The National Crime Victimisation Survey

A. Overview of the dataset

The National Crime Victimisation survey is a survey about crimes administered by the US Census Bureau. It covers nonfatal personal crimes like assault, robbery and household property crimes like theft. Each year, about 240,000 people in 150,000 households are interviewed across the United States, with the data being nationally representative ("National Crime Victimization Survey"). The survey was designed because it would allow detailed information about the victims and consequences of crime, and estimate the number and types of crimes not reported to the police ("National Crime Victimization Survey Resource Guide"). This dataset contains data from the 2020 survey. The study is a retrospective observational study as it asks respondents about crimes they experienced in the last 6 months.

The sampling process for the 2020 survey was designed with data from the 2010 Census. The sampling is stratified by geographic area. A rotation scheme was introduced, with six rotating groups. Each group is interviewed every six months for 3.5 years. They are interviewed either over the phone or in person. The sample includes households, those living in group quarters (like dormitories) but excludes those in institutional settings (hospital facilities) or people who are homeless. Afterwards, the survey attempts to weight records to estimate the total number of said crimes in the US population.
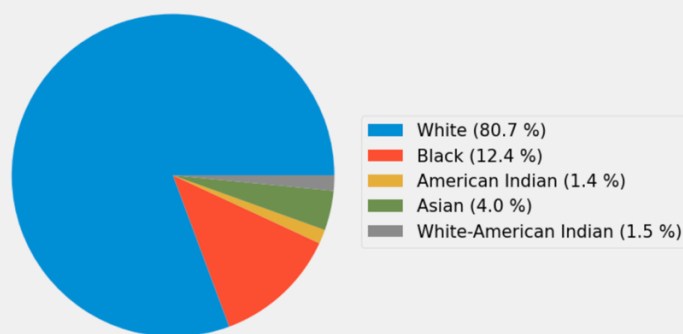
It is likely that despite a response rate of 64%, there is some nonresponse bias so the survey is biased ("National Crime Victimization Survey (NCVS)"). Excluding the homeless population and those who live in military facilities may also make the sample biased.

There are 8043 observations in this sample, along with 81 columns. Each column corresponds to a variable, including date of Interview, ID of the household in the survey, demographics like income and house type, whether a particular type of crime (such as burglary) was experienced and the number of times it was. The difference between the 8043 observations and the larger dataset with 270,000 observations is that the 8043 observations are only for those reporting a criminal incident.
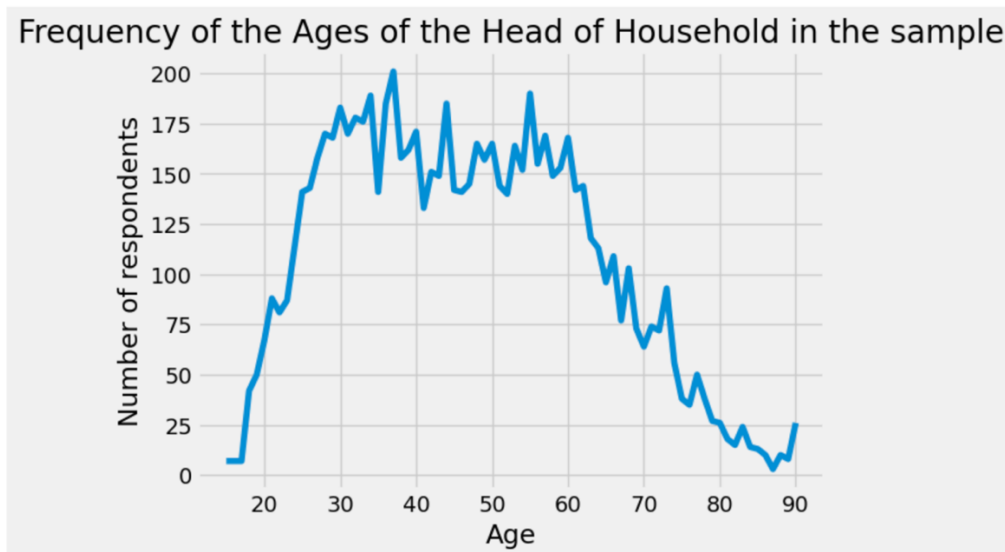
B. Characteristics of the sample

Race

Proportion of households by race of primary respondent

- White (80.7 %)
- Black (12.4 %)
- American Indian (1.4 %)
- Asian (4.0 %)
- White-American Indian (1.5 %)

We can look at the racial makeup of the sample taken, removing smaller races or mixed-race combinations that had less than 100 members in the sample. It is worth noting that Hispanic is counted as an ethnicity rather than race, so many Hispanics are counted as White. Most proportions

are in line with the US population as a whole, perhaps with the proportion of Asians being slightly lower – 4.0% in the sample instead of 6.3% in the US as a whole ("U.S. Census Bureau QuickFacts: United States").

