

Running Head: RECENT CRIME TRENDS

Recent Crime Trends in Chippewa, Luce, and Mackinac Counties and the Ongoing Struggle With

Substance Abuse

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Table of Contents

Abstract	3
Introduction	4
Methodology	4
The Data	5
County	7
Crime Type	7
Race	9
Age	12
Gender	15
Fiscal Year	16
Previous Criminal Activity	17
Prior Issues with Domestic Violence or Substance Abuse	19
Community Corrections	19
Income	20
Education	21
Analysis	21
County	22
Crime Type	23
Race	24
Age	24
Gender	25
Fiscal Year	26
Previous Criminal Activity	26
Prior Issues with Domestic Violence or Substance Abuse	27
Research Issues & Explanations	28
Conclusion	29

Abstract

Data which detailed criminal offenses committed since November of 2004 in the tri-county area of Chippewa, Luce, and Mackinac was obtained. The offenders' demographic data was entered into SPSS and analyzed with the objective of validating the hypothesis that the number of elderly individuals committing criminal offenses involving substance abuse was on the rise. Although the number of elderly offenders is not high enough to merit excessive concern, the data revealed that substance abuse has a strong, continual niche throughout the years and counties represented in the data. This trend of substance abuse will likely continue to impact the local area unless a thoughtful plan which addresses most, if not all, of the issues discovered in this research can be implemented.

Introduction:

This research project was crafted around the idea that substance abuse is an enemy that people are battling in our local community. This researcher intended to show that the elderly were especially at risk, and that the frequency of arrests for substance abuse crimes were increasing. When the research began, the main hypothesis was that there would be an increase in criminal acts, specifically those involving substance abuse, from the elderly population of Chippewa, Luce, and Mackinac counties from November 2004 to the present. Ultimately, this hypothesis was not supported. The researcher will present some possible reasons for this later.

This simple fact does not make the research null and void, and the research proposal pledged that the researcher would gather and interpret as much data as possible about crime and criminals in this tri-county area. The proposal indicated that the research would analyze crime data by county, and it was hypothesized that most elderly substance abuse offenses are committed in Chippewa county. The researcher also wanted to compare crimes and race, and it was hypothesized that most elderly substance abusers would be Caucasian. The researcher also believed that most substance abusing offenders would not have had prior substance abuse treatment. From this point on, this research will reveal, interpret, and analyze data detailing these specific parameters, and the researcher will discuss other significant and intriguing trends and relationships discovered in the data throughout the course of the research.

Methodology:

The data for this research was compiled using the record keeping system of the Eastern Upper Peninsula Community Corrections Advisory Board (EUPCCAB). The board consists of one coordinator who meets and discusses ideas with criminal justice professionals from the local courts, sheriffs' departments, and police departments. The EUPCCAB monitors community corrections for Chippewa, Luce, and Mackinac counties, and their primary objective is resource tracking and

expenditure monitoring to ensure that community corrections are administered in the most cost-effective manner.

The data which was chosen to be utilized was broken down into fiscal years, with fiscal year five beginning in November of 2004 and ending with fiscal year eight which concluded in October of 2008. The data included all adults who were caught by police committing arrestable offenses in one of the three counties during this time period. Young juveniles were not included in this data, nor were simple infractions such as speeding tickets or other infractions of that nature. The data contains an adequate amount of demographic information for each offender, and the specifics and complexities regarding the demographic information will be addressed in greater detail throughout this document.

The Data:

After the researcher gathered the paper copies of the data, the researcher began to enter the data into SPSS. The records in SPSS initially included: fiscal year, county, age, gender, offense, number of prior felonies, number of prior misdemeanors, number of previous placements on the tether system, number of previous placements in a community service program, prior substance abuse issues, prior substance abuse treatment, prior domestic violence, prior anger management course, ethnicity, employment, and level of education achieved.

Some of these variables were too large to work with, so the researcher had to recode the variables into similar but streamlined variables. To get a more manageable data set, age was recoded into categories which included 20 and under, 21 to 39, 40-59, and 60 and older. Continuing with this recoding, the researcher turned to the crimes. One of the problems anticipated and mentioned in the research proposal dealt with the classification of crimes. There were too many individual and varied crimes to work with, so similar crimes had to be grouped together. The crime groupings included domestic violence, violent crime, public order or administrative crime, drug and substance abuse crime, theft, fraud, and other.

Domestic violence consists of stalking, child abuse and neglect, and obviously, domestic violence. Violent crime is made up of any weapons crimes, breaking and entering, home invasion, criminal sexual conduct, and arson. Public order and administrative crime is an extensive category for crimes which could be cleared up with the filing of a few papers. This category also includes things that just disturb the public. A few examples are driving with a suspended license, resisting and obstructing a police officer, malicious destruction of property, license plate crime, and lewd conduct.

Drug and substance abuse crimes include driving under the influence, operating while intoxicated, and all of those variants. Offenses like manufacturing and delivering, possession of drugs, and operating a drug house are also included. Minors in possession or MIPs were placed in this category as well. The theft category includes any type of larceny as well as burglary. The crime of receiving and concealing stolen property also fits in here.

Fraud consists of crimes such as passing bad checks or having insufficient funds. Retail fraud and shoplifting are also crimes that are in the fraud category. Lastly, the other crimes are crimes that do not fit into any other categories. A sampling of these crimes include: failure to stop, safe breaking, unlicensed dog, trespassing, conspiracy, jailbreak, and operating a criminal enterprise.

Next, the researcher decided that it would be best to recode the education variable as well. The original numbers of years of school completed were recoded into more sensible categories such as GED, less than high school, high school graduate, some college, and college graduate. Near the end of the research project, it was determined that more variables would need to be recoded. Gender counts were not coming back correctly when analyzed by SPSS, so the researcher recoded that data. Additionally, the researcher recoded the number of previous felonies and misdemeanors into one through four, and then more than four. This recoding and the recoding of age, crime, education, and gender made the statistics much clearer and easier to work with, and this allowed the researcher to proceed and begin analyzing the data.

After entering 1,000 plus entries into SPSS and recoding variables where appropriate, the next step to examining the data was to run frequency descriptions using the SPSS program. The options here allowed the researcher to configure specifically what he wanted to examine, and he chose to include percentages and measures of central tendency such as mean, median, and mode.

Next, to analyze relationships, the crosstabs feature was utilized. To use this feature, it is important that the independent variable is placed in the column position and the dependent variable is placed in the row position (Babbie, Halley & Zaino, 2007). Each cell created after the crosstabs feature is run will have a frequency count and a column and row percentage. The row frequency totals and the row percentages are presented in a total column at the far right of the output, and the column frequency totals and the column percentages are in a total row at the bottom of the output. These crosstabs can also calculate the chi-square, and the researcher utilized that feature as well.

County:

Of the 1070 total offenses occurring in the four year period, 638 of them, or 59.6%, were committed in Chippewa county. In the sample 142, or 13.2% of the offenses were committed in Luce county, and 289, or 27% were committed in Mackinac county. Aside from having the most overall offenses across the board, Chippewa county had the most offenses when broken down into their seven categories. This data will be analyzed specifically in the next section of this document, the crime type section.

