Does growing up in Neighborhood with Open Drug Dealings affect Youth Criminal Justice Involvement?

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**Introduction**

In this paper, I would be using data to investigate if growing up in a neighborhood with open drug dealings has a causal relationship with being arrested at the youth age.

The burden of drug abuse is becoming an issue of public concern across the globe. With the potential supply-driven expansion of the drug market, the problem is deepening, and the consequences are becoming more alarming, particularly for children. Young people who partake in indiscriminate use of drugs were perhaps engaged in it from early childhood. For most cases, young people who engage in indiscriminate use of drugs often experience an array of problems, including academic difficulties, declining grades, unhealthy peer relationships, health-related problems (including mental health issues) and involvement in juvenile justice system

There exists an undeniable link between drug abuse and delinquency. Arrest, charges, and intervention by the juvenile justice system are eventual consequences for many teenagers involved with drugs. In addition, there are consequences for family members, the community, and the entire society. This increases fear among community residents and the demand for juvenile and criminal justice services.

History has shown a society full of crime will soon devolve into lawlessness. It is for this reason that corrective and punitive measures exist, to punish deviants who commit these crimes and set them back on a proper path for the good of all society. Indeed, one could argue that a primary justification for the existence of laws lies in protecting minors. What happens, however, when these minors are the ones to violate the laws set up in their communities? Youth delinquency is the ensuing result. Such acts include status offences like underage drinking or more serious crimes like property crimes or cybercrime.

These crimes therefore lead to situations of arrest and being charged in court, sometimes leading to indictments. Herein therefore lies the fundamental question; Are the actions of these teenagers swayed by external influences? If so, to what extent are they influenced negatively? What manner of influences are responsible? There are a lot of possibilities. From drug abuse to gang violence to childhood trauma, there’s a consensus by psychologists that each of these incidents could lead their victims on a path to delinquency.

According to a study, the formative years, lasting up to 8 years of age are the years “where they learn more quickly than at any other time in life”. This suggests that children of that age can respond more easily to stimuli around them as they develop mentally, physically, emotionally, and intellectually. As they grow, there is a tendency for their characters to be shaped in line with the experiences they have been through. Solely for this reason, there exists a distinct possibility that a child having witnessed drug abuse during his formative period becomes inured to its status as a social ill in the same way a child growing up in a gang filled environment has a possibility, no matter how minor, to be inducted into and perpetuate the exact same lifestyle.

I found a study by Anna Damm and Christian Dustmann (2013) that looked at the effects of a high crime neighborhood on youth criminal behavior. This study was conducted using refugees in Denmark and concludes that social interaction and peer influence are the main causes of youth criminal behavior in areas of high crime. They quote “….it is the share of criminals living in the area, and not the rate of committed crimes, that affects later criminal engagement, which speaks in favor of social interaction as a key factor linking neighborhood crime with later criminal behavior.”

This study which I’m conducting differs from Anna and Christian’s study. I would instead be investigating if living in a drug dealing neighborhood in the formative years of life opens the possibility of arrest in the youth age. To determine this causal effect, I would use data to perform regressions while controlling for factors that might cause endogeneity. The reason such a study is necessary is to ascertain the root cause and proffer solutions towards the growing instances of youth delinquency.

**Data Discussion**

The data from this study comes from the Longitudinal Studies in Child Abuse and Neglect. This data (LONGSCAN). LONGSCAN is a set of prospective studies which began with children at age four or younger and follows them at regularly scheduled intervals (ages 4, 6, 8, 12, 14, 16, 18 and 20 years) administering an extensive face-to-face interview with the primary caregiver and the child/youth; data are also collected from periodic review of Child Protective Services case narratives, Central Registry records, and written teacher reports.

After getting the full zip file from LONGSCAN representatives, I worked with my professor on streamlining all the data to ask the question I needed answered. To clean the data, we went through all the data and narrowed it down to the question I wanted to ask. Using RStudio, we imported the dataset for the variable I was interested in and then joined them on the column they all had in common.

