L. (2017). A comparative study of rhythm perception in preterm and term children. In Rodrigues L. P., Clemente, F. M. & Lima, R. (Eds.), *X Studies in Children Motor Development* (pp. 53-63), Melgaço, Portugal.
9. Zanon, F. T., Marinho, H., Coimbra, D., & Martins, M. (2016). Ansiedade na performance musical: estudo de caso com a Orquestra Filarmonia das Beiras [Anxiety in musical performance: a case study with the Orquestra Filarmonia das Beiras]. *OPUS*, 22(2), 325-348. <https://doi.org/10.20504/opus2016b2213>
10. Castro, S. L., & Martins, M. (2015). Rhythm perception in children: The roles of age, sex and prematurity. *Proceedings of the 17th European Conference on Developmental Psychology* (pp. 151-156). Braga: University of Minho. ISBN 978-88-7587-733-0
11. Moura, M., Martins, M., & Coimbra, D. (2014). Contributo das atividades de complemento curricular (clube de música) no desempenho académico de estudantes do ensino básico. *Educação, Sociedade & Culturas*, 41, 69-89.
12. Santos, M. J., Cavaleiro, F., Campos, P., Sousa, A., Teixeira, F., & Martins, M. (2010). Impact of amoeba and scuticociliatidia infections on the aquaculture European sea bass (*Dicentrarchus labrax* L.) in Portugal. *Veterinary parasitology*, 171(1-2), 15-21. <https://doi.org/10.1016/j.vetpar.2010.03.013>

FORTHCOMING

1. Martins, M., Gaser, C., & Castro, S. L. (2021). Orff-based music training fosters plasticity in the developing brain. Manuscript in preparation.
2. Branco, P., Martins, M., Lima, C. F. & Castro, S. L. (2021). Dynamic reorganization of functional connectivity after music and sports training: a longitudinal study. Manuscript in preparation.

COMMUNICATIONS (Oral and Posters)

1. Martins, M. (2020, December). *As bases neurobiológicas da leitura* [vídeo]. YouTube. https://www.youtube.com/watch?v=24R_wuLqACQ
2. Martins, M., Coimbra, D., Reis, A. M., Gaser, C., Castro, S.L. (2020, June; postponed due to COVID-19). Orff-based music training induces plasticity in the developing brain – a behavioral and neuroimaging longitudinal study. Poster presented at the Neurosciences and Music Conference VII, Aarhus.
3. Lima, C. F., Correia, A. I., Branco, P., Martins, M., Reis, A. M., Martins, N., & Castro, S. L. (2019, June). Sensorimotor contributions to auditory emotion recognition in children: A resting-state fMRI study. Poster presented at the 25th Annual Meeting of the Organization for Human Brain Mapping, Rome.
4. Correia, A. I., Branco, P., Martins, M., Reis, A. M., Martins, N., Castro, S. L., & Lima, C. (2019, May). Resting-state functional connectivity predicts children's ability to recognize vocal emotions. Poster presented at the PhD Meeting in Psychology: Psychology and Well-being, Lisbon. Best poster award.

