

COURSE TITLE: Research in psychology: An overview of questionable and best practices (Maria Paola Paladino, 5 hours - 1 cfu)

PERIOD: November 2023

COURSE CONTENTS, OBJECTIVES AND LEARNING OUTCOMES

Description of activity and topics:

In the last years, we have witnessed a growing emphasis on the importance to get one's own research published also during the PhD. The importance "to get it published" has not to divert the attention from the importance of "to get it right", that is to rely on rigorous methodology. This course (as well as other initiatives offered in the doctoral course) stems from this observation and aims to consolidate methodological bases required to undertake one's own research project and at the same time, to increase the awareness that good quality research needs good methodological choices.

The course will start with a discussion on psychology research methodology, with a focus on experimentation and internal validity. Then, taking advantage of the current debate on the "replication crisis", we will discuss "questionable research practices" to then focus on pre-registration as best practice.

Specific learning objectives (i.e. specific knowledge and skills that the participants in the activity will acquire):

The students will be able to evaluate one's own methodological basis, and identify eventual gaps and actions to undertake to fill these gaps. Other outcomes are: to improve one's own competence to make informed choices regarding the methodology of one's own research; to get some knowledge on pre-registration websites.

DUBLIN DESCRIPTORS (Indicate the learning objective(s) that the activity aims to achieve, exercise and/or consolidate)

- systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;
- ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
- ability to make a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;
- ability to critically analyse, evaluate and synthesise new and complex ideas;
- ability to communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;
- ability to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society;

ENTRANCE REQUIREMENTS (Indicate any specific knowledge and/or skills that the student must have in order to participate in the activity)

Some background on quantitative research methods in psychology.

TEACHING AND LEARNING METHODS AND ACTIVITIES

Students are expected to actively participate in group discussion; Students are also expected to read articles (and eventual other materials) before classes and to integrate this course' knowledge with those acquired in other seminars and courses on open science and best practice in research.

ASSESSMENT OF THE ACHIEVEMENT OF LEARNING OBJECTIVES (Possibly an activity carried out independently by the student functional to his/her research activity)

Students will write a pre-registration regarding 1 or several studies involved in their doctoral research project. This pre-registration will be included in the final year report (to be submitted at the end of July) and will be discussed in the interview to be admitted to the second year.

BIBLIOGRAPHY /STUDY MATERIALS (video-lessons, etc.) (Specificare se il materiale va letto, visionato, etc. prima degli incontri)

Readings (e.g. books, chapters, etc.) to fill eventual gaps in research methodology.

- 2) LeBel, Etienne P., Peters, K. R. (2011). Fearing the future of empirical psychology: Bem's (2011) evidence of psi as a case study of deficiencies in modal research practice. *Review of General Psychology*, 15(4), 371–379.
- 3) John, L. K., Loewenstein, G., Prelec, D. (2012). Measuring the prevalence of questionable research practices with incentives for truth telling. *Psychological Science*, 23(5), 524–32.
- 4) Pre-registration. For a pre-registration template <https://osf.io/jea94/>. For further information on journals that have a pre-registration policy <https://cos.io/rr/#journals>.