***Brain Structure, Child Experiences, and Emerging Mental Illness in Adolescence***

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Adolescent brain development has established itself as a key substrate target for the scientific study of behaviour. The notions of atypical or abnormal neural maturation arising during dynamic change in adolescent brain structure is a legitimate target for  psychiatric research. This neuromaturational period of adolescence is also associated with the highest incident risk rate for emerging mood disorders, psychotic symptoms and hazardous behaviors including suicide and non-suicidal self harm.  This brief overview will highlight some selected aspects of the growing relationship between neuroscience, developmental psychiatry and the importance of disaggregating effects of early experience from expected age change and the putative effects of psychopathology and hazardous behaviours on brain. The importance of precision in concurrent estimations of brain and behaviour will be discussed and illustrated with formal models of self reported manifest behaviour.