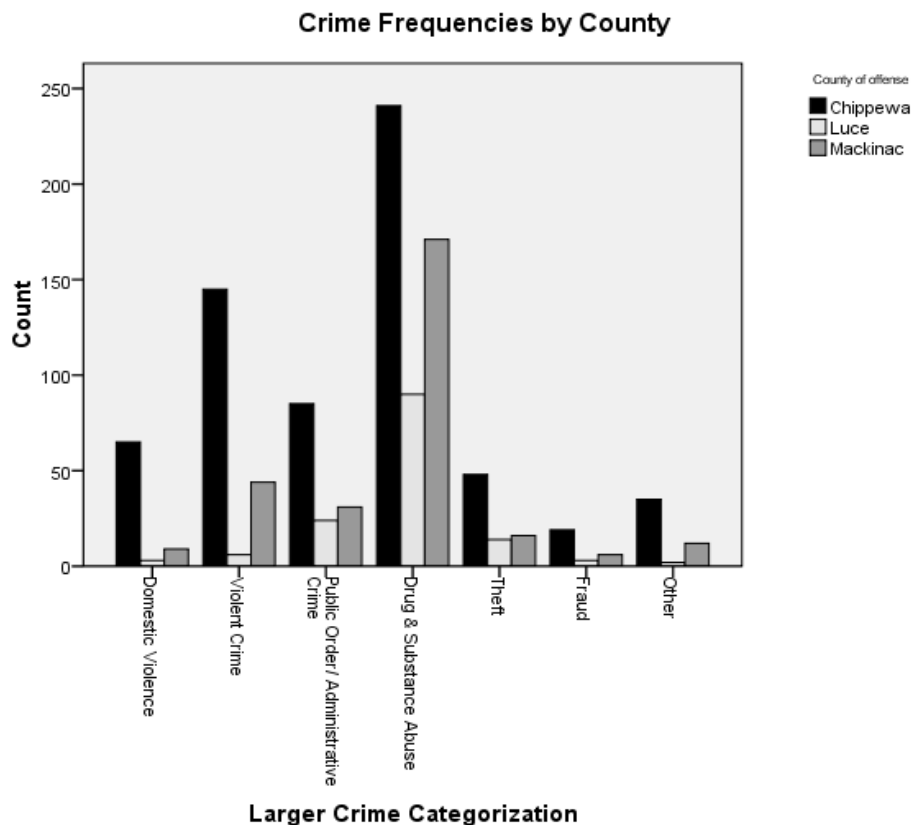
Crime Type:

During the four years of the sample there were 1,072 crimes committed across the three counties. As classified above, there were 77 domestic violence crimes and 196 other violent crimes. There were 104 public order or administrative offenses committed. There were 78 thefts, and 28 instances of fraud. Additionally, 502 substance abuse offenses occurred in the sample. There were 49 other crimes, and two crimes for which there was not enough data to make any sort of classification

whatsoever.

Obviously, substance abuse crimes made up the bulk of the sample. These crimes constituted 46.9% of the total criminal activity. The next largest percentage is violent crime, which was 18.3% of the total crime, followed by public order or administrative crimes with 13.1%. Domestic violence and theft respectively contribute 7.2% and 7.3% to the total crime makeup. Other crimes make up 4.6% of the total, and fraud contributes 2.6%.

Of all the domestic violence crimes represented in the data, 65 crimes, or 84.4%, were committed in Chippewa county. Nine of these crimes, or 11.7%, stemmed from Mackinac county, and Luce reported three of these offenses, 3.9% of the larger domestic violence sample. Again, Chippewa county led the other counties with 145 violent crimes. This figure represents 74% of all violent crimes. Mackinac had 44 offenses (22.4%) and Luce had six offenses which equated 3.1% of the total violent crime offenses. Mackinac had 44 offenses (22.4%) and Luce had six offenses which equated 3.1% of the total violent crime offenses.



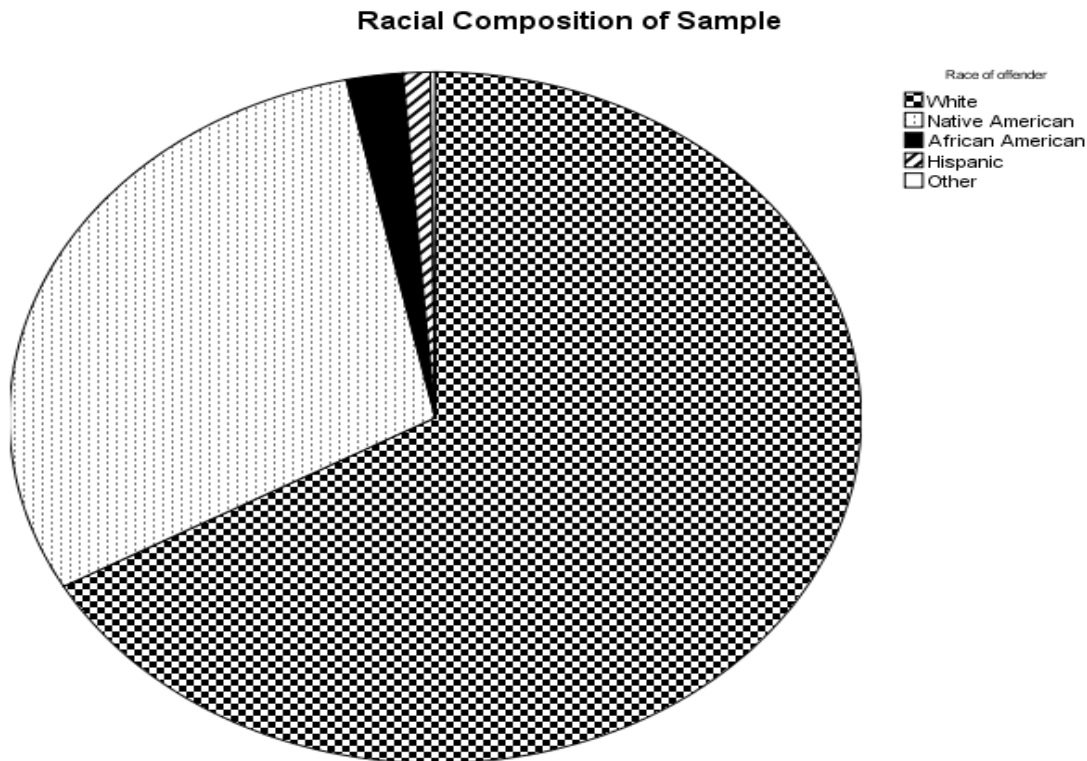
Chippewa county had 85 public order or administrative crimes, while Luce had 24 and Mackinac had 31. As parts of the larger category, 60.7% of these crimes occurred in Chippewa, 17.1% in Luce, and 34.1% in Mackinac. Of crimes that could be classified as other, 35 occurred in Chippewa county, comprising 71.4% of the category. Luce county was home to two of these offenses, and Mackinac reported 12. When looking at overall contributors to the other category, the percentages are 4.1% for Luce and 24.5% for Mackinac.

Chippewa county had 48 theft and 19 fraud offenses. These represent 61.5% and 67.9% of their respective categories. Luce county had 14 thefts and three frauds, representing 17.9% and 10.7% of those categories. Mackinac was in the middle with 16 crimes of theft and six of fraud. This is 20.5% of the thefts, and 21.4% of the frauds.

Lastly come the drug and substance abuse crimes. Chippewa county reported 241 of these offenses, amounting to 48% of all substance abuse crimes reported in the sample. Mackinac had the next highest amount, 171 crimes, which equaled 34.1% of the total offenses. Luce came in last with 90 offenses, or 17.9% of this total classification.

Race:

The most commonly encountered racial group in the four years of data consisted of white individuals. Of those represented, 66.9%, or 717 individuals, were white. Native Americans were the second most common group, and they included 29.8% of the sample with 319 individuals. African American individuals made up 2.1% of the data, or 23 individuals. Hispanic individuals were less commonly represented, and the 11 individuals equated to 1% of the sample, and a race classified as other applied to only two individuals.

