

2017

## Juvenile delinquency and cause of death for adolescents between 13 and 17 years in Detroit in 2015

Tao Lei

Follow this and additional works at: <https://commons.emich.edu/honors>



Part of the [Criminology Commons](#)

---

### Recommended Citation

Lei, Tao, "Juvenile delinquency and cause of death for adolescents between 13 and 17 years in Detroit in 2015" (2017). *Senior Honors Theses & Projects*. 540.

<https://commons.emich.edu/honors/540>

This Open Access Senior Honors Thesis is brought to you for free and open access by the Honors College at DigitalCommons@EMU. It has been accepted for inclusion in Senior Honors Theses & Projects by an authorized administrator of DigitalCommons@EMU. For more information, please contact [lib-ir@emich.edu](mailto:lib-ir@emich.edu).

---

## Juvenile delinquency and cause of death for adolescents between 13 and 17 years in Detroit in 2015

### Abstract

The records for the cause of death of 38 adolescents who died near Detroit, MI in 2015 were examined from case files at the Wayne County Medical Examiner's Office. Adolescents between the ages of 12 and 17 years were more prone to being victims of violence than natural death, with a peak in violent deaths during the month of April. The majority of adolescents in this sample were Black males (58%). The manner of death among the majority of adolescents was accidental (47%), however the cause of death was all in a violent manner. The cause of death reported for the majority of the adolescents were multiple injuries (37%), with gunshots being the second most common (29%). These findings demonstrate that the manner of death was mostly violent among accidental and homicide deaths of adolescents.

### Degree Type

Open Access Senior Honors Thesis

### Department

Sociology, Anthropology, and Criminology

### First Advisor

Megan K. Moore

### Second Advisor

Brian Sellers

### Keywords

Adolescent, Violent, Death, Accidental, Homicide, Cause

### Subject Categories

Criminology

JUVENILE DELINQUENCY AND CAUSE OF DEATH FOR ADOLESCENTS  
BETWEEN 13 AND 17 YEARS IN DETROIT IN 2015

By

Tao Lei

A Senior Thesis Submitted to the

Eastern Michigan University

Honors College

In Partial Fulfillment of the Requirements for Graduation

With Honors in Sociology, Anthropology, and Criminology

Approved at Ypsilanti, Michigan, on this date 3/30/2017

Megan Moore  
Supervising Instructor (Print Name and have signed)

Brian Sellers  
Honors Advisor (Print Name and have signed)

Julian M. Murchison  
Department Head (Print Name and have signed)

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS.....</b>	<b>3</b>
<b>ABSTRACT .....</b>	<b>4</b>
<b>INTRODUCTION .....</b>	<b>5</b>
<b>BACKGROUND.....</b>	<b>8</b>
<b>METHODS .....</b>	<b>10</b>
<b>RESULTS.....</b>	<b>13</b>
<b>DISCUSSION &amp; CONCLUSION .....</b>	<b>16</b>
<b>WORKS CITED .....</b>	<b>18</b>

## **ACKNOWLEDGEMENTS**

I would like to thank Dr. Megan Moore and Dr. Brian Sellers for being my advisors and supporting me throughout this project. I would like to give a special thanks to Dr. Megan Moore for guiding me, providing a lot of support and assistance, and allowing me to accompany her to exhume a body and to witness autopsies. I would like to thank Dr. Rebecca Sipe and the Honors College for giving me the opportunity to do this research project and for providing me with a fellowship in support of my research. I would also like to thank the Wayne County Medical Examiner's Office for allowing me to conduct research at their facility and Dr. Schmidt and Dr. Sung of the Wayne County Medical Examiner's Office for providing access to the data. I would like to thank Eastern Michigan University having an annual undergraduate symposium. Finally, I would like to acknowledge all the children represented in this study, whose lives were far too short. You are not forgotten.

