Lena Seeger

Jonathan Spencer

Geography 565

December 15, 2009

The Correlation between Illegal Drugs and Violent Crime in Madison, Wisconsin Abstract

Studies show conflicting findings on the nature of the violent crime and drug relationship. This is partly due to the differences in the method of data collection employed by these studies. Statistical data generally shows a positive correlation between violent crime and drug activity, which can lead conclusions about a cause and effect relationship that may not exist. Data gathered through interviews and surveys can give a more nuanced picture of the relationship. Self-report studies have indicated that drug use at an early age is a precursor for increased drug use in adulthood, and that juvenile crime is a precursor for more serious crime in adulthood. The types of drugs used and distributed vary among different races. The frequency of arrests for drug crimes in also greatest among racial minority populations. In Madison, Wisconsin, the highest arrest rates for both violent activity and drug crimes are found in areas with large minority populations, and low levels of both education and income.

Research Question

We wish to examine the relationship between violent crime and illegal drug activity in Madison, Wisconsin. We hypothesize that the use of cocaine, heroin, hallucinogens, and amphetamines will be positively correlated with acts of robbery, homicide, sexual assault, reckless behavior, child abuse, and battery and mayhem. In order to understand the way violent

crime and drug use are linked, we need to understand the extent that each is influenced by other social and economic factors. Thus, we also study how race, income, and education are correlated with rates of drug arrests and arrests for violent acts. We hypothesize that these rates will be highest in areas of Madison with low incomes, low levels of education, and high minority populations.

Introduction

A great deal of discrepancy exists regarding the relationship between drug crime and violent crime. This article will attempt to qualify this relationship by presenting and classifying large sets of data on drug arrests, violent crime arrests, and several census variables in Madison, Wisconsin. We will also present maps and tables to show the spatial distributions of these data sets. This article also examines a sample of the large body of literature examining the relationship between drugs and crime. This literature helps to guide the presentation and analysis of the data.

Literature Review

Below, we review studies and articles which have already examined the link between drugs and crime. The studies reviewed in these articles use either a self-report methodology, in which face-to-face interviews and surveys are conducted with subjects, or a statistical analysis methodology, which attains data through police reports and the United States Census. Both methodologies have their advantages and disadvantages, but the self-report methodology appears the most successful. This is because the foremost methodological problem in studying the relationship between drugs and crime has been inaccuracies of official statistical arrests records (Nurco, Hanlon, & Kinlock, 1991: 221). Also, data gathered from self-reports is less likely than the data gathered from official forms of government agencies to underestimate the subjects'

involvement in criminal activity and drug abuse (Chaiken & Chaiken, 1990: 206). However, some self-report studies of inmate populations have found that "new arrestees tend to underreport recent illicit drug use, even in a voluntary, confidential research interview" (Nurco, Hanlon, & Kinlock, 1991: 221). As a result, urinalysis is increasingly being used to determine recent drug use in prisons among inmates (Nurco, Hanlon, & Kinlock, 1991: 230). Furthermore, subjects involved in drug abuse may have difficulty recalling past behavior, which leads to under-reporting of criminal offenses and drug abuse in some self-report studies (Chaiken & Chaiken, 1990: 206).

In "Drugs and Predatory Crime," only self-report studies are presented, whereas "Social Disorganization, Drug Market Activity, and Neighborhood Violent Crime" presents a study of Miami in which only police reports and census data are used. In "Recent Research on the Relationship between Illicit Drug Use and Crime," Nurco, Hanlon, and Kinlock examine two different types of self-report data collection techniques. Researchers can conduct an interview with known drug abusers regarding their criminal background and current criminal activity. They can also conduct an interview with convicted persons in correctional facilities about their personal substance abuse regularity and history (Nurco, Hanlon, & Kinlock, 1991: 222). However, one possible disadvantage of drawing information about addict populations from correctional facilities is that addicts are over-represented in prisons, since drug users who commit crimes are more likely to be arrested than non-drug users who commit crimes (Chaiken & Chaiken, 1990: 203).

