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relationship of monoamine oxidase a gene polymorphisms with personality traits

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ABSTRACT:

This paper investigates the relationship of MAOA gene expression with personality traits. It has already been shown that low expression of MAOA (3 and 3.5 repeats of VNTR) is associated with a tendency to violence and mental problems [1]. Two samples of responders (1st sample - 400, 17-26 years, 65% female, 2nd sample - 380, 15-58 years, 41% female) filled out Big Five questionnaire [2] and HEXACO-PI-R [3]. Respondents' DNA was subjected to fragment analysis by QIAxcel Advanced system. The results were analyzed using IBM Statistics and STATISTICA programs with Pearson correlation, cluster and factor analysis. Higher MAOA expression (4 VNTR repeats) was associated with lower manifestation of integrity compared to lower levels (3 repeats). Correlation between neuroticism and MAOA gene expression was detected only in group of male respondents. Young males with 3 repeats had higher rates of emotional instability compared to carriers of 4 repeats. These results may indicate different effects of MAOA gene expression on personality traits throughout ontogenesis.

References

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