Ottavia M. Epifania

GitHub: https://github.com/OttaviaE

Open Science Framework: https://osf.io/profile/ Birth Date: January 10th, 1990

CURRENT EMPLOYMENT

Temporary research fellow

Padova, IT

University of Padova

July 2022 - June 2024

Phone: +39-3479261377

Email: otta.epifania@gmail.com

PRIN 2020 Project: "Computerized, Adaptive and Personalized Assessment of Executive Functions and Fluid Intelligence"

Principal Investigator: Professor Luca Stefanutti

Law: art. 22 della Legge 240/2010

Note: Currently underway

Lecturer Milan, IT

60-hour course (First semester), 8 c.f.u.

Since Academic Year 2021/2022

Course: **Statistical Psychometrics** (Introduction to Measurement Theory in Psychology, univariate and bivariate descriptive statistics, Probability Theory, Statistical Inference)

School: Bachelor degree in Psychology, Catholic University of the Sacred Heart, Milan, Italy

Note: Currently underway, Confirmed for the Academic Year 2023/2024

Review Editor

Frontiers in Quantitative Psychology

July 2021 - On going

Oct 2017 - May 2021

EDUCATION

Ph.D. in Psychological Sciences; cum laudae

Padova, IT

University of Padova

Thesis defended on May, 14th, 2021

Thesis reviewers: Prof. David Andrich, Prof. Francis Tuerlinckx.

Defense committee: Prof. Luca Andrighetto, Prof. Caterina Primi, Prof. Katie Wolsiefer

Thesis: Inglorious Measures: A Linear Mixed-Effects Model approach for a Rasch analysis of implicit measure

accuracy and time responses

Advisor: Professor Egidio Robusto Co-advisor: Professor Gianmarco Altoè

Attended courses: Null hypothesis testing, R basics/advanced, Inferential Statistics (NHST), Inferential

Statistics (Bayesian), Latent trait modeling, Scientific writing.

Visiting research scholar

Ohio, USA

The Ohio State University

Jan 2019 - May 2019

Collaboration with Prof. De Boeck (i.e., multilevel data modeling, latent variable modeling)

Master Degree in Psychology, 110/110 cum laude

Genova, IT

University of Genova

Nov 2012 - Nov 2014

Supervisor: Prof. Carlo Chiorri

Thesis: Pratiche di Body Modifications: Associazione con la tendenza al self injury e con i tratti di personalità

Bachelor Degree in Psychology, 109/110

Genova, IT Oct 2012 - Oct 2009

University of Genova Supervisor: Dr. Paola Cardinali

r

Thesis: Violenza e processi Psicosociali: Il G8 di Genova

Page 1 of 8

PREVIOUS WORK EXPERIENCE

Temporary research fellow

Padova, IT

University of Padova Feb 2021 - June 2022

Project: "New frontiers in developing tests for Psychological Assessment"

Principal Investigator: Professor Pasquale Anselmi

Law: art. 22 della Legge 240/2010

Note: 5-month mandatory maternity leave, from 24th December 2021 to 24th May 2022

Translator

Busto Arsizio, IT

 $EduVal\ Project\ srl$

Sep 2018 - Dec 2018

English-Italian translations of documents, reports, tests for the OECD-SSES project

Temporary research fellow

Genova, IT

Educational Technologies Institute - National Research Council

May 2016 - Sept 2017

Project: "Technologies for socio-educational inclusion of children with chronic illness"

Principal Investigators: Dr. Vincenza Benigno, Dr. Guglielmo Trentin

Law: art. 22, comma 3, della legge 240/2010, art. 6, comma 2 bis, della L. 27 febbraio 2015 n. 11, di conversione del D.L. 31 dicembre 2014 n. 192

Note: Originally, the contract was from May, 1st 2016 to April, 30th 2017, but it was extend on April, 24th for a 6-month period starting from April, 30th 2017.

TEACHING EXPERIENCE

Statistical Pscyhometrics

Milan, IT

60-hour course, 8 c.f.u.

