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GXE INTERACTION AS A PROTECTIVE FACTOR: 5HTTR AND BAD ENVIRONMENT

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Early traumatic experiences have been consistently associated with a higher risk to develop psychopathological symptoms in adulthood. Resilience, a trait reflecting tolerance of negative affect, positive acceptance of change and an action-oriented approach to problem solving, has been hypothesized to be a protective factor against stressors. Genetic aspects have been also hypothesized influencing resilience to stress and risk to develop psychopathological symptoms in response to both early and recent adverse events. In particular, a common polymorphism within the gene coding for serotonin transporter (5-HTTLPR s/l) has been consistently associated to the risk to develop depressive-anxious symptoms in response to stressful life events. In the present study we aimed to investigate the role of childhood traumas and 5-HTTLPR on measures of resilience and depression in a sample of individuals at a high risk for psychological distress. A large sample of male prisoners was investigated (n=1516). 5-HTTLPR genotype was available for 762 individuals. Overall, childhood traumas were significantly correlated to poor resilience and more severe depressive symptoms. 5-HTTLPR genotype did not influence resilience and depressive severity. However, a significant interaction was observed between 5-HTTLPR and childhood traumas on both resilience and depressive severity. Contrary to expectations, s/s individuals exposed to a high number of early traumas had a current higher resilience and less depressive symptoms than l-allele carriers. Present data did not confirm the 5-HTTLPR s-allele as the genetic risk variant for psychopathology in individuals exposed to stressors.