Data Analysis of Rochester Burglar Arrests, 2009-2010

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Center for Public Safety Initiatives Rochester Institute of Technology 585-475-2423 While most crimes are decreasing across the City of Rochester, burglary has remained steady, even increasing at times, in recent years. For this reason, Monroe Crime Analysis Center is interested in gathering more information around burglaries. This is the first working paper in a series of working papers addressing burglary in Rochester. This first paper specifically explores and analyzes those who were arrested for burglary over a two year period. The data set we are using has been derived from the Rochester Police Department's 2009-2010 arrest reports for burglary cases. From this data set, it can be concluded that a total of 399 burglars were arrested within the 2009-2010 time period. It should be noted, that there were 6,347 burglary reports made to the Rochester Police Department during this same time period. This data set allows for conclusions to be drawn about the age, race and ethnicity, and sex of arrested burglary offenders. Conclusions can also be drawn regarding the frequency of arrests per individual and how it relates to said individual's age.

Distance to Crime

This report first addresses the distance between burglar home addresses and the first offense for which they were arrested in the 2009-2010 (some offenders had as many as three burglary crimes associated with them in the data). This will give the reader the sense of how far arrestees range in committing crimes and will then be used below to explore whether age, race, or gender are linked with distance to targets. The literature indicates that, in general, burglars are "lazy" and often commit this crime opportunistically, as a way to get money for some "need" which can include food, prestige, or drugs. (Wright & Decker 1994; Cromwell, Olson & Avary 1991) They also show fear of the unknown, and understand that they may appear out of place in another neighborhood. It is hypothesized that this often causes them to commit their crimes within

walking distance of their own homes as they know the layout and when people tend to be out and about. In some cases friends and family are even fair game (Wright & Decker, 1994), again, indicating that it is unlikely that arrestees travel a great distance to commit crimes. The distance traveled will be discussed in more detail below, but, generally, the arrested burglars traveled between 1.7 and 2.1 miles from their home to commit the burglary.

Study Area and Measurement Issues

As previously mentioned our data come from the Monroe Crime Analysis Center and is all of the collected data from 2009-2010. There are multiple cautions with the collected data. For example, some cases with a distance of zero represent burglars who lived in an apartment complex burgling from a neighbor, but it is also possible it is an input error. Further scrutiny of the data is required to clarify this issue (a total of 68 cases have zero as distance traveled). There were also a few cases of burglary without a reported home or a "Homeless" entry. It is also plausible that not all of these burglars stayed in the home they have marked down on file. With a sample of 399 it is likely that the errors have a limited total impact on distance measured between reported offenses and home address.

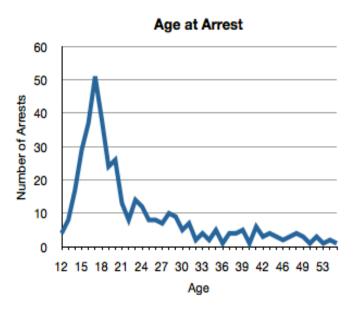
Age and Distance Traveled at Arrest

It should be noted that the availability of vehicles after age 16 can change the distance individuals travel to commit burglaries a bit. It has been noted that the farther the distance traveled, the more likely a burglar is to get higher "rewards" (Snook, 2004). According to our data, burglars aged 12-20 traveled roughly 1.8 miles to their targeted location; 21 to 30 year olds traveled an average of 2.1 miles. There is a drop back down to roughly 1.7 miles from ages 31-40

and a further decrease to about 1.4 miles at ages 41-50. The average distance rises again at 51+ years going up to 1.7 miles again. It seems distances are relatively stable for the most part which falls in line with other research, such as Wright & Decker's *Burglars on the Job*.

Age at Arrest

Based on data collected from the Monroe Crime Analysis Center, the modal arrestee is 17 years old. The frequency of arrests increases from 14 to 17, then declines rapidly after age 21. After age 27, the frequency of arrests is very low. This is possibly due to individuals "aging out" of crime and diminishing participation in crime among older individuals.



