



ICPSR 30981

Intercity Variation in Youth Homicide, Robbery, and Assault, 1984-2006 [United States]

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User Guide



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Bibliographic Description

ICPSR Study No.: 30981

Title: Intercity Variation in Youth Homicide, Robbery, and Assault, 1984-2006 [United States]

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Scope of Study

Summary: The research team collected data on homicide, robbery, and assault offending from 1984-2006 for youth 13 to 24 years of age in 91 of the 100 largest cities in the United States (based on the 1980 Census) from various existing data sources. Data on youth homicide perpetration were acquired from the Supplementary Homicide Reports (SHR) and data on nonlethal youth violence (robbery and assault) were obtained from the Uniform Crime Reports (UCR). Annual homicide, robbery, and assault arrest rates per 100,000 age-specific populations (i.e., 13 to 17 and 18 to 24 year olds) were calculated by year for each city in the study. Data on city characteristics were derived from several sources including the County and City Data Books, SHR, and the Vital Statistics Multiple Cause of Death File. The research team constructed a dataset representing lethal and nonlethal offending at the city level for 91 cities over the 23-year period from 1984 to 2006, resulting in 2,093 city year observations.

Subject Term(s): age, assault, crime patterns, crime statistics, drug related crimes, firearms, gang violence, gangs, homicide, juvenile crime, juveniles, robbery, trends, violence, violent crime, violent crime statistics, youths

Smallest Geographic Unit: city

- Geographic Coverage: United States
- Time Period: • 1984 - 2006
- Date(s) of Collection: • 2007 - 2010
- Unit of Observation: city-by-year
- Universe: All youth between the ages of 13 to 24 in the 100 most populous central-cities in the United States from 1984 to 2006.
- Data Type: aggregate data
- Data Collection Notes: Detailed information about the Uniform Crime Reporting Program (UCR), including the Supplementary Homicide Reports (SHR), is available through the Uniform Crime Reporting Program Resources Guide ([Link](#)).

Users should refer to the project's final technical report (Browne and Strom, 2010; NCJ 232622) for additional information on the study methodology, missing data, and imputation procedures.

Methodology

- Purpose of the Study: The purpose of this study was to estimate temporal trends in youth violence rates variation across 91 of the 100 largest cities in the United States from 1984-2006, and to model city-specific explanatory predictors influencing these trends.
- Study Design: In order to estimate trends in homicide offending for youth 13 to 24 years of age in 91 of the 100 largest cities in the United States from 1984-2006, data for youth homicide were acquired from the Supplementary Homicide Report (SHR), a component of the FBI's Uniform Crime Reporting Program (UCR). Measures of youth arrests for the nonlethal violent crimes of robbery and assault were acquired from UCR city arrest data for the same time period. Annual homicide, robbery, and assault arrest rates per 100,000 age-specific (i.e., 13 to 17 and 18 to 24 year olds) population were calculated by year for each city in the study. Annual homicide rates were calculated through a conventional procedure: annual incidents in a specific city, divided by the age-specific population of that city, multiplied by 100,000. Partial reporting during the time period resulted in dropping 9 cities from the homicide data and 10 cities from the robbery and assault data. Data on city-level characteristics including measures of structural disadvantage, drug market activities, gang presence-activity, and firearm availability were derived from the County

and City Data Books, SHR, and the Vital Statistics Multiple Cause of Death File, respectively.

Missing data came from two sources; failure to report in homicide and some of the Census collections, and lack of data for specific years, mainly in Census data, between major data collection points like the Decennial Census and the Mid-decade estimates from Census related sources. Missing data in the homicide measures were addressed using an Iterative Chain equation procedure to conduct Multiple Imputation. Variables from the original source used in the multiple imputation procedure included age of victim, race, ethnicity, gender, seven available measures of homicide circumstances, and city population size. Extrapolation methods were used to adjust for missing data in the robberies and assaults by age, and in the census and economic data sources. To estimate a missing year between two reported values, the missing year was estimated to be mid-way between the two observed years on either side of the missing year. Longer gaps involved further averaging and allocating according to the number of years missing; these estimates amount to maximum likelihood estimates of the missing years or in the case of the robberies and assaults, months as well.

Sample: The initial sample consisted of the 100 largest cities in the United States based on the 1980 Census; however, several cities were dropped due to missing data problems, resulting in a sample of 91 cities for the homicide data and 90 cities for the nonlethal violence data. If a city had 10 or more consecutive years of missing data, the researchers eliminated it from the final dataset. The 91 cities were measured over the course of 23 years from 1984 to 2006, resulting in 2,093 total observations.

Weight: None.

