

# **Spatial Contagion of Male Juvenile Drug Offending Across Socioeconomically**

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### **Summary**

This study builds off prior research in that neighborhoods and social contextual mechanisms of juvenile involvement in crime does not occur independently but are rather intertwined. The authors investigate neighborhood socioeconomic characteristics and its impact on drug offense juvenile delinquency. The social interactions in a neighborhood as seen in concepts like social disorganization and collective efficacy are used to further explain juvenile involvement in criminal behavior. To address the issues associated with disadvantaged neighborhoods, the authors employed a spatial approach. The author primarily focuses on the strong influence of concentrated disadvantage on neighborhood rates of juvenile delinquencyand repeat drug offending.

#### **Methods**

Data was acquired from the Program Development and Evaluation System, which is a database of juvenile offenders assigned to court-order programs by the Family Court of Philadelphia, Pennsylvania. This study focuses on 7,323 male juveniles in ProDES who were inthe system at least 6 months. Neighborhoods were characterized using the U.S. Bureau of theCensus (2000) and the Philadelphia Police Department (2000-2002). The characteristics usedconsisted of residential mobility, race, racial segregation, unemployment segregation, and isolation from 'mainstream society' due to linguistic barriers. From this data, the authors used a regionalization technique called REDCAP (Regionalization with Dynamically Constrained Agglomeration and Portioning) that clusters a set of spatial units into a set of spatially contiguous neighborhoods that are composed of one or more spatial units. This approach was taken to ensure that each neighborhood has enough delinquentsfor statistical analysis.

#### **Results**

The authors findings indicate that there is a strong positive influence of concentrated disadvantage on the juvenile delinquency rate. Drug offense delinquency was found to be associated with concentrated disadvantage, the presence of Hispanics, and residential mobility. It was also observed that delinquent behavior from one neighborhood to an adjacent neighborhood occurs for drug offending, but not for general delinquency.

## **Implications**

Drug offending in a neighborhood enhanced by concentrateddisadvantage clusters in nearby neighborhoods as well. Social contact among juveniles livingnearby one another explains why there was a heavier presence of drug offending in certain blocks. If law enforcement implements a plan in one neighborhood to combat drug delinquency in juveniles, it is likely that it will influence the rates of drug delinquency in adjacent neighborhoods.

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