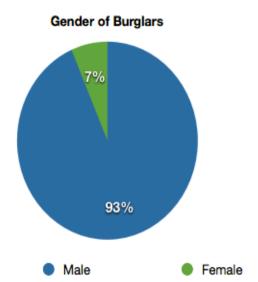
Race & Ethnicity

The data consists of 399 burglary arrests. Of the 399, 60 (15%) of those arrested were Hispanic. African-Americans accounted for 310 arrests, whites made up 83, and 6 were people for whom race was unknown. According to the 2010 U.S. Census, in Rochester, 42% of the population is

black and 44% is white. Further, 16% of the Rochester population is Hispanic (U.S. Census, 2012). Minority representation is highest in the neighborhoods were the burglaries were reported and where those arrested reside. For example, zip codes with greater percent white population yielded a larger proportion of white arrestees than those zip codes with greater proportion of minority residents.

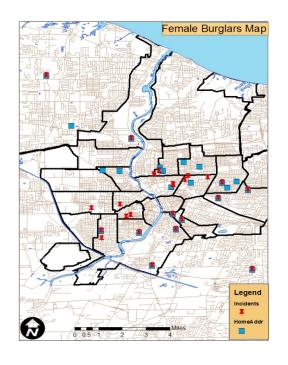
Gender

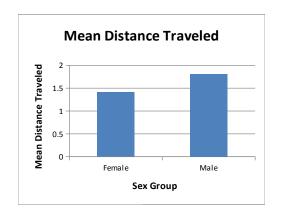
Observing the number of female burglars arrested compared to males, the female frequency was 26 while the male frequency was 373. Females make up 6.5% of the 399 burglars arrested. Through previous research, we have discovered that females are less involved in burglaries. According to the article *Gender, Social Networks, and Residential Burglary*, the 2001 UCR reported that females made up 15% of all burglaries. The research also describes the role of female burglars as more typically an accomplice or a partner used temporarily with males when committing burglaries. Females' involvement is hypothesized to arise out of romantic relationships and street life connections (Wright & Decker, 1994). Thus the current data from Rochester indicate an even smaller proportion of female involvement than is historically reported. This leads to questions as to whether female participation patterns (accomplice, etc.) are similar within the current population of arrestees.



Female Burglars

Age and gender breakdowns suggest differing patterns among males and females. Looking at the data offered by MCAC on female burglars, out of the first 13 females in the data only three acted alone. Looking at further data, it is shown that males are most involved in burglaries between the ages of 16 and 19. However, the highest frequency of females arrested for burglary was between the ages of 20 and 29. This can be supported through the idea that females at this age may be burglarizing to make money in order to support a family or child. Many burglars do report using some of the money they gain from burglary on needed items like food, clothes for babies and other such items (Wright & Decker 1994). Ages 20-29 would be the age group most likely to be associated with marriage or the beginning of families. Females also tended to travel less than males, only averaging about 1.4 miles as opposed to males 1.8. This could, however, be due to the limited sample of females in our data.





Conclusion

While the above data offers an interesting snapshot into those arrested for burglary in Rochester, it is important to note that these are only representative of those *arrested* for the crime. There were 6,347 burglary reports made to the Rochester Police Department during 2009-2010, thus showing that those arrestees linked to the crimes account for less than 10% of the total burglaries reported. Similar rates of clearance by arrest are also reported nationally with about 12.4% of burglaries being reported as cleared during those same years. The National Crime Victim Survey data also indicate that approximately 50% of burglaries are not reported to the police. It is also probable that those who were not arrested have different descriptive factors, such as travel distance to the place being burgled. We are continuing research to look more closely at female burglars, reviewing criminal histories of the arrested burglars, as well as looking more into distance traveled.

Future Research Questions

These preliminary analyses suggest several areas for future research including:

- Distance traveled as a function of burglar and case characteristics should be examined
- Further data collection on female burglars and a sample of male burglars that have been arrested to compare features of their crimes such as
 - o Victim-offender relationship
 - Motives
 - Methods
 - o Objects target and value of items
 - o Co-offending patterns

In addition, looking at distances to burglary for multiple cases with multiple offenders will be addressed in future research.

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