Since A.Y. 2021/2022

Topics: Introduction to Measurement Theory in Psychology, univariate and bivariate statistics, Probability Theory, Statistical Inference

School: Bachelor Degree in Psychology, Catholic University of the Sacred Heart, Milan, IT

course: An introduction to R

Milan, IT

12-hour course

June 7th-8th, 2023

Topics: Variables, functions, and operators, data structures, working with data frames, descriptive statistics, graphics (base R and ggplot2)

School: Graduate School in Psychology, Catholic University of the Sacred Heart, Milan, IT

Further information: Lesson at the Graduate School in Psychology of the Catholic University of the Sacred Heart.

Course website: https://github.com/OttaviaE/coRso

RMarkdown: Reproducible analysis, presentations, reports and beyond

Padova, IT

20-hour course

2022, 2023

Topics: Basics of RMarkdown, integrating code, analysis, and text in one file, presentations with basic RMarkdown, xaringan, and beamer, introduction to quarto

School: Applied Research Courses Academy, Department of Developmental Psychology and Socialisation, University of Padova, Padova, IT

Further information: Open-badge course, Third mission. The course is an intensive school on RMarkdown. So far, it has been delivered three times (June 2022, March 2023, June 2023).

Course website: https://arca-dpss.github.io/CorsoRmarkdown/

Introduction to Item Response Theory with applications in R

Bolzano, IT

December, 19th-21st, 2022 16-hour course

Topics: Introduction to Item Response Theory for dichotomous responses, model estimation with R on simulated and real data, investigation of Differential Item Functioning.

School: University of Bolzano, Bolzano, IT

Course characteristics: Lesson at the Graduate School in Bressanone-Brixen

Course website: https://ottaviae.github.io/bRixen-IRT/

From experiment design to data analysis: How to work with implicit measures Padova, IT

8-hour course 2022, 2023

Topics: Programming experiments in Inquisit, Saving data, Import and analyze data with R

School: II Level Master in Quantitative Psychology, University of Padova, IT

Further information: The course in an intensive school on programming and collecting data in Inquisit, and analyze the collected data. So far, it has been delivered twice times (July 2022, July 2023).

Programming in R and introduction to shiny

Padova, IT

12-hour course July, 2022

Topics: Introduction to R and shiny, Basic and advanced programming in shiny

School: Higher Education Learning Platform for Quantitative Thinking (QHELP)

Course website: https://ottaviae.github.io/RcouRse/

Implicit assessment in psychology: Myths, doubts, and practical applications Milano, IT June. 10th. 2022 2-hour seminar

Topics: Excursus on the concept of implicit in psychological assessment, implicit measures, Psychometrically sound approaches for analyzing implicit measures data

School: Methodological School (FoRME), Catholic University of the Sacred Heart, Milan, IT

Further information: Third mission.

Psychometrics – Tutor

Padova, IT

30 hours (Second semester) Academic years: Since 2019/2020

Topics: Statistical inference, Statistical testing in Psychology

School: Bachelor in Psychology, University of Padova, IT

The Rasch model: Practical applications in R

Padova, IT

6-hour course Academic year: 2017/2018 Topics: Introduction to R, Analysis of simulated data with the TAM package in R, infit and outfit computation and interpretation

School: Master Degree in Work Psychology, University of Padova, IT

STUDENT SUPERVISION

Academic Year 2019-2020

Padova, IT

University of Padova Bachelor degree in Psychology

Thesis: "Risposta sbagliata!": L'effetto del feedback sulla performance durante l'Implicit Association Test.