5. Castro, S. L., Martins, M., Neves, L., Rodrigues, P. & Vasconcelos, O. (2019, February). Music vs. sports training: Impact on children's fine motor abilities. Paper to be presented at the 47th Annual Meeting of the International Neuropsychological Society, New York City, USA.
6. Martins, M., Coimbra, D., & Castro, S. L. (2018, October). A prática instrumental Orff como potenciadora de competências musicais e não-musicais em crianças em idade escolar: Resultados de um estudo longitudinal no 1.º Ciclo do Ensino Básico. Paper presented at the "Seminário CIPEM – 20 Anos de Investigação e Prática" [CIPEM Seminar: 20 Years of Research and Practice], Escola Superior de Educação, Instituto Politécnico do Porto, Portugal.
7. Lima, C. F., Correia, A. I., Branco, P., Martins, M., Reis, A. M., Martins, N., & Castro, S. L. (2018, June). Resting-state functional connectivity predicts vocal emotion recognition in children. Poster presented at the 24th Annual Meeting of the Organization for Human Brain Mapping, Singapore.
8. Dias, S., Oliveira, A.R., Gouveia, J., Martins, M., Silva, S., & Castro, S. L. (2018, April). The impact of musical training on music-unrelated skills of first-graders. Poster presented at the 13.º Meeting of the Portuguese Association for Experimental Psychology, University of Minho, Portugal.
9. Correia, A. I., Branco, P., Martins, M., Reis, A. M., Martins, N., Castro, S. L., & Lima, C. F. (2018, February). Resting-state connectivity between inferior frontal and premotor cortices predicts auditory emotion recognition in children. Paper presented at iJUP 18, University of Porto, Portugal.
10. Martins, M., Neves, L., Rodrigues, P., Vasconcelos, O., & Castro, S. L. (2017, November). A comparative study of rhythm perception in preterm and term children. Paper presented at the "12.º Seminário de Desenvolvimento Motor da Criança" [12th Seminar on Child Motor Development], Melgaço, Portugal.
11. Rodrigues, P., Martins, M., Castro, S.L., & Vasconcelos, O. (2017, November). Manual dexterity asymmetry after music and basketball training programs. Paper presented at the III International Consortium of Motor Development Research Annual Conference, Escola Superior de Desporto e Lazer - Instituto Politécnico de Viana do Castelo (ESDL - IPVC), Melgaço, Portugal.
12. Correia, A. I., Branco, P., Martins, M., Reis, A. M., Martins, N., Castro, S. L., & Lima, C. (2017, May). Resting-state functional connectivity indexes individual differences in emotional prosody recognition in children. Poster presented at the 12.º Meeting of the Portuguese Association for Experimental Psychology, University of Porto, Portugal.
13. Cordeiro, C., Neves, L., Martins, M., Limpo, T., & Castro, S. L. (2017, May). Can musical abilities predict phonological awareness and reading in young children?. Poster presented at the 12.º Meeting of the Portuguese Association for Experimental Psychology, University of Porto, Portugal.
14. Neves, L., Cordeiro, C., Martins, M., Silva, S., & Castro, S. L. (2017, May). Rhythm skills in 5- to 6-year-old children: the role of cognitive functions. Poster presented in 12º Encontro Nacional da APPE, Universidade do Porto.
15. Martins, M., Neves, L., Cordeiro, C., Reis, A. M., Martins, N., Gaser, C., & Castro, S. L. (2016, October). Anatomical brain correlates of reading ability in 8- to 9-year-old Portuguese children. Paper presented at the III International Congress CADin, ISCTE-IUL, Lisboa, Portugal.
16. Neves, L., Martins, M., Cordeiro, C., Vasconcelos, O., & Castro, S. L. (2016, September). Benefícios da prática desportiva vs. musical na coordenação visuomotora em crianças de idade escolar. Paper presented at the "3º Encontro da Ordem de Psicólogos Portugueses", Alfândega do Porto, Porto, Portugal.
17. Martins, M., Neves, L., Cordeiro, C., Branco, P., Castro, S. L. (2016, July). From music to reading through working memory? Poster presented at Encontro Ciência 2016, Centro de Congressos de Lisboa, Lisboa, Portugal.

18. Martins, M., & Castro, S. L. (2016, June). Acknowledging the elephant in the room: Empirical insights into the relation between arithmetics and reading fluency. Poster presented at the 3rd International Conference of the European Society for Cognitive and Affective Neuroscience, Porto Palace Congress Hotel & Spa, Porto, Portugal.
19. Martins, M., & Castro, S. L. (2016, April). Music aptitude and reading acquisition: New empirical insights to an inferred relation. Poster presented at the 11st National Meeting of the Portuguese Association of Experimental Psychology, ISCTE-IUL, Lisboa, Portugal.
20. Martins, M., Gaser, C., Castro, S.L. (2015, August). The impact of music training on reading and mathematical abilities of normal and reading disabled children: A behavioral and neuroimaging longitudinal study. Poster presented at the Cognitive Neuroscience - Helsinki Summer School, University of Helsinki, Helsinki, Finland.