Each effective study and article must make distinctions between types of crime and types of drugs or drug use. In particular, researchers often make a clear distinction between narcotic and non-narcotic drug users/abusers, for example, in investigating the heroin addiction-theft

relationship. Furthermore, one study done in Sacramento County found that the types of drugs for which people are arrested vary by the race of the offender. The authors studied a sample of 1,379 cases that involved arrests for drug-related crime in Sacramento County, CA in 1989. Of drug arrests in 1989, 78.3 percent of African American offenders were arrested due to crack cocaine, but less than 8 percent of Hispanic and white offenders were arrested due to this drug (Barnes & Kingsnorth, 1996: 43). Among Caucasian offenders, methamphetamine was the cause of arrest in 74.1 percent of cases (Barnes & Kingsnorth, 1996: 43). Among Hispanic offenders, both heroin and methamphetamine were the cause of 34.9 percent of arrests (Barnes & Kingsnorth, 1996: 43).

Many studies which research the correlation between narcotic substances and crime focus on property crime, as opposed to violent crime (Nurco, Hanlon, & Kinlock, 1991: 223).

However, many studies find that the higher the frequency of illicit drug use, whether narcotic or non-narcotic, the more likely the user is to participate in criminal activity (Nurco, Hanlon, & Kinlock, 1991: 223). In addition, poly-drug abuse almost always exists among individuals who abuse drugs frequently; they may be using both narcotic drugs and non-narcotic drugs (Nurco, Hanlon, & Kinlock, 1991: 222). Conversely, in "Drugs and Predatory Crime," the distinction between types of drugs is stated to be unnecessary, as the article focuses on predatory crime, rather than the behavior that may result from the physiological effects of drugs (Chaiken & Chaiken, 1990: 205). The article places a greater emphasis on the frequency of drug use of subjects. Predatory crime is defined by the authors as "any instrumental offense committed for material gain" (Chaiken & Chaiken, 1990: 205). The authors consider this separate from violent crime although in practice, crimes such as robbery involve the use of violence.

The findings of the studies in these articles are consistent in some respects, but differ in other areas. One of the first studies on the relationship between drugs and crime, done in 1930, focused on a Chicago neighborhood with a high proportion of immigrants. The study examined approximately 2,500 opium addicts and discovered certain characteristics, specifically residential instability, population heterogeneity, and socioeconomic deprivation, in the study area. The combination of these three factors is termed by the authors as "social disorganization" (Martínez et al. 2008: 49). Further drawing on the idea of social disorganization, Martinez et al. examined drug activities and neighborhood crimes in Miami, Florida. Census tracts were used to break Miami down into 74 study areas. The least-squares regression analysis method was used to estimate the strength of the correlation between social disorganization and each of violent crime and drugs. The conclusions reached by the study are that social disorganizations increase drug activity, which leads to an increase in crime, and that ethnicity did not appear to have been linked to the level of drug activity of the neighborhoods (Martínez et al. 2008: 49). Furthermore, Martinez et al. argues that active drug activity itself can attract crimes such as robbery, since the drug-abusing victims either carry large sums of cash or are vulnerable due to their inebriation (Anderson, 1990: 10).

The National Youth Survey, which is a longitudinal study over 1976-1986 of delinquent behavior, found results contrasting those of the Martinez et al study. This is most likely due to the differences in methodology and type of crime studied—the Martinez et al study uses only statistical data and regression analysis and focuses on violent crime, whereas the National Youth Survey was based entirely on self-report data and focused on predatory crime.

The National Youth Survey does not support the finding of the Martinez et al. study that the use of illicit drugs will result in the user's involvement in crime. First of all, more young people were found to use drugs than were found to be involved in predatory crime (Chaiken & Chaiken, 1990: 216). The study also found that as young drug users approached adulthood, they were likely to continue to use drugs, but less likely to commit crimes than non-drug users. Also, those youths who were users and committed crimes were actually more likely to commit property crime than violent crime (Chaiken & Chaiken, 1990: 216). Furthermore, the study does not provide evidence for the conception that drug users begin predatory crime in search for money to buy drugs. Youths who were found to use drugs and commit predatory crimes were mostly involved in predatory crime before drug use began (Chaiken & Chaiken, 1990: 216). A stronger conclusion than that drug use is a precursor for predatory crime is that minor predatory crime is a precursor for more serious predatory crime. However, youths who were both predatory offenders and high-frequency drug users were very likely to be high rate predators (Chaiken & Chaiken, 1990: 216). The assertion that higher frequencies of illicit drug use indicate a higher likeliness of the user to participate in criminal activity is consistent with this (Nurco, Hanlon, & Kinlock, 1991: 222). Also, all persistent serious predatory offenders are likely to use illegal drugs at some point (Chaiken & Chaiken, 1990: 216). Chaiken and Chaiken would probably conclude from the data presented in the Martinez et al. study that drug activity does not increase crime, but rather that social disorganization is responsible for both high levels of crime and for high levels of drug use, which leads to crime and drug use being positively correlated.