Age

Frequency of the Ages of the Head of Household in the sample

Most of the primary householders are between 30 and 60 years of age. There is an increase from 15 to 30, a plateau from 30 to 60 and a decline from 60 till 90. It makes sense that there are fewer heads of household between 15 and 30 years of age, as they are more likely to be living with parents and not be the head of household. The decline from 60 onwards is likely because people often die after the age of 60, becoming progressively more likely to die as they age. The apparent uptick in age at the end is because all ages above 90 are coded as 90 in the dataset for privacy reasons.
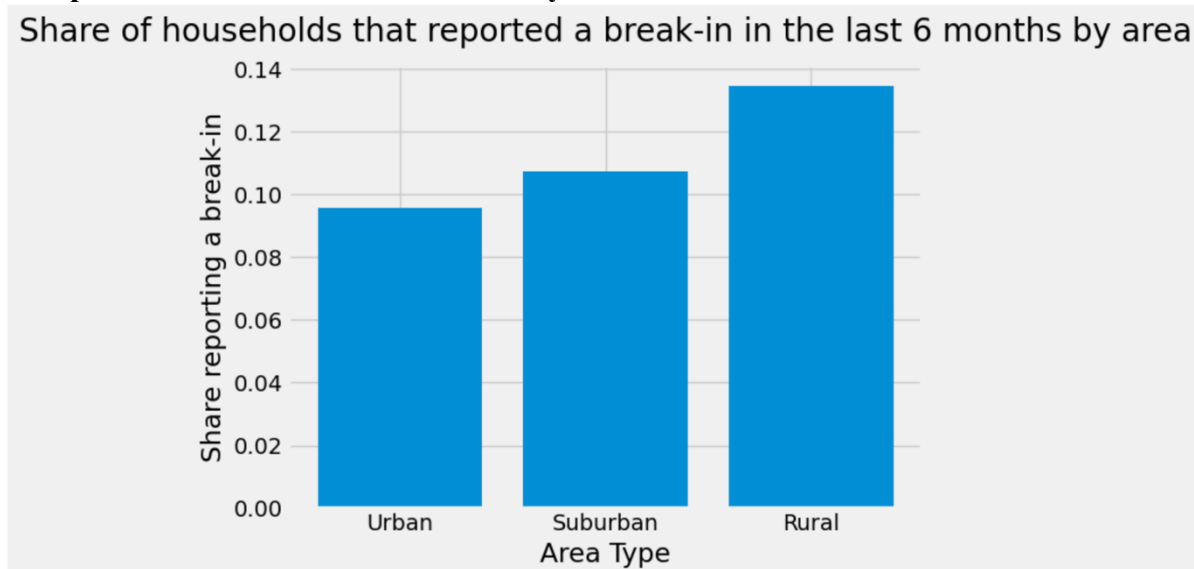
Urbanicity

Type of Area	Counts	Percent in Area
Urban	1441	17.9
Suburban	5442	67.7
Rural	1160	14.4

68% of households in the sample are in suburban areas, with 18% in urban areas and 14% in rural areas. Only 52% of Americans describe their location as suburban while 27% describe it as urban (Bucholtz), which is different from the sample. The addresses were classified based on the address at the block level rather than self-description, so this implies that a lot of Americans describing their location as urban were classified as having as suburban address in this dataset (Anderson).
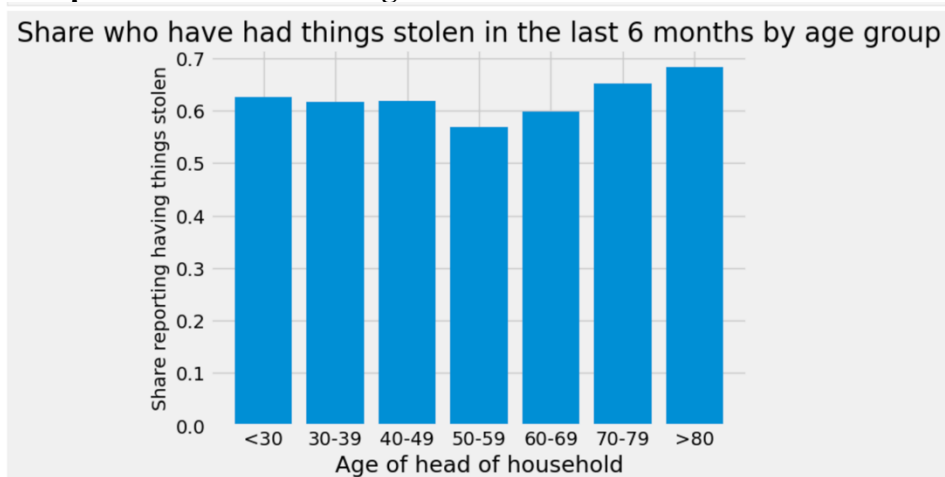
C. Relationships between variables and D. Context:

Comparison of Break-ins and Urbanicity

Share of households that reported a break-in in the last 6 months by area

Urban areas are typically perceived to be the most dangerous in the United States. We can investigate this by looking at what share of households in the sample reported a break-in in the last six months in urban, suburban and rural areas. Interestingly, urban areas have the lowest proportion reporting break-ins while rural areas have the highest proportion. This appears to contradict the usual perception, but it could also mean that rural areas are less likely to have other kinds of crime that is more frequent urban areas. To more accurately gauge this, we would need data about the total number of respondents in urban, suburban and rural areas, so as to compare the proportion of all respondents that have reported a break-in.
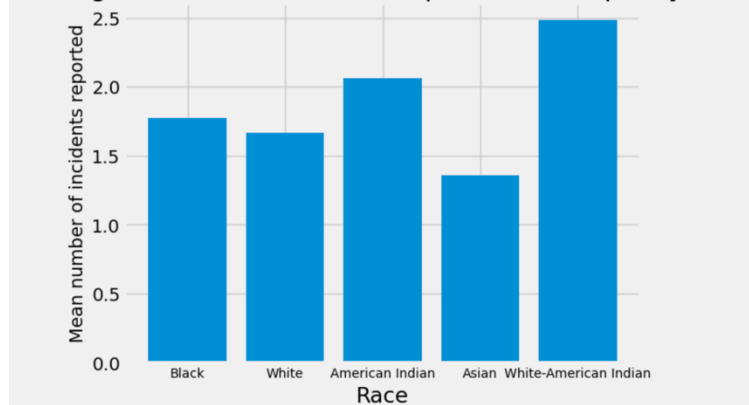
Comparison of Theft and Age

Share who have had things stolen in the last 6 months by age group

The share that have things stolen is roughly constant until the age of 59, after which it increases. This increase makes sense as older people are more likely to stay within the house rather than go out (Bachman, 1). This means they are less likely to be assaulted, and as the dataset only focuses on incidents reported, burglary makes up a greater share of all crimes that they faced. This relationship is more likely because of association rather than causation, with the confounding variable being time spent at home.

Comparison of Incidents Reported and Race

In the sample, we can see that Asians report fewer crime incidents that Whites or Blacks, while American Indians report the most crime incidents. This is likely because Asians face less crime than Blacks, Whites or Native Americans. Here the confounding variable is likely neighbourhoods: Asians tend to live in higher-income neighbourhoods than Whites, who tend to live in higher-income neighbourhoods than Blacks (Andrews). Higher income neighbourhoods tend to have less crime, thus Asians face the least crime, and Whites face slightly more crime than Blacks.

E. Conclusion/Reflection

From this dataset, I learned about how our perception of crime may not always be realistic. I was surprised to find rural areas with relatively more break-ins, or how the White-Black gap in reporting crime incidents was pretty small, which contrasted with my prior perceptions based on consuming media. However, I think these conclusions could be sharpened by having access to the entire dataset of 240,000 observations, instead of just the sample where a criminal incident was reported. This would give a more complete picture.

Works Cited

Anderson, Jeffrey. *Classification of Urban, Suburban, and Rural Areas in the National Crime Victimization Survey*.
	2020.
Bucholtz, Shawn. "Urban. Suburban. Rural. How Do Households Describe Where They Live?"
Urban. Suburban. Rural. How Do Households Describe Where They Live?, 3 Aug. 2020,
www.huduser.gov/portal/pdredge/pdr-edge-frm-asst-sec-080320.html.
Andrews, Edmund. "Stanford Study Finds Blacks and Hispanics Need Higher Incomes than Whites to Live in
Affluent Neighborhoods." Stanford Graduate School of Education, 18 July 2019, ed.stanford.edu/news/stanford-study-finds-blacks-and-hispanics-need-higher-incomes-whites-live-affluent.
Bachman, Ronet. Bureau of Justice Statistics, 1992, Elderly Victims, https://bjs.ojp.gov/content/pub/pdf/ev92.pdf.
"National Crime Victimization Survey." *Bureau of Justice Statistics*, bjs.ojp.gov/programs/ncvs#22931.
"National Crime Victimization Survey (NCVS)." *Bureau of Justice Statistics*, 2022, bjs.ojp.gov/data-collection/ncvs#w76mxj.
"National Crime Victimization Survey, [United States], 2020." *Www.icpsr.umich.edu*, 18 Oct. 2021,
	www.icpsr.umich.edu/web/NACJD/studies/38090/summary.
"National Crime Victimization Survey Resource Guide." *Umich.edu*, 2018,
	www.icpsr.umich.edu/web/pages/NACJD/NCVS/index.html.
United States Census Bureau. "U.S. Census Bureau QuickFacts: United States." United States Census Bureau, 1
	July 2021, www.census.gov/quickfacts/fact/table/US/PST045221.