**Data Dictionary Used**

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| **VARIABLE NAME** | **VARIABLE DESCRIPTION** | **CODING IF CATEGORICAL** | **EQUATION NOTATION** |
| ID | Individual ID |  |  |
| CENTER | LONGSCAN field center | EA- East  MW- Midwest  SO- South  SW- Southwest  NW- Northwest | Center |
| NRFA2 | Neighborhood Description | 1. Urban 2. Suburban 3. Rural 4. Something Else | Neighborhood |
| NRFA4B | Housing Description | 1. Public Housing 2. Section 8 Housing 3. Military Housing 4. Rehab Centers 5. Shelter 6. Residential Group Home 7. Currently Homeless 8. None of the above | Housing |
| NRFA24 | Open drug abuse/dealing in neighborhood | 1. Never true 2. Almost never true 3. Sometime true 4. Usually true 5. Always true | Drugs |
| CJIA1 | Have you ever been arrested, taken into Custody by the police for something they Thought you might have done, or charged with A crime for anything other than a minor traffic violation? | 1. No 2. Yes | Arrested |

(Table drawn up from LONGSCAN data)

The variables I chose to perform my analysis with include: the “Center”. This variable represents the different regions of the United States data was collected from. This is necessary in my data so I can control the Center as a fixed effect. Perhaps more arrests for drug offenses occurred in the Midwest than the Northeast. To determine whether the sort of neighborhood lived in (Urban, Rural, etc.) had a different impact on people being arrested, I also decided to utilize the neighborhood description as a variable. If drug-related criminal justice involvement among juveniles was more prevalent in rural than urban locations. The type of housing lived in also matters. Does your engagement with the criminal justice system change if you live in a military housing unit, are homeless, etc.?

**Descriptive Statistics of Variables**

* 20.3% of individuals in this data have been arrested while 79.7% have not been arrested.
* 40.8% of individuals in this data responded there was sometimes-always drug dealing in their neighborhood while the remaining 59.2% said there was almost never drug dealing in their neighborhood.
* **Neighborhood Description-** 58.2% of individuals in this data lived in an urban neighborhood, 31.9% in a suburban neighborhood, 9.3% in a rural neighborhood, while 0.7% responded.
* **Housing Description-** 14.8% of individuals in this data lived in Public Housing, 10.8% lived in Section8 Housing, 0.1% lived in Military housing, 0.1% lived in Rehab centers. The remaining 74.2% responded as “None of the above” for their housing description.
* 20.7% of individuals in the data were interviewed in the East, 16.8% in the Midwest, 19.2% in the Northwest, 19% in the South and 24.3% in the Southwest.

According to the data, 8.3% of those who said that drug dealing was sometimes-always open in their area had been charged or arrested between the ages of 15 and 18. We can also see that people who lived in a high-drug-abuse area and were arrested between the ages of 15 and 18 were more likely to reside in the East than the South (0.8% vs. 2.7%, respectively). Additionally, 6.7% percentage of individuals who were arrested between the ages of 15 and 18 and resided in a high drug misuse area were primarily from urban areas.

According to the descriptive data, there aren't many people who were arrested between the ages of 15 and 18 who resided in high-drug-abuse areas. Although this is not in line with our expectations, we will do an additional empirical study before drawing any conclusions.

**Empirical Discussion**

I estimated various models for this analysis. The dependent variable in each specification is Being Arrested/Charged. For this first model, the independent variable is Open Drug Activities in the Neighborhood.

We can see from the code that there is an insignificant but positive relationship between our variables. For those who said that there were sometimes-always open drug operations in the neighborhood, the likelihood of getting arrested or charged at a young age increases by 0.17%. This indicates that, in the absence of controls, residing in a neighborhood where drugs are sold openly has no bearing on the likelihood that a young person will be caught (coefficient being insignificant). The effect of living in a neighborhood with open drug dealing is not strong enough, given our sample size, to determine it to be statistically different from zero.

In the second model, I include the region the data comes from as an independent variable. This variable would act as a Fixed-Effect to control variations within regions that we are not paying attention to. This might increase the precision of our coefficient on drug activities. After adding the Center variable, we have this model,

The coefficient on Drug Activities is now higher. Controlling for other variables, the probability of being arrested/charged at youth age goes up by 0.94% for people that responded that there’s sometimes-always open drug activities in the neighborhood. This is also not significant. There’s no difference between the 0.94% of people that responded that there’s sometimes-always open drug activities in the neighborhood and no people at all. There’s still no impact on being arrested/charged at a youth age. We also observe that, in comparison to the East, those who resided in the Northwest typically experienced more arrests than people from any other region, whereas people from the South typically experienced less arrests. The coefficient on these region variables is not significant, indicating that the region you live in has no effect on being arrested (according to our data).

