

Special Issue on

Transdiagnostic Neuroimaging of Depressive and Psychotic Disorders: Applications and Methods

CALL FOR PAPERS

The application of neuroimaging techniques in psychiatry is relevant to the context of the overall progress in neuroscience. It reveals common and specific patterns of structural and functional deterioration of brain networks in mental disorders, which are further correlated with clinical diagnosis.

One major challenge remains the incorporation of neuroimaging findings into clinical reasoning. A premise for this caveat is the problematic diagnostic validity of the current systems for classification and diagnosis which are exclusively based on interviews or self-assessment scales. By definition, depression as part of affective disorders and psychotic disorders are regarded as discrete diagnostic groups in conventional taxonomic systems, whereas from phenomenological perspective they actually constitute broader continuum with at least partially shared clinical features and syndromes. The other premise is the controversial body of evidence in neuroscience with high inter- and intra-individual variability, which prevents it from adequate integration into clinical diagnosis in psychiatry. The high level of discrepancy between methods and methodological approaches contributes further to the so-called explanatory gap between brain and symptoms.

The aim of this Special Issue is to bring together contributions which address the described challenges in the field in terms of multimodal and multivariate neuroscience and clinical data integration, including various methods for semi-supervised machine learning to produce novel diagnostic classes and therapeutic targets. Critically, we aim at more careful insights into translational research and data management, which can help to converge clinical assessments with neuroimaging or other biological tests to overcome the conventional dichotomy between depression and psychotic disorders. Research and review articles with conceptual content, or phenomenological approaches are welcome. Moreover, papers that test and directly compare categorical and more RDoC like dimensional approaches for the continuum of depressive and psychotic symptoms based on DSM or ICD classification systems are welcome.

Potential topics include but are not limited to the following:

- ▶ Group Independent Component Analysis applied to explore paranoid and depressive syndromes
- ▶ Phenomenological similarities and similarities of depressive symptoms in Major Depressive Disorder (MDD) and Schizophrenia (SZ)
- ▶ Converging structural and functional connectivity changes in MDD and SZ including their continuum between depressive and psychotic symptoms
- ▶ Large-scale data with clinical individual subject prediction using state-of-the-art machine and deep learning
- ▶ Direct comparison of neural data between categorical and dimensional approaches to depressive symptoms in the context of SZ and MDD
- ▶ Identification of neuroimaging biomarkers for discriminating mood disorders
- ▶ Multisite, multi-dimensional data management and harmonization in psychiatric research
- ▶ Methods to precisely characterize individual difference and/or their applications in mental disorders
- ▶ Early diagnosis and warning of severe disease risk in adolescents or early stages of depression
- ▶ Division of biological subtypes of mood disorders and their potential use in clinical practice
- ▶ Division of biological subtypes in brain developmental disorders and their potential use in translational medicine
- ▶ Individualized prediction and classification of the progression of psychiatric diseasedepression and anxiety symptoms based on brain imaging
- ▶ Brain functional-structure association/coupling maps and their alterations in depression and psychiatric disorders
- ▶ Multifactor (brain, environment, behavior and or genetics) interactions and their variation in mental disorders
- ▶ The impact of anxiety and depression on learning ability and its neural basis

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.wiley.com/submit?specialIssue=805453>.

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

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