## **ABSTRACT**

The records for the cause of death of 38 adolescents who died near Detroit, MI in 2015 were examined from case files at the Wayne County Medical Examiner's Office. Adolescents between the ages of 12 and 17 years were more prone to being victims of violence than natural death, with a peak in violent deaths during the month of April. The majority of adolescents in this sample were Black males (58%). The manner of death among the majority of adolescents was accidental (47%), however the cause of death was all in a violent manner. The cause of death reported for the majority of the adolescents were multiple injuries (37%), with gunshots being the second most common (29%). These findings demonstrate that the manner of death was mostly violent among accidental and homicide deaths of adolescents.

**Keywords:** Adolescent, violent, death, accidental, homicide, cause

## INTRODUCTION

The issue of juvenile homicide has been the topic of headlines in the news all over the United States and abroad since the early 1990s. In the 1990s, homicide became the second leading cause of death among adolescents in the U.S., and the leading cause of death among African American male adolescents (Snyder and Sickmund, 1995). This research will examine how many juvenile deaths are related to delinquency, drugs, and/or violence within the city of Detroit compared to the State of Michigan and national averages.

Although it is difficult to assess the exact number of murders committed by juveniles because the age of the killer is not specified by the arresting authority in as many as a third of the cases, there is no question from available data that murders by young people have risen during the past two decades (Heide, 2013). Analysis of crime patterns clearly indicates that youth involvement in homicide remains a serious problem in the United States in the 21st century. Homicide arrests of juveniles rose every year from 1984 through 1993 (Heide, 2013). With homicide arrests of juveniles increasing every year, juveniles are victims of homicide, as well. Homicide is one the leading causes of juvenile deaths (Sickmund et al., 2014). On average, between 2011 and 2010, about 1,600 juveniles were murdered annually in the U.S. (Sickmund et al., 2014).

The goal of this mixed methodology, multidisciplinary project is to determine the number of juvenile deaths in Detroit and the circumstances surrounding the deaths. Specifically we are interested in deaths related to juvenile delinquency, drugs, and/or violence. These local statistics will be compared to statistics across Michigan and nationally. This research will examine how many juvenile deaths are related to

delinquency, drugs, and/or violence within the city of Detroit compared to national averages during the year 2015.

Juvenile delinquency is the habitual committing of criminal acts or offenses by a young person, especially someone below the age at which ordinary criminal prosecution is possible. A potential traumatic outcome of participating in juvenile delinquency, drug use, and violence is unfortunately death. Juvenile delinquency is a significant problem because our national response to juvenile delinquency is to simply lock them up in a juvenile prison. There is little focus on helping juveniles who are in drug and/or violent situations, with more focus on penalization and incarceration (Sellers, 2015). By determining how many deaths are related to delinquency, drugs, and/or violence, it can aid in finding a better solution for juveniles who may be delinquent.

Youth violence is a significant social and public health problem. Cause of death is the reason that precipitates death (i.e. gunshot wound, aneurism, drowning). The manner of death is the fashion or circumstances in death, which are designated either natural or unnatural. Unnatural deaths fall under the categories: accidental, homicidal, suicidal, or undetermined. Violence rates peak during the adolescent years, and adolescents disproportionately suffer the consequences of violence, including imprisonment, injury, and death (Stoddard et al., 2012). African Americans and adolescent males are at particular risk for involvement in violence (Stoddard et al., 2012). Nationwide, African American students are more likely than Hispanic or White students to report having been in a physical fight in the past year (Stoddard et al., 2012). Homicide is the leading cause of death among African American adolescents and young adults (Stoddard et al., 2012). African American youth are fifteen times more likely to die of homicide than their White

counterparts (Stoddard et al., 2012).

Research on youth violence includes risk and protective factors present within individuals, and peer and family relationships that increase or decrease the likelihood that young people will engage in violence (Singh et al., 2014; Stoddard et al., 2012). At the individual level, attention and learning problems, antisocial behavior, hopelessness, witnessing violence, and violent victimization has been associated with higher levels of aggression and violence (Stoddard et al., 2012). On the other hand, individual level factors, such as social skills, school achievement, connections to school, and a sense of hope and purpose have been deemed promotive (Stoddard et al., 2012).