Some studies reviewed by Nurco, Hanlon, and Kinlock in "Recent Research on the Relationship between Illicit Drug Use and Crime", support the conclusion of Martinez et al. that drug use leads to crime, specifically violent crime. Although the majority of crimes committed by drug users are income-generating crimes, as opposed to violent crimes, some authors state

that addicts commit far more violent crimes than is assumed by most studies (Nurco, Hanlon, & Kinlock, 1991: 224). These studies also suggest that heavy narcotic drug use and, more recently cocaine use, have contributed to record numbers of homicides in large cities in the United States either directly or through the generation of market-related violence (Nurco, Hanlon, & Kinlock, 1991: 224).

Finds of various studies contradict the conclusion of Martinez et al. that ethnicity is not related to drug activity. First of all, the types of income-generating crimes prevalent among individuals of different races vary, as black addicts are more likely to be involved in crimes of gambling, while white addicts are more likely to be involved in confidence games such as forgery schemes (Nurco, Hanlon, & Kinlock 1991: 226). This may be due to the socioeconomic differences between races. We also find that racial minority members are disproportionately more likely to be drug users and to be arrested for crimes than whites (Chaiken & Chaiken, 1990: 205). As a result, one might find racial minority members to be over-represented in prison populations. In the Sacramento County study, only 44 percent of the population arrested for drug crimes was white, although whites make up 79.6 percent of the county's population (Barnes & Kingsnorth, 1996: 42). Conversely, 44.1 percent of the offenders were African American, even though African Americans consist of only 9.1 percent of the county's population (Barnes & Kingsnorth, 1996: 42).

From the articles we reviewed, it appears that the consensus is that drug crime and violent crime are positively correlated, but where the articles disagree is on the extent that this correlation is due to a cause and effect relationship. "Drugs and Predatory Crime" seems to argue strongly against a cause and effect relationship, whereas Martinez et al. concludes that drug activity that is brought on by social disorganization leads to violent crime. Because our

study, like the Martinez et al, consists primarily of statistical data, we may be tempted to match causation conclusions with the correlations we find in our data. For this reason, understanding the self-report studies discussed above will be helpful in interpreting our data.

Methods

As described in the literature, two methods of data collection are common for this kind of study. We recall that the self-report methodology is the methodology in which researchers distribute surveys or conduct face-to-face interviews among the populations of interest. Our research relied primarily on a statistical methodology, in which we used numerical data from sources such as police reports and the US Census. However, we also designed a survey that could serve as the basis for future studies involving self-report data and a large number of subjects.

We collected data from the US Census Bureau from the 2000 Census on race, income, and education. To classify race, we created a racial breakdown of four groups: black, white, Hispanic, and Asian and Pacific Islander. We divided our median annual income data into four brackets, with the poverty line, given as an annual income below \$37,170 for a four-person household, as a divisor. Lastly, we used high school diploma attainment among twenty-five-year-olds in Madison to classify education attainment.

We also collected data from the Madison Police Department about violent crime and drug arrests from the years 1998 to 2008. Thomas Dull provided us with this information on 23 November 2009. For the purposes of our study, we examined the following six types of violent crimes. The first is violent robbery, which is robbery committed either with a weapon or by strong-arming (using physical force). Even though relatively few homicides occur annually in Madison, we allowed a separate category for homicide. This is because we expect to find a

strong correlation between homicide and drug use. We included all forms of child abuse in a third category, as familial dysfunction can often result from drug addictions. Sexual assault, or rape, became be a fourth violence category. We designated battery, which we define as unwanted or harmful physical contact, as a violence category separate from sexual assault, as we assume that the motivations for sexual assault typically differ from the motivations behind battery. The final violence category that we designated was recklessness, or behavior that places other people in danger. The Madison Police Department also provided us with data about drug arrests, both for possession and intent to deliver, of hallucinogens, amphetamines, heroin, and cocaine.

