IIHA – It Is Happening Again: Digital criminal justice archives as building blocks for the study of recidivism

Summary

Context

Recidivism is an important societal and political issue about which there is a clear knowledge gap in Belgium (Maes et al., 2021). The absence of systematically produced national recidivism statistics has important consequences, including the difficulties (or even impossibility) to scientifically evaluate the impact of criminal justice policies and interventions (including punishments and measures). This implies that criminal justice interventions in Belgium take place without any scientific evidence about their effectiveness in tackling crime (be it through general or specific deterrence, incapacitation or rehabilitation).

However, recidivism remains a complex social phenomenon that is difficult to measure (Maes et al., 2021). Indeed, measuring recidivism faces numerous limitations, including how to deal with the *dark number*, the *grey number*, and the *impunity bias* (Zara & Farrington, 2016), some of which are due to the very functioning of the criminal justice administration system. Despite their gaps and imperfections (Robert, 1977), official data is one of the sources that can potentially be mobilized to study recidivism.

The National Institute of Criminalistics and Criminology has access to a wealth of historical data from two criminal justice databases: the Central Criminal Record (over the 1995-2020 period) and the SIDIS-Greffe penitentiary database (over the 1974-2014 period) (hereafter: 'the Criminal Justice Databases'). Unfortunately, the optimal exploitation and valorisation of this heritage is made difficult due to lack of documentation about, and standardization of, the data.

The project aims to address societal questions through studies on recidivism and criminal careers by documenting and analysing these historical data. To achieve this, an integrated historical database was developed containing a standardized version of historical datasets extracted from these two criminal justice databases to make these data available for research. At the same time, analyses of recidivism and criminal careers were carried out on several themes (e.g. homicides, terrorism, sexual offences). Moreover, a prototype of a recidivism monitor was developed enabling the production of baseline recidivism rates for different cohorts.

Objectives

1. Documenting the Criminal Justice Databases

Expanding on a past project (De Blander et al., 2019), the first objective of this project is to thoroughly document the purpose, content, structure, limitations and potential for research of the two databases hereby solving the lack of an up-to-date centralized documentation.

2. Developing an Integrated Historical Database

The second objective is to develop an integrated database to store a standardized version of historical records obtained from the Criminal Justice Databases. The purpose was to link an extraction of the Central Criminal Record (over the 1995-2020 period) with a full extraction of the SIDIS-Greffe penitentiary database and to create an integrated historical database. The goal of this integrated database is to make the datasets that are currently stored as separate files available within a common system that allow easy access for the production of descriptive statistics and research.

3. Analyses of recidivism and criminal careers

The third objective is to conduct several analyses. A first type of analysis concerns criminal careers and recidivism based on year-based cohorts or focused on the perpetrators of certain categories of offences based on conviction data and/or detention data. These results provide an immediate benefit for policy-makers and scientists.

4. Studying the feasibility of a recidivism module

Informed by the results from the previous steps and previous research (particularly Robert & Maes, 2012, Mine et al., 2015; De Blander et al., 2019), the feasibility of developing a computer-based application aimed at monitoring recidivism is studied. The feasibility study includes collaborations with software developers as well as with the staff currently managing the two databases.

Methodology

Three main types of methods have been used to achieve these objectives.

The work of documenting the Central Criminal Record and Sidis-Greffe databases (Objective 1) was essentially based on qualitative methods such as the analysis of interviews carried out with a certain number of database experts from various departments of the FPS Justice and documents collected within NICC's Criminology department that were useful for understanding the structure and operation of the databases (i.e., entity-relationship diagram, nomenclatures, etc.) and recording practices (i.e., user manual).

Then, the development of the integrated historical database (Objective 2) and the recidivism monitor prototype (Objective 4) relied primarily on methods relating to computer programming and database management.

Finally, the research team used quantitative methods to carry out statistical analysis on recidivism and criminal careers (Objective 3) such as descriptive analyses, survival analyses, etc.

Results

The first output of this research is a detailed description of each of the two databases of interest, with a view to meeting the needs of criminological research. To this end, the data structure of both databases is described, as is the nature of their respective data. Two reports (Huynen, Jeuniaux et al., 2024; Maes, Mine et al., 2024) highlight the relevant tables to be taken into consideration (and the relationships between them) with a view to their use for scientific, statistical and historical purposes, more specifically as regards the production of knowledge on the issues of recidivism and criminal careers. They also include a list of the documents indexed and the bibliographies specifically dedicated.

The available data from the Central Judicial Record and the detention database (Sidis-Greffe) have been imported into the integrated historical database in the form of a graph, amounting in the creation of multiple nodes and relationships. This output satisfies the objective of storing and preserving the data but also the objective of matching the two original datasets for further criminological analyses related to recidivism and criminal careers (Jeuniaux, Mine et al., 2024).

Several statistical results have been produced on the recidivism of people convicted of terrorism, on the trajectory of sex offenders, on the duration of the criminal careers of convicted sex offenders and even on the criminal careers of perpetrators of homicides.

Finally, a recidivism monitor prototype was produced which provides four main measures of recidivism, i.e. its prevalence (the recidivism "rate"), the number of antecedents and new convictions ('recidivism') and the measure of the time to recidivism. These four statistics are available for the years 1995-2017, and can be selected and broken down by gender, age group, nationality, offence type and sentence type. The interface's main products are statistical tables.

Conclusion and recommendation

The IIHA project reinforces some of our past observations (see Mine & Vanneste, 2011) and based on its findings, we advocate for a culture of more and better scientific evidence that can serve to inform criminal justice policies and practices in Belgium, which implies a smooth and safe access to the Criminal Justice Administration System data, and data of better quality (in terms of internal, horizontal, vertical, and contextual integration).

Keywords: recidivism, criminal careers, databases, justice, digital heritage

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