Limitations of NIBRS Data Analysis

Since the 1990s, law enforcement in Vermont have been fully NIBRS compliant. This means that all law enforcement agencies submit offense and arrest data about specific criminal incidents including known demographic information about suspects, victims, and arrestees. As such, Vermont NIBRS data can give researchers incredible insight into crime incidents known to law enforcement. However, understanding how information about a crime is recorded in the data can help one understand the limits of the data.

NIBRS data reports on the following races: Black, Asian, Indigenous (including American Indians and Alaskan Natives), White, Native Hawaiian/Pacific Islander, and Other. NIBRS reports Ethnicity as either Hispanic or Not Hispanic or Unknown. In Offender and Victim segments of NIBRS race/ethnicity data may not be known or may not be recorded. NIBRS data goes through an auditing process at each police department, and data are often missing because the information is not known.

NIBRS also captures data on victims', offenders', and arrestees' sex. Sex is reported as either: female, male, or unknown. Because these categories might not sufficiently describe an individual's gender identity, researchers using NIBRS are not able to analyze issues regarding the experiences of transgender or gender-diverse people.

NIBRS data record crimes that were reported to the police and the police believe occurred. For example, if a person reports a missing cell phone and they do not know if they misplaced it, or it was stolen, NIBRS would not report this incident unless the police had reason to believe it was stolen. Now assume the victim knows it was stolen. They left the phone on a coffee shop table, got up to refill their coffee and returned to the table to find their cell phone gone. They know nothing about the offender and if there were no security cameras or witnesses to the theft, then the offender demographics would be unknown. Demographics of the victim would come from the self-report of the victim. Victim/Offender demographics are not available if the person reporting the crime (a witness) does not know/perceive the race of the victim and the victim cannot be identified by police. For example, if someone witnesses a bar fight and calls the police the report might come in as males engaged in a fight, but no witness knew or was able to perceive race. And all victims left the area before police could speak to them. In this case, the race of the victim would be unknown.

Because NIBRS is capturing crimes reported to the police, it is likely undercounting crimes because many crimes go unreported. We also know that the demographic of the victim affects whether the crime will be reported. One study, for example, found that Black women were more likely to report intimate partner violence to the police than White women.[1] We do not know if this is true in Vermont.

Next, because a crime does not have to be solved to be recorded, NIBRS data is continuously updated by law enforcement agencies as more information about an incident becomes available. In the above example with the theft of the cell phone, the data would have been submitted to NIBRS in the month that the police determined the theft took place. The offender demographics, because they were unknown, would not be present. If the police make an arrest in the incident one year later, the offender and arrestee information would be updated with the demographics of the offender/arrestee. This means that NIBRS data are fluid, and more information about offenders or victims may come to light after an analysis is performed.

NIBRS is a rich data set and can inform public policy. To date, we have been able to use NIBRS data to learn more about crimes against vulnerable adults and the elderly, crimes of domestic violence, and Black victims of violent crime. However, it is important that stakeholders are aware of why and how crime data are collected as this knowledge informs an understanding of the data's limitations. In general, how and why data is collected determines what questions can and cannot be answered by analysis of the data. As such, stakeholders should keep data limitations in mind as they evaluate crime statistics and research. If there are any questions on interpretation of NIBRS data, limitations of our research and conclusions please do not hesitate to reach out to the author of the report in question.

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[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7231654/