Predictive analytics and the social organisation of police work

A study exploring the organisational implications of developing, integrating and using predictive analytics in police work.

Key details

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Police region	South East
Level of research	PhD
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Date due for completion	September 2026

Research context

Among the various strategies employed in crime prevention, predictive policing gained prominence throughout the 2010s in police forces across the world. Predictive analytics (PA) refers to the use of historical data and statistical methods to predict the likelihood of future outcomes.

When applied in a policing context, PA is also known as predictive policing. Commonly, approaches are:

- place-based (predicting the likelihood of criminal events at certain locations at specific times)
- person-based (predicting the likelihood of becoming an offender or victim of crime)

The development and use of predictive policing, however, has not been without its challenges. Most notably, civil rights groups, academics and media discourse have raised concerns about the potential for these techniques to reinforce biased and discriminatory policing. Debates also continue as to whether the use of predictive policing results in increased efficiency and effectiveness for police forces.

Organisational studies on predictive policing exist but the literature base can be further developed. This research seeks to explore the implications for police organisations, personnel and practices when developing, integrating and using predictive analytics.

Aims

This research has three core aims.

1. To investigate how the development, integration and use of predictive analytics is viewed and experienced by professionals and police personnel.
2. To explore how predictive analytics can be developed 'ethically' and the processes associated with this in practice.
3. To examine how key stakeholders understand the current challenges of developing, integrating and using predictive analytics in policing.

Research methodology

In line with the three aims above, this research is divided into three studies.

Study one

This first study will be a systematic review of empirical literature on predictive policing. It will synthesise the views and experiences of professionals (such as software developers and data scientists) and police personnel (including police leaders, officers and staff) to explore the similarities and differences between these groups.

Study two

The second study will be a case study of one police ethics committee in England that oversees the development of data analytics for a police force. This will include a document analysis to

understand the committee's functioning and its impact on the development and use of predictive policing.

Study three

The third study will explore the perspectives of key stakeholders (including organisational representatives and academics) in the field of predictive policing across the UK. Semi-structured interviews will focus on the current ethical and organisational challenges of developing, integrating and using predictive analytics in policing.

Across all three studies, data will be collected from published literature, grey literature (non-commercially published literature), publicly available documents and interview transcripts. All studies will employ a variation of thematic analysis, adopting an iterative approach to coding and theme development. Findings from the three studies will then be synthesised to provide a holistic understanding of the development, integration and use of predictive analytics in police work.

Research participation

The researcher would like to hear from:

- representatives of UK policing oversight or professional bodies, and policing think tanks that understand or have experience with predictive policing (or broader data analytics)
- academics in the UK that have researched predictive policing
- representatives (for example, police management, police officers or police staff) from police forces in the UK that have used or currently use predictive policing
- software developers or data scientists in the UK that have developed predictive policing systems

Please email the researcher if you are interested in participating and/or if you have any questions about this research.