



Trust in Forensic Science Evidence

Project Launch Event Report

Dr Violeta Kapageorgiadou, Dr Min Zhang, Dr Emma Johnston, Dr Emmanuel Nsiah Amoako, Dr Maria Maclennan, Dr Vincent Hughes, Professor Heather Flowe, Professor Niamh Nic Daéid, Professor Lara Frumkin

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Executive Summary

On 27 March 2024, University College London hosted a launch event for the UKRI funded project '*Trust in Forensic Science Evidence in the Criminal Justice System: The Experience of Marginalised Groups*'.

This project is led by Professor Lara Frumkin at The Open University in collaboration with Dr Emma Johnston (De Montfort University), Dr Emmanuel Nsiah Amoako (UWE Bristol), Dr Maria Maclennan (University of Edinburgh), Dr Vincent Hughes (University of York), Professor Heather Flowe (University of Birmingham), Professor Niamh Nic Daéid (University of Dundee), Dr Min Zhang (The Open University), Dr Violeta Kapageorgiadou (The Open University). The project focuses on the role and value of forensic science in the criminal justice system. It seeks to explore current perceptions of trust, and tackle public (dis)trust in forensic science evidence, both DNA and digital. By exploring the marginalised groups' perception regarding forensic evidence (DNA and digital evidence), the project will develop insights into how public understanding is shaped around preparing, sharing, and presenting forensic evidence in the end-to-end crime scene to courtroom journey.

The launch event offered the project team a chance to interact with a wide range of stakeholders - from forensic science, policing, government, private sectors and academia - and grasp their perspectives on public's trust in forensic science.

The event was a joint venture with another UKRI funded project, the '*Towards A Smart Digital Forensic Advisor To Support First Responders With At-Scene Triage Of Digital Evidence Across Crime Types*' led by Dr Mark Warner at University College London. Some of the overlapping themes are:

- The risks of collateral intrusion in digital forensics, and its potential to undermine public trust in policing.
- The challenges of defining and communicating terminology used in forensic science.
- The need to embed transparency in digital forensic processes with the aim of increasing understanding and trust in forensics more broadly.

We are grateful to all the participants who took the time to join and contribute to this launch event. We look forward to maintaining our engagement with these stakeholders throughout both projects and into the future.

Themes



Defining Trust

- Defining the ways trust is experienced
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(Dis)trust in Forensic Science?

- Perception
 - Process
 - Miscarriages of Justice
 - Resources
-



Starting points for Increasing Trust

- Inclusivity and Accessibility
 - Communication
 - Capacity
 - Resources
-



Defining Trust in Forensic Science

- The way trust is understood by the public and the different levels of trust experienced by the public need to be identified.
- A 'healthy' trust allows users to trust but also be critical of forensic science.

During the discussions, stakeholders discussed the importance of identifying the different ways trust is experienced and understood by the public, particularly marginalised groups. Different types of trust were mentioned, such as 'overall' trust, where people trust forensic science every step of the way, 'epistemic' trust where individuals are willing to accept new knowledge as trustworthy, and finally a general trust in science. They noted that the public may exhibit different levels of trust towards forensic science, the criminal justice system, and its agents.

The discussion also revolved around the need for healthy trust, rather than blind faith. Healthy trust allows users to question forensic science instead of unquestioningly accepting it as flawless.

The stakeholders have expressed a keen interest in understanding the public's opinion regarding forensic science and the levels of trust they have in it. Their focus is not limited to the general public but also includes the experiences of marginalised groups. Their objective is to gain insights into what people trust or distrust in forensic science. Furthermore, they are interested in exploring what people would like to see done to enhance the trustworthiness of forensic science.



(Dis)trust in Forensic Science?

Perception

- The negative representation and misinterpretation of forensic science by the media affects public's trust.
- The CSI effect creates unrealistic expectations of forensic science.
- The tendency of some practitioners to avoid explaining the science to users appears to also affect public trust.