Thesis: L'effetto del feedback (bult-in correction) nella somministrazione dell'Implicit Association Test

Academic Year 2018-2019

Padova, IT

University of Padova Bachelor degree in Psychology

Thesis: Implicit Association Test, Single Category Implicit Association Test e misure esplicite per la valutazione della preferenza per il cioccolato

Academic Year 2018-2019

Padova, IT

University of Padova Master degree i

Master degree in Social and Work Psychology

Thesis: Misure implicite e scelte comportamentali: Confronto tra l'Implicit Association Test e il Single

Category Implicit Association Test

Academic Year 2017-2018

Genova, IT

University of Genova Bachelor degree in Psychology

Thesis: Validità di costrutto di una misura per la valutazione dell'atteggiamento verso i senzatetto

Academic Year 2016-2017

Padova, IT

University of Genova

Bachelor degree in Psychology

Thesis: Relazioni fra misure implicite ed esplicite dell'atteggiamento verso le persone tatuate

SKILLS SUMMARY & GENERAL INFORMATION

- Awards: Third position for "Best presenter' @ Cognitive Science Arena (2020).
- Programming and data analysis: R (data analysis: 8 years, packages development 4 years), shiny (5 years), RMarkdown (6 years), LATEX(article, beamer, book, 5 years), HTML (4 years), CSS (4 Years), Matlab (Basic), Python (Basic), SQL (Basic).
- Software for teaching: Moodle, Kaltura, Blackboard
- Languages: Italian (Mother Tongue), English (Advanced)
- Personal: Goal-oriented, team player, strong work ethic, assertive, creative, out-of-the-box thinker.
- Psicostat: Member of the Psicostat group since 2020, https://psicostat.dpss.psy.unipd.it/

Advanced training courses

IRT, CAT, Machine Learning

Cambridge, UK

University of Cambridge

July 2018

Topics: R, IRT, Concerto testing platform, CAT, Data mining, sentiment text analysis, Machine learning in practice

Professor: Dr. Aiden Loe, and Dr. Chris Gibbons

Tools for Teaching Quantitative Thinking (TquanT)

Glasgow, UK

University of Glasgow

Feb 2018

Topics: R, shiny, parameter estimation

Professor: Dr. Lisa de Bruine, Prof. Francis Tuerlinckx, Prof. Florian Wickelmaier, Prof. Martin Losert, Prof. Hans Colonius

IRT models Florence, IT

University of Florence

Feb - May 2017

Topics: IRT models for dichotomous and polytomous items, Differential Item Functioning, Goodness of Fit

Professor: Prof. Caterina Primi, Prof. Francesca Chiesi

Measurement models in Psychometrics

Genova, IT

University of Genova

June - July 2016

Topics: Latent variables modeling - Exploratory Factor Analysis, Confirmatory Factor Analysis - in R

Professor: Prof. Carlo Chiorri

Data analysis with R

Genova, IT

University of Genova

June - July 2015

Topics: Import data in R, bivariate and multivariate statistical analysis

Professor: Prof. Carlo Chiorri, Dr. Marcello Passarelli, Dr. Tommaso Piccinno, Dr. Michele Masini

Page 4 of 8

Internships

Trainee in Developmental Psychology

Genova, IT

Educational Technologies Institute - National Research Council

Sep 2015 - Mar 2016

Project "Technologies for socio-educational inclusion of children with chronic illness"

Supervisor: Dr. Vincenza Benigno

Trainee in Psychometrics

Genova, IT

University of Genova

Mar 2015 - Sep 2015

Collaboration with other trainees and Ph.D. students in data analysis

Supervisor: Prof. Carlo Chiorri

Papers in Peer-Reviewed Journals (Scopus, WoS)

2023

Epifania, O.M., Anselmi, P., Robusto, E. (2023). Pauci sed boni: An Item Response Theory Approach for Shortening Tests. In: Wiberg, M., Molenaar, D., González, J., Kim, JS., Hwang, H. (eds) Quantitative Psychology. IMPS 2022. Springer Proceedings in Mathematics & Statistics, vol 422. Springer, Cham. https://doi.org/10.1007/978-3-031-27781-8_7

