This study incorporates the economic theories of crime, human capital investment, reasoned action, extended theory of subjective expected utility, as well as developmental criminological theories in a life-course perspective to develop a conceptual model to explore factors related to juvenile recidivism. The study aims to provide information for practitioners to help identify potential chronic and serious offenders, to explore evidence to validate risk and needs assessment tools, and to probe the significant factors to be used as the basis for evidence-based programs.

Recidivism is measured as count data in both frequency and severity level of subsequent offenses. Count data are data in which the observations can take only non-negative integer values and the integers arise from counting. A unique combination of data from five public sources is obtained to examine the influence of individual-level risk factors, neighborhood characteristics, and juvenile justice intervention on juvenile recidivism. Exploratory factor analysis and principle component analysis are applied to solve issues related to assessment and census data. Four different regression models for count data are compared to propose the one with the best fit and the most predictive power for each response variable.

Results indicate that the most consistent and influential indicators for identifying potential chronic and serious offenders are being older, being male, having a more serious first offense, showing a tendency towards violence, scoring high on the overall factor that represents problematic attitude, behavior, and social relations, and the existence of harmful parental impact. Race is not identified as a significant indicator after controlling other risk factors and socioeconomic differences between youth of different racial groups. Results indicate that where the youth lives matters. As compared with juveniles located in neighborhoods with positive socio-economic characteristics, those from the most disadvantaged areas are found to recidivate more frequently and more seriously. Findings also suggest that available community services might play a role in youth behavior. Cognitive-behavioral and supervisory programs are shown to have great potential in reducing recidivism. However, only when juveniles successfully complete the assigned programs, are they involved in fewer subsequent delinquent behaviors.