Trends in Juvenile Offending: What You Need to Know

Methodology

The analysis, entitled, *Trends in Juvenile Offending: What You Need to Know*, focuses on trends in offending from 2016 through 2022 by examining changes in the frequency of juvenile offending by crime type, demographics, and several other characteristics.

This study uses incident information from the National Incident-Based Reporting System (NIBRS) from 2016 to 2022. The study period begins in 2016 because of notable increases in agency participation in reporting crime statistics to NIBRS following 2015; it ends in 2022 because that was the most recent year of data available at the time the report was prepared. To produce these data, offense, victim, and offender segment-level information was aggregated to the incident level for each year. The year files were then appended into a master incident-level file, in which incidents were restricted to those (a) involving at least one juvenile offender; and (b) from agencies that reported to NIBRS each month during the study period. From this file, totals were created for each month in every year. Some totals represent the total number of offender participations, while other totals represent the total number of incidents with one or more characteristics of interest. The outline below walks through each segment of NIBRS, how information was aggregated, how cases were dropped, and how totals were generated.

OFFENSE SEGMENT

Offense Types

Starting with the offense segment, a series of dummy variables were created for each offense category (e.g., "sex offenses", which includes rape, statutory rape, sodomy, fondling with an object, and so on) at the offense-level. Some offenses were coded independently if they were relatively prevalent and/or particularly interesting (i.e., murder, aggravated assault, simple assault, and intimidation received their own variables, rather than being group into an "assault offenses" category). These offense-level dummy variables were then totaled within incidents, which were later totaled within month-years. Therefore, these totals reflect the total number of offenses within a given month. For instance, an incident with three burglaries and one simple assault would have a total of 3 burglaries and 1 simple assault in the respective total measures.

Below is a detailed breakdown of all the offense categories and offense types. Offenses that have their own measure, while also included in a broader offense category (e.g., "sex offenses" includes rape and other sex offenses, while there is also a rape measure) are noted in parentheses below:

- Violent Crime
  - Murder
  - Negligent manslaughter
  - Aggravated assault
  - Simple assault
  - Intimidation
  - Robbery
  - Sex offenses
    - Forcible rape, sodomy, sexual assault with an object, fondling, and incest
- Property Crime
  - Arson
  - Burglary
  - Counterfeiting/forgery
  - Embezzlement
  - Extortion/blackmail
  - Fraud offenses
    - False pretenses/swindle/confidence game; credit card/automated teller machine fraud/ impersonation; welfare fraud; wire fraud; identity theft; hacking/computer invasion; money laundering
  - Larceny
    - Pocket-picking; purse-snatching; shoplifting; theft from building; theft from coin-operated machine or device; theft from motor vehicle; theft of motor vehicle parts or accessories; all other larceny
  - Motor vehicle theft
  - Stolen property offenses
  - Vandalism
- Other Crime
  - Animal cruelty
  - Gambling offenses
    - Betting/wagering; operating/promoting/assisting gambling; sports tampering
  - Drug offenses.
    - Drug/narcotic violations and equipment violations.
  - Human trafficking
    - Sex trafficking (also separate measure)
    - Labor trafficking (also separate measure)
  - Kidnapping
  - Weapon law violations.
    - Doesn't include violations of the national firearm act, explosives, or weapons of mass destruction due to low prevalences

The following offenses were **not** included in the frequency totals due to very low prevalence, or the because offense code was not available for all years (2016-2022):

- Commerce offenses: including import violations, export violations, federal liquor offenses, federal tobacco offenses, wildlife trafficking
- Espionage
- Fugitive offenses: including harboring escapee; flight to avoid prosecution; flight to avoid deportation
- Justifiable homicide
- Immigration violations: including illegal entry; false citizenship; smuggling undocumented immigrants; re-entry after deportation
- Pornography offenses
- Prostitution offenses: including prostitution; assisting or promoting prostitution; purchasing prostitution
- Treason

Location

NIBRS includes a number of different location codes that are very specific (i.e., shopping mall, park, sidewalk/roadway, etc.). As such, locations were recoded into six different categories and aggregated to the incident level. This aggregation involved creating dummy variables indicating if an incident took place in one of these locations (1 = Yes, 0 = No). Therefore, the interpretation of these measures should be the total number of incidents occurring in whole or in part at school, in public, at home, and so on. Incidents occurring in a jail/prison, in cyberspace, or in a military installation were omitted from the location-based analyses, because they were infrequent and could not be reasonably coded as public spaces. Below is a complete detailing of the locations included within each location type:

1. School:
   - School/College
   - "School - Elementary/Secondary
   - "School - College/University
2. Public
   - Air/Bus/Train Terminal
   - Bank/Savings and Loan
   - Bar/Nightclub
   - Church/Synagogue/Temple
   - Commercial/Office Building
   - Construction Site
   - Convenience Store
   - Department/Discount Store
   - Drug Store/Dr.'s Office/Hospital
   - Field/Woods
   - Government/Public Building
   - Grocery/Supermarket
   - Highway/Road/Alley
   - Hotel/Motel/etc.
   - Lake/Waterway