2022

- Epifania, O. M., Anselmi, P., & Robusto, E. (2022). Filling the gap between implicit associations and behavior: A Linear Mixed-Effects Rasch Analysis of the Implicit Association Test. Methodology, 18(3), 185-202, doi: https://doi.org/10.5964/meth.7155
- Epifania, O. M., Anselmi, P., & Robusto, E. (2022). Implicit social cognition through the years: The Implicit Association Test at age 21. Psychology of Consciousness: Theory, Research, and Practice, 9(3). doi: https://doi.org/10.1037/cns0000305
- Epifania, O. M., Robusto, E., & Anselmi, P. (2022). Is the performance at the Implicit Association Test sensitive to feedback presentation? A Rasch-based analysis. Psychological Research, 1–14. doi: 10.1007/s00426-022-01703-w

2021

- Epifania, O. M., Robusto, E., & Anselmi, P. (2021). Rasch gone mixed: A mixed model approach to the Implicit Association Test. TPM: Testing, Psychometrics, Methodology in Applied Psychology, 28(4). doi: 10.4473/TPM28.4.5
- Paolini, S., Devita, M. Epifania, O.M., Anselmi, P., Sergi, G., Mapelli, D. & Coin, A. (2021). Perception of stress and cognitive effciency in older adults with mild and moderate dementia during the COVID-19-related lockdown Journal of Psychosomatic Research, 149. doi: https://doi.org/10.1016/j.jpsychores.2021.110584

2020

- Epifania, O. M., Anselmi, P., & Robusto, E. (2020). Dscoreapp: A shiny web application for the computation of the implicit association test d-score. Frontiers in Psychology, 10, 2938. doi: 10.3389/fpsyg.2019.02938
- Epifania, O. M., Anselmi, P., & Robusto, E. (2020). A fairer comparison between the Implicit Association Test and the Single Category Implicit Association Test. Testing, Psychometrics, Methodology in Applied Psychology, 27(2). doi: http://doi.org/10.4473/TPM27.2.4

2020

- Epifania, O.M., Anselmi, P., & Robusto, E., (2020). Implicit measures with reproducible results: The implicitMeasures package. *Journal of Open Source Software*, 5(52), 2394. doi: 10.21105/joss.02394
- Epifania, O. M., Anselmi, P., & Robusto, E. (2020). implicitMeasures: Computes the Scores for Different Implicit Measures [Computer software manual]. Retrieved from https://CRAN.R-project.org/package=implicitMeasures (R package version 0.2.0)

2019

- Epifania, O. M., Anselmi, P., & Robusto, E. (2019). DscoreApp: A user-friendly web application for computing the Implicit Association Test D score. *Journal of Open Source Software*, 4(42), 1764, https://doi.org/10.21105/joss.01764
- Epifania, O. M. (2019). DscoreApp. http://fisppa.psy.unipd.it/DscoreApp/. (April 2019)

Conferences

2023

Epifania, O. M., Brancaccio, A., de Chiusole, D., Anselmi, P., & Stefanutti, L. (2023). matRiks: An R package for rule-based automatic generation of Raven-like matrices. Presentation at the *Meeting of the European Mathematical Psychology Group*, Amsterdam (NL), Jul, 18th-21th 2023

2022

- Epifania, O.M., Anselmi P., & Robusto, E. (2022). Don't say CAT: New Item Response Theory approaches for developing short test forms. Presentation in the Symposium "Recent Advances in Psychometrics II", XXX Conference of the Italian Psychology Association Padova, Padova (IT) Sep, 27th-30th 2022
- Epifania, O.M. (2022). The Rasch model: Questionnaires and beyond. Presentation in the Symposium "Connecting People and Ideas from Psychology and Statistics: The Psicostat Experience", XXX Conference of the Italian Psychology Association Padova, Padova (IT), Sep. 27th-30th 2022
- Epifania, O.M., Anselmi P., & Robusto, E. (2022). Pauci sed boni: New Item Response Theory-based procedures for shortening tests. Presentation at the *Meeting of the European Mathematical Psychology Group 2022*, Rovereto (IT), Sep, 5th-7th 2022
- Epifania, O.M., Anselmi P., & Robusto, E. (2022). Pauci sed moni: An Item Response Theory approach for shortening tests. Poster presentation at the *International Meeting of the Psychometric Society* (IMPS), Bologna (IT), July, 11th-15th 2022

