
The Dsm-v Classification From the Perspective of Neurochemical Model of Temperament

I. Trofimova¹

¹Senior Researcher, CI Lab, Hamilton, Canada

Introduction: Temperament is viewed here as biologically based individual differences. These differences are consistent through situations and are observable not only in humans, but also in animals and very young children, i.e. in pre-cultural individuals. Temperament therefore cannot be called 'personality', contrary to common beliefs since 'personality' refers to culturally based phenomena. Temperament and mental illnesses are considered to be varying degrees along the same continuum of imbalance in the neurophysiological regulation of behavior. Temperament traits are linked to specific patterns in the relationships between neurotransmitters and activation of certain brain structures. Similar links were found between neurotransmitters, brain structures, and mental disorders. **Objectives:** To describe the neurochemical systems underlying adult temperament traits and mental disorders. **Methods:** Findings in neurochemistry, neuropsychology, differential psychology and psychopathology will be compared to the traits described as temperament within the perspective of the neurochemical Functional Ensemble of Temperament (FET) model. **Results:** Neurochemical correlates for each trait are reviewed and compared against symptoms of psychiatric illnesses. The role of biogenic amine systems (serotonin, dopamine, noradrenalin), GABA/glutamate, neuropeptide and opioid receptor systems are linked to regulation of specific dynamical properties of behavior. Several insights for the structure of the classification of mental disorders from the perspective of the FET model are proposed. **Conclusions:** An integration of research in neurochemistry and psychopathology of behavior with differential psychology based on healthy samples can bring new insights for classification of mental disorders.