Although prior research has examined the genetic correlates of antisocial behavior, genetic influences on psychopathic traits remain largely unknown. Consequently, we investigated the influence of polymorphic variation at the serotonin transporter protein gene (SLC6A4) and socioeconomic resources (SES) on psychopathic traits in youth across two studies.

In Study 1, a main effect of serotonin transporter (5-HTTLPR) genotype was associated with the impulsivity dimension of psychopathy (individuals homozygous for the short allele evidenced more impulsivity than those homozygous for the long allele), and a gene-environment interaction was associated with the callous-unemotional and narcissistic features of psychopathy. In the latter instance, callous-unemotional and narcissistic traits increased as SES decreased only among youths with the homozygous-long (l/l) genotype, a novel finding replicated and extended in Study 2.

Results suggest that the l/l genotype confers risk for the emotional deficits and predatory interpersonal traits associated with psychopathy among youths raised in disadvantaged environments.