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Juvenile Secure Confinement and Recidivism Risk: A Propensity Score Matching Approach

Juvenile crime is a serious issue in the United States. Juveniles, those who are under 18 years of age, account for approximately 24% of the population (Census Bureau 2014). This segment of the population is responsible for over 10% of all crime committed in the United States (FBI 2012). Although secure confinement has been identified as one of the most significant contributors to a juvenile's future risk of recidivism (Bezruki, Varana, and Hill 1999), few studies have directly examined the link between juvenile secure confinement and recidivism. Using official data from Montana's Juvenile Court Accountability and Tracking System (JCATS) (n=2,897), this study adds to the literature. The findings are based on propensity score matching to obtain a more comprehensive estimate of the influence placement in secure confinement has on a juvenile's risk of recidivism. In the investigation, recidivism refers to involvement in delinquency within one year, following juvenile court intervention, including release from secure confinement. Close to 70% of juveniles released from secure confinement are involved in recidivism within one year (Bezruki, Varana, and Hill 1999). Propensity score matching approximates the conditions of a controlled experiment. Treatment can include any form of intentional intervention, in this case, placement in secure confinement. Treated cases are matched to non-treated cases based on their propensity to receive treatment (Apel and Sweeten 2010). This statistical analysis eliminates some of the problems of causal inference by ensuring that matched individuals are statistically equivalent. While controlling for covariates related to juvenile recidivism, propensity score matching allows for the estimation of the causal effect of treatment (Guo and Fraser 2015). Conclusions from this research will inform practitioners in the area of juvenile justice on the realities of a practice that has been described as dangerous (Holman and Ziedenberg 2006). Practitioners and researchers alike will be interested in the unique effect of a placement in secure confinement on a juvenile's risk of recidivism. In addition, results from prior studies contrasted with results from this investigation have the potential to inform other researchers of a more valuable tool for analyzing quasi-experimental data.