

Special Issue on Computational Paradigms for Mental Health

CALL FOR PAPERS

Technology is allowing the acquisition of unprecedented information related to individuals' mental wellbeing as well as the provision of novel methods of treatment. The use of computational devices leverages the opportunities offered by the new research advancements to provide an improved diagnosis and a better support to both healthy subjects and patients, but also to extend the theoretical knowledge.

Computational paradigms related to both new technologies and mathematical models have now many uses in psychology and cognitive science and can be a great opportunity for mental health research and clinical practice.

The experience of using computational tools is profoundly affected by the extent to which their use is easy, accessible, and above all accepted. In the last decades the use of computer-based assessment has hugely increased and we are now living the era in which technology is becoming accepted by both the practitioners and the patients. However technology needs to be defined within a paradigm, to be believable and then accepted. In this regard, we are soliciting high-quality papers able to capture the links between computational paradigms (related to technological tools, paradigms, models, simulation, and experiments) and mental health with regard to both wellness and illness.

Original articles as well as reviews are accepted from all related fields: psychology, computational science, neuroscience, mathematics, neurology, computer science, and other.

Potential topics include but are not limited to the following:

- ▶ Sensing and data processing:
 - ▶ Computational intelligence
 - ▶ Wearable computing
 - ▶ Smart environments
 - ▶ Biomedical devices
 - ▶ Speech analysis
 - ▶ Big data for individual/public health
 - ▶ Computational psychometrics
 - ▶ Combined sensing systems and infrastructures
 - ▶ Computer-enhanced self-reporting
 - ▶ Machine learning and data mining methods
- ▶ User experience:
 - ▶ Novel interfaces
 - ▶ Usability studies
 - ▶ Visualizations
 - ▶ Augmented reality
 - ▶ Virtual reality approaches
- ▶ Applications:
 - ▶ Mental wellbeing support
 - ▶ Stress/emotional response analysis
 - ▶ Affective computing
 - ▶ Serious games for mental health
 - ▶ Cognitive stimulation
 - ▶ Life-logging methods
 - ▶ Monitoring activities relevant to mental health
 - ▶ Psychological treatments of mental disorders
 - ▶ Systems to support patients and/or caregivers
 - ▶ Using technology to improve the understanding of cognitive processes
 - ▶ Tools for neuropsychological assessment and rehabilitation
 - ▶ Mental health promotion and disorders prevention
- ▶ Clinical application:
 - ▶ Alzheimer's disease
 - ▶ Depression
 - ▶ Bipolar disorder
 - ▶ Parkinson's disease
 - ▶ Autism
 - ▶ Developmental disorder
 - ▶ Attention-deficit hyperactivity disorder (ADHD)

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Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/cmmm/pdmh/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.