To begin analyzing our data, we created a series of choropleth, dot reference, and proportional symbols maps of the Madison census tracts. Figure 1 is a choropleth map which shows the proportion of the population of twenty-five-year-olds in each census tract of Madison without a high school diploma. Figure 2 is a choropleth map showing median annual household income. Figure 3 is a proportional symbol map showing the racial breakdown of each census tract and the proportion of each race. Figure 4 is a choropleth map showing the proportion of the population of each census tract arrested for drug sales or drug possession. Figure 5 shows the proportion of the population of each census tract that has been arrested for violent acts. Lastly, Figure 6 uses proportional symbols to compare the percent of the population of each census tract arrested for violent acts and drug crimes. We took the three census tracts with the highest rates of both drug arrests and violence arrests and created two insets for each. These insets show the types of violent crimes and drugs for which arrests were made, as well as the spatial distribution of these arrests.

Results

Education. The proportion of the twenty-five-year-old population without a high school diploma in a given census tract can range from 0 percent to 23 percent. According to Figure 1, the census tracts that show the highest proportions of twenty-five-year-olds without high school diplomas, 10.1 percent to 23 percent, are 002302, 002200, 002500, 002601, 002100, 001300, 001401, 001501, and 001502. The census tracts in which 98 percent to 100 percent of twenty-five-year-olds possess a high school diploma are 000205, 000204, 000202, 010100, 000800, 000900, 001100, 001601, 001602, 001000, 000504, 010702, 010701, 010702, and 010200. In general, the upper-East side of Madison and the lower-East side of Madison show the greatest proportion of people age twenty-five without a high school diploma.

Income. Figure 2 shows annual median household income in 1999. The estimated poverty line for a household of four people is an annual income of \$37,170 (U.S Census Bureau: 2009). Those census tracts farthest below the poverty line with annual median income of less than \$27,175 are 003200, 001100, 001601, 001701, 001602, and 001401, though 002500, 002200, 002100, 001800, 001900, 001200, 001300, 001501, 001502, 001403, 001402, 000600, and 000300 are also below the poverty line. In general, the Isthmus area, and the Northeast, South-central, and Southeast tracts are the most impoverished. The wealthy census tracts, in which annual median household income is greater than \$77,527, are 010902, 000205, 010100, 010200, and 010701.

Race. Figure 3 shows that the census tracts with the highest proportions of racial minorities are 003200, 000600, 001401, 001501, 001502, 002301. The census tracts in which nearly 100 percent of the population is white are 011200, 010800, 010600, 010500, 010300, 011400, and 010200.

The highest proportions of Asians and Pacific Islanders are found in tracts 003200 and 000300, with the Asian population dominating the minority population from Central Madison to the Midwest. The black population is highest in 000600, 001402, 001401, 001501, 002301, 002402, and 002500. In general, the majority of the black population is concentrated across the Northeast and South-central portions of Madison. The Hispanic population is highest in 000600, 003200, 001402, 001403, 001401, and 001502. Thus the Hispanic population of Madison is mostly found in the Southeast.

Drug sales and possession arrests. Figure 4 shows the percent of the population of each census tract that has been arrested for drug sales or possession between 1 January 1998 and 5 January 2005. The census tracts showing the lowest rates of drug arrests, between 0 percent and 0.02 percent, are 011200, 010200, 011000, 003200, 010100, 000900, 001000, 010701, and 010600. The tracts showing the highest rates of drug arrests, between 2.1 percent and 6 percent of the population, are 002500, 002603, 002100, 001701, 001501, 001502, 001401, 001402, and 000600. The majority of drug arrests seem to take place in the South and Northeast of Madison.

Violent crime arrests. Figure 5 shows the proportion of the population of each census tract that has been arrested for a violent act between 1 January 1998 and 5 January 2005. The lowest arrest rates, from 0 to 0.1 percent, are found in 0011302, 011200, 011102, 010902, 011101, 011000, 000205, 010800, 010701, 010600, 010400, and 010200. The highest rates of arrest, which range from 2.51 to 6 or more percent, are found in 002602, 002500, 002402, 002301, 002100, 002000, 002601, 002603, 001601, 001701, 001501, 001401, and 000600. The majority of arrests for violent crimes appear to be in a few areas of the South and in the Northeast of Madison.