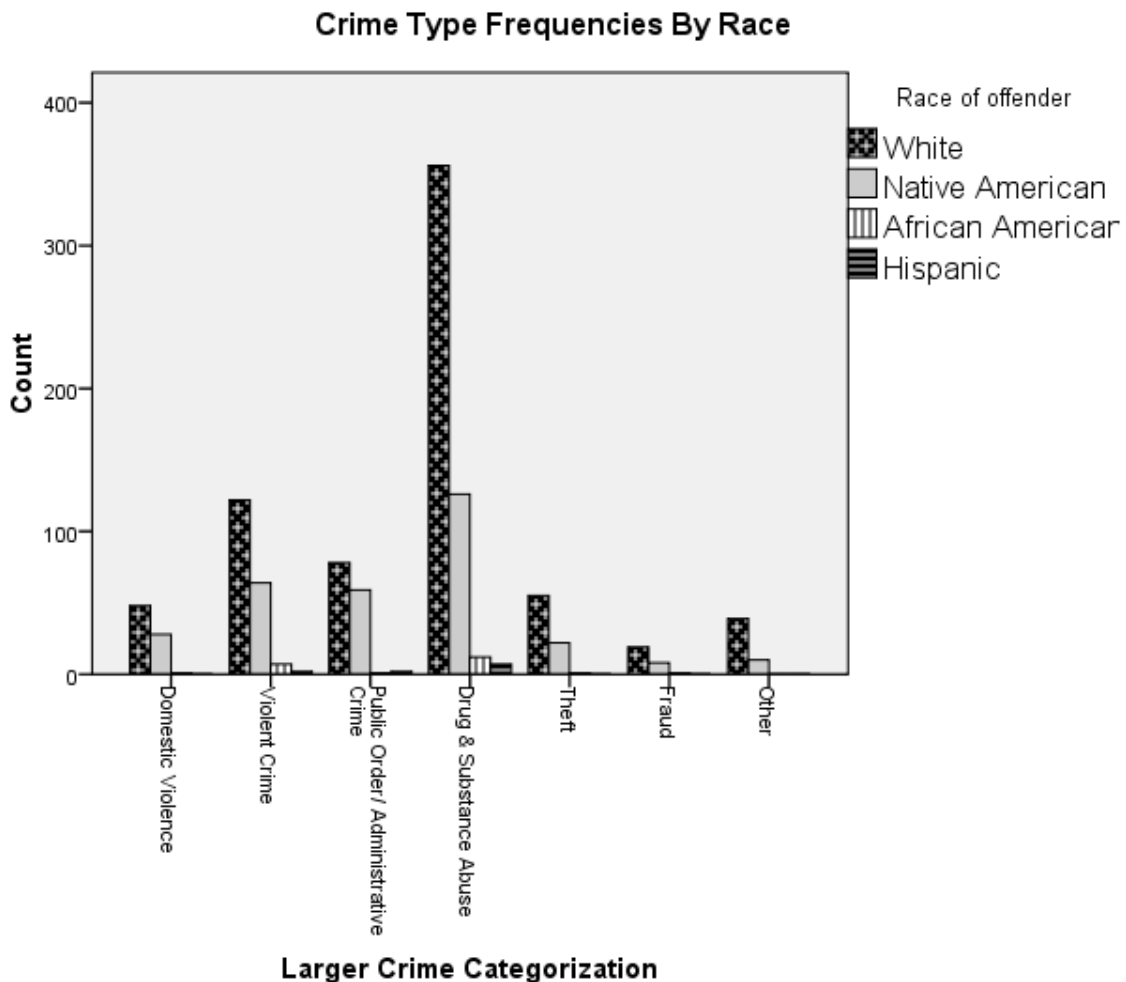


The breakdown of this by county revealed that there were 401 white offenders in Chippewa county, 116 white offenders in Luce county, and 199 white offenders in Mackinac county. Chippewa county had the largest number of Native American offenders as well with 216 offenders on the books. Mackinac county followed with 78 and Luce had 25. There were 14 African American criminals in Chippewa county, seven in Mackinac, and two in Luce. There were six Hispanic individuals in Chippewa county, five in Mackinac, and none in Luce. The two individuals whose race could be described as other were arrested in Chippewa county.

White individuals were responsible for 48 cases, or 62.3% of the domestic violence offenses. Native American individuals committed 28 domestic violence offenses or 36.4% of the cases. There was one African-American perpetrator in this category. White offenders were also the most frequent violent criminal offenders, and there were 122 cases represented in the sample. These cases comprise 62.2% of this crime category. Native Americans were responsible for 64 violent criminal acts which

amount to 32.7% of the total category. There were seven African-American violent offenders, two Hispanic offenders, and one other offender. Together, these groups were responsible for less than five percent of the violent crime in the sample.

Public order or administrative crimes were committed by White individuals on 78 occasions, or 55% of the time. Native-American individuals were responsible for 59 instances, or 42.1% of this crime. African-American and Hispanic offenders were responsible for three crimes, about two percent of this type of crime. White individuals had committed 55 thefts and 19 frauds, or 70.5% of thefts and 67.9% of frauds. Native-Americans were responsible for 22 thefts and eight frauds. This is 28.2% of the total thefts and 28.6% of the frauds. There was one African-American thief and one fraud as well. This theft constituted 1.3% of the total thefts and the fraud amounted to 3.6% of that category.



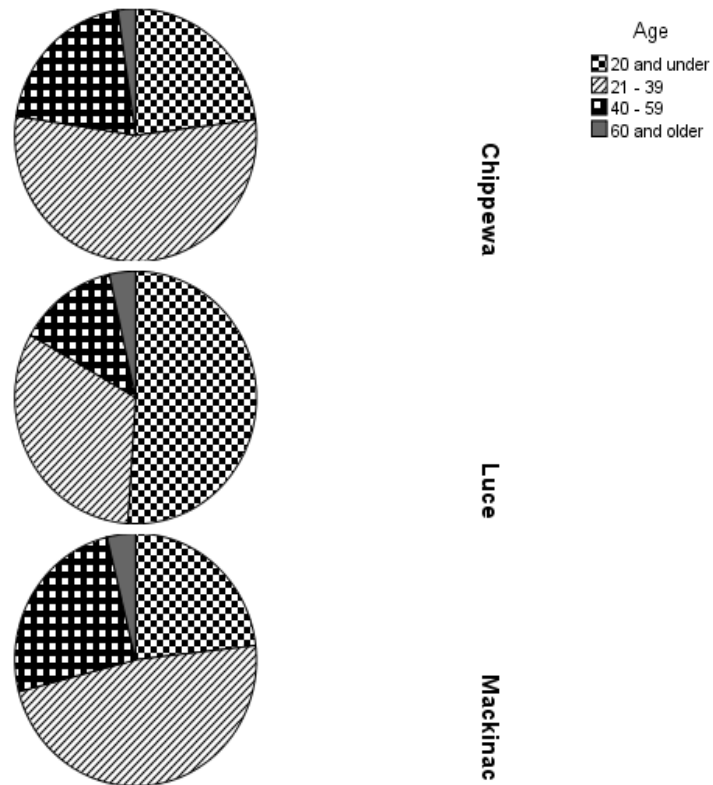
Other crimes were committed 39 times by White individuals, and they constituted 79.6% of that crime category. Native-Americans committed ten other crimes, or 20.4% of them. There were no offenders of any other race in this category. The substance abuse crimes were committed 70.9% of the time by White individuals. This equates to 356 crimes. The Native American population came in second, with 126 crimes, or 25.1% of the substance abuse share. There were 12 African-American offenders which contributed 2.4% to the total number of crimes of this type. There were seven Hispanic offenders and one other offender, and together they amounted to less than two percent of the substance abuse crimes.

Age:

Although the average age of a criminal in this sample was 30.24 years, a variety of ages were represented in the data. There were 287 criminal offenders, or 26.8% of the sample, who were 20 years old or younger. The 532 individuals who were 21 to 39 years of age made up the largest part of the sample, 49.7%. There were 221 individuals aged 40-59, representing 20.6% of the sample. Lastly, the elderly offenders amounted to 31 individuals, or 2.9% of the sample.