INVITED TALKS

- | | |
|------|--|
| 2019 | Neuroeducation: contribution and challenges for an inclusive School, I Congresso de Educação Múltipla Escolha, Faculty of Psychology and Education Sciences, University of Porto, Portugal |
| 2019 | Music and the brain, Psychology of Music Course, Porto's School of Music and Performing Art, IPP, Portugal |
| 2018 | Music and the brain, Psychology of Music Course, Porto's School of Music and Performing Art, IPP, Portugal |

MSc DISSERTATION COMMITTEE MEMBER

- | | |
|------|--|
| 2019 | Carla Batista, University of Porto, Portugal |
| 2019 | Vera Ferreira, University of Porto, Portugal |

EDITORIAL AND REVIEWING SERVICE

- | | |
|------|---------------------------------------|
| 2020 | Fulbrigh - Portugal (Grant Reviewing) |
|------|---------------------------------------|

SPECIALIZED TRAINING

- | | |
|-------------|---|
| 2017 – 2018 | Internship, Gaab Lab, Laboratories of Cognitive Neuroscience, Harvard Medical School, Boston, USA (Fulbright scholarship) |
| 2016 | SPM course 2016, University of Zurich & ETH Zurich, Switzerland |
| 2015 | Cognitive Neuroscience course, Helsinki Summer School, University of Helsinki, Finland |
| 2014 | BrainVoyager QX Training Course, PROACTION LAB, University of Coimbra, Portugal |

MANAGEMENT, EXTENSION, AND ECONOMIC AND SOCIAL VALORIZATION OF KNOWLEDGE

ORGANIZATION/COORDINATION OF EVENTS AND MANAGEMENT EXPERIENCE

- | | |
|------|---|
| 2017 | Organization Committee of the 12.º Meeting of the Portuguese Association for Experimental Psychology, University of Porto, Portugal |
|------|---|

- 2016 Organization Committee of the 23^o Annual Meeting of the Society for the Scientific Study of Reading, Porto, Portugal
- 2015 & 2016 Organization Committee of the I and II Symposium of the Doctoral Program in Psychology, University of Porto, Portugal
- 2014 - 2015 Elected member (student representative), Monitoring Committee of the Doctoral Program in Psychology, University of Porto, Portugal

INTERNS AND RESEARCH ASSISTANTS

- 2019 - Emílio Cunha, ICBAS - UP
Ivo Fernandes, ICBAS - UP
Núria Moreira, ICBAS - UP

SCIENTIFIC DISSEMINATION

- 2020 (postponed due COVID-19) Roundtable: Brain, Cognition and Education (in the series Conversas com...), Agrupamento de Escolas irmãos Passos, Portugal (target audience: educational community)
- 2019 Neuroeducation: contribution and challenges for an inclusive School, Agrupamento de Escolas irmãos Passos, Matosinhos, Portugal (target audience: school' teachers)
- 2019 Roundtable: What Does Music Training Teach Us About Cognition and Brain Plasticity? Current Perspectives and Challenges (in the series No Laboratório à Conversa Com), University of Porto, Portugal (target audience: researchers and professionals working in related fields)
- 2018 Neuroscience Research Meeting – Moving on from structural and functional MR studies to clinical applications and scientific research, UNILABS, Porto, Portugal (target audience: physicians and other health professionals)
- 2016/2017 Projeto Impacto – Resultados Preliminares” [The Impact Project – Preliminary Results], Agrupamento de Escolas irmãos Passos, Matosinhos, Portugal (target audience: educational community)
- 2016 Projeto Impacto [The Impact Project], Colégio Nossa Senhora da Bonança, V.N. de Gaia, Portugal (target audience: teachers and other education professionals)

CONTINUING EDUCATION

- 2018 Co-design and collaboration, C633. Da Ciência à Educação: Práticas para Promover o Ensino da Leitura e da Escrita [From Science to Education: Practices to Promote Reading and Writing], CFAE, Matosinhos, Portugal

OTHER

HONORS AND AWARDS

- 2017 Fulbright scholarship, internship at Gaab Lab - Boston Children’s Hospital, Harvard Medical School, USA)
- 2015 Helsinki Summer School - Cognitive Neuroscience Fellow
- 2005 Poster award (3rd place), IX National Meeting of Biology Students, University of Algarve, Portugal

TECHNICAL EXPERTISE

Analysis of MRI data (e.g., voxel-based morphometry, cortical thickness). Extensive experience in: (1) neuropsychological evaluation; (2) testing children through behavioral and neuroimaging methods; (3) programming through stimulus-delivery software; (4) quantitative data analysis using diverse software, including SPSS, Excel, and R.

Last updated: May 2021