Types of violent crimes and drugs. In 000600, 001401, and 001701, both violent crime arrest rates and drug arrest rates are exceptionally high. Figure 6 shows the dot reference data for the violent crime arrests and drug arrests. It is clear from Figure 6 that the majority of drug arrests in 000600 occur around the Allied Drive area (City of Madison, 2009). It is also clear that cocaine accounts for the vast majority of drug arrests made in this area. Furthermore, violent arrests in 000600 are also concentrated around the Allied Drive area (City of Madison, 2009). No one type of crime seems to predominate. Arrests for robbery, sexual assault, reckless behavior, child abuse, and battery and mayhem seem to occur at roughly equal frequencies, though the number of arrests made for homicide appears to be very low.

Figure 6 shows that the vast majority of drug arrests in 001401 were made around the South Park Street area (City of Madison, 2009). Cocaine accounts for most of the drug arrests, with heroin following as a close second. The arrests for violent acts appear to be spaced roughly evenly across the tract. As in 000600, no one particular type of crime seems to dominate.

On Figure 6, we can see that the majority of arrests for both violent acts and drug acts in 001701 occurred near West Mifflin Street and North Henry Street (City of Madison, 2009). Cocaine is responsible for the majority of drug arrests, though we can also see scattered arrests for heroin. No one type of violent crime seems to dominate.

Table 1 summarizes the extremes in the data. If a certain trait for a tract appears to be neither high nor low, it is excluded from the table.

Discussion of Results

Education. Areas in which a low proportion of the population of twenty-five-year-olds has high school diplomas generally have high rates of drug arrests and violence arrests.

However, some areas in which a large portion of the population has a high school diploma still show high rates of arrests for violence.

Income. Areas in which income is low generally show high rates of drug arrests and violent crime arrests. Violent crimes, such as robbery, can be used to generate income, which may explain the high rate of violent crime in these areas. Furthermore, distributing illegal drugs can be used to generate income, which may explain the high rate of arrests for drug-related activities in these areas.

In general, the job prospects are higher for people with high school diplomas than without. This may explain why areas with low education levels show high rates of crime. It is true that 001100 and 001601 show very low incomes but high education levels, but this is probably because these census tracts correspond to areas on or near the University of Wisconsin campus. Thus a large portion of the people living in these areas produce little income since they are studying for advanced degrees. However, many university students come from privileged families, thus, despite the low levels of income they are generating, they do not commit violent acts or drug crimes at high rates.

Race. In general, areas with large minority populations show high levels of violent crime arrests and drug arrests. Areas in which the dominant minority is either African American or Hispanic, rates of drug arrests and violent crime arrests are high. Areas in which the dominant minority is Asian/Pacific Islander, rates of drug arrests and violent crime arrests are low. This does not necessarily mean that African Americans and Hispanics commit more violent acts and drug crimes than whites and Asians. We know from the literature that criminals who are racial minorities are more likely to be arrested for the crimes they commit than white criminals (Chaiken & Chaiken, 1990: 205). Thus arrest rates in areas with high racial minority populations

may show higher arrest frequencies, simply because African American and Hispanic criminals are more likely to be arrested than white criminals.

Types of drugs/crimes. Cocaine is the drug behind the vast majority of drug arrests. The literature tells us that African Americans drug criminals are arrested most often for crimes involving cocaine (Barnes & Kingsnorth, 1996: 43). The fact that white drug criminals are most commonly arrested for crimes involving amphetamines (Barnes & Kingsnorth, 1996: 43), and the exceptionally low rate of arrests for amphetamine-related crime, further suggests that racial minorities, particularly African Americans, are more likely to be arrested for the crimes they commit than whites in Madison.

No clear pattern is evident in the types of crimes that are committed, although Madison seems to have an exceptionally low rate of homicide. However, we see various instances of arrests for robbery present in Figure 6, which might be expected in low-income communities.