Chippewa county contained the most young offenders, with 147 individuals who were 20 or under. Luce follows with 73 offenders, and Mackinac with 67. The 21 to 39 year olds were heavily concentrated in Chippewa county as well, and there were 347 offenders. Mackinac followed with 138, and Luce had 46 offenders. The middle aged offenders were also most prevalent in Chippewa county, and 129 of them committed offenses there. Middle aged offenders committed 73 offenses in Mackinac county during the sample, and 19 in Luce county. The elderly offenders were also most populous in Chippewa county, and there were 15 individuals. Closely following was Mackinac county, with 11 elderly offenders. Lastly, Luce county had five elderly offenders.

Number of Offenders From Each Age Group Per County



Of the youngest group, 143 individuals, or 50%, committed a substance abuse crime. In the next oldest age group of 21-39 year old individuals, 220 individuals, or 41.4% of all criminals in that age range, committed a substance abuse crime. Because of the large number of offenses, people in this age group were responsible for the majority of the substance abuse crimes (43.8%). Criminal offenders of ages 40-59 committed 121 substance abuse crimes, or 24.1% of the substance abuse crimes in the sample. Elderly offenders committed 18 of these crimes, or 3.6% of all the substance abuse crimes.

The next crime type that accounts for the second largest portion of the age groups is violent crime. Individuals 21 to 39 years of age committed 102 of these offenses, which account for 19.2% of their age grouping. Additionally, these 102 violent crimes represent 52.3% of the larger violent crime category. Offenders 20 years of age or under committed 58 of these offenses. Of the youngest individuals in the data, 20.3% of them committed some type of violent crime. Offenders age 40-59

committed 28 crimes accounting for 12.7% of their age group and 14.4% of all violent crimes. Elderly offenders committed seven of these crimes, and these seven violent crimes represent 22.6% of the crimes committed by their age group. Their contribution to the overall violent crime category was quite small and insignificant.

The majority of the public order or administrative crime was committed by 21-39 year old individuals. They were responsible for 87 crimes, or 62.1% of this crime category. Individuals 20 or under and individuals 40-59 were responsible for 20.7% and 15.7% of this type of crime, respectively. Elderly offenders only committed two offenses of this type.

Domestic violence offenses had a likelihood of 57.1% of being carried out by the 21-39 age group, which committed 44 crimes of this type. After them, individuals 40-59 years old committed 20 offenses, or 26% of the offenses in this crime category. Offenders 20 years of age or younger were responsible for 12 crimes of this type, or 15.6%, and one domestic violence offense was committed by an elderly person.

Thefts were committed 34 times by individuals 21-39 years of age; and this represented 43.6% of the total thefts and 6.4% of the offenses carried out by that age group. Following this are the 31 thefts committed by the youngest age group. These thefts counted for 39.7% of the total thefts, and 10.8% of the crimes committed by individuals aged 20 or under. The 40-59 age bracket was responsible for 13 thefts, 16.7% of total thefts and 5.9% of offenses committed by that age group. The elderly individuals committed no thefts.

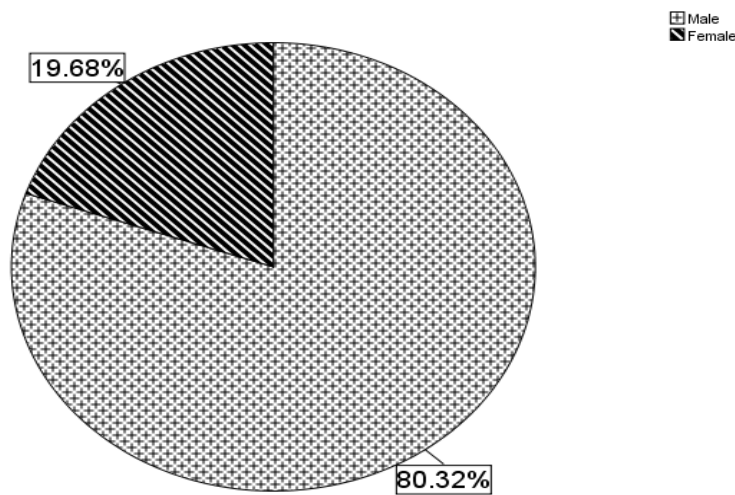
Similarly, the 21-39 age group was responsible for 17 fraud offenses, or 60.7% of them. The offenders 40-59 committed seven of these offenses, or 25%. The youngest group committed only four frauds, or 14.3% of all fraud offenses. The other crimes were committed most frequently by individuals aged 21-39 as well. These offenders committed 27 of these offenses, or 55.1% of all offenses of this type. The age group claiming next the largest percentage of this category is the 40-59

year olds. They committed ten offenses, or 20% of the offenses. The youngest offenders committed nine offenses, or 18.4% of all other crimes. Lastly, the elderly committed three of these offenses, or 6% of the total offenses of this type.

Gender:

In this sample of offenders from the tri-county area of Chippewa, Luce, and Mackinac counties, males outnumbered females by about four to one. There were 861 males represented in the sample, and 211 females; making the sample 80.3% male and 19.7% female.

Percentage of Each Gender of Offender Represented in the Sample



On top of the difference in number of offenders, males and females were committing varying types of crimes in differing frequencies. When looking at crime rates within gender constraints, the list for men from most frequently committed to least reads as: substance abuse, violent crime, public order or administrative crime, domestic violence, theft, other crimes, and fraud. The women are slightly different; and their list (organized in the same fashion) reads: substance abuse, violent crime, theft, public order crimes, fraud, other crimes, and domestic violence. For the women, the number of

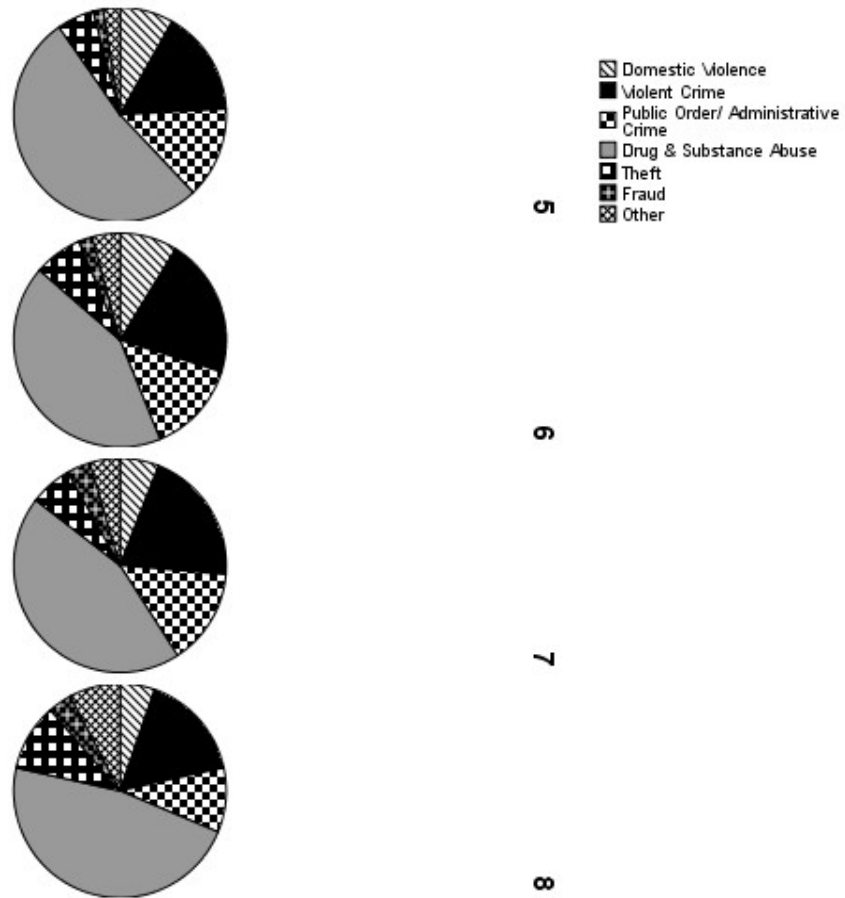
offenders who committed theft and violent crime are the same, so for popularities sake, these categories tie.