Sources of Information: UNIFORM CRIME REPORTS [UNITED STATES]: SUPPLEMENTARY HOMICIDE REPORTS, 1984-2006 [Annual Data Files]

UNIFORM CRIME REPORTING PROGRAM DATA [UNITED STATES]: ARRESTS BY AGE, SEX, AND RACE, 1984-2006 [Annual Data Files]

United States Census of the Population, 1980, 1990, 2000

United States Economic Census, previously known as the Census of Business and Industry, 1982, 1987, 1992, 1997, 2002, 2007

City and County Data Book Series, 1987, 1996, 2006

American Community Survey, 2001-2006

National Center for Health Statistics, Division of Vital Statistics, Multiple Cause of Death file

Mode of Data Collection: record abstracts

Description of Variables: The study contains a total of 39 variables including city name, year, crime rate variables, and city characteristics variables. Crime rate variables include imputed and non-imputed homicide rate variables for juveniles aged 13 to 17, young adults aged 18 to 24, and adults aged 25 and over. Other crime variables include the number of imputed and non-imputed homicides as well as the robbery rate and assault rate for juveniles and young adults. City characteristics variables include population, poverty rates, percentage of African Americans, percentage of female-headed households, percentage of residents unemployed, percentage of residents receiving public assistance, home-ownership rates, gang presence and activity, and alcohol outlet density.

Response Rates: Not applicable.

Presence of Common Scales: One scale was used: The FAC1_1 "REGRESSION BASED FACTOR SCORE INCLUDING POVERTY AFROAM FEMHH PUBAST UNEMP" variable is a regression based factor score based on a principal components factor analysis of five of the variables.

Extent of Processing: Standardized missing values.

Checked for undocumented or out-of-range codes.

Access and Availability

Note: A list of the data formats available for this study can be found in the [summary of holdings](#). Detailed file-level information (such as record length, case count, and variable count) is listed in the [file manifest](#).

Original ICPSR Release: 2012

Dataset(s):

- DS1: Intercity Variation in Youth Homicide, Robbery, and Assault, 1984-2006 [United States]

Publications

Final Reports and Other Publication Resources: A list of publications related to, or based on, this data collection can be accessed from the study's download page on the NACJD Web site or through the ICPSR Bibliography of Data-Related Literature at <http://www.icpsr.umich.edu/ICPSR/citations/index.html>. The list of citations

includes links to abstracts and publications in Portable Document Format (PDF) files or text files when available.

Final reports and other publications describing research conducted on a variety of criminal justice topics are available from the National Criminal Justice Reference Service (NCJRS). NCJRS was established in 1972 by the National Institute of Justice (NIJ), an agency of the U.S. Department of Justice, to provide research findings to criminal justice professionals and researchers. NCJRS operates specialized clearinghouses that are staffed by information specialists who supply a range of reference, referral, and distribution services. Publications can be obtained from NCJRS at NIJ/NCJRS, Box 6000, Rockville, MD, 20849-6000, 800-851-3420 or 301-519-5500. TTY Service for the Hearing Impaired is 877-712-9279 (toll-free) or 301-947-8374 (local). The URL for the NCJRS Web site is:

<http://www.ncjrs.gov/>

NIJ Data Resources Program

About the DRP: The National Institute of Justice Data Resources Program (DRP) makes datasets from NIJ-funded research and evaluation projects available to the research community and sponsors research and training activities devoted to secondary data analysis. Datasets are archived by the National Archive of Criminal Justice Data (NACJD) at the Inter-university Consortium for Political and Social Research (ICPSR) at the University of Michigan.

The NACJD maintains a World Wide Web site with instructions for transferring files and sending messages. Criminal justice data funded by the Department of Justice are available via the Internet at this site at no charge to the user. NACJD may be contacted at NACJD/ICPSR, P.O. Box 1248, Ann Arbor, MI, 48106-1248, 800-999-0960. The URL for the NACJD Web site is:

<http://www.icpsr.umich.edu/NACJD/>

Data Completeness Report

Notes: (1) Variables are individually listed only if they have greater than 5% missing data. These variables are listed under the appropriate percentage category in the order in which they appear in the data file. (2) The Data Completeness Report only captures information about system missing or other values that are declared missing. Codes that have a label implying that they are missing but that are not declared missing values are not reflected in this report. Data users should consult the codebook for more specific information about missing values. (3) Some variables that have 100% missing data may have been blanked by ICPSR to protect respondent confidentiality. Data users should consult the codebook for more specific information about blanked variables. (4) Data do not contain skip patterns or skip patterns are not reflected in the data as coded.

Table 1: Distribution of Variables by Percentage of Missing Values

Variable Name and Label (Total Cases = 2093)	Percent of Cases with Missing Values
69.2% (27 of 39 variables)	have 0% Missing Values
0.0% (0 of 39 variables)	have 0% - 1% Missing Values
25.6% (10 of 39 variables)	have 1% - 3% Missing Values
0.0% (0 of 39 variables)	have 3% - 5% Missing Values
5.1% (2 of 39 variables)	have 5% - 10% Missing Values
HOMICIDE	NON-IMPUTED # OF HOMICIDES 6.2%
POP	POPULATION 5.2%
0.0% (0 of 39 variables)	have 10% - 20% Missing Values
0.0% (0 of 39 variables)	have 20% - 40% Missing Values
0.0% (0 of 39 variables)	have 40% - 99% Missing Values
0.0% (0 of 39 variables)	have 100% missing values