2021

Epifania, O.M., Anselmi P., & Robusto, E. (2021). Risposta sbagliata! L'effetto del feedback sulla performance all'Implicit Association Test [Wrong response! The feedback effect on the performance at the Implicit Association]. Presentation at the XXVII Italian Psychology Association Conference, Experimental Psychology Section, Lecce (IT), Sep, 8th-10th 2021

Epifania, O.M., Anselmi P., & Robusto, E. (2021). Less is more: Una procedura Item Response Theory per lo sviluppo di forme brevi di test. [Less is more: An Item Response Theory Procedure for shortening tests] Presentation at the XXVII Italian Psychology Association Conference, Experimental Psychology Section, Lecce (IT), Sep, 8th-10th 2021

2020

- Epifania, O.M., Anselmi P., & Robusto, E. (2020). Non separare dopo quello che hai somministrato insieme prima: Un approccio misto per l'analisi congiunta delle misure implicite. [Don't split what you administered together. A mixed model approach for the concurrent analysis of implicit measures] Presentation at the XXVI Italian Psychology Association Conference, Experimental Psychology Section, Sep 2th-4th 2020
- Epifania, O.M., Anselmi, P., & Robusto, E. (2020). Scoring the implicit: The implicitMeasures package. Oral poster presentation @ useR!2020 Virtual Conference, July, 7th-9th 2020. Retrievable @ https://www.youtube.com/watch?v=INa426Ru40Y&list=PL4IzsxWztPdmqml-u7PvYOVLdSvD7kjby&index=5
- Epifania, O.M., Anselmi, P., & Robusto, E. (2020). Scoring the Implicit Association Test has never been easier: DscoreApp. Shiny demo presentation @ eRum 2020 Virtual Conference, June, 17th-20th June. Retrievable @ https://github.com/OttaviaE/erum2020program
- Epifania, O.M. (2020). Filling the gap between implicit and behavior: A Rasch modeling of the Implicit Association Test. Presentation, *Cognitive Science Arena*, Bressanone-Brixen (IT), Feb, 7th-8th (Third position "Best presenter").

2019

Epifania, O. M., Anselmi, P., & Robusto, E. (2019). DscoreApp: Una Shiny Web application per il calcolo del D score. [DscoreApp: A shiny web application for the computation of the D score], Presentation at the XXV Conference of the Italian Psychology Association, Exeperimental Psychology, Experimental Psychology Section, Milano (IT), Sep, 18th-20th 2019

2018

Epifania, O.M., Robusto, E., & Anselmi, P. (2018). Rasch gone mixed: A mixed model approach to the Implicit Association Test. Oral Presentation, *Meeting of the European Mathematical Psychology Group 2018*, Genova, 30th July – 2nd August 2018.

2017

- Panarello, S., Pronesti, A., Epifania, O. M., Priolo, E. et al. (2017). Afachia Pediatrica Monolaterale e Bilaterale: Valutazione delle Modificazioni Refrattive e del Risultato Funzionale. Presentation at the XXXXII Conference of the Oftalmolgic Society, Genova (IT), Oct, 6th-7th 2017
- Epifania, O. M. (2017). Now you see me: Personality predictors of tattoos visibility. Presentation at the Cognitive Science Arena 2017, Bressanone-Brixen (IT), Feb 17th-18th 2017

2016

Benigno V., Epifania O.M., Fante, C., Ravicchio, F., & Caruso, G. (2016). Which technological skills and teaching strategies for inclusive education: Synergies and discordances. Presentation at the *International Conference of Education, Research, and Innovation*, Sevilla (E), Nov 14th-16th 2016

Epifania, O.M., & Chiorri, C. (2016). L'analisi di variabili di conto con sovrabbondanza di zeri: Il caso della relazione tra caratteristiche di personalità e numero di tatuaggi. [Data analysis with zero over dispersion: The relationship between personality characteristics and number of tattoos]

Presentation at the XXII Conference of the Italian Psychology Association, Exeperimental Pscyhology Section, Roma (IT), Sept 20th- 22nd 2016