Fiscal Year:

The crimes were spread fairly evenly across the years of the sample. In fiscal year five there were 320 crimes, or 29.9% of the total sample. In fiscal year six, 285 crimes were committed, accounting for 26.6% of the total crimes. In year seven, 221 crimes were committed, or 20.6% of the sample, and in fiscal year eight, 246 crimes were committed, or 22.9% of the total crimes.

In each fiscal year, drug and substance abuse crimes made up the majority of the crimes. The highest percentage of substance abuse offenses occurred in fiscal year five when 52.3% of the total offenses were substance abuse offenses. The years after this had percentages of substance abuse crime hovering around 46%. Violent crimes are the second most frequent crimes across each year of the data, consistently making up about 17% of all crime.

Percentages of Crime Types Contributing to Each Fiscal Year

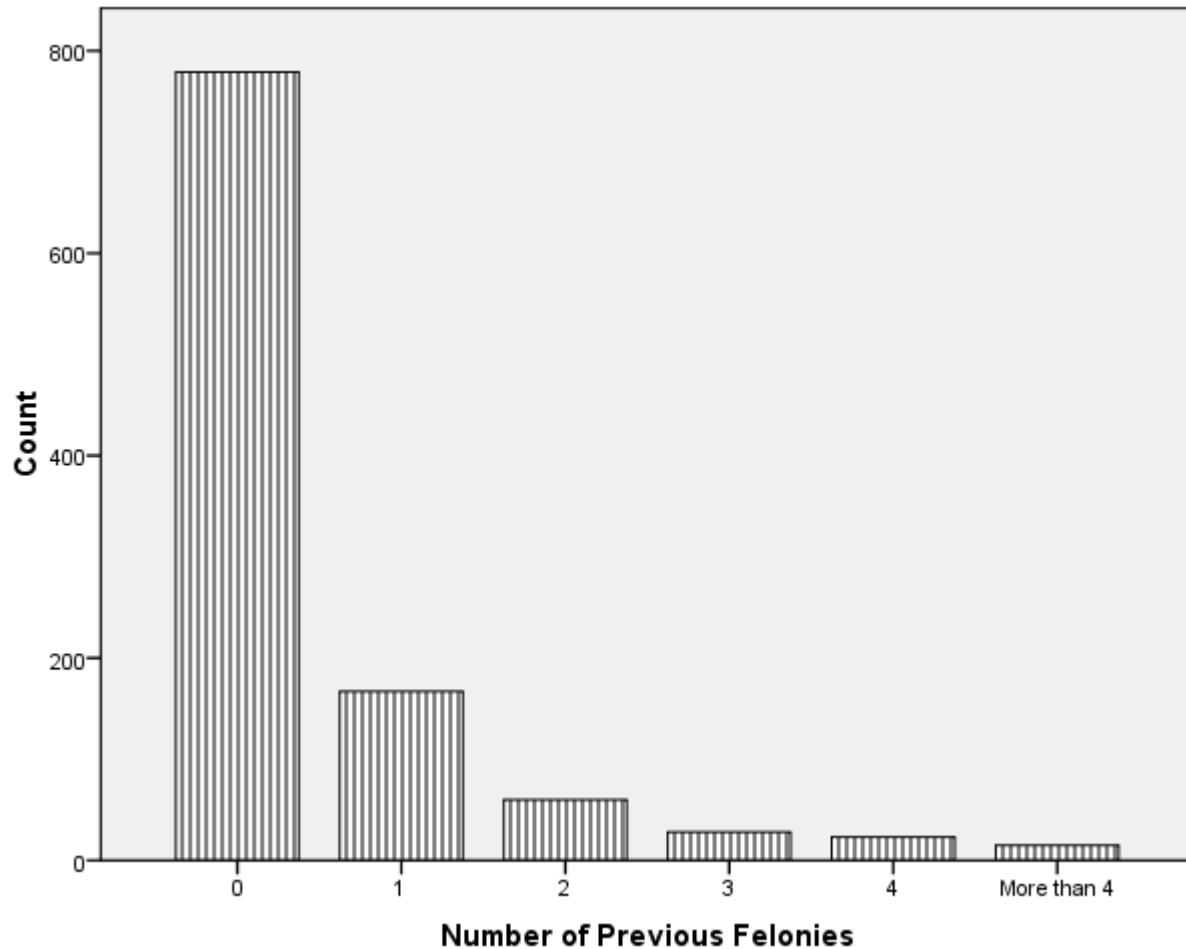


For fiscal years five and six, the crime breakdown, from most popular to least, was: substance abuse, violent crime, public order or administrative crime, domestic violence, theft, other, and fraud. For fiscal year seven, the only thing that changed was that thefts were more common than acts of domestic violence. In the last year of the study, some things changed. Substance abuse was still most common, followed by violent crime. Thefts were the next most common, followed by crimes of public order, other crimes, domestic violence crimes, and frauds.

Previous Criminal Activity:

The researcher examined the data that indicated the frequency of an offender's prior troubles

with the law. For every individual, the number of previous felonies and the number of previous misdemeanors was included in the data.



For the felonies, the minimum number was zero and the maximum number was 12. Of all the offenders, 779 of them, or 72.7%, had no prior felonies on their record. In the sample, 167 offenders had one previous felony. This is 15.6% of the sample. There were 60 individuals, or 5.6% of the sample, who had two felonies on their records. Individuals with three or four felonies make up less than five percent of the sample altogether. It was fairly uncommon to encounter an offender with five or more felonies. Overall, the mean number of previous felonies was .52, confirming that most offenders in this sample had not been charged with felonies in the past.

The minimum number of prior misdemeanors represented in the sample was zero, and the maximum was 30. The amount of individuals with no prior misdemeanors was very similar to the individuals who had one prior misdemeanor. In the sample, 231 individuals, or 21.5% of the sample, had no prior misdemeanors. Individuals with one misdemeanor numbered 225, which was 21% of the sample. Offenders with two misdemeanors were found in the sample 161 times, and they make up 15% of the sample. There are 134 individuals with three misdemeanors and 105 individuals with four misdemeanors. These individuals make up 12.5% and 9.8% of the sample respectively. All other individuals with five or more misdemeanors never amount for more than six percent of the sample. The mean number of misdemeanors on an offender's record is 2.86

Prior Issues with Domestic Violence or Substance Abuse:

Most offenders in the sample had some sort of previous substance abuse charges on their records. In fact, these 639 individuals made up 59.6% of the total sample. The majority of individuals charged with domestic violence, violent crime, public order or administrative crime, drug and substance abuse crime and fraud have had past struggles with substance abuse.

Of these 639 individuals who had a drug or alcohol problem, only about half of them had ever received any treatment. When discussing the 502 substance abuse crimes specifically, there were 185 individuals who had at least one prior treatment episode, and 317 individuals who had not been treated. Most of the offenders in the sample did not have prior histories of domestic violence, and the only crime category in which there were more individuals with prior domestic violence convictions than individuals without was the domestic violence category. In total, 275 offenders had a history of domestic violence, and 795 individuals had no such history.