Drugs and crime relationship. Areas with high rates of violent crime arrests also have high rates of drug arrests. Areas with low rates of violent crime arrests also have low rates of drug arrests. The literature gives varying possibilities for the cause of this positive correlation. Some studies find that the greater the drug use of an individual, the greater the likelihood that that person will engage in criminal activity (Nurco, Hanlon, & Kinlock, 1991: 222). Other studies have found that factors like population heterogeneity and socioeconomic deprivation lead to both violent crimes and high rates of drug offenses (Martínez et al. 2008: 49). Some studies find that drug users engage mostly in property crimes rather than violent crime, further suggesting that high rates of both drug activity and violent acts are due to outside factors, rather than each other (Chaiken & Chaiken, 1990: 205).

In Figure 6, we see that the rate of arrests for violent crime in each census tract is greater than the rate of drug arrests, but this most likely due to the exclusion of marijuana arrest data in our study.

Limitations. We are aware of the limitations of the classification method of our data. We acknowledge that the racial categories of the census are overly simplistic. For example, Asians are classified as one racial category, even though there are vast cultural and socioeconomic differences between different Asian countries and even within these countries. The census also only collects data from a sample of the population, which may not be completely representative of the entire population. We have oversimplified our data on drug arrests as well, by lumping together possession and possession with intent to distribute for each drug category.

The crime frequencies we found are likely to be low due to under-reporting of crimes. For instance, very few instances of rape are actually reported. In general, violent acts and drug possession and distribution often occur without an arrest taking place. Also, approximately 13 percent of our arrest data was lost during the geo-coding process. Thus the maps we create using this data are unstable representations of reality (Hannah, 2001: 152).

The time scales used for our census data and our police report data do not correspond completely. The U.S. Census is only conducted every ten years. For our report, we use census data from 2000, whereas our police report data covers the years 1998 through 2008. Secondly, the enumeration units for the police report data and the census data are different. The arrest data is aggregated to the block level, while the census data is aggregated to census tracts, which consist of multiple blocks. The fixed point data in Figure 6 is also not completely spatially accurate.

We make several assumptions that can limit the accuracy of our data. For example, we necessarily assume that the arrests made for crimes in certain census tracts are always of people who live in that tract. Our education data also assumes that no one in the Madison population will earn a high school diploma after age twenty-five. We also assume that the average household in Madison is impoverished when the median annual household income is below \$37,070. However, not all households consist of four people. A household at this income level with less than four people should not necessarily be considered to be in poverty. A household with more than four people and an income greater than \$37,070 may be considered impoverished, even though the household's annual median income is not below the poverty line.

Further Research. Though our study relies on the U.S. Census and police report data, we have designed a survey relevant to our study that could be used to obtain self-report data for further research. This survey would be distributed among prison inmates in Madison, and follows in Appendix A. As indicated by the literature, the survey would have to be completely voluntary and confidential to increase the likelihood that representative data is obtained (Nurco, Hanlon, & Kinlock, 1991: 221).

Conclusion

Our study is consistent with the literature in that it finds a positive correlation between violent crime and drugs in Madison, Wisconsin. We have found several factors that may trigger high rates of violence and drug activity, mainly economic status and the level of education. Also the proportion of the population within a census tract that is nonwhite may account for high levels of arrests for both drug activity and violent activity in that tract. In order to draw a cause and effect conclusion about violent acts and drug activity, we would require a large quantity of

self-report data. This could be obtained by future researchers by distributing the survey in

Appendix A to the inmate population of Madison.

Appendix A

- 1. Which of the following types of drugs have you used? (circle all that apply)
 - a. Hallucinogens
 - b. Amphetamines
 - c. Heroin
 - d. Cocaine
 - e. None of these
- 2. Roughly how frequently did you use the drug selected in Question 1? (If multiple drugs are selected, answer with the drug most frequently used)
 - a. Daily
 - b. Weekly
 - c. Monthly
 - d. I only tried this drug but did not become a regular user
 - e. I have not used any of these drugs
- 3. Which of the following crimes have you committed? (circle all that apply)
 - a. Robbery
 - b. Homicide
 - c. Sexual assault
 - d. Reckless behavior
 - e. Child abuse
 - f. Battery & mayhem
 - g. None of the above
- 4. In your personal life, which came first?
 - a. Drug use
 - b. Violent crime
 - c. I have not committed any of the above crimes
 - d. I have not used any of the drugs listed
 - c. I have not committed any of the above crimes nor used any of the above drugs
- 5. Please identify your race.
 - a. White
 - b. Black
 - c. Hispanic
 - d. Asian/Pacific Islander
 - e. Other
- 6. Do you have a high school diploma?
 - a. Yes

- b. No
- 7. Please identify your age.
 - a. Below 20 years old
 - b. 21-30 years old
 - c. 31-40 years old
 - d. 41-50 years old
 - e. Above 50 years old

Acknowledgements

The authors would like to thank Thomas Dull, Dan Hauter and staff of the Madison Police Department for data on arrests.

