

Fighting as a Function of Personality and Neuropsychological Measures

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Violence among young people has surpassed communicable disease as the primary cause of mortality in young people.¹ A complete understanding of what causes aggression remains elusive, but it is likely that the probability of exhibiting violent behavior is dependent upon interactive, multifactorial mechanisms.² Greater magnitude of familial adversity has been linked to increased likelihood of aggressive behavior.^{3,4} Personality profiles in kindergarten have been shown to predict antisocial behavior in adolescence,⁵ and deficits in neuropsychological function have been used to discriminate between levels of aggression.⁶ In this study, the subjects, 143 Caucasian boys derived from a community sample of 53 schools with the lowest socioeconomic status (SES) in Montreal, were rated for fighting behavior by their teachers at ages 6, 10, 11, and 12 using the Preschool Behavior Questionnaire (PBQ).⁷ These fighting scores were used to divide the sample into three groups: stable fighters ($n = 52$), above the 70th percentile on the fighting scale of the PBQ at age 6 and at one more assessment; stable nonfighters ($n = 47$), who were below the 70th percentile at all assessments; and unstable fighters ($n = 44$), not otherwise classifiable. Neuropsychological and personality instruments were administered, and teacher-rated anxiety and mother-rated familial adversity measures were obtained. The best fit multiple linear regression equation contained 13 variables, including neuropsychological and personality measures, as well as teacher-rated anxiety ($R^2 =$ proportion of variance explained $= 0.49$). The best fit logistic regression equation comparing stable fighters versus stable nonfighters contained 15 variables and obtained a classification accuracy hit rate of 92% for identifying members of both groups. A four-variable logistic regression model containing the neuropsychological factors of verbal learning and executive functions,⁷ plus the Eysenck Junior Personality Questionnaire Anxiety Scale and the NEO-PIR Agreeableness Scale, had a hit rate of 90% for stable fighters and 83% for stable nonfighters. Two of the three a priori hypotheses were supported, as neuropsychological and personality measures were included in the

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best-fit prediction models. Familial adversity was not significant in any of these analyses, possibly due to restriction of range in this low SES sample.

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