Community Corrections:

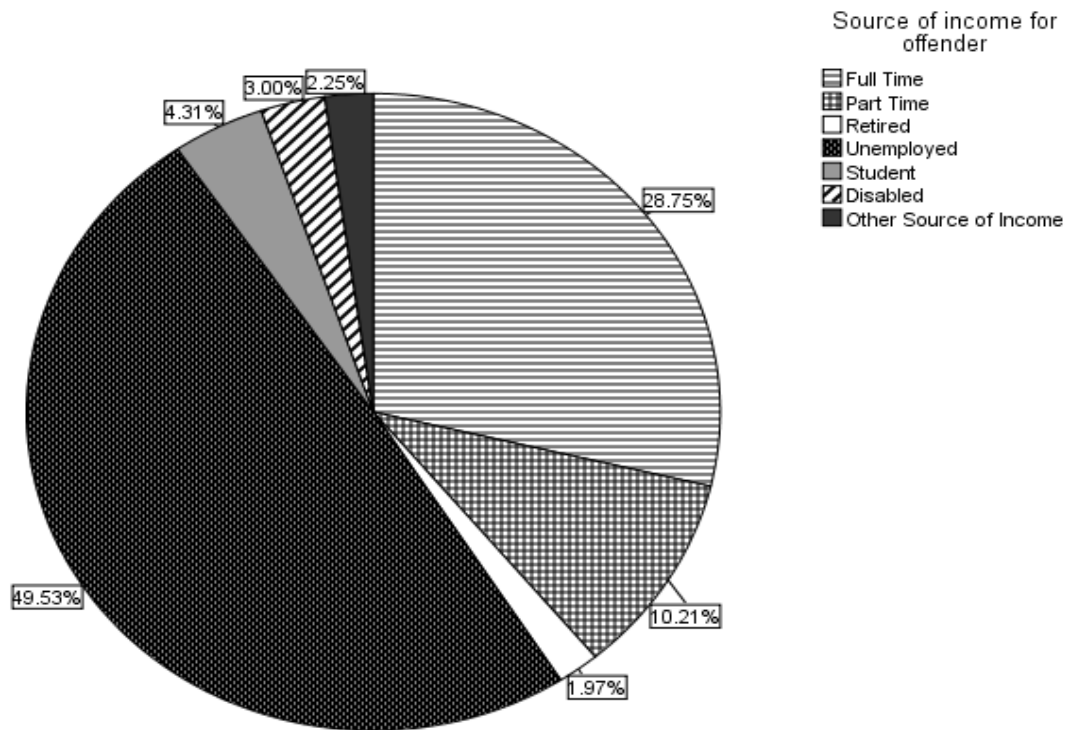
The number of occasions in which an offender was sentenced to the tether program or the community service program is also included in the data. No prior placements on the tether was

common, and 763 offenders, or 71.2% of the sample, had never experienced tether. One placement on the tether was fairly common, and 266 individuals, or 24.8% of the sample, had experienced that. Any other number of placements on the tether was fairly uncommon, and the mean number of placements for the offenders was .36, indicating that most individuals had not experienced one tether placement.

Community service was never previously sentenced to 788 of the offenders in the sample, but the community service program was used about a quarter of the time for 264 individuals. Two or more prior sentences to community service were uncommon in the data, and occurred on only 19 occasions in the sample. The mean number of community service placements for the offenders was .29, or less than one occasion.

Source of income:

The way in which the offenders occupy most of their time can be discovered by examining their source of income. Not surprisingly, 529 of the offenders, or 49.3% of them, were unemployed. The next most common source of income is full-time employment. In the sample, 307 individuals, or 28.6% of the offenders, were employed in this manner. Part-time employment follows, and 109 individuals, or 10.2% of the individuals in the sample worked part-time. Students followed, and 46 of them were represented in the data. Individuals who are disabled, retired, or had some other source of income each make up less than three percent of the individuals in the sample.



Education:

The level of education the offenders have is important to note, because it may have a bearing on criminal activity. The majority of individuals in the sample, 398, did not finish high school. This is about 37% of the sample. The next largest group consisted of 368 offenders, 34.3% of the sample, who graduated high school. There were 150 individuals who had some college, but less than a bachelor's degree. These criminal offenders made up 14% of the sample. The 125 offenders who had obtained a GED made up 11% of the sample, and the 28 offenders who had a bachelor's degree made up less than three percent of the sample.

Analysis:

To clarify and simplify the organization of this research document, the researcher will divide and present the analysis of the data using variable specific sections.

County:

One of the auxiliary hypotheses was that most elderly substance abuse offenses would be committed in Chippewa county, and this hypothesis was reaffirmed by the data. Of the 18 elderly substance abusers charged in the four year period, eight were from Chippewa county. Luce and Mackinac contributed five individuals apiece. Although the hypothesis was found to be correct, such small variation between counties doesn't appear to be indicative of a larger trend.

Taking the analysis further, this researcher looked at the all inclusive group of elderly (60 plus) offenders which includes substance abuse crimes and crimes from other categories. Of these individuals, 15 were from Chippewa county, five were from Luce county, and 11 were from Mackinac county. The researcher noticed an interesting trend here, that is five out of five, or 100%, of elderly offenders in Luce county were elderly substance abusers. This compares with eight out of 15, or 53% for Chippewa and five out of 11 or 45% for Mackinac county. So, although Chippewa county has the most elderly offenders, there are more elderly substance abusers per capita of elderly offenders in Luce county. Using this fact to make an extrapolation about the condition of the elderly in this tri-county area, this researcher will say that it appears as though elderly people in Luce county are most troubled with substance abuse.

A chi-square test was employed at this point to determine if the type of crime an offender commits depends on the county they live in. This result would indicate whether or not the 1,072 individuals in this sample were somehow affected by their county of residency. The null hypothesis for this particular application would be that there is no significant relationship between crime type and county of residence. The research hypothesis would be that there is a significant relationship between the likelihood of a person choosing to commit one type of crime over another based on the county they live in. The chi-square value in this instance was 87.227 with a degree of freedom of 18. The significance level was .000. Based on all these factors, and using an alpha value of .05, it became

clear that there was a significant finding here and that the null hypothesis should be rejected. Since the frequency of each type of crime was highest in Chippewa county, it appears as though living in Chippewa county affects criminality in some way.

Crime Type:

In every category, the majority of the crimes occurred in Chippewa County. The county that contributed the least to the crime category in every instance was Luce. Consequently, Mackinac was always in-between the two other counties. Regardless of their differences from category to category, it became apparent that substance abuse was the most prevalent issue within the three counties. Before this conclusion is explained, first understand that these past paragraphs have examined which county is responsible for how much of the share of the larger crime category. Another figure which intrigued the researcher represents the share that a crime classification has as a percentage of one county's total crimes. For every county, drug and substance abuse offenses represent the largest frequency and percentage of the offenses.

For instance, Chippewa county's 241 substance abuse offenses represent 37.8% of all crime reported in the sample for that county. This trend holds true with Luce county, where 90 substance abuse offenses represent 63.4% of the total offenses represented in the four year study. Mackinac county's 171 substance abuse offenses represent 59.2% of the total crimes in that county over the four years. Notice when it is broken down above that Mackinac and Chippewa counties have had more substance abuse offenses, but their percentages are smaller than that of Luce county. This is because Mackinac county had almost double the total offenses that Luce had. Also, Chippewa county had more than four times the amount of offenses. In both instances, these offenses were more varied across categories, whereas Luce county's smaller group of offenders was consistently abusing substances. This finding is consistent with the finding above that substance abuse is having a greater impact in Luce county than in other counties.

Race:

The research used a chi-square test to determine whether the type of crime committed depends on race. In this case, the null hypothesis would be that there is no significant relationship between one's race and the type of crime they commit. The research hypothesis would be the opposite. The chi-square value in this instance was 30.382 with a degree of freedom of 24. The significance level was .172. Based on all these factors, and using an alpha value of .05, it became clear that there was not a significant finding here and that the null hypothesis was appropriate for the data. This finding is logical and makes sense because there was not one race that had a majority of its members committing only one type of crime. Regardless of the type of crime, White individuals had always committed more offenses. This is to be expected due to the relative racial homogeneity which is common in the Upper Peninsula.