We thank Dr. Amy Burnicki, Bill Buckingham, D. P. Huffman, James Beaudoin, Richelle Winkler, and Sarah Bennet of the University of Wisconsin-Madison for GIS technical support.

We thank Dr. William Gartner for advisement.

References

- Anderson, Elijah. (1990). *Streetwise: Race, Class, and Change in an Urban Community*. Chicago: University of Chicago Press.
- Barnes, C. and Kingsnorth, R., 1996. "Race, drug, and criminal sentencing: Hidden effects of the criminal law." *Journal of Criminal Justice*, (24.1), 39-55.
- Capital Area Regional Planning Commission. Retrieved 14 December 2009 from http://www.capitalarearpc.org/us_census.htm
- Chaiken, Jan M. and Chaiken, Marcia R. (1990). Drugs and Predatory Crime. *Crime and Justice*, (13), 203-239.
- City of Madison. Retrieved 1 October 2009 from http://www.cityofmadison.com/police/documents/AnnualReport2005.pdf>
- Drug Enforcement Administration. Retrieved 1 October 2009 from http://www.usdoj.gov/dea/pubs/state_factsheets/wisconsin.html
- Hannah, Matthew (2001). Representation & Reality. In Castree, Noel, Rogers, Alisdair, & Sherman, Douglas (Ed.), *Questioning Geography: Fundamental Debates* (pp. 151-166). Malden, MA: Blackwell Publishing.

Martínez et al. (2008). Social Disorganization, Drug Market Activity, and Neighborhood Violent Crime. Urban Affairs Review, (43), 846-874.

Nurco, DSW, Hanlon, PhD, Kinlock, M.A. (1991). Recent Research on the Relationship between Illicit Drug Use and Crime. *Behavioral Sciences & the Law*, (9), 221-242.

Office of Justice Assistance. 1 October 2009. http://oja.wi.gov/index.asp

U.S. Census Bureau. "United States Census 2000." 7 April 2009 http://www.census.gov/main/www/cen2000.html

Figures

Tract name	Proportion	Income	Dominant	Drug arrest	Violence	Proportion
	with		minorities	rate	arrest rate	minority
	diploma					population
002302	Low		Black			
002200	Low	Low	Black			
002500	Low	Low	Black	High	High	
002601	Low		Black		High	
002100	Low	Low	Black	High	High	
001300	Low	Low	Black			
001501	Low	Low	Black	High	High	High
001502	Low	Low	Hispanic	High		High
000205	High	High	Asian		Low	
000204	High		Asian			
000202	High		Asian			
010100	High	High		Low		Low
00800	High		Asian			
000900	High		Asian	Low		
001100	High	Very low	Asian			
001601	High	Very low	Asian		High	
001602	High		Asian		High	
001000	High					Low
000504	High		Black			
010702	High					Low
010701	High	High			High	Low
003200		Very low	Hispanic,	Low		High
			Asian			
001601		Very low	Asian			
001701		Very low		High		
				(especially		
				for cocaine		

				and		
				heroin)		
001401	Low	Very low	Hispanic, black	High (especially for cocaine and heroin)	High	High
001800		Low	Black, Asian, Hispanic	neromy		
001900		Low	Black, Asian, Hispanic			
001200		Low	•			Low
001403		Low	Hispanic			
001402		Low	Hispanic, black	High		
000600		Low	Hispanic, black	High (especially for cocaine)	High	High
000300		Low	Asian			
001902		High			Low	
010200	Low	High		Low	Low	Low
002301			Black		High	High
002402			Black		High	
011200				Low	Low	Low
010800					Low	Low
010600				Low	Low	Low
010300						Low
011400						Low
010200				Low	Low	Low
002603			Black	High	High	
011302					Low	Low
011102			Asian		Low	
011101			Black, Asian, Hispanic		Low	
010400			Hispanic		Low	
002602			Hispanic		High	
002000			Black		High	
010500						Low

Table 1