Wayne County in Southeast Michigan is composed of extremely segregated neighborhoods, with impoverished minority communities in the city of Detroit and wealthy White suburbs on the county's fringes. Detroit, the main city in Wayne County, epitomizes the urban decline story in many American cities (Ng, 2010). Unemployment has led to family stress and break-ups. Such an atmosphere of family and community break down, which led to low social organization and low levels of collective efficacy (Ng, 2010). Social disorganization, in turn, escalated violence and crime (Ng, 2010). As a result of unemployment, some individuals have turned to illegal means to earn money such as theft and drug trafficking. The conditions in Detroit would presumably create hotbeds for rampant and serious crimes. Indeed, the violent crime rate in Detroit in 2000 was twenty-three crimes per thousand inhabitants, the seventh highest in the nation (Ng, 2010).

The research conducted for this study required close collaboration with Dr. Megan Moore, which entailed reviewing forensic case report summaries and death

certificates at the Wayne County Medical Examiner's Office in Detroit, Michigan. By the end of January 2017, 38 cases of juvenile deaths, between the ages of 12 and 17 years, in Detroit were examined in total. A survey of literature on juvenile delinquency reviews why minors become delinquent and how our society deals with minors who are labeled as delinquent.

## **BACKGROUND**

In Detroit in 2012, of the 29 violent deaths among residents aged 16 years or younger, 25 of them were related to homicide, two of them were related to suicide, and two of the were related to unintentional firearm (McGowan et al., 2006). National statistics reveal that assault-related violent deaths among children and adolescents are commonly associated with the following factors: the victim and suspect are typically male, they often involve peer interpersonal violence and substance abuse, and they occur more often during summer months. In 1995, 72% of the murdered juveniles were male, 49% were black, and 47% were white. Twenty-two percent of juvenile murder victims were murdered by family members, 37% by acquaintances, and 13% by strangers; in 28% of juvenile murders in 1995, the offender was unknown. Sixty-one percent of all juveniles murdered in 1995 were killed with a firearm (Sickmund et al., 1997).

Homicide was the fourth leading cause of death nationally for children ages 1–11 years in 2010 (Sickmund et al., 2014). Only deaths caused by unintentional injury, cancer, and congenital anomalies were more common for these young juveniles (Sickmund et al., 2014). That same year, homicide was the third leading cause of death nationally for juveniles ages 12–17, with the more common causes of death being

unintentional injury and suicide (Sickmund et al., 2014). An estimated 1,450 persons under age 18 were murdered in the U.S. in 2010 (Sickmund et al., 2014). Three of every ten (30%) of these juvenile murder victims were female. More than four in ten (42%) of these victims were under age six, less than one in ten (6%) were ages 6–11, less than one in ten (7%) were ages 12–14, and more than four in ten (45%) were ages 15–17. Nearly half (49%) of juvenile murder victims in 2010 were American Black, 47% were American White, and 3% were either American Indian or Asian (Sickmund et al., 2014). Given that American White youths constituted 76% of the U.S. resident juvenile population in 2010 and American Black youth 17%, the murder rate for American Black youths in 2010 was nearly five times the rate of American White youths (Sickmund et al., 2014). This disparity was seen across victim age groups and increased with victim age.

Nearly half (49%) of all juveniles murdered in 2010 in the United States were killed with a firearm, 20% were killed by the offender's hands or feet (e.g., beaten/kicked to death or strangled), and 13% were killed with a knife or blunt object (Sickmund et al., 2014). The remaining 18% of juvenile murder victims were killed with another type of weapon, or the type of weapon used was unknown (Sickmund et al., 2014). Firearms were used less often in the killings of young children. In 2010, firearms were used in 14% of murders of juveniles under 12 years but in 82% of the murders of juveniles ages 12–17 (Sickmund et al., 2014). In 2010, a greater percentage of American Black than White juvenile murder victims were killed with a firearm (63% vs. 36%, respectively) (Sickmund et al., 2014). In 2010, firearms were used more often in the murders of juvenile males (59%) than in the murders of juvenile females (25%) (Sickmund et al., 2014).