Age:

The data reflects a trend which is that the crime that makes up the majority of every age group is a substance abuse crime. Based on other analysis done thus far, this is not a surprising finding. The individuals aged 21-39 offended most throughout the sample. They were responsible for 531 crimes, or 49.7% of all crimes. These 531 crimes are slightly more than double the 286 crimes committed by the youngest group and more than double the 221 crimes committed by the 40-59 age bracket. Elderly individuals are responsible for only 31 crimes. A hypothesis which was mentioned in the research proposal was that most elderly substance abusers would be white. This is indeed the case, as 16 of the 18 substance abusing offenders are white, and 2 are Native American.

Although it was expected that older people would be more criminal, it makes sense that the majority of crimes are committed by individuals aged 21-39. This group includes some college students, who are notorious for being a little out of control at times. Additionally, there are probably those older individuals around 35 years of age or so who are hesitant to settle down and leave their

younger, more rebellious days behind.

This researcher was interested to know whether the type of crime an offender commits depends on their age. To test this, the researcher used a chi-square test where the null hypothesis was that there is no significant relationship between age and type of crime committed. The research hypothesis was that there is a significant relationship between the two variables. The chi-square value was 42.963 with 18 degrees of freedom, and the significance level was .001. Using the .05 alpha level, this is a significant finding and the null hypothesis should be rejected. This indicates that some sort of relationship exists between the type of crime an offender commits and that person's age. This finding is reasonable due to the fact that there were certain types of crimes that particular age groups just were not likely to commit. An example of this would be how individuals 20 and under or elderly individuals have a decreased likelihood of committing domestic violence, due to their age.

Gender:

Substance abuse and violent crime are still priorities for criminal offenders, regardless of gender. Most perpetrators of domestic violence are men, so it is expected to see the crime popularities shift around a bit near the middle of the list. In this sample, men were the most frequent perpetrators and made up the largest amount of the crime categories in every instance.

To see if there were any underlying relationships not yet discovered, a chi-square test was employed. The null hypothesis was that there is no significant relationship between gender and crime type, and conversely the research hypothesis operated under the presumption that there was a relationship between crime gender and crime type. With six degrees of freedom, the chi-square value was 34.382 and the significance value was .000. Using the alpha value of .05, the null hypothesis should be rejected in favor of the research hypothesis which indicates that the gender of an offender will have some effect on the type of crime an offender commits. This is evidenced by the domestic violence crimes, as mentioned above.

Fiscal Year:

Although it was no surprise to find that substance abuse was still holding steady as the most commonly committed offense, it was interesting to see how the popularity of certain crimes changed as time went by. Theft consistently moved up the list and became increasingly popular. Theft occupied the fourth spot in fiscal year seven, and the third spot in fiscal year eight. This may be due to the fact that as time passes, the economy seems to deteriorate, giving people more reasons to steal. It is also feasible that individuals need to steal more goods to get money to maintain a drug or alcohol habit.

Previous Criminal Activity:

Since it is commonly said that education is important and that someone with more education can experience much more success than someone with less, it would be expected to find a relationship between previous run-ins with the law and highest levels of education completed. A negative correlation seems likely; as the amount of education increases the number of prior felonies should decrease. A chi-square test was used to analyze this, and the null hypothesis was that there is no relationship between education and number of previous felonies, while the research hypothesis maintained that there would be a relationship between the two variables. The chi square value was 78.503, and the significance value was .000. Using an alpha standard of .05, there was a significant finding and the null hypothesis should be rejected. So, it can be said that the level of education an offender has directly impacts their likelihood of having committed felonies in the past.

Does the same relationship exist for misdemeanors? A chi-square test for these variables was employed to discover if level of education obtained had any impact on the number of prior misdemeanor crimes on an offender's record. The chi-square value in this instance was 39.818 and the significance level was .005. This significance level indicates that the probability of getting results like this due to random chance alone is very slim. Therefore, the null hypothesis that there is no relationship between number of previous misdemeanors and the highest level of education completed

should be rejected in favor of the research hypothesis which stipulates that there is a relationship between those two variables.

Prior Issues with Domestic Violence or Substance Abuse:

The data indicates that more offenders have a history of substance abuse than domestic violence. Another auxiliary hypothesis set forth in the research proposal was affirmed, as it is apparent that the majority of individuals in the data who have a substance abuse problem have not had any substance abuse treatment. Clearly this is an area where improvements could be made that would help to resolve the prevalence of substance abuse.

To determine whether or not a history of substance abuse could have prevented some of the offenders in the study from attaining a high level of education, consequently making them more prone to criminal acts, a chi-square analysis was used. In this instance, the null hypothesis would have stated that there is no relationship between past substance abuse issues and the level of education obtained. The research hypothesis would indicate that the level of education an offender achieved depends on whether or not the offender has ever had substance abuse issues. The chi-square value in this instance was 11.513, and the significance value was .174. Using an alpha level of .05, there was no significant finding, and the null hypothesis must stand. No significant relationship exists between prior substance abuse problems and the level of education an offender completes.

This result goes against conventional logic; one would think that someone who is not chemically dependent would do better in school and advance further than someone who is chemically dependent, but there are fully functioning addicts out there who can go to college just like anybody else. Actually, 95 offenders with past substance abuse issues had completed some college compared to 55 offenders with no history of substance abuse. More offenders with previous substance abuse issues graduated high school compared to offenders without the history of substance abuse. These figures all depend on the age of onset at which an offender begins to abuse substances. Also, remember the

sample consists of criminal offenders and sober or not, they may not have the scholarly ambition or drive necessary to be successful in school.

Research Issues & Explanations:

Some possible explanations as to why the main research hypothesis was not affirmed by the data include: the migratory nature of the elderly, the private manner of the crime, and the amount of notice the age group draws. Due to the harsh winters experienced by Upper Peninsula residents, it is not uncommon for elderly individuals to temporarily take up residence in warmer climes. If they are indeed experiencing the trials and struggles of aging, the loss of loved ones, declining health, loneliness, and the other complexities outlined in this research proposal, they could be abusing substances, breaking the law, and getting caught in different states. For this reason they would be expected to be absent from a few months of this data.

Even if the elderly population is not leaving the area for a portion of the year, they could still be affected by substance abuse. The elderly could be abusing substances privately behind closed doors. It is not unheard of for older people to become reclusive or to shut themselves off from their families and their communities. For this reason, elderly substance abuse can become a silent epidemic.

Lastly, suppose that none of the above explanations are correct. It is remotely possible that the elderly are abusing drugs and alcohol and leaving their homes and living life alongside everybody else. In this researcher's education and professional career this researcher has learned about and discussed profiling, suspicion, and intuition. These discussions make this researcher wonder whether or not the amount of scrutiny the elderly population receives is less than the amount of scrutiny a 20 something year old male receives.

Recall the discussion regarding age above, and how mention was made of the fact that younger individuals, males especially, have gained notoriety for being wild and fearless. For this reason it is entirely possible that law enforcement individuals are turning a blind eye to the somewhat docile and

reserved elderly population in order to spend more time watching and observing the riskier younger population. This idea that they are just getting away with these crimes could account for the some of the absences of the elder population in the data.

Another issue encountered during the research is that as a statistician, one is supposed to have a sample that is representative of the larger population before drawing conclusions. This data, which contains all criminal offenders, is probably not representative of the larger population, because every person is not out in public committing crimes every day. However, this researcher does stand by his results and insinuations. The researcher believes that the sample could be representative of a different larger population, the criminal class of the entire Upper Peninsula.

It is probable that if this same research analysis was completed using Marquette, Baraga, and Iron counties, similar results would've been obtained. The main crime would've probably been substance abuse, and the county with the most offenders would probably be Marquette, because that is where the largest cities are. Also, most offenders would probably be white males.

Another issue was encountered, which was discussed and predicted in the research proposal. This issue dealt with the classification and categorization of offenses. In some records, there were multiple crimes listed. In this instance, the researcher classified them as best and as accurately as possible could using the information at hand. Usually, those offenders with multiple crimes were classified according to the more serious offense.