- o Liquor Store
- o Parking Lot/Garage
- o Rental Storage Facility
- o Restaurant
- o Service/Gas Station
- o Specialty Store (TV, Fur, etc.)
- o Abandoned/condemned structure
- o Amusement Park
- o Arena/stadium/fairgrounds/coliseum
- o ATM separate from bank
- o Auto dealership new/use
- o Camp/campground
- o Dock/wharf/freight/modal terminal
- o Farm facility
- o Gambling facility/casino/race track
- o Industrial site
- o Park/playground
- o Rest area
- o Shelter--mission/homeless
- o Shopping mall
- o Tribal lands
- o Community center

3. Residence/Home

Weapon Type

There are two weapon type categories employed in these analyses: firearm and other. These were aggregated by flagging an incident if it involved a firearm (i.e., firearm, handgun, rifle, shotgun, and other firearm) or other weapons (i.e., knife, blunt object, motor vehicle, poison, explosives, fire, drugs, asphyxiation, other). Personal weapons (i.e., hands, fist, and feet) were treated as no weapon and were not counted. These were then coded dichotomous measures indicating if a firearm or other weapon was present in an incident, and then totaled to the month and year-level. This means the totals of these variables are interpreted as, the number of incidents involving firearms.

VICTIM SEGMENT

Injury

This analysis employs three measures to tap into severity of injury. If there were multiple injuries in an incident, the most severe was aggregated to the incident level. In other words, if there was an incident with three minor injuries and one serious injury, the incident would be coded as resulting in a serious injury. Therefore, the totals of injury are the number of incidents with no injury, minor injury, serious injury, or lethality (measured as total murder offenses). These measures do not represent the number of injuries, but

instead the number of offenses involving injury, and reflecting the most serious type of injury involved. The types of injury included in each category is detailed below:

- Injury
  - No injury
  - Minor injury
  - Serious injury:
    - Apparent Broken Bones
    - Other Major Injury
    - Possible Internal Injury
    - Loss of Teeth
    - Severe Laceration
    - Unconsciousness
  - Lethal injury (measured as murder/total murder)

OFFENDER SEGMENT

Multiple Offenders

There are a number of measures utilized from the offender segment. First, incidents were flagged if they involved multiple offenders (1= yes, 0 = no); these were then totaled to the monthly and yearly level.

Offender Sex

The sex of offenders was measured using a series of dummy coded variables. In most cases, unless otherwise stated, offense participation counts rely on the involvement of any male or female.

- Female offenders
  - Any female incident – indicates that an incident has at least one female offender. (1 = yes, 0 = no)
  - All female incident – indicates an incident is comprised entirely of female offenders
  - Total females in incident – indicates the number of females in an incident
- Male offenders
  - Any male incident – indicates that an incident has at least one male offender
  - All male incident – indicates an incident is comprised entirely of male offenders
  - Total males in incident – indicates the number of males in an incident

Offender Race

Offender race is measured in the same fashion as offender sex. Each racial category (White, Black, other race) has three variants: any, all, and total. Unless otherwise stated,

offense participation counts rely on the involvement of any offender according to their reported race.

- White
  - Any white – incidents with at least one white offender (1 = yes, 0 = no)
  - All white – incidents with entirely white offenders (also includes incidents with one offender who is white)
  - Total white – the total number of white offenders
- Black
  - Any black
  - All black
  - Total black
- Other
  - Asian
    - Any Asian
    - All Asian
    - Total Asian
  - Native American
    - Any Native American
    - All Native American
    - Total Native American

CONSTRUCTING THE MONTH-YEAR FILE

Selection Criteria

Before generating the totals, the sample was restricted along several lines. First, incidents from "possessions" (e.g., Canal Zone) were dropped because of low prevalence and to focus on crimes within states that report to NIBRS. Second, incidents comprised entirely of adult offenders were removed from the sample, leaving only incidents that involved juveniles. Separate totals were generated for juvenile only and juvenile and adult incidents (i.e., total juvenile only incidents with any white offenders and total adult incidents with any white offenders). Third, the participation measure (0 = No months; 1 = 1-5 months; 6 = 6-11 months; and 12 = 12 months) from the Batch Header segment was used to restrict the sample to only agencies that reported information to NIBRS for each month of the period (2016-2022). Following this, measures of totals within each month-year (i.e., January 2016; February 2016; and so on) were generated.

In sum, the following selection criteria were employed in the construction of the final dataset:

- Removed incidents from the "possessions" region
- Limited to incidents involving juveniles (adult only incidents were dropped)
- Limited to incidents reported by agencies who submitted information each month for the entire period

SAMPLE LIMITATIONS

Although NIBRS is the primary source of incident-based crime data in America at this point, it is important to acknowledge that these data are not entirely generalizable to the U.S. The current analysis, moreover, is limited to less than 4,000 agencies who report complete data during the study period. It is thus not necessarily generalizable to other jurisdictions. Second, and relatedly, the agencies included in the NIBRS data tend to skew more rural, with many of the largest urban centers failing to report data. Because racial diversity tends to be higher in urban areas, it is thus possible that some of the demographic trends (e.g., the proportion of white offenders in the data), are in part the result of the geographic coverage of the NIBRS data. It is thus important to emphasize a focus on trends, rather than baseline or comparative frequencies. Finally, because the NIBRS data represents official police data, it only represents those crimes that come to the attention of the police, nor are all the crimes in the data formally adjudicated or cleared by arrest. Because victims are less likely to report less severe victimization to the police, it is thus likely that the data undercount less severe (e.g., non-violent) types of youth offending.