The 17 National Violent Death Reporting System (NVDRS) states included in this report collected data concerning 18,765 incidents and 19,251 deaths that occurred in 2013 in the United States (Fowler et al., 2016). The crude death rate was 20.1 deaths per 100,000 individuals. Suicides (n = 12,747; 66.2% of total) accounted for the highest rate of violent deaths (13.3 per 100,000 population), followed by homicides (n = 4,459; 23.2% of total) (4.6 per 100,000 population) (Bridget et al., 2016). Deaths of undetermined intent (n = 1,698; 8.8% of total), legal intervention deaths (n = 222; <1.0% of total), and unintentional firearm deaths (n = 125; <1.0% of total) occurred at lower rates (1.8, 0.2, and 0.1 per 100,000 population, respectively) (Bridget et al., 2016). Firearms were the method used in 51.3% of deaths, hanging/strangulation/suffocation in 17.2%, and poisoning in 16.3% (rates: 10.3, 3.4, and 3.3 per 100,000 population, respectively) (Bridget et al., 2016). Rates for all other methods of deaths were lower than firearm rates, hanging/strangulation/suffocation rates, and poisoning rates. For all deaths, a house or apartment was the most common location where injury occurred (69.4%), followed by a street or highway (6.4%) (Bridget et al., 2016).

## **METHODS**

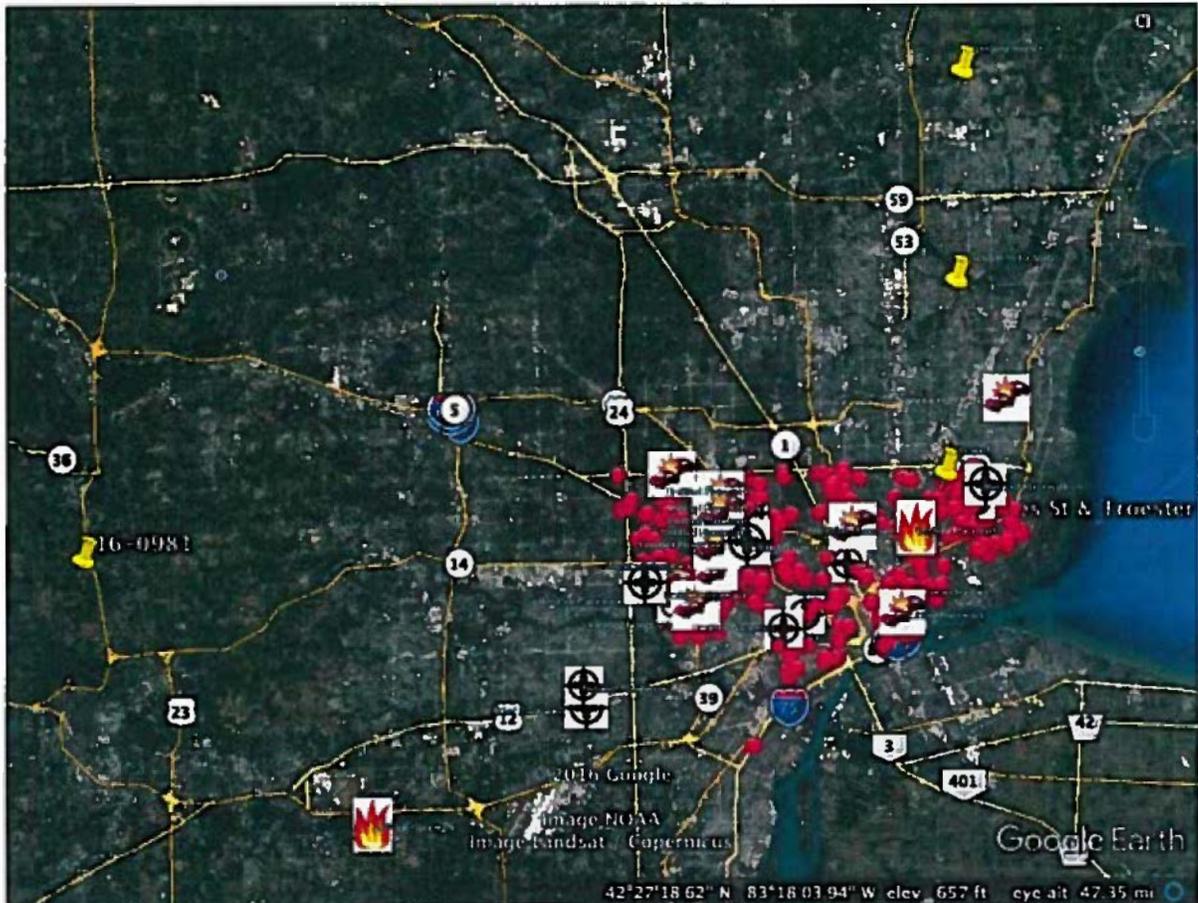
For the purposes of our investigation, we focused on all deaths of youths between 12 and 17 who were processed at the Wayne County Medical Examiner's Office. A case was included if it occurred between January 1, 2015 and December 31, 2015 among Wayne County residents under 17 years of age. The cases were identified using a filter of the records by age within 2015, which was provided by one of the pathologists at the Wayne County Medical Examiner's Office. These records provided information