Conclusion:

Although the hypothesis that elderly substance abuse offenses were on the rise was not validated by the data, many other interesting trends were discovered throughout the course of the research. For instance, all of the auxiliary hypotheses laid out in the proposal were confirmed by the data. First, it is true that the majority of elderly substance abusers committed their offenses in Chippewa county. Also, the majority of these elderly substance abusers were white. Lastly, as it was

mentioned pages ago, the hypothesis regarding substance abuse treatment was substantiated by the fact that the majority of individuals in the data who have a substance abuse problem have not had any substance abuse treatment.

When looking at all of the offenses in the sample, it was apparent that they were fairly evenly spread across the fiscal years which the data represented. It also became obvious through the research that the most common offense committed in this tri-county area is a substance abuse offense, and these substance abuse offenses make up the bulk of each counties crimes. Also, the majority of offenders in the sample were white individuals. Most of these white offenders lived in Chippewa county, and Chippewa county residents of all races were responsible for the largest portion of crime in the sample. The researcher noticed that the majority of criminals of any racial background were substance abusers.

Another realization from the data indicated that substance abuse is not linked to one specific age group, and offenders of all ages are consistently turning to substance abuse. Additionally, the age group responsible for the most criminal offenses was the 21-39 year old age group. A very interesting statistic appeared and indicated that all of the elderly offenders in Luce county were substance abusing elderly individuals. This elderly population in this county could be especially at risk for developing substance abuse problems.

Details about the impact of different variables on criminality were also discovered throughout the research. The researcher discovered that a relationship exists between the type of crime an offender commits and their county of residency. Similar dependent relationships exist between crime type and age and crime type and gender. Conversely, the type of crime an offender commits is independent of their race. Additionally, if the highest level of education an offender completed is known, predictions can be made regarding their involvement in past misdemeanors and felonies. A surprising relationship was discovered when it was realized that past substance abuse issues did not affect the level of education an offender completed. Another finding that was fairly predictable indicated that the

majority of the offenders in the sample had not finished high school and were unemployed.

Of all the various crimes and influences discovered and analyzed, the truth is that substance abuse offenses are the most problematic and popular locally. This fact troubles Doreen Howson, a women's advocate with the Diane Pepler Resource Center. According to Howson there is a continuum of interest and advocacy for social issues and along this continuum lie things like domestic violence, sexual assault, child abuse, and substance abuse. Howson believes that there is a pendulum that swings along this continuum which determines where the funding and effort needed to tackle the issues will be concentrated (D. Howson, public presentation, March 25, 2009).

Howson, along with other workers in her field, have noticed that the pendulum has shifted recently back towards domestic violence and sexual assault and away from substance abuse, leaving substance abuse treatment providers struggling financially and grappling for lifelines to ensure continued operation of their agencies. Howson also mentions that substance abuse funding is becoming increasingly more outcome based, and that the ease of garnering future funding is dependent on whether or not clients successfully complete the program or relapse (D. Howson, public presentation, March 25, 2009).

To this researcher (an intern in a residential substance abuse treatment facility) it doesn't seem as though funding substance abuse treatment in this manner is a good method to reduce the local substance abuse problems evidenced by the data. It is unfair that someone who genuinely wants help can be denied that opportunity because individuals in the program previously have relapsed. Also, continually monitoring individuals after their treatment to determine their prolonged success is neither cost effective nor efficient with regards to staffing. Many individuals who receive treatment are transient or homeless and can be hard to contact. Furthermore, in the instance when a former client can be contacted, there is no way to validate their verbal testimonial stating that they are sober.

More insight about funding the treatment of substance abuse was gained from a personal

interview with Katharine Rommel, case manager of a local residential substance abuse treatment facility. Rommel (2009) is in agreement with Howson due to the fact that they each have noticed changes in the availability of funding. Northcare, the main funding source for substance abuse treatment in this area, can not supply as much money as they formerly could. Rommel notes that the current model of substance abuse has changed from a social, understanding model to the black-or-white medical model. This change in perspective, or swing of the pendulum, had caused funding sources such as Northcare or Medicare to mandate shorter treatment stays for our area. This means that a client who needs a long stay in the residential program may not get it, or the client may even be forced to accept outpatient treatment only.

Securing the funding is only one obstacle to treatment, and the other important aspect is the matching of the client to the facility or program. The services to help substance abusers are out there, but if an individual lacks the skills or motivation to find them, they will not find them. Katharine is quick to point out that these important resources are most abundant in Chippewa county. "It's not my opinion, it's the truth," Rommel stated as she flipped through a large binder filled with referral information for clients. From children's services to housing, the referral book contained all the known resources in each nearby county in Michigan. Rommel explained that located in Chippewa county there is the Great Lakes Recovery Centers, operating with two inpatient programs and one outpatient program, which even branches into the prisons in Kincheloe. Also, the main office of Hiawatha Behavioral Health, including the residential mental health facility, is located in Chippewa county. There are also three private mental health providers in this county who provide substance abuse treatment (K. Rommel, personal communication, March 20, 2009).

Rommel then flipped the binder to Mackinac county, where many of the programs had directory listings that referenced the reader back to resources and programs located in Chippewa county. Rommel discovered similar results as she browsed the Luce county section. "There are one or two

outpatient offerings in these other counties, but outpatient services only do so much,” Katharine admitted (K. Rommel, personal communication, March 20, 2009). This may be part of the reason why the elderly offenders in Luce county, or the offenders of any age in Luce county, are consistently turning to substance abuse.

Another area in which the referral book is lacking is housing. This researcher knows from studies of substance abuse and addiction that after completing residential substance abuse treatment, a client needs a stable recovery environment. Katharine pointed out that there are four or five agencies in Chippewa county that can help someone in need evaluate all their housing options, and secure rental assistance. The referral book listed no service agencies, only landlords and apartments, for the other counties. Katharine feels that this absence of housing resources is a large contributor to the substance abuse problem, and the relapse issue. “There are no halfway or three fourths of the way houses. People in these facilities have opportunities to get jobs and to have shelter. The consequence of this is clients going back into bad environments and becoming chronic offenders” (K. Rommel, personal communication, March 20, 2009). Clearly a halfway house operating under certain guidelines would resolve issues such as homelessness and unemployment for clients who are fragile in this moment of transitioning to a lifestyle of sobriety.

According to Katharine, the key to success in substance abuse treatment is a seamless transition from intake to the completion of treatment. This can be tricky because the completion of treatment doesn't end when the client walks out the door. Rommel points out that just like anything else someone does that they want to perfect, the follow-through is very important. She described the ideal stay of a successful client at the Men's New Hope House, a residential treatment facility operating under Great Lakes Recovery Centers. First, the client arrives in the social detoxification unit of the house. Next, he experiences a desire to change, and transitions to the residential aspect of the treatment program. He successfully completes the appropriate length stay in the residential program, and he transitions to

outpatient meetings once or twice a week. Lastly, he follows through by attending AA and NA and building recovery supports (K. Rommel, personal communication, March 20,2009).

If in five years this study were to be repeated in a similar fashion, and the researcher had a vested interest in this locality and hoped to see a healthier and safer community, particularly a community less impacted by substance abuse, many things would need to change. The treatment a substance abuse client needs must first be readily available and accessible, in every county. This treatment should be tailored to the client specifically, and the duration and funding of of this treatment should be determined objectively. In harsh economic times, substance abuse case managers who are willing to exhaust their resources and find new ways or opportunities to secure funding are also a necessity. The treatment process should be seamless, and the care must be coordinated to resolve or address every issue the client has. The client must be able to transition into an environment that supports recovery. This transition should include the utilization of things such as halfway houses and the support network accessible through attendance of Narcotics and Alcoholics Anonymous or similar support groups.

References

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