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| --- | --- | --- |
|  | Model 1 | Model 2 |
| Drug Dealing | 0.0017 | 0.0094 |
|  | (0.030) | (0.032) |
| Fixed Effect for Center | No | Yes |

For our final model, I include an interaction on the Center variable and every variable that deals with the housing and neighborhood description of the interviewee. Adding these variables in my model would help explain if there is a significant relationship between the additional variables, open drug dealing in a neighborhood and being arrested/charged. It also explains how these variables are related to the dependent variable (“being arrested”). These includes:

* Neighborhood description-e.g., rural, urban etc.
* Housing Description-e.g., Public Housing, Residential Housing etc.

After including these specifications in my model, we see that the likelihood of getting arrested increases by 14.8% for residents of public housing, the East, and urban areas when open drug dealing is present. This is statistically insignificant. It seems to be the case that according to our data living in an open drug abuse area has nothing significant to do with being arrested at a youth age.

**Interaction Variables-** Relative to the East, the probability of being arrested for those that lived in an area with open drug dealings goes up by 14.4% in the Southwest (the highest amongst the region variables). The coefficient on Northwest, South and Southwest are insignificant whilst the coefficient on Midwest is statistically significant. We note that the probability of being arrested for those that lived in an area with open drug dealings goes down by 19.6% in the Midwest (a significant effect). Relative to Urban areas, most people that were arrested at a youth age and lived in an area with open drug dealings described their neighborhood as “Something Else” (neighborhood other than Urban, Rural, and Suburban). The coefficients on the neighborhood description variables are insignificant. Additionally, Relative to Public Housing, the probability of being arrested for those that lived in a drug area is highest for those who responded to live in Section8 Housing. The housing variables are also insignificant, indicating that according to this data, your housing situation has no effect on being arrested.

Relative to the East, the Northwest has the highest probability of people being arrested (17.1%), with the Midwest following (14.1%). There is a significant relationship between being arrested between the ages of 15-18 and living in the Northwest. The coefficients of the other regions are insignificant (they have no effect on being arrested). Relative to Urban areas, most people that were arrested at a youth age described their neighborhood as “Something Else” (neighborhood other than Urban, Rural, and Suburban). The coefficient on Suburban areas is significant meaning that the probability of being arrested goes down by 12.9% for those that live in such areas. The coefficients on the remainder of the neighborhood description variables are insignificant. Additionally, Relative to Public Housing, the probability of being arrested is highest for those who responded to live in Section8 Housing. The housing variables are also insignificant, indicating that according to this data, your housing situation has no effect on being arrested.

**Conclusion**

All the models analyzed above support the fact that living in a neighborhood with open drug abuse at a young age (formative years) has a positive impact on being arrested at a youth age, but it is not significant, so it basically does not have a significant impact on the dependent variable. This insignificance only means that the data doesn't provide evidence of an effect; it doesn't mean that such an effect cannot exist. This doesn’t support my hypothesis.

There are some drawbacks to the outcomes I provided above. In order to clean the dataset, I had to remove some of the "N/A" responses. This might have had a negative effect and caused bias because some important data might have been deleted. Additionally, some of the things I wanted to evaluate or assess the significance of in my model lacked data. Poverty for instance is correlated with almost everything. Those that are poor tend to be stressed. Let’s assume this stress on the parents affects the child as well. The child then becomes open to peer pressure in a drug dealing neighborhood and ends up living a life of crime to put food on the table for their parents. Education is also another variable that I would have liked to control for. If a school doesn’t provide information on how to avoid peer pressure or distant themselves from the criminals in the area, a student (especially those of younger ages) would not know their right from their wrong. They end up moving with the wrong people and then live terrible lives of crime.

Although we didn’t have a significant relationship between our variables, there was a positive relationship. To make this relationship negative, policies to protect and help the youth/families of individuals should be provided.

* To prevent any influence on the child as they grow up, the authorities should relocate families who reside near or in open drug dealing locations to better neighborhoods.
* Teenagers should be exposed to drug prevention initiatives in schools.
* Teenagers between the ages of 12 and 18 should have access to employment possibilities to curb any form of idleness, which could eventually lead to criminal activity.

For future research, I’ll love to re-analyze this same question but using a dataset with more variables to control for. I’d also love to use a dataset that has lesser N/A responses so there’s still an adequate amount of data to perform the analysis. This would increase precision and allow for a second look at anything I might have missed in this paper.

**References**

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