concerning age, sex, race, cause of death, manner of death, place of injury, drugs used (if applicable), location, and date. The specific variables selected were: race, sex, and cause of death. The age of the population were used to examine whether a specific age cohort under 17 years was at the highest risk. Race of victims was used to examine which populations were at a higher risk to become victims of violent deaths. The manner of death of the population was included in order to examine whether homicide deaths increased from the previous year, stayed the same, or decreased. Cause of death was used to examine whether violent homicide deaths increased from the previous year, stayed the same, or decreased. Place of injury was examined in order to examine which areas of the city, if any, are more prone to violent crime. Drug/Alcohol use was recorded in order to examine if any of the causes of death were related to drug/alcohol use. Finally, the location was used to compare the deaths of residents of Wayne County under age 17 years to all deaths in Wayne County and the dates were recorded in order to examine which months had higher homicide rates.

The records examined pertained to decedents, so there are no human subjects and thus no IRB approval needed. The subjects of the records have all been anonymized, with identifying information removed. Some of the files included police records and death records, as well as pathologist reports. The data that we were looking for were the distribution of causes of death among adolescents in Detroit, Michigan. I accompanied Dr. Megan Moore to the Wayne County Medical Examiner's Office where I was given access to look at case files by the Chief Medical Examiner, Dr. Carl Schmidt. There were a total of 38 cases and all were examined on January 6, 2017. Dr. Sung of the Wayne County Medical Examiner's Office selected participants by providing the case numbers

of Wayne County residents under 17 years. The population of the study represented the general population of Wayne County. All cases were from Wayne County. The data gathered was entered into an Excel spreadsheet. The frequency was calculated between populations and was analyzed.

Descriptive statistics were analyzed using Microsoft Excel™ and the location of death was plotted on a map using Google Earth™ (see Figure 1 below). In the map below, the location of juvenile death was designated by icon and compared to overall locations of death for all age cohorts for the city. The cross-hairs icon indicates gunshot victims, the flames icon signifies fire deaths, two colliding cars signifies auto accident or pedestrians struck by an automobile, and the yellow pins signify other deaths of juveniles (i.e. strangulation, drowning, etc.). The red dots are all other homicide victims in Detroit from other age cohorts during 2015. These data points were acquired from records of the Detroit Police Department reported on the City of Detroit Website: DPD: 2015 Homicide Offenses - Victims (Confirmed) Map (City of Detroit, 2017).



**Figure 1.** Location of adolescent deaths compared to all deaths in Wayne County

## RESULTS

From January through December of 2015, there were 11 violent deaths among youths between the ages of 13 and 17 in Detroit. Homicide was not the most common manner of death in the 38 cases examined. The manner of death for four cases was natural, one was undetermined, and the majority was ruled accidental ( $n=22$ ). Of the 38 cases examined, 30 of those cases involved a male victim and 8 of those cases involved a female victim. Of the 38 victims, 31 of them were Black, five were White and two were other. None of the White victims were victims of homicide. There were a total of 572 homicides in the state of Michigan and Detroit youths made up 38 of those. What we

found in the statewide data was that there were 25 victims under the age of 10 in Michigan, but zero of those victims were from Detroit. Of the forty victims aged 15-19 in Michigan, 27 of those victims were from Detroit. However, of the eight Michigan victims aged 10-14 years of age, there were 11 victims who were in that age range in Detroit. Of the 572 victims of Homicide in Michigan, most were victimized during the month of August; but of the 38 cases in Detroit, the majority of deaths were in April (Figure 2 below). In Michigan, the majority of deaths occurred on a Saturday; the majority of deaths occurred in Detroit was on both Saturday and Sunday (Figure 3 below). Comparing the homicide frequency by race in Michigan, Detroit, and Nationwide, Blacks made up the majority of victims of homicides (Figures 4, 5, and 6 below).

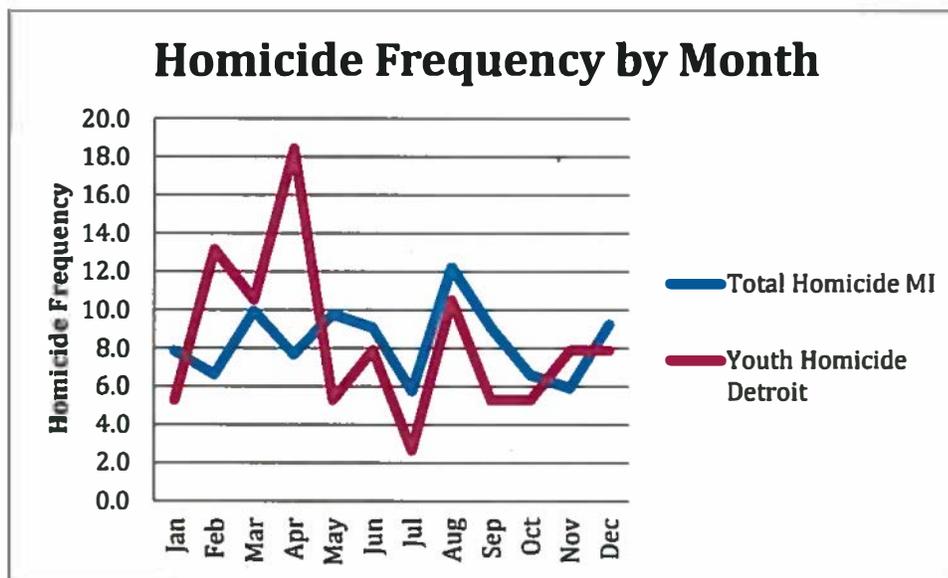


Figure 2. Homicide Frequency by Month

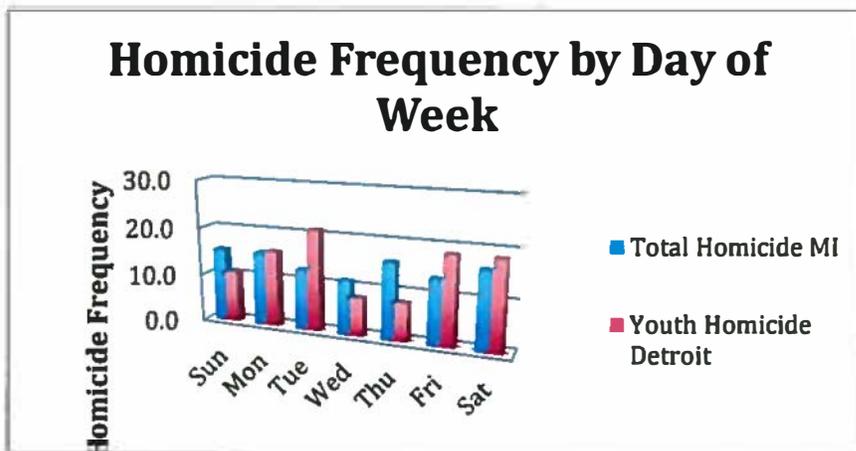


Figure 3. Homicide Frequency by Day of Week

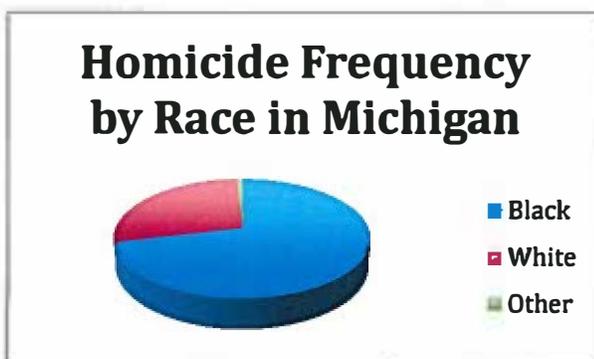


Figure 4. Homicide Frequency by Race in Michigan

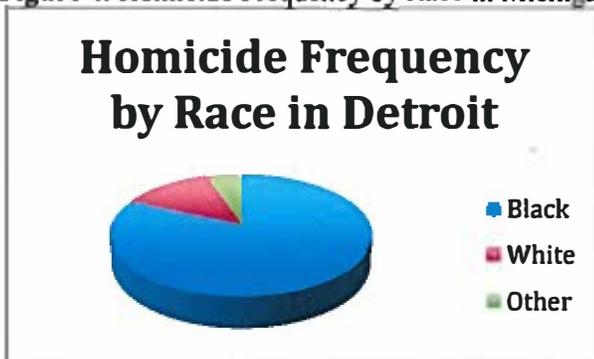
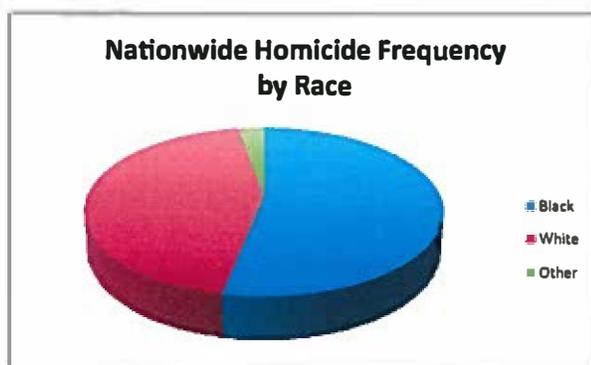


Figure 5. Homicide Frequency by Race in Detroit



**Figure 6.** Nationwide Homicide Frequency by Race

## DISCUSSION & CONCLUSION

In the 1990s, homicide became the second leading cause of death among adolescents in the USA, and the leading cause of death among African American male adolescents (Snyder, et al., 1995). This research examined how many juvenile deaths are related to delinquency, drugs, and/or violence within the city of Detroit compared to the State of Michigan and national averages. There were 38 cases that were examined in this study. Of the 38 cases, there were zero victims under the age of ten. This finding matches up with previous empirical research that finds homicide among youth under age 10 to be rare (Sellers & Heide, 2012; Heide & Sellers, 2014). There were 11 victims between the ages of 10 and 14 years and 27 victims between the ages of 15 and 19. Thirty-one victims of the 38 were Black, five were White, and two were “Other.” Of the 38 cases, 30 of them were Male and eight were Female. April had the highest number of homicides among the 38 cases but August had the highest number of homicides across the state of Michigan. There were seven deaths in April in Detroit and 44 deaths in April in Michigan. Tuesdays had the highest number of homicides among the 38 cases throughout the year of 2015, but Saturday had the most homicides in the State of Michigan during

2015. There were eight deaths on Tuesday in Detroit of 2015 and there were 72 juvenile deaths on Tuesday in April of 2015.

In conclusion, the findings in this study are similar to the results of juvenile related deaths reported in Detroit, Michigan in 2012 by McGowan and colleagues (2006) and following the national trends reported by the Federal Bureau of Investigation: Uniform Crime Reporting Website (2015). Not only are Black Males at the highest risk in this population, it is also shown in the national trends. In 2015, there were a total of 1,333 adolescent victims and 1,123 were Black Male adolescent victims. There were a total of 11,771 adults who were adult victims in 2015 which is a much higher number than the number for adolescent victims. There are protective factors that help prevent juvenile delinquency that will also prevent juvenile deaths. Although the primary goal of early educational interventions is often school readiness, early interventions have also been cited for their capacity to promote higher levels of social functioning (Mann, et al., 2006). Youths with high levels of social competence are thought to seek out and maintain social relationships and therefore have access to better social supports than youths who lack social competence (Mann, et al., 2006). Limitations to this study include small sample size and the lack of data pertaining to whether drugs or alcohol contributed to the deaths. Further limitations include lack of access to the police reports in order to read details about the scene of death. This is recommended for further research. Our case definitions included only individuals between the ages of 13 and 17, excluding potential victims 12 years or younger. There may have been a lack of reported victims between the ages of 13 and 17 that may have affected the sample size and distribution of homicide frequency. There are a total of 4,502 deaths among individuals between the ages of 20-

29. With such a dramatic increase in number in such a small age range, this can call for future research on violent deaths for 20-29 year olds.

#### References

- Detroit, City of (2017). DPD: 2015 Homicide Offenses - Victims (Confirmed) Map Year-end, victim-based, listing of homicide offenses that occurred in calendar-year 2015. <https://data.detroitmi.gov/Public-Safety/DPD-2015-Homicide-Offenses-Victims-Confirmed-Map/9d8p-4k7v>. Accessed on February 10, 2017.
- Federal Bureau of Investigation: Uniform Crime Reporting (2017). 2015 Crime in the United States: Offenses Known to Law Enforcement. *US Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Division* Website: <https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/offenses-known-to-law-enforcement/expanded-offense>. Accessed on March 28, 2017.
- Fowler, K., Blair, Janet., Johnson, Linda. (2016). Surveillance for Violent Deaths --- National Violent Death Reporting System, 17 States, 2011. *Surveillance Summaries*, 1-71
- Heide, K. (2003). Youth Homicide: A Review of the Literature and a Blueprint for Action. *Sage journals*, 47(1), 6-36
- Heide, K. M., & Sellers, B. G. (2014). Girls arrested for murder: An empirical analysis of 32 years of U.S. data by offender age groups. *Behavioral Sciences & the Law*, 32(4), 467-482. doi: 10.1002/bsl.2130
- Mann, E., Reynolds, A. (2006). Early Intervention and Juvenile Delinquency Prevention:

- Evidence from the Chicago Longitudinal Study, *Social Work Research; Oxford*, 30(3), 153-167
- McGowan, A., Crosby, A., Hasboruch, L., Boulton, M., Kanluen, S., Maseru, N. (2006). Child and Adolescent Violent Deaths: An Epidemiologic Investigation.
- Ng, I. (2010). Where juvenile serious offenders live: A neighborhood analysis of Wayne County, Michigan. *Journal of Criminal Justice*, 38(2), 207-215
- Sellers, B. G. (2015). Community-based recovery and youth justice. *Criminal Justice & Behavior: An International Journal*, 42(1), 58-69. doi: 10.1177/009385481455002
- Sellers, B. G., & Heide, K. M. (2012). Male and female child murderers: An empirical analysis of U.S. arrest data. *International Journal of Offender Therapy and Comparative Criminology*, 56(5), 691-714.
- Sickmund, M., Puzanchera, C. (2014). Juvenile Offenders and Victims: 2014 National Report. *National Center for Juvenile Justice*, 1-244
- Sickmund, M., Snyder, H., Poe-Yamagata, E. (1997). Juvenile Offenders and Victims: 1997 Update on Violence. Statistics Summary. *National Center for Juvenile Justice*, 1-56
- Singh, J. P., Desmarais, S. L., Sellers, B. G., Hylton, T., Tirotti, M., & Van Dorn, R. A. (2014) From risk assessment to risk management: Associations between strengths and vulnerabilities, interventions, and intra-institutional outcomes for adolescent offenders. *Children and Youth Services Review*, 47, 1-9. Retrieved from <http://dx.doi.org/10.1016/j.childyouth.2013.09.015>
- Stoddard, S., Zimmerman, M., Bauermeister, J. (2012). A Longitudinal Analysis of

Cumulative Risks, Cumulative Promotive Factors, and Adolescent Violent Behavior. *Journal of Research on Adolescence*, 22(3), 542-555

Snyder, H., Sickmund, M. (1995). Juvenile Offenders and Victims: A Focus on Violence. *National Center for Juvenile Justice*, 1-37