



Review article

Don't fear 'fear conditioning': Methodological considerations for the design and analysis of studies on human fear acquisition, extinction, and return of fear



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ABSTRACT

The so-called 'replicability crisis' has sparked methodological discussions in many areas of science in general, and in psychology in particular. This has led to recent endeavours to promote the transparency, rigour, and ultimately, replicability of research. Originating from this zeitgeist, the challenge to discuss critical issues on terminology, design, methods, and analysis considerations in fear conditioning research is taken up by this work, which involved representatives from fourteen of the major human fear conditioning laboratories in Europe.

This compendium is intended to provide a basis for the development of a common procedural and terminology framework for the field of human fear conditioning. Whenever possible, we give general recommendations. When this is not feasible, we provide evidence-based guidance for methodological decisions on study design, outcome measures, and analyses. Importantly, this work is also intended to raise awareness and initiate discussions on crucial questions with respect to data collection, processing,

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Individual differences
 Statistics
 Design
 Methods
 Terminology

statistical analyses, the impact of subtle procedural changes, and data reporting specifically tailored to the research on fear conditioning.

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