

INVOLVEMENT OF THE BDNF VAL66MET POLYMORPHISM AND PARENTAL REARING IN FORMATION OF INTERPERSONAL SENSITIVITY

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Interpersonal sensitivity is defined as undue and excessive awareness of, and sensitivity to, the behavior and feelings of others and is one of the vulnerable factors to depression. In a twin study, it was suggested that this personality trait was characterized by both genetic and environmental factors. In the present study, we examined the effects of the brain-derived neurotrophic factor (BDNF) Val66Met polymorphism and parental rearing on interpersonal sensitivity. The subjects were 725 unrelated healthy Japanese volunteers (mean age \pm SD =27.1 \pm 8.5, 405 males and 320 females). Assessment of interpersonal sensitivity was performed by the Japanese version of the Interpersonal Sensitivity Measure (IPSM). Perceived parental rearing was assessed by the Parental Bonding Instrument (PBI), which consists of the care and protection factors. The BDNF polymorphism was detected by the PCR-RFLP method. There was no main effect of the BDNF genotype on the IPSM score, while the PBI factors except maternal care had significant main effect on the IPSM score. There was significant interaction effect between the BDNF genotype and maternal care of the PBI on the IPSM score. Post-hoc analysis of simple slopes showed that the negative relationship between the IPSM score and maternal care was strongest and significant in the Met/Met genotype group, intermediate in the Val/Met genotype group, and weakest in the Val/Val genotype group. The present study suggests that the interaction between the BDNF Val66Met polymorphism and parental rearing, especially maternal care, influences interpersonal sensitivity in healthy subjects.