This theme explores why the public views forensic science negatively. It highlights the impact of public understanding, or lack thereof, and the role of media in shaping this perception. The discussions delved into the media's tendency to portray forensic science in a negative light, emphasising flawed forensic science and wrongful convictions. It also touched on how the media contributes to misinformation, such as non-experts misinterpreting forensic science.

The 'CSI effect' was discussed, focusing on how glamourised crime scene investigation shows create unrealistic expectations, which can erode public trust. Additionally, the terminology and scientific language used in forensic science for instance, phrases such as 'Digital Strip Search', can be off-putting and difficult for the public to understand.

Finally, the tendency of some practitioners to dismiss the public's questions or concerns about forensic science, deeming the science as 'too complicated' to be explained, can erode trust.

Process

- Forensic investigation is an opaque process that the public do not see or understand.
- Users are not informed about how forensic science is used.
- Users might be reluctant to cooperate with practitioners due to privacy concerns.
- The absence of proper laws on retaining evidence leads to inconsistent practices among law enforcement agencies.

The discussions highlighted the potential limitations of forensic science in terms of public trust. The process of forensic investigation, both physical and digital evidence, is often not transparent to the public, leading to a lack of understanding. This lack of transparency and the complex nature of the investigations, particularly for digital evidence, decrease the opportunities for practitioners to 'engage well' with the public, indicating a need for a more open approach.



'The investigation of digital evidence is a process that takes place out of users' sight, by people they have never met'.

(Launch event participant, during discussion activity)



Stakeholders also mentioned the insufficiency of information provided by the criminal justice system (police, forensic science experts, legal teams) to the public and users involved in cases about how forensic science might be used.

Privacy concerns, especially in digital evidence investigations, were discussed, emphasising the importance of users' awareness, rights, and consent. The stakeholders acknowledged the intrusive nature of the investigation regarding digital evidence compared to physical evidence. In an illustrative example, the stakeholders mentioned that a mobile phone can be more personal than a house, explaining that people's thoughts and feelings might not be on their house walls, but they will be on their phones. Thus, the users might be reluctant to hand over a device, fearing irrelevant personal information will be accessed by strangers.

Another concern that was brought up was forensic integrity. Specifically, oversight and expert opinion views were identified as areas of concern.

Finally, the stakeholders also mentioned the absence of laws on retaining evidence. It was noted that forces in England and Wales use ad hoc guidelines, resulting in inconsistency in practice that can negatively affect public trust.

Miscarriages of Justice

- The improper handling of evidence may compromise the forensic investigation.
- The fragmentation of forensic investigations may impact trust in forensic science.

The discussion developed around potential limitations in forensic investigations that could lead to miscarriages of justice and, consequently, affect public trust. This was seen as a paradox where forensic science can both potentially cause miscarriages of justice and prevent them. It was noted that forensic science can be a *'very important agent of change in the criminal justice system'*.

The stakeholders also talked about poor investigations due to lack of knowledge, noting that *'Knowledge of frontline officers is often limited'* and human error could potentially damage digital evidence.

In addition, the fragmentation of forensic science practice was discussed. Fragmentation occurs mostly when evidence from the same case is sent to different laboratories. It was acknowledged that the fragmentation, lack of coordination, and communication may impact trust in forensic science.

Resources

- Inconsistent funding levels in forensic science impact wrongful convictions.
- Limited resources do not allow proactive policing.
- The challenges of accreditation (due to budget cuts) could undermine trust in forensic science.

The stakeholders mentioned the challenges forensic science faces due to a lack of adequate resources, which can potentially affect the public's trust. The phenomenon of the 'funding cycle' in the context of forensic science was discussed. This cycle is characterised by periods of increased investment in forensic science by the government in response to high rates of wrongful convictions resulting from unreliable forensic evidence. However, once this is under control, funding for forensic science is subsequently reduced, leading to a potential increase in wrongful convictions.

In addition, the current budget cuts (including cuts to forensic science and community policing expenditures) could potentially affect the public's confidence in forensic science and the criminal justice system in general.

Finally, the challenges of accreditation, primarily due to high costs, were brought to the forefront. This issue could lead to a decrease in the quality and accountability of forensic providers, thereby undermining public trust in the field.



Starting Points for Increasing Trust

Inclusivity and Accessibility

- Equity, diversity, and inclusion education could increase inclusivity and accessibility in forensic science and the criminal justice system in general.
- Introducing forensic science in schools before students are exposed to it in a negative context.
- Increasing diversity in the workforce so it reflects the communities it serves.

One recommendation is to make forensic science more inclusive and accessible through education and transparency. A focus on education on equality, diversity, and inclusion, including all stakeholders in the criminal justice system, was suggested.

Another recommendation is the introduction of forensic science at an early stage of education. This could be achieved through a forensic science curriculum in schools, a potential catalyst for sparking curiosity and interest in forensic science among students. The stakeholders stressed the importance of introducing forensic science to young people before they are exposed to it in a negative context related to a crime.



"it's likely that people only come into contact with us when something bad has happened".

(Launch event participant, during discussion activity)



Increasing workforce diversity is also suggested, through the recruitment of scientists from underrepresented, minoritised groups. This approach was suggested based on the observation that the current workforce does not reflect the communities it serves.

Communication

- The process of a forensic investigation should be communicated clearly.
- A common and simplified language makes forensic science more accessible to the public.
- A proactive communication approach encourages the public to express their concerns and queries.
- Increasing awareness regarding regulations and codes of practice increases the reliability of forensic science.

The stakeholders underlined the pivotal role of forensic scientists communicating the process of an investigation clearly. This not only bolsters the credibility of forensic science but also demonstrates respect for the victims and those directly affected by crime. They suggested more engagement with the public to '*demystify*' forensic science and forensic technologies, in order to '*bridge the gap between the scientific community and the public*'.

In addition, the use of jargon-free language was suggested to reduce public confusion. Complicated terminologies in academic and forensic settings, reduce accessibility. It was also suggested that a two-way communication approach should be adopted. This approach requires forensic scientists to proactively engage with the public, while simultaneously ensuring that the public is encouraged to express their concerns and queries with respect to forensic science.

Finally, it was noted that the regulations and codes used in forensic science play a crucial role in maintaining and potentially increasing public trust. Increasing awareness of the regulations and codes used in forensic science would ensure the public that forensic evidence is gathered ethically and that the results are reliable and unbiased.

Capacity

- Increasing capacity, particularly investing in new career pathways, is highly beneficial to the field.
- Initiating collaborations with the public increases awareness of forensic science.
- Interdisciplinary collaborations allows the development of new ideas, and identification of new research areas.

Prioritising the well-being of the workforce and investing in leadership was suggested. It was acknowledged that a new approach to developing clearer career pathways in forensics and focusing on recruitment and leadership roles is highly beneficial.

Moreover, the enhancement of public awareness and interest in forensic science was suggested by investing in citizen science and interdisciplinary collaborations. Citizen science is a scientific research method that involves members of the public. This approach enables people from all walks of life to contribute to and gain a deeper understanding of science.

Additionally, interdisciplinary collaboration allows scientists to combine knowledge and expertise, help in the development or adoption of new approaches, and identify new areas of research and application of forensic science.

Resources

- Increasing funding in staff education, recruitment and accreditation improves the quality and accountability of forensic science and investigations.

Financial resources featured in most of the above discussions, with stakeholders suggesting the need for increased funding for staff recruitment, accreditation, and staff education. More funds allocated to forensic science would address the issues related to recruitment of staff, accreditation, and further staff education, consequently improving the quality and accountability of forensic science.

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Jo Morrissey: Workforce Strategy Lead, Forensic Capability Network

Partners



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For more information, please contact Professor Lara Frumkin (lara.